

WSIS Stocktaking ICT Case Repository

The Coronavirus Response Special Report



Information and
Knowledge Societies for
Sustainable Development Goals
www.wsis.org



World Summit
on the Information Society
Turning targets into action
Geneva 2003 | Tunis 2005 | New York 2015



Acknowledgement

The content for this document was coordinated and shaped by Vladimir Stankovic, Program Officer, ITU, under the overall supervision of Yushi Torigoe, Chief of Strategic Planning and Membership Department and Catalin Marinescu, Head of Strategy and Planning Division, ITU, and Gitanjali Sah, Strategy and Policy Coordinator, ITU.

In addition, the report benefited from the contributions and insights of ITU staff: Luolan Sheng, Qing Yang, Qiuyan Song, Shi Jian, Jinyuan Wang, and Michael Kioy.

The WSIS team would like to acknowledge the tremendous contributions from governments, international organizations, the private sector, civil society and other stakeholders in providing information on ongoing projects and initiatives to the WSIS Stocktaking Platform.

Disclaimer

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ISBN:

978-92-61-31591-7 (Electronic version)

Foreword

The year 2020 marked a milestone in the history of the World Summit on the Information Society (WSIS), a 15-year period that has seen the world undergo an unprecedented digital transformation that is accelerating social and economic progress across the globe. Never has this been more evident than during the COVID-19 pandemic where information and communication technologies (ICTs) have been essential to keeping societies and economies running everywhere.

Information and Knowledge Societies have emerged as one of the main lines of defense against a virus that is still inflicting immense loss of lives and livelihoods and hampering progress towards achieving the United Nations Sustainable Development Goals (SDGs). In this report you will see how WSIS stakeholders rose to the challenge, with more than 200 COVID-19 response case studies featuring ICT projects and initiatives from governments, private sector companies, academia, civil society, international organizations, and others. This form of cross-sector collaboration and best-practice sharing is the essence of the WSIS Stocktaking process, and it is exactly what is needed to defeat COVID-19 and advance the WSIS Action Lines in support of the SDGs.

The pandemic has changed our lives forever and brought the importance and potential of ICTs and emerging technologies ranging from AI to 5G to the fore. But it has also shone a light on deep digital inequalities between and within countries at a time when overall growth is slowing and worrying gaps in connectivity and access persist, especially in rural and underserved areas. It is my hope that we can use this moment to recommit ourselves to fulfilling the vision outlined 15 years ago of an Information Society where everyone can benefit from the opportunities that ICTs can offer.

The WSIS Stocktaking process puts participants right at its center, and that is what makes the WSIS movement so powerful. I congratulate all those who made a submission to this report and encourage everyone to follow their example. The WSIS Stocktaking: The Coronavirus (COVID-19) Response – ICT Case Repository is a living document. The call for action is still open, and I invite you to share your projects and show the world how you are using ICTs to respond to the ongoing COVID-19 pandemic.

ICTs have become the unifying thread that runs through all aspects of our societies and economies. With only ten years left to achieve the SDGs, ICTs are a key driver for global development and a central element of our efforts to build back better – for a stronger, safer, and more inclusive Information Society.



ITU Secretary-General

Part 1: Government (175 Projects)

Case N°	Organisation Title	Country
1	Ghana Investment Fund for Electronic Communications	Ghana
2	OGERO Telecom	Lebanon
3	Office of Electronic Communications (UKE)	Poland
4	Office of Electronic Communications (UKE)	Poland
5	Office of Electronic Communications (UKE)	Poland
6	Digital Agency for Public Innovation	Mexico
7	Bangladesh Computer Council	Bangladesh
8	Government Digital Service (GDS) - GDS is a unit of the Cabinet Office	United Kingdom
9	General Directorate of Ministry of Justice of Turkey	Turkey
10	Administrative Modernization Agency (AMA)	Portugal
11	Ministry of Health	Oman
12	Information and Communication Technology Agency	Sri Lanka
13	Information and Communication Technology Agency	Sri Lanka
14	Information and Communication Technology Agency	Sri Lanka
15	Ministry of Transport and Communications	Qatar
16	Ministry of Transport and Communications	Qatar
17	Ministry of Transport and Communications	Qatar
18	Ministry of Transport and Communications	Qatar

19	CMHS - ICRT	Cuba
20	Ministry of Technology and Communications	Oman
21	AMA - Administrative Modernisation Agency	Portugal
22	AMA - Administrative Modernisation Agency	Portugal
23	The Authority for Info-communications and Technology Industry of Brunei Darussalam (AITI)	Brunei Darussalam
24	The Authority for Info-communications and Technology Industry of Brunei Darussalam (AITI)	Brunei Darussalam
25	Ishan Institution	Bangladesh
26	National Agency of Information Society	Albania
27	New Economy Academy (NEA), The Department of International Trade Promotion, Ministry of Commerce	Thailand
28	Ministry of Transport and Communications	Qatar
29	Ministry of Transport and Communications	Qatar
30	Ministry of Transport and Communications	Qatar
31	Ministry of Transport and Communications	Qatar
32	Ministry of Transport and Communications	Qatar
33	Ministry of Transport and Communications	Qatar
34	Ministry of Transport and Communications	Qatar
35	Ministry of Transport and Communications	Qatar
36	Digital Development Agency	Morocco
37	AGESIC	Uruguay
38	Ministry of Education	Saudi Arabia
39	Centers for Disease Control and Prevention	United States of America

40	Directorate of Primary Education	Bangladesh
41	Entreprise d'Appui au Développement du Numérique (EADN EPE SPA)	Algeria
42	Centers for Disease Control and Prevention	United States of America
43	Federal University of Pernambuco	Brazil
44	"Information and Account Centre" JSC	Kazakhstan
45	CyberSecurity Malaysia	Malaysia
46	Office for Information Technologies and eGovernment of the Government of Serbia	Serbia
47	Office for Information Technologies and eGovernment of the Government of Serbia	Serbia
48	Office for Information Technologies and eGovernment of the Government of Serbia	Serbia
49	Office for Information Technologies and eGovernment of the Government of Serbia	Serbia
50	Office for Information Technologies and eGovernment of the Government of Serbia	Serbia
51	Office for Information Technologies and eGovernment of the Government of Serbia	Serbia
52	Office for Information Technologies and eGovernment of the Government of Serbia	Serbia
53	Office for Information Technologies and eGovernment of the Government of Serbia	Serbia
54	Office for Information Technologies and eGovernment of the Government of Serbia	Serbia
55	Office for Information Technologies and eGovernment of the Government of Serbia	Serbia
56	Office for Information Technologies and eGovernment of the Government of Serbia	Serbia
57	Office for Information Technologies and eGovernment of the Government of Serbia	Serbia
58	Office for Information Technologies and eGovernment of the Government of Serbia	Serbia
59	Office for Information Technologies and eGovernment of the Government of Serbia	Serbia
60	Office for Information Technologies and eGovernment of the Government of Serbia	Serbia

61	Office for Information Technologies and eGovernment of the Government of Serbia	Serbia
62	Universal Access Service Fund	Botswana
63	Telecommunications Regulatory Authority	United Arab Emirates
64	Federal Authority for Nuclear Regulation	United Arab Emirates
65	The State Construction Control Bureau of Latvia (SCCB)	Latvia
66	Aspire to Innovate (a2i) Programme	Bangladesh
67	Government Digital Service (GDS) - GDS is a unit of the Cabinet Office	United Kingdom
68	Gobierno del Estado de Sinaloa	Mexico
69	Aspire to Innovate (a2i) Program	Bangladesh
70	National Information Center	Sudan
71	Kenya National Library Service - Kibera Branch	Kenya
72	Federal Office of Public Health (FOPH)	Switzerland
73	Aspire to Innovate (a2i) Programme	Bangladesh
74	GovTech Polska	Poland
75	Directorate General of Drug Administration	Bangladesh
76	CITY OF JOHANNESBURG MUNICIPALITY LIBRARIES	South Africa
77	Information Technology Organization of Iran	Iran (Islamic Republic of)
78	National Telecommunications Agency (Anatel)	Brazil
79	Entrepreneurship & Skills Development Project	Bangladesh
80	Directorate General of Drug Administration	Bangladesh
81	Directorate General of Drug Administration	Bangladesh
82	Government Technology Agency (GovTech)	Singapore
83	Government Technology Agency (GovTech)	Singapore

84	Government Technology Agency (GovTech)	Singapore
85	Government Technology Agency (GovTech)	Singapore
86	Government Technology Agency (GovTech)	Singapore
87	Government Technology Agency (GovTech)	Singapore
88	Government Technology Agency (GovTech)	Singapore
89	Saudi Red Crescent Authority	Saudi Arabia
90	ENTERPRISE EUROPE NETWORK-SWITZERLAND(www.swisseen.ch www.icsc.un.org www.undp.org www.usaid.gov www.mcc.gov www.state.gov) AND LORD RAVINDER KUMAR SHARMSLA PROP KUMAR SHARMA & ASSOCIATES PO BOX 118 GPO SHIMLA PINCODE 171001 HP INDIA PLACE OF BIRTH VILLAGE AND PO TUNNUHATTI DISTT CHAMBA PINCODE 176301 HP INDIA	India
91	ENTERPRISE EUROPE NETWORK-SWIZERLAND(www.swisseen.ch) AND LORD RAVINDER KUMAR SHARMA PROP KUMAR SHARMA & ASSOCIATES PO BOX 118 GPO SHIMLA PINCODE 171001 HP INDIA PLACE OF BIRTH VILLAGE AND PO TUNNUHATTI DISTT CHAMBA PINCODE 176301 HP INDIA	India
92	National Informatics Centre (NIC)	India
93	Directorate General of Drug Administration	Bangladesh
94	KRISHI VIGYAN KENDRA, HINGOLI	India
95	Kenya Marine and Fisheries Research Institute (KMFRI)	Kenya
96	Telecommunication Infrastructure Company (TIC)	Iran (Islamic Republic of)
97	Ethiopian Institute of Agricultural Research	Ethiopia
98	Digital Agency for Public Innovation	Mexico
99	The General Authority of Small and Medium Enterprises	Saudi Arabia

100	Federal Authority for Identity and Citizenship	United Arab Emirates
101	Ministère du Commerce et de l'Industrie	Côte d'Ivoire
102	Department of Telecommunications Government of India	India
103	Data Processing Center (DPC) of the Ministry of Transport, Communications and High Technologies of the Republic of Azerbaijan.	Azerbaijan
104	Department of Survey and Mapping Malaysia (JUPEM)	Malaysia
105	Department of Survey and Mapping Malaysia (JUPEM)	Malaysia
106	Department of Telecommunications, Post and Telecom Division	Bangladesh
107	Ministry Of	Malaysia
108	Relawan TIK Maluku and Pemerinta Kota Ambon	Indonesia
109	Botswana Communications Regulatory Authority (BOCRA)	Botswana
110	Ministry of Housing and Local Government (MHLG)	Malaysia
111	Data Processing Center (DPC) of the Ministry of Transport, Communications and High Technologies of the Republic of Azerbaijan.	Azerbaijan
112	Data Processing Center (DPC) of the Ministry of Transport, Communications and High Technologies of the Republic of Azerbaijan.	Azerbaijan
113	Ministry of communication and information technology	Saudi Arabia
114	Central Informatics Bureau	Mauritius
115	Ministry of Education	Saudi Arabia
116	Ministry of Education	Saudi Arabia
117	Ministry of Human Resources and Emiratisation	United Arab Emirates
118	Ministry of Education	Saudi Arabia
119	TRA	United Arab Emirates

120	Data Processing Center (DPC) of the Ministry of Transport, Communications and High Technologies of the Republic of Azerbaijan.	Azerbaijan
121	Azexport.az (Internet Portal)	Azerbaijan
122	MOI	United Arab Emirates
123	Ministry Of Justice	Qatar
124	Digital Trade Hub of Azerbaijan	Azerbaijan
125	Ministry of Culture & Youth	United Arab Emirates
126	Ministry of Culture & Youth	United Arab Emirates
127	Ministry of Culture & Youth	United Arab Emirates
128	Blod.id	Indonesia
129	Information & eGovernment Authority	Bahrain
130	Rwanda Information Society Authority(RISA)	Rwanda
131	Rwanda Information Society Authority(RISA)	Rwanda
132	Rwanda Information Society Authority(RISA)	Rwanda
133	Rwanda Information Society Authority(RISA)	Rwanda
134	Comisión de Regulación de Comunicaciones	Colombia
135	Ministry of Information and Communicaitons	Bhutan
136	Dubai Health Authority	United Arab Emirates
137	MOTC	Qatar
138	Abu Dhabi quality and conformity council	United Arab Emirates
139	ENTERPRISE EUROPE NETWORK-SWITZERLAND(www.swisseen.ch www.admin.ch www.unog.ch www.icsc.un.org) AND LORD RAVINDER KUMAR SHARMA PROP KUMAR SHARMA & ASSOCIATES PO BOX 118 GPO SHIMLA PINCODE 171001 HP INDIA PLACE OF BIRTH VILLAGE AND PO	India

	TUNNUHATTI DISTT CHAMBA PINCODE 176301 HP INDIA AND OECD & FATF(FINANCIAL ACTION TASK FORCE) HQ 2 rue Andre Pascal 75775 Paris Cedex 16 FRANCE	
140	ENTERPRISE EUROPE NETWORK- SWITZERLAND(www.swisseen.ch www.admin.ch www.unog.ch www.icsc.un.org) AND LORD RAVINDER KUMAR SHARMA PROP KUMAR SHARMA & ASSOCIATES PO BOX 118 GPO SHIMLA PINCODE 171001 HP INDIA PLACE OF BIRTH VILLAGE AND PO TUNNUHATTI DISTT CHAMBA PINCODE 176301 HP INDIA AND OECD & FATF(FINANCIAL ACTION TASK FORCE) HQ 2 rue Andre Pascal 75775 Paris Cedex 16 FRANCE	India
141	CITY GOVERNMENT OF TAGUIG	Philippines
142	SDAIA	Saudi Arabia
143	SADID	Saudi Arabia
144	中通服设计研究院	China
145	Nic	Saudi Arabia
146	CITC	Saudi Arabia
147	Broadcasting Authority of Zlmbabwe	Zimbabwe
148	الصحة السعودية	Saudi Arabia
149	Jakarta Smart City	Indonesia
150	Dubai Health Authority	United Arab Emirates
151	barcopharma	Iraq
152	barcopharma	Iraq
153	barcopharma	Iraq
154	barcopharma	Iraq

155	Dubai Health Authority Government	United Arab Emirates
156	National Pension Fund	Algeria
157	CNAS	Algeria
158	CNAS - National Social Insurance Fund	Algeria
159	CNAS - - National Social Insurance Fund	Algeria
160	Ministere des Moudjahidine et Des Ayants Droit (MDMAD)	Algeria
161	Environmental Research Center CRE	Algeria
162	Ministry of religious affairs and wakfs	Algeria
163	National Waste Agency	Algeria
164	National Waste Agency	Algeria
165	ALGERIE POSTE	Algeria
166	ALGERIE POSTE	Algeria
167	a2i - Aspire to Innovate	Bangladesh
168	Data Direct	United Arab Emirates
169	Kelurahan Kebon Kelapa	Indonesia
170	Department of Information and Communications Technology	Philippines
171	U LAO Office, Chukaibari	Bangladesh
172	Palli Sanchay Bank	Bangladesh
173	acland office kendua	Bangladesh
174	Bureau of jail management and penology	Philippines
175	Md. Akramul Haque	Bangladesh

Part 2: Academia (43 Projects)

Case N°	Organisation Title	Country
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1	Universidad de las Ciencias Informáticas (UCI)	Cuba
2	Federal University of Ceará - UFC	Brazil
3	International Academic Network WEIWER® - Wikis, Education & Research	Portugal
4	International Academic Network WEIWER® - Wikis, Education & Research	Portugal
5	IMDEA Networks Institute	Spain
6	Geneva Centre for Education and Research in Humanitarian Action	Switzerland
7	Sultan Qaboos University	Oman
8	REviver na Rede	Portugal
9	Spoken Tutorials, Indian Institute of Technology Bombay, Mumbai, India	India
10	Kuwait University	Kuwait
11	CodingPro CJSC	Armenia
12	Birla Vishwakarma Mahavidhyalaya	India
13	K-12math.info inc	United States of America
14	K-12math.info inc	United States of America
15	Pacific Disaster Center	United States of America
16	ISUTIC	Angola
17	Institute of Geographical Sciences and Natural Resources Research (IGSNRR), Chinese Academy of Sciences	China
18	UNIVERSITY OF NIGERIA	Nigeria
19	Addictlab /SDGZINE	Switzerland

20	PressXAI-University	Poland
21	Universidad de las Ciencias Informáticas	Cuba
22	K-12math.info inc	United States of America
23	University of Tehran/ and Sustainable agriculture and environment	Iran (Islamic Republic of)
24	Ecole Nationale Polytechnique (ENP)	Algeria
25	Ecole Nationale Polytechnique (ENP)	Algeria
26	Universidad de las Ciencias Informáticas (UCI)	Cuba
27	Daffodil International University	Bangladesh
28	Ahfad University for women	Sudan
29	Iran University of Science and Technology	Iran (Islamic Republic of)
30	Palestine Technical University- Kadoorie (PTUK)	Palestine
31	Al-Quds Open University	Palestine
32	Khalifa University	United Arab Emirates
33	University of Botswana	Botswana
34	University of Foggia	Italy
35	Robotics	Saudi Arabia
36	Nibras schools platform	Sudan
37	Alm	Saudi Arabia
38	Moscow Technical University of Communications and Informatics (MTUCI)	Russian Federation
39	Moscow Technical University of Communications and Informatics (MTUCI)	Russian Federation

40	Moscow Technical University of Communications and Informatics (MTUCI)	Russian Federation
41	CFPA Zaraa Abdelbaki, Tebessa-2-	Algeria
42	University Tahri Mohammed Bechar	Algeria
43	Jemcer Blacer	Philippines

Part 3: Civil Society (112 Projects)

Case N°	Organisation Title	Country
1	ITU	Kenya
2	Bangladesh NGOs Network for Radio & Communication(BNNRC)	Bangladesh
3	SWGfL	United Kingdom
4	Fundación Cibervoluntarios	Spain
5	Sverdlovsk Philharmonic	Russian Federation
6	URIDU	Germany
7	Olabi.Org	Brazil
8	ICT Volunteer Bojonegoro	Indonesia
9	C-Sema	United Republic of Tanzania
10	ESTRATEGIO TECHNOLOGIES	Ecuador
11	Association des Techniciens en Technologies de l'Information et de la Communication	Chad (Republic of)
12	TaC-Together against Cybercrime International	Switzerland
13	World Wide Web Foundation	United States of America
14	Instituto Educadigital	Brazil

15	Instituto Educadigital	Brazil
16	association Eseniors	France
17	D&D International - Digital Democracy	Peru
18	Royal Oman Police	Oman
19	Forum for African Women Educationalists - Zimbabwe Chapter	Zimbabwe
20	Society of Young Nigerian Writers	Nigeria
21	Outreach Social Care Project- OSCAR	South Africa
22	GGA,USA,global ambassador,peace and hr,india,SRC	Egypt
23	Digital Empowerment Foundation	India
24	GEM institute	Lesotho
25	Instituto Bem Estar Brasil- IBEBrasil	Brazil
26	Women in Technology in Nigeria	Nigeria
27	Women in Technology in Nigeria	Nigeria
28	Developments in Literacy	Pakistan
29	RayZnews	Nepal (Republic of)
30	Innovative Trauma Relief Access (INNTRA)	Switzerland
31	International Federation of Library Associations and Institutions	Netherlands
32	Finding Gambia	Gambia (Republic of the)
33	Mahadebnagar Rural Welfare Society	India
34	Association for Progressive Communications (APC)	South Africa

35	Apps and Girls	United Republic of Tanzania
36	Our Voices Against Harassment (OVAH)	United Republic of Tanzania
37	Halley Movement Coalition	Mauritius
38	Bangladesh NGOs Network for Radio & Communication	Bangladesh
39	Childcare Consortium	India
40	Edified Generation Rwanda	Rwanda
41	Childcare Consortium	India
42	Childcare Consortium	India
43	Childcare Consortium	India
44	Childcare Consortium	India
45	Association des Techniciens en Technologies de l'Information et de la Communication	Chad (Republic of)
46	CARTHAGE	Chad (Republic of)
47	Childcare Consortium	India
48	B-Gifted Foundation of Sierra Leone / Maryland University Francis King Carey School of Law	Sierra Leone
49	Farm Radio International	Canada
50	ENJEAL NYS AGRO	Cameroon
51	Reseau des organisations de la société civile pour le développement du Tonkpi (ROSCIDET)	Côte d'Ivoire
52	Women Engage for a Common Future (WECF)	Netherlands
53	WOMENVAI	France
54	Redes por la Diversidad Equidad y Sustentabilidad AC	Mexico

55	Saujana.org	Indonesia
56	E-Seniors	France
57	Childcare Consortium	India
58	Unistream	Israel
59	Saksham Trust (and its subsidiary Saktek Foundation)	India
60	Omar Dengo Foundation (Fundación Omar Dengo)	Costa Rica
61	Omar Dengo Foundation (Fundación Omar Dengo)	Costa Rica
62	Saksham and its subsidiary Saktek Foundation	India
63	Farm Radio International	Canada
64	Breathing Games Association	Switzerland
65	Global Barter Communities	Philippines
66	inABLE	Kenya
67	ZMQ	India
68	Special Needs Initiative for Growth	Nigeria
69	Geneva Internet Platform	Switzerland
70	Datamation Foundation Charitable Trust	India
71	Datamation Foundation Charitable Trust	India
72	Women in Technology in Nigeria(WITIN)	Nigeria
73	Janastu	India
74	Ayni Bolivia	Bolivia
75	Ayni Bolivia	Bolivia
76	Childcare Consortium	India

77	Childcare Consortium	India
78	Childcare Consortium	India
79	Childcare Consortium	India
80	Childcare Consortium	India
81	Special Needs Initiative for Growth	Nigeria
82	Association E-SENIORS	France
83	Gatef organization	Egypt
84	Alamsurya Kubara Endriharto	Indonesia
85	TechnoSpect	Syrian Arab Republic
86	Kelas Bersama (Class for Everyone)	Indonesia
87	Kelas Bersama (Class for Everyone)	Indonesia
88	NASSCOM Foundation	India
89	MR.GENIUS	Morocco
90	Relawan TIK Malang	Indonesia
91	Agromedium Kft.	Hungary
92	Digitas Institute	Slovenia
93	PythonesiaORG	Indonesia
94	Ada Lovelace Foundation	India
95	Asociación Mundo Posible	Guatemala
96	Organización de Mujeres Campesina e Indígenas(CONAMURI)	Paraguay
97	Digital Woman Uganda	Uganda
98	Artificial Intelligence Laboratory - University of Udine	Italy

99	CITY OF KISUMU URBAN AREAS ASSOCIATION	Kenya
100	项目	China
101	التعليم	Saudi Arabia
102	Tayota	Saudi Arabia
103	ICT Volunteers Magetan	Indonesia
104	Youth In Action	United Republic of Tanzania
105	Algerian Waters / algérienne des eaux	Algeria
106	Madeserv	Algeria
107	Algeria waters unit oum el bouaghi	Algeria
108	Algerian Waters / algérienne des eaux	Algeria
109	Bangladesh NGOs Network for Radio and Communication	Bangladesh
110	état centre de formation Professional	Algeria
111	China	China
112	De Doronos-Jay women and Youth Development Foundation	Nigeria

Part 4: Private Sector (115 Projects)

Case N°	Organisation Title	Country
1	LLC «System»	Russian Federation
2	8villages	Indonesia
3	Open Health Network	United States of America
4	AliHealth	China
5	Information Age Consulting	Kuwait
6	Caribbean Climate Innovation Center	Jamaica

7	BEINDAY by INTERFACE SAS	Senegal
8	Global Plan Inc.	Japan
9	LibraRisk srl	Italy
10	Key2enable Assistive Technology Mena Ltd	United Arab Emirates
11	PJSC Rostelecom	Russian Federation
12	Healthrostrum	Tunisia
13	KaiOS Technologies	China
14	PJSC Rostelecom	Russian Federation
15	VegaNet	Tunisia
16	CybExer Technologies OÜ	Estonia
17	CybExer Technologies OÜ	Estonia
18	SABAQ	Pakistan
19	Ada Lovelace Software Pvt Ltd	India
20	Proexponente	Ecuador
21	América Móvil	Mexico
22	mPower Social Enterprises Ltd.	Bangladesh
23	G2K Group GmbH	Germany
24	Targa / Ooredoo	Tunisia
25	EduHarbor	Germany
26	Ywai Aqua Life Integrated systems	Nigeria
27	Earlyone	Armenia
28	Earlyone	Armenia
29	Genecoin	Brazil

30	Inmarsat	United Kingdom
31	Inmarsat	United Kingdom
32	IUSOFT Technology	Bangladesh
33	Intelsat	United Kingdom
34	Casantey Business Solutions Group	Ghana
35	Hellas Sat	Cyprus
36	8villages Indonesia	Indonesia
37	The National Association of Public Librarians and Libraries in Romania	Romania
38	Arabic Digital Reform Institute (ADRI)	New Zealand
39	GEOSYS	Algeria
40	Agasha Group Ltd	Uganda
41	Center of Information technology Pakistan	Pakistan
42	Last Mile Medicine	Kenya
43	Saahas	India
44	Zimba Women	Uganda
45	QRCrypto SA	Switzerland
46	Subah Infosolutions Ltd.	Ghana
47	AfyaRekod	Kenya
48	InspireMill	Pakistan
49	KaiOS Technologies	China
50	Scrypt.Media	France
51	Jasmeen incubator	United Kingdom

52	SayEnergy	Poland
53	ICT4DEV	Côte d'Ivoire
54	Addictlab	Switzerland
55	SIWAK	Poland
56	COOPERATIVA DE AHORRO Y CRÉDITO COOPAD	Ecuador
57	DGT Sp. z o.o.	Poland
58	Bioniks.Org	Pakistan
59	Dalberg Data Insights	Belgium
60	TechNovator	Poland
61	innect feeCOMPASS sp. z o.o.	Poland
62	IDENTT	Switzerland
63	BOWWE	Poland
64	SoftServe	United States of America
65	SES	Luxembourg
66	SES	Luxembourg
67	SES	Luxembourg
68	MedShr	United Kingdom
69	SES	Luxembourg
70	SES	Luxembourg
71	Future leaders international group	Egypt
72	Mbumba Lapaque	Democratic Republic of the Congo
73	WonderTree	Pakistan

74	Solercool technologies LLC(Trading as solerchil in Africa)	United States of America
75	Village Link Company Limited	Myanmar
76	Senetec Africa	Zimbabwe
77	DuoKey SA	Switzerland
78	Earlyone	Armenia
79	CCEducare Myanmar	Myanmar
80	I LOVESWAG MEDIA	Botswana
81	Heallax	Pakistan
82	SOOP Technologies	Pakistan
83	sarl idenet geolocalisation	Algeria
84	sarl idenet geolocalisation	Algeria
85	Orbit-Ed	Pakistan
86	Spectrum Analytics	Botswana
87	Idenet	Algeria
88	TAP ERP	Pakistan
89	Entnest	Switzerland
90	China Mobile Group Shanxi Co., Ltd. JinCheng Branch	China
91	Arabic computer systems	Saudi Arabia
92	HOPE HORIZON	Tunisia
93	stc	Saudi Arabia
94	Startup Business Gate	Palestine
95	stc	Saudi Arabia
96	Ajman free zone	United Arab Emirates

97	Athena psychiatric & de-addiction treatment center	Bangladesh
98	Agromedium Kft.	Hungary
99	Waselat AIMuffaker for educational services Co.	Palestine
100	Waselat AIMuffaker for educational services Co.	Palestine
101	Ajad	Palestine
102	OREL Vision	Pakistan
103	Nic	India
104	الطائف	Saudi Arabia
105	Ghana Chamber of Telecommunications	Ghana
106	SDAIA	Saudi Arabia
107	Globan Aviation Corp	Philippines
108	Kafaat	Saudi Arabia
109	Bechtel	Kenya
110	SDAIA	Saudi Arabia
111	深讯科技	China
112	Nabeel Yasin Training and Consulting Center	Yemen
113	Algeria Doctors Directory (Atibaa el djazair)	Algeria
114	MA SOLUTION	Algeria
115	Iprobooking	Algeria

Part 5: International Organization (30 Projects)

Case N°	Organisation Title	Country
1	ITU	Switzerland

2	ITU	Switzerland
3	The Arab Federation for Libraries & Information (AFLI)	Tunisia
4	Foundation for Environmental Education	Denmark
5	Asia Initiatives	United States of America
6	Test	Switzerland
7	United Nations University	China
8	Global E-Schools and Communities Initiatives-GESCI	Kenya
9	Save the Children US	United States of America
10	Save the Children US	United States of America
11	Ministry of Foreign Affairs	Liberia
12	SHEVA	Guatemala
13	International Telecommunication Union	Switzerland
14	Fundacion Abba Colombia	Colombia
15	Child Helpline International	Netherlands
16	Chayn	United Kingdom
17	CAWST (Centre for Affordable Water and Sanitation Technology)	Canada
18	Global Open Data initiative for Agriculture and Nutrition (GODAN)	Canada
19	Amplio Network	United States of America
20	Norwegian Refugee Council	Uganda
21	United Nations Economic Commission for Africa	Ethiopia
22	China Mobile Group Shanxi Co., Ltd.	China

23	United Nations	Indonesia
24	United Nations Development Programme	India
25	United Nations world food programme CERFAM KEPT	India
26	Fundacion Abba Colombia	Colombia
27	UXLI	Algeria
28	UXLI	Algeria
29	Bangladesh Red Crisent Society Sylhet Unit	Bangladesh
30	Shorter College	United States of America

Part 6: Other (60 Projects)

Case N°	Organisation Title	Country
1	K-12math.info inc	United States of America
2	K-12math.info inc	United States of America
3	China Unicom Network Technology Research Institute	China
4	Orenda	Pakistan
5	Millennium@EDU SUSTAINABLE EDUCATION	Switzerland
6	SkyFarms	Netherlands
7	inABLE.org	Kenya
8	Zimba Women	Uganda
9	Oman Technology Fund (OTF)	Oman
10	The Research Council	Oman
11	China Telecom	China
12	Ministry of Technology and Communications	Oman

13	Ministry of Education	Oman
14	Ministry of Agriculture & Fisheries	Oman
15	Gram Vaani Community Media (Onion Dev Technologies)	India
16	China Telecom	China
17	Yagiten Pvt. Ltd	Nepal (Republic of)
18	Women Economic and Leadership Transformation Initiative	Nigeria
19	ekShop, a2i	Bangladesh
20	Dicapta Foundation	United States of America
21	EADN	Algeria
22	EADN	Algeria
23	IT-Spark LLC	Armenia
24	IT-Spark LLC	Armenia
25	Job In Rwanda Foundation	Rwanda
26	pharmacy	Bangladesh
27	pharmacy	Bangladesh
28	Reality Unit sp. zo.o.	Poland
29	sciencecast	Kenya
30	LEVEL 33 AV sp. z o.o.	Poland
31	China Mobile Information Technology Company Limited	China
32	IEEE Standards Association	United States of America
33	BRIDGE Foundation	Bangladesh
34	Hello	Kenya

35	Society of Young Nigerian Writers	Nigeria
36	Sandstream Development Sp. z o.	Poland
37	GlosarioIT	Argentina
38	BizB	Pakistan
39	GSMA	United Kingdom
40	UNESCO Youth As Researchers	Lebanon
41	Dasa wisma	Indonesia
42	NIC	Saudi Arabia
43	mohmd	Saudi Arabia
44	Tales	France
45	مركز المعلومات الوطني	Saudi Arabia
46	مركز المعلومات الوطني	Saudi Arabia
47	tk	China
48	Chain	China
49	elm	Saudi Arabia
50	中通服咨询设计有限公司	China
51	الوقايه خيراً من العلاج	Yemen
52	Ministry of Tourism and Handicrafts	Algeria
53	CACOBATPH	Algeria
54	confido	Algeria
55	onaaph	Algeria
56	Suarise	Indonesia
57	APJII	Indonesia

58	Rosey Mozammel Womens College	Bangladesh
59	panchbariyahat s a dhakil madrasah	Bangladesh
60	Abbas Ali High School	Bangladesh

Part 1: Government

Case 1 - National Information Contact Center (311), Ghana

Title of the project, Contact Organization Name, Stakeholder type, Country
National Information Contact Center (311)Ghana Investment Fund for Electronic Communications Government Ghana
Beneficiaries

The General Ghanaian Populace are the main beneficiaries.

Basically the Centre provides the following;

- Provide information on Covid-19;
 - Provide real time information on clarifications on the imposition of restricted movement;
- and
- Receive feedback from Medical facilities on Personal Protective Equipment (PPE) issues

Other Benefits

Increased access by giving citizens one convenient number to call for all non-law enforcement Government services.

Spot trends early and allow Government to take corrective action before problems become major issues.

Elevate the citizen's perception of the Government's service delivery to "best of class" status.

Make information more readily available as appropriate, to the citizenry.

Improve citizen satisfaction and communication

Give citizens the choice of communication channels (SMS, WhatsApp, telephone, Internet, mobile App) by providing citizens access anytime and in many locations.

Provide citizens with self or agent-assisted help/service.

Personalize every citizen interaction and transaction uniquely to the citizen request.

Learn more about citizens' needs based on analysis of requests for service.

Website

<https://www.ogero.gov.lb/>

Description

The National Information Contact Center (NICC) (Info311) is a single-point-of-access non-emergency phone number that allows the public to call in for information on Government services / policies, make complaints, or report problems. More importantly, the system allows citizens to make inputs and also allows Government to "push" information to the citizenry as well as conduct survey to elicit feedback on Governmental issues.

This project is being implemented by the Ghana Investment Fund for Electronic Communications (GIFEC), the Ministry of Information and SIEGHARD acting as Technical partners.

On April 1st 2020, the Center was re-calibrated as COVID-19 Information Center to complement Government of Ghana fight in the prevention and eradication of the Covid-19 pandemic and primarily to facilitate the flow of information on the novel virus

The Centre has received Twelve Thousand, Three Hundred and Forty (12,340) calls between April 1-15, 2020. The Call categories include; COVID-19 Lockdown Issues (5129), COVID-19 Donation (119), COVID-19 PPEs Request (202), COVID-19 Emergencies (25), COVID-19 Information (4716), General Information (1960) and Prank Calls (189).

ICT Tools

A fifth generation contact centre solution-ZXNGCC

A multi-media contact center system that seamlessly allows the convergence of mobile, narrow band, fixed and data communications and processes data and content coming from different media.

Utilizes data and voice. Employs a multi-channel service model of the ff: - Voice interaction (by dialing 311); Messaging (sms, whatsApp interface -0555311311); Social media (Facebook, Twitter etc); and Mobile & Web- based applications for smartphones and PCs

Challenges

Excessive Prank Calls

We have embarked on an Education and Awareness programme aimed at sensitizing the public to stop the prank calls to give opportunity to the real people in distress and in need of governmental information on COVID-19 and other related matter.

Partnership

New Partners in the area of "Technological Assistance" are welcomed

Replicability

This project is replicable. It can be replicated in other countries. The basic facilities needed for the set-up such as access to Toll Free Number, establishing connectivity with Telecom Companies among others can easily be done and acquired through proper coordination with the Ministry responsible for Communications and the Nations Regulatory Company.

Sustainability

This project is sustainable. The 311 is a Toll Free Service. The Government of Ghana has officially sanctioned the Contact Centre as the main avenue and repository of information for the general public on governmental services and access to general information. And so there is an oversight responsibility from the Central Government which will ensure proper supervision to enable citizens have access real time information on government services and elicit feedback.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

AL C2. Information and communication infrastructure

AL C3. Access to information and knowledge

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|

Goal 11: Make cities inclusive, safe, resilient and sustainable

Case 2- Preventing Covid -19 is our responsibility

Title of the project, Contact Organization Name, Stakeholder type, Country

Preventing Covid -19 is our responsibility

OGERO Telecom

Government

Lebanon

Beneficiaries

All users, mainly students for online studies and corporate for work at distance

Website

<http://www.uke.gov.pl>

Description

To cope with the spread of the Corona virus, OGERO took a set of measures including doubling free of charge, the ceiling of Internet consumption and speed for the unlimited packages, for its users encouraging citizens to stay at home and conduct their work at distance and enabling students to continue their studies online.

OGERO have launched an awareness campaign calling for a reasonable use of the Internet, in particular by number of computers connected simultaneously or by reducing the quality of videos on YouTube. Noting that OGERO is maintaining local caches for the major OTT content (YouTube, Netflix, Facebook..) so its National Broadband network carried easily the surge in traffic. Some extra capacity was added where needed mainly between the major regions and Beirut to handle the additional demand.

OGERO is continuously upgrading its capacity on its submarine cables and increasing the size of its international peering links in order to meet the increasing demand of the Lebanese market but It is noted that 2 months after confinement our international links are not strained.

ICT Tools

Broadband
Challenges
The huge challenge was to cope with the additional demand but extra capacity was added to connect Beirut, the capital, with the major regions. Plans are made to expand international links.
Partnership
OGERO is cooperating with its usual partners

Case 3- Ensuring the Continuity of Telecommunications Services in the Age of Coronavirus

Title of the project, Contact Organization Name, Stakeholder type, Country
Ensuring the Continuity of Telecommunications Services in the Age of Coronavirus Office of Electronic Communications (UKE) Government Poland
Beneficiaries
All the consumers/users, especially those whose professional life fully or largely relies on fast broadband connection.
Website
http://www.uke.gov.pl
Description
The President of UKE urged telecommunications operators to take the necessary actions to guarantee service continuity by preventing and removing the effects of network congestion resulting from increased demand during the COVID-19 outbreak. Pursuant to Regulation 2015/2120 of the European Parliament and of the Council, during such threats as the coronavirus epidemic, the regular ban on the use of non-standard traffic management measures may be reduced. The Regulation allows measures to be taken in order to: <ul style="list-style-type: none"> - preserve the integrity and security of the network, of services provided via that network and of the terminal equipment of end users; - prevent impending network congestion and mitigate the effects of exceptional or temporary network congestion.

At the same time, we remind the public about adoption and publication of the Joint Statement from the Commission and BEREC on coping with the increased demand for network connectivity. Actions taken by operators in accordance with the above-mentioned premises arising from Regulation 2015/2120 and the Statement from the Commission and BEREC will not lead to a violation of the prohibition to apply traffic management measures.

ICT Tools

As a result of COVID-19, almost all the activities, both professional and leisure, shifted to the online world. Consequently, data usage increased dramatically. Since many individuals and entities rely fast connection, we want to make sure that the continuity of network and data transfer is provided. Therefore UKE asked telco operators to take necessary measures in order to equip the customers with whatever is needed. In this way we support the digital transformation but also, if not foremost, make sure that digital world is flawlessly functioning now.

Challenges

The biggest challenge for all of us now is increased demand for data transfer and reliable connection. Thus, UKE asked the operators for joint efforts to make sure that we can overcome these challenges as best as we can.

Partnership

As mentioned above, it is a joint initiative with the telco operators. Multistakeholder collaboration is a key, especially during this COVID-19 crisis moment.

Replicability

It is definitely replicable and similar actions could be taken in other regions and countries.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 16: Promote just, peaceful and inclusive societies

Case 4- #stayhome campaign

Title of the project, Contact Organization Name, Stakeholder type, Country
#stayhome campaign Office of Electronic Communications (UKE) Government Poland
Beneficiaries
Children and their parents – we are aware how many different challenges they are facing now, that is why we want to make sure that necessary tools and advice are provided.
Website
http://www.medu.ir
Description
<p>UKE came up with different tools and ideas to facilitate transition from school-based to home-based education during the COVID-19 outbreak. We offer students and their parents the three following cycles – their content will be updated on a regular basis so users can access new resources.</p> <p>a) #Talktochild – during this unusual time, most of us moved our activities to the virtual world. We work, learn, exchange messages and follow news in the network, we also enjoy online entertainment. This is an opportunity for parents to see how children use the Internet. We encourage you to read our articles about the effects of the Internet and social media on children and young people.</p> <p>b) Did you know that...? – the history of telephony, mail or the Internet is more complex than we think. Thanks to our campaign children will learn the most interesting facts, dates and characters related to telecommunications and post.</p> <p>c) I click sensibly! – our well established and known educational campaign is continued online! It is our proposal to spend time together at home. For younger and older children we have prepared puzzles related to telecommunications - among them on-line quizzes, crosswords, cross-sections and coding diagrams.</p>
ICT Tools
Digital transformation cannot fully happen without taking education into account. Learning and teaching are the basis for any progress to come. That is why we decided to provide students and their parents with tools and materials to ensure continuity of education. We use online platforms and various materials in order to facilitate education during this challenging time.
Challenges

The biggest challenge is the transition in itself – sudden shift of education from schools to homes. However, we want to take this challenge as an opportunity that shows us how important digital tools are and how efficiently we can use them, especially during this sort of unusual situation.

Partnership

We are happy to collaborate with schools and other institutions (also from different sectors) in order to ensure the continuity of education.

Replicability

It is replicable and we can already see many other institutions, entities, and countries implementing similar strategies by providing students (and teachers) with different tools available.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 5- Head of Smart school group982182283032

Title of the project, Contact Organization Name, Stakeholder type, Country

Head of Smart school group982182283032
Government
Iran (Islamic Republic of)

Beneficiaries

Students, teachers, Manager Schools and Parents

Website

<http://www.medu.ir>

Description

Social private Network

ICT Tools

SNA, LMS, Virtual Class. Skyroom, Adobe conect and MOOCs

Challenges

Ch1: Lack of proper telecommunication infrastructure and internet network

Solution: It needs to be upgraded in the long run

Ch2:Lack of access for all stakeholders due to financial problems of some families and some teachers

Solution:The government should provide these people with facilities

Ch3:Low internet speed

Solution:Increase in bandwidth by the government

Partnership

This is a new Project and soon Now!

Replicability

Yes

If we achieve the desired results. It is used in all kinds of events that may occur.

It can be used even in normal conditions.

Sustainability

Yes

As mentioned.

Our intention is to invest more in it

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-environment

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 16:

Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case 6- Joint Agreement Protecting Subscribers

Title of the project, Contact Organization Name, Stakeholder type, Country

Joint Agreement Protecting Subscribers
Office of Electronic Communications (UKE)
Government
Poland

Beneficiaries

All the Internet users, the most vulnerable in particular (e.g. elders who are not so tech savvy or kids who have not yet acquired enough digital skills to safely operate within the digital world).

Website

<https://adip.cdmx.gob.mx/>

Description

The President of UKE together with the Minister of Digital Affairs, NASK and Orange Polska, Polkomtel, P4 and T-Mobile Polska have entered into an agreement on cooperation in the special protection of Internet users against data phishing sites, including for personal data, during the states of emergency, such as an epidemic. The agreement will contribute to protecting consumer interests. In connection with the COVID-19 outbreak, Internet domains are increasingly appearing to mislead and phish for users' personal data as well as financial resources, in particular using SMS and MMS. This is facilitated by increased use of electronic communications during the widespread model of remote work and online education. The agreement is the basis for joint actions of UKE, the Ministry of Digital Affairs, NASK and operators to create and efficiently maintain a list of alerts regarding Internet domains that are used to phish for subscribers' data and funds. The register developed by NASK will complement UKE's current anti-fraud activities. UKE investigates, among others the phenomenon of consumer scams such as "wangiri fraud", which is provoking a subscriber to call back a missed international call, or impersonating another operator to induce a new contract.

ICT Tools

Digital transformation cannot happen without ensuring security and consumer/user protection. Meaningful and inclusive connectivity has to be rooted in safety in every possible form. Otherwise this process of transformation will rather increase existing gaps instead of bridging them. The joint agreement is a great example of collaboration between different

entities and showing that there is a common prevailing goal – protecting citizens and allowing them to equally benefit from the digital opportunities.

Challenges

Phishing activities are the biggest challenge in this scenario, that is why UKE and the other entities signed this agreement. We are aware that it requires constant action and being up to date with activities taken by phishers. Therefore we join our efforts with e.g. the operators so together we can be more effective.

Partnership

The agreement was signed in cooperation with the abovementioned entities. Consumer protection is our priority and we know it requires joint efforts, from each possible side (telcom operators, civil society, government, etc.). Collaboration across sectors is crucial in this case.

Replicability

It is replicable and gives a great example on how to collaborate with other entities. This sort of agreement and the following actions can be replicated in any other environment/region. It also shows how quick a response to a given crisis situation should be – all in order to protect the customers.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 7- COVID-19 Emergency Response

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Emergency Response
Digital Agency for Public Innovation
Government
Mexico

Beneficiaries

The beneficiaries are the residents of Mexico City who are in need of assistance, whether it be because they are in high risk of infection or are actually infected with COVID-19, lost their jobs due to the pandemic, are owners of a microenterprise that has been economically affected, or are just looking for credible, official information regarding the current situation. The screening tool, as well as the information on available hospital beds are both available in English as well, as to make sure the foreigners living in the city and international visitors also make use of these tools.

Website

<http://www.bcc.gov.bd>

Description

Mexico City has developed a thorough strategy consisting of several coordinated actions that aim to solve some of the issues derived from the pandemic. The automated screening model was launched on March 17th, 2020, to provide attention to people that suspected could have coronavirus. Users of this service enter their contact information and symptoms, following an automated flow of questions. According to their responses, the system formulates a general diagnosis. This system allows for better patient monitoring and follow-up care in the event symptoms worsen over time and is available via SMS, online, through the city's official app, and by dialing the city's call center, Locatel.

In addition to this service, more than 6,000 medical kits have been delivered to people whose cases have been confirmed as coronavirus, to help keep sick patients from leaving their homes. Also, a website shows the availability of hospitals beds capable of treating COVID-19 cases patients in Mexico City and the metropolitan area. The objective of this tool is to limit the time patients needing immediate care spend in transit.

The forms for applying to the Unemployment Insurance Program are now available online to people who have lost work as a result of the health crisis.

These and other actions taken by the city's government can be consulted in the information site covid19.cdmx.gob.mx.

ICT Tools

The automated screening model alleviates the pressures on the health system by using an automatic question flow that gathers information on the people that might be infected with coronavirus. Although this tool was specifically developed in the context of the current pandemic, we now consider it one of the assets of the Digital Agency, since it can be adapted to future health crises.

The same can be said about the epidemiological model, which shares with the general public the theoretical bases used to make estimations on the scope of the pandemic in Mexico City and the metropolitan area .

Also, the hospital availability tracker has proved to be an efficient means to avoid having patients visit more than one hospital looking for an available bed, therefore diminishing the

risk of contagion. This tool is now another asset developed by the Digital Agency that will no doubt continue to be of value once the pandemic is over.

Challenges

The main challenge has been to keep up with the pandemic and provide an adequate and timely answer to the emergency, given the limited resources available. The needs change as the pandemic evolves, and it is necessary to make the adaptations to the digital tools in a very short time. The developers are working around the clock and it has been a challenge to count on enough personnel to keep up with the needs of the city, providing reliable and updated information that contributes to the wellbeing of the population.

Another significant challenge has been to make it possible for the different platforms to interoperate and share reliable, updated information that makes sense when compared to the data generated by other sources. It is also necessary to process the information gathered almost in real time as to make sense out of the numbers and make decisions accordingly.

Partnership

We are looking for partners that could provide human and digital resources to analyze and make an efficient use of the data gathered through all the platforms that have been put to place. Given that the resources we use to operate are public, it is challenging to engage private partners in the operation of the programs. However, it would be useful to count on partners to analyze and draw conclusions out of the data available, in order to make better decisions.

Replicability

This project could be replicated in cities that face challenges to:

- provide medical attention to all potential patients and therefore are in need of an automated screening tool
- provide information to patients as to where they might receive medical attention
- allocate resources for people who have lost their jobs due to the pandemic
- allocate resources for entrepreneurs whose businesses are struggling to continue operating due to the pandemic
- provide face-to-face attention to people who have been victims to certain kinds of crimes but are unable to leave their homes

Sustainability

It is, since the interphase that has already been developed for the purpose of providing information on the hospital availability could continue to be in place after the pandemic is over, and improved so that it can be updated automatically with the information provided by the medical centers.

The automated screening model could be later adapted for other ends, whether health-related or not.

New procedures that formerly could only be done in person are now available online, thus broadening the scope of digitization in the city. These new digitized procedures will continue to be so once the pandemic is over.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case 8- COVID-19 Tracker with localized content

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Tracker with localized content
Bangladesh Computer Council
Government
Bangladesh

Beneficiaries

Developed in a bid to provide authentic information service to citizens of Bangladesh. They include

1. General People
2. Journalists
3. Scientists and Statisticians
4. Decision Makers

Benefits:

- * Corona infection related information can be collected and displayed to the user within shortest possible time.
- * Relevant information from all over the world including Bangladesh can be presented easily and concisely through maps and tables.
- * Data can be automatically collected and updated from time to time without the need for manual intervention
- * It is also effective for the general public as a result of provision for displaying or searching in Bengali.
- * Research and Analysis of data / information can be easily done on the basis of the data and statistics provided.

Website

<https://www.gov.uk/>

Description

It is basically a web based data / information collection system that shows the collected data through maps. It collects information on corona virus infections from reliable and world-renowned portals or systems. The data / information collected here is open to everyone. It exposes API (Application Programming Interface) to be integrated with external systems, and it's connected to the National e-Service Bus platform. Therefore, any other system or organization (if needed) can get updated information on Corona virus infections in real-time. The main purpose of this system is to ensure authentic information delivery for the citizens of the country.

Salient Features:

- User Interface in Bangla
- Collects Data from authenticated National/International sources (IEDCR.gov.bd, worldometers.info, www.jhu.edu)
- Focuses Bangladesh statistics at default page loading
- View comparison & statistics of multiple countries in chart/graphically
- Search facility in Bangla/English
- Refreshes automatically in every 5-10 minutes
- Facility to view full screen map, bubble map and change map legends
- It provides mobile friendly view also
- Option to search, sort, filter and export data from tabular format

ICT State minister inaugurated the tracker on 20 Apr 2020. It has so far got 3,40,000+ page visits and it has been shared in social networks 10,000+ times. Some local organizations are using it's API for different needs.

ICT Tools

It's the FIRST EVER Map based graphical COVID 19 Tracker in Bangla Language. It DOESN'T track covid symptoms or suspected cases, it tracks covid infections/contagion related data. It uses following tools/technologies -

1. Java based Web Application
2. HTML5
3. Node.js
4. JSON
5. Map and Chart tools

As it provides authentic and reliable data and information, there many peoples and citizens of Bangladesh who visit the site regularly. We observe 7000-8000 page visits on each day. Also, Provides domestic organizations or citizens with the ability to view data on Corona infections and to prepare various reports and use it for other useful purposes. It also enables individuals or organizations to make policy-making decisions with the help of relevant information. It shows up-to-date information from reliable and world-renowned information sources and makes those usable. The Tracker presents authentic information to the people of the country quickly.

ESRI Bangladesh has contacted us showing interest to assist us to extend COVID 19 tracker. Some local freelancers have shown interest to develop iOS /Android app based on the tracker. Wikipaedia Bangladesh has mentioned URL of the tracker as an information source in it's article related to covid 19.

As the tracker provides Covid infections info of different countries, so it can be used internationally.

Challenges

We faced several challenges during development and implementation of the COVID 19 tracker

1. Authentic source of data: Developing such type of tracker may not be a big deal, but authentic source of data is one of the challenge. Local authentic source was main challenge as we show segregated infections count for smaller geographic area (i.e District) of Bangladesh. As a result, it took time to incorporate the feature of showing segregated infections count of Bangladesh.
2. Availability of API: It was another challenge. Our COVID tracker doesn't require manual data entry. Manual data entry may introduce human errors which may create big problem for a govt web site. Unfortunately, we are yet to get API from the local source IEDCR authority, hence we have to process data from IEDCR and upload to our portal after quality check/review
3. Infections count for more granular geographic area: We have got feedback to show infections count for more granular geographic area (i.e Upazilla) of Bangladesh. However, IEDCR doesn't publish such data in public. Also, there is no other reliable source. There are news in newspapers in this regard, but it will require to employ more workforce to collect and process such data. But there will be question about it's authenticity and reliability.

Partnership

The Tracker is developed in partnership between

1. ICT Division (ictd.gov.bd) and
2. Bangladesh Computer Council (bcc.gov.bd)

However, as we take data from IEDCR (Institute of Epidemiology, Disease Control and Research), it will be better to develop partnership with them. In that case, we can get data via API in real-time. Alternately, BNDA team can help IEDCR to expose API from it's portal/website. Talks with DGHS (Director General of Health Services) is in progress also, to extend the partnership further for the betterment of all citizens of Bangladesh.

Replicability

The Tracker is replicable to any geographic region of the world. However, it may require some customization and localization. It shows covid infections data of different countries and comparative visualization of such data of different countries. This is a common need for people of any country, hence it can be replicated after incorporating localization changes.

The tracker also shows infections data of states/smaller geographic areas of Bangladesh. Each country maintains similar infections data for it's states/territories. So, the tracker can be customized and make usable for other countries also.

In generic sense, this project is replicable for any disaster prevention scenario where quick flow of information needs to be established.

Sustainability

Our ICT ministry has accepted the tracker as an innovative product. As a result, ICT state minister inaugurated the tracker on 20 Apr 2020. Also, The tracker is focused in the national platform for Corona information and activities in Bangladesh. Also, ICT minister has accepted future improvement opportunities of the COVID 19 tracker. So the tracker now has an official roadmap and BNDA team is officially responsible to maintain and upgrade the tracker dedicatedly.

ICT ministry and BCC can impose subscription based service to make the COVID 19 tracker financially sustainable. It presents users latest and historical data related to covid infections, both for Bangladesh and other countries of the world. So it will be helpful for researchers and journalists, hence subscription based service seems a viable option for future.

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 17: Revitalize the global partnership for sustainable development

Case 9- The UK's Government Digital Service (GDS) support to the COVID-19 response

Title of the project, Contact Organization Name, Stakeholder type, Country

The UK's Government Digital Service (GDS) support to the COVID-19 response
Government Digital Service (GDS) - GDS is a unit of the Cabinet Office
Government
United Kingdom

Beneficiaries

We are also using our existing digital systems, services, skills and standards to rapidly create new services. For example:

An Extremely Vulnerable Persons Service, which is managing the needs of over a million extremely vulnerable people who require support in order to self-isolate. This service allows citizens identified as vulnerable by the National Health Service (NHS) to notify the government if they need help accessing essential supplies and support. Users will have received a link to the service in a letter or a text message from the NHS, or been advised by their GP to fill in the form. They can fill the form in themselves, or someone else can fill it in for them. There is also an interactive voice response (IVR) automated phone service provided by AWS. This is for users who do not have access to the internet.

A service to allow business to let government know what help they can provide. Our minimum viable product (MVP) for this focused on personal protective equipment.

<https://www.gov.uk/coronavirus-extremely-vulnerable>

Website

<http://www.bigm.adalet.gov.tr/>

Description

GDS have been at the forefront of the UK's response to COVID-19. Our existing services have been in high demand. They are ensuring citizens remain informed and able to access vital services. Across the digital, data and technology function across government, 39 user facing digital services have been developed as part of the COVID-19 response, with a further 40 in the pipeline.

Examples of our existing services operating at scale and at pace include:

[GOV.UK](#), the place to find government information and services online, is supporting the design of a range of new products (for example their latest is [gov.uk/ask](#), where citizens can ask questions at the daily press briefings). The [GOV.UK](#) content team is also working closely with the Prime Minister's Office to organise the management and improvement of all coronavirus content. Visitors to [GOV.UK](#) per week have gone up over 600%.

<https://www.gov.uk/ask>

[GOV.UK](#) Notify - the government's messaging platform, has been used for National Health Service (NHS) text message support for the extremely vulnerable and those isolating at home; business continuity messaging for public sector staff; and FCO travel alerts. Over 250 local authorities and 173 services use Notify. At its peak, over 8 million SMS messages were sent using Notify, compared to a daily average of 150,000.

[GOV.UK](#) Verify, used to prove identity online, has also seen a serious increase in usage linked to the unprecedented demand for government services (in particular Universal Credit). Verify is receiving approximately 500% more traffic from certain services, and this has risen to up to 900-1000% at its peak.

[GOV.UK](#) PaaS is a cloud hosting platform that allows departments to deploy applications without infrastructure specialists. PaaS has been used to support the build of key services such as the Extremely Vulnerable People Service.

ICT Tools

So much of the UK's COVID response effort is layered onto years of hard-learned lessons and battles for funding of common components and standards. The UK's experience demonstrates that investing in getting the basics right is what can ultimately strengthen countries' abilities to build effective and resilient digital projects in the long term.

The UK's COVID-19 response highlights that good digital projects are based on much more than just technology, but on strong digital policy, services and standards and embedded digital, data and technology skills across the public sector. We've found that digital-ready teams have proved significantly more resilient during the COVID period - for example, adapting to remote working and the challenge of joining up across government.

51 new digital services have been stood up in the last two months by the UK Government with 50 more currently in development. 40 of those are using GDS' [GOV.UK](#) platform across 13 departments.

[GOV.UK](#) Notify has been used on 3 new NHS services communicating key messages to vulnerable people and those self isolating at home.
7 services are hosted using GDS' Platform as a Service.

Challenges

Our work on COVID-19 is going to continue for some time.

To be able to meet the heightened demand for our existing and new services, we've had to reprioritise and adapt our ways of working by redeploying large numbers of staff from across the organisation to the frontlines of new and existing services.

We have published new guidance on conducting user research remotely while people must stay at home because of coronavirus.

<https://www.gov.uk/service-manual/user-research/conducting-user-research-while-people-must-stay-at-home-because-of-coronavirus>

Our standards and assurance team have been continuing their work by running remote service assessments.

We have ensured that Digital, Data and Technology skills are accessible by other government departments through establishing a DDaT COVID-19 Working Group. This has enabled all departments and devolved administrations to have a single, forum to articulate needs, risks and issues. GDS use this to coordinate responses, capture requests and engage or connect industry with demands as needed.

We are collating data on new services being built in response to COVID19 as well as areas where there has been a considerable increase in effort. This work aims to identify common problems and areas of best practice being solved across government and get a picture of all services and efforts, both internal and user-facing.

Partnership

The COVID-19 crisis is an unprecedented situation requiring a coordinated response and large scale, cross Government wide collaboration in the Digital, Data and Technology Profession. We've also built new relationships with some parts of government because of this.

One of the services allow business to let government know what help they can provide. Our minimum viable product (MVP) for this focused on personal protective equipment.

<https://www.gov.uk/coronavirus-support-from-business>

We have created a GDS COVID-19 Resource Hub that triages demand and funnels people or information to areas in need, drawing on a range of internal and commercial channels. The Resource Hub has triaged 23 requests from departments looking for support with COVID19 services across government. We are mapping this against 50+ offers received from industry and leading on the resourcing of staff for priority services in NHSX (NHSX is leading the largest digital health and social care transformation programme in the world). The UK's Foreign & Commonwealth Office (for the repatriation of UK nationals), Universal Credit and the Vulnerable People Service.

The Crown Commercial Service (CCS) 'Working From Home' Task Force collaborates with the GDS DDaT COVID-19 Working Group to ensure a coherent cross-functional response to meet procurement demand with suitable and available supply.

Replicability

The government's response to COVID-19 is going to develop and change over time, and as government plans for the lockdown are revealed. However, at its core its built on our existing digital infrastructure, so everything that has been done, can be done again, at scale and at pace.

[GOV.UK](https://www.gov.uk) particularly will remain high profile, not only because of the crucial advice for citizens but because we will likely continue to host new services at speed, which are also iterated at speed.

<https://www.gov.uk/>

For example, since GDS set up the landing page on [GOV.UK](https://www.gov.uk) new services have been developed including - Get coronavirus support as a clinically extremely vulnerable person and Offer coronavirus (COVID-19) support from your business. These services can be viewed from the landing page.

<https://www.gov.uk/coronavirus-extremely-vulnerable>

<https://www.gov.uk/coronavirus-support-from-business>

[GOV.UK](https://www.gov.uk) now streams the government's daily press conferences live from [GOV.UK](https://www.gov.uk) Since going live, these products have been continually iterated and scaling up continues.

The landing page is essentially the campaign landing page for all government content on coronavirus information and brings together wider signposts to existing and new content and allows [GOV.UK](https://www.gov.uk) to iterate at pace and move content around.

Sustainability

The sustainability of what we have done is grounded in the fact that the bulk of our response has been built from existing digital services, standards, skills and policies ('digital foundations'). The UK's COVID-19 response has demonstrated the critical importance of having strong underlying cross-government digital foundations that can be a springboard for innovation and moving at pace in a crisis. It is also what will enable us to scale back up in the face of future shocks. However, we have also learnt new lessons and identified areas for improvement which we have either rectified as we've moved along, or identified them for further work in the future.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C7. ICT applications: benefits in all aspects of life – E-science|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 16: Promote just, peaceful and inclusive societies

Case 10- Our Actions Against Coronavirus (COVID-19)

Title of the project, Contact Organization Name, Stakeholder type, Country

Our Actions Against Coronavirus (COVID-19)
General Directorate of Ministry of Justice of Turkey
Government
Turkey

Beneficiaries

Our primary beneficiaries are mainly judicial workers and lawyers. We also serve to the Ministry officials. We develop and host e-justice services.

Website

<https://www.ama.gov.pt/>

Description

With the remote working model, technical personnel were enabled to continue their planned work at their home with the remote working model.

Remote desktop solution allows them to access everything they need for a productive working day. All the meetings started to be held via teleconferencing and video conferencing. Pre-planned or needed meetings are currently hosting live online conference system.

All IP telephones in office call forwarded to GSM number of our staff. COVID-19 awareness trainings were prepared and offered to our staff through our e-learning portal.

ICT Tools

VPN software is used for accessing intranet as for remote working. e-signature or authorized tokens used in VPN connections. Applications such as authorized storage environments, communication / video conferencing tools, project management tools are used when remote working.

Our IT department provides e-signature or admin tokens to the staff who will use the VPN service. And also all the e-signature which needs to be renewed because of e-signature certificates have expired are renewed.

All the online meetings fulfill the principles of confidentiality and membership of authorized staff.

Challenges

We have to take actions against COVID-10 within a limited time. That is the main challenges. We overcome this challenge with an organized working team efficiently and to minimize repeated activities.

Sustainability

Yes

Action Lines

AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-employment

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 11- ePortugal webportal (single digital gateway for public services)

Title of the project, Contact Organization Name, Stakeholder type, Country

ePortugal webportal (single digital gateway for public services)
Administrative Modernization Agency (AMA)
Government
Portugal

Beneficiaries

The portal is available to everyone and was developed taking into consideration usability and accessibility requirements.
The main benefits of the portal are the ability to access all digital public services in a central platform and to perform a wide array of transactional services in a secure and simple way. on any device and on a 24/7 basis, thus minimizing the risk of infection by covid-19.

Website

<https://www.moh.gov.om>

Description

Services and information were enriched in ePortugal, the Portuguese single digital gateway for public services, which was quickly adapted to provide new information, tutorials and services for citizens and companies, as onsite public delivery was closed and only available by pre-booking to critical services.
As such, ePortugal is the privileged vehicle to provide both citizen and businesses the services they need in this context of social distance.
There are a wide range of transactional services that can be performed on the ePortugal portal, including changing the address on the Citizen Card, requesting birth, marriage and/or death certificates or requesting over 500 business licenses and permits, to name just a few.

Additionally, the portal offers specific service channels for citizens and businesses, namely the Citizen Call Center and the Business Call Center (available by phone and email) and SIGMA, a chatbot based on artificial intelligence that assists the user and provides him/her with information about the services available on the portal.

It's worth mentioning that ePortugal was developed with a focus on accessibility and usability, adapting to any type of device and presenting a simpler and clearer language.

ICT Tools

ePortugal is the single digital gateway for public service delivery for both citizens and businesses, and is based on Liferay DXP, with a responsive design that allows optimal access from any device. Also, it was developed taking into consideration usability and accessibility requirements. - since July 31, 2019, it has the usability and accessibility silver seal, which identifies and promotes the implementation of the best practices in terms of accessibility and usability in websites and apps that are meant to simplify the use of online public services by the citizens, and more specifically citizens with disabilities.

Being run by AMA, the national agency responsible for administrative modernisation and digital transformation, under the tutelage of the Minister of the Presidency and of Administrative Modernisation, and more specifically under the Secretary of State Assistant and of Administrative Modernisation, ePortugal uses several digital infrastructures and platforms, which are at the core of the Portuguese digital transformation efforts:

- national eID and authentication provider (autenticação.gov, both with the Portuguese Citizen Card and the Digital Mobile Key)
- Interoperability platform - iAP (for system integration with social security, tax authority, etc.)
- the national Catalogue of Entities and Services (central repository of information about public organisations, services, points of care, websites, apps, etc.)

In terms of content management, the portal covers more than 2500 services (1200 for citizens and 1300 for companies), each with its own website. The content management system allows the creation, organization, elimination and publication of content in an agile and real-time way.

Challenges

One of the most relevant lesson learned is the importance of involving the potential users and other stakeholders since the development phase. It's essential to always keep in mind who's the main user of a portal such as this and who provides the information to be made available; therefore, it is important to engage them and work with and for them since the very beginning.

Throughout the development of the project, there were also postponements due to the integration of several applications with the portal - the ePortugal portal has replaced the previous version of the Citizen Portal, the Entrepreneur's Desk and the Citizen Map as the central channel to access and deliver electronic public services in Portugal. Therefore, it had to integrate several applications that were used to update those three portals with the Catalog of Entities and Services, and then connect the Catalog with the ePortugal.gov.

Partnership

The portal was developed by AMA, which is also the entity responsible for coordinating and managing the ePortugal, having the responsibility to obtain, update and upload content of services and entities of all the Public Administration. As so, all the entities envisaged are part of the process - there are more than 1,000 services available on the portal, and those are provided by about 600 entities, from both the Central Government, Local Government and private entities.

Replicability

A project like ePortugal implies the observation of certain conditions, including high-level political commitment, strong and permanent collaboration between the different areas of governance and investment in the various facets of interoperability. For instance, the services published on the ePortugal.gov portal are provided through the Catalog of Entities and Services (CES), which was built around the core public service vocabulary. This catalog acts as a central repository of information about public organizations, services, face-to-face points, websites, mobile applications, etc.

One of the advantages of this catalog is that, in the future, it can be used to provide information to several other portals regarding the Portuguese public services. The CES, along with the ePortugal portal, is managed by AMA.

Sustainability

As it was developed within the SIMPLEX program (the national programme for administrative simplification and modernization), the ePortugal benefits from strong political commitment, which is essential in a project that integrates so many services and needs the cooperation of so many different entities.

Also, the portal draws from the pre-existing human resource structure located at AMA, which is an advantage since AMA had the know-how in several of the needed areas for the development and maintenance of the Portal (technology, communication, legal, usability, etc.).

The fact that AMA also provides the Citizen and the Businesses Contact Centres, providing assistance to the users of the portal is also a condition for success and a way of not digitally excluding potential users, helping the ones that are not very comfortable with the digital services.

Action Lines

AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life — E-government

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 16: Promote just, peaceful and inclusive societies

Case 12- Tarassud Plus

Title of the project, Contact Organization Name, Stakeholder type, Country
Tarassud Plus Ministry of Health Government Oman
Beneficiaries
<p>Infected person and quarantined individuals through a medical algorithm that can analyze an individual's condition through questions. It guides them whether to stay at home in quarantine, establishes/schedule communication with one of the specialized medical institutions, or refer them urgently to the nearest medical institution, if needed.</p> <p>The system is used during primary infection indicators by spotting only the cases that require medical care and directing them to medical institutions. So, it supports the overall medical system by minimizing and scheduling visits to medical institutions, focusing only on cases that need a medical examination</p>
Website
http://www.icta.lk
Description
<p>Tarassud Plus is an integrated platform having International Standards developed by highly qualified local SME.</p> <p>The monitoring platform enhance the Ministry of Health's current monitoring system by diagnosing, following up, and tracking the medical condition of individuals infected with COVID-19, who are under quarantine, by using artificial intelligence technology and advanced tracking technologies.</p> <p>The platform consists of two main systems – the medical test program and the registration and follow up system to check their medical condition on a daily basis. It also monitors the spread of the pandemic and sets priorities by using Artificial Intelligence technology to minimize the intervention of medical personnel in early quarantine stages.</p> <p>The system is used during primary infection indicators by spotting only the cases that require medical care and directing them to medical institutions. Hence, it supports the overall medical system by minimizing and scheduling visits to medical institutions, focusing only on cases that need a medical examination.</p>
ICT Tools

The platform consists of two main systems – the medical test program (qScout) to register individuals and follow up the development of their medical condition on a daily basis. It also monitors the spread of the pandemic and sets priorities by using Artificial Intelligence technology to minimize the intervention of medical personnel in early quarantine stages. The Second system is a medical supervising system, which is a tracking, and follow-up system for infected and medically quarantined individuals. It uses a mobile app, along with a hand bracelet to determine the patients' location through their mobile phones or any other mobile devices. The system also allows the authorities concerned to automatically identify the quarantined person through face detection technology.

The authorities in charge of the app can identify the infected persons once they get near them. The system also allows the authorities concerned to automatically identify the quarantined person through face detection technology.

Partnership

Information Technology and Communications Group, eMushrif company, and Oman Broadband company. It comes as part of initiatives supervised by the State's General Reserve Fund.

Case 13- Continuous Education for School Children through multi channel approach amidst COVID-19

Title of the project, Contact Organization Name, Stakeholder type, Country

Continuous Education for School Children through multi channel approach amidst COVID-19

Information and Communication Technology Agency

Government

Sri Lanka

Beneficiaries

Beneficiaries of this programme, in long term, will be the entire student population in Sri Lanka, who could not attend their normal class-rooms because of the COVID-19 situation. Through this they find a medium to continue their studied without interruptions. From the positive reviews received it was apparent the students took this novel attempt useful and user-friendly.

eThaksalwa platform has been consumed by more than 50,000 unique students per day with a hit count exceeding 4 Million and keep on increasing.

In Phase I, the only one already commenced, students of 16 schools amounting to 16,000, with an average of 1,000 students per school, directly benefit from the project. Moreover, these solutions have been adopted in National Colleges of Education (teacher training institutes) for their training purposes.

Website

<http://www.icta.lk>

Description

Government of Sri Lanka's decision for all schools not to conduct regular classes for COVID-19 period lead to an array of problems. Teachers found it difficult to cover the necessary syllabi and ensure continuous flow of learning. Responding to this need, multiple platforms were used to offer educational content online. The most common was the transmission over broadcast media through television channels. A dedicated continuous live TV channel on five weekdays.

A TV program incorporated to state electronic media and freely available satellite TV networks. included following:

- i) Live interactive teaching sessions
- ii) Revision programs
- iii) Content from National Institute of Education repository and Sri Lanka Rupavahini Corporation (National TV station) repository
- iv) Nenasana education TV content
- v) eThaksalawa, an online education channel, content

The eThaksalawa, a Learning Management Solution (LMS) has been scaled up and delivered the relevant content. Moreover, new educational tools have been introduced and used for teaching and learning process.

Information and Communication Technology Agency of Sri Lanka (ICTA), apex government body for ICTs, introduced a video conferencing platform to assist the students through this innovative real time learning feature. This feature was piloted successfully in 16 Schools in the country with high adoption. This facility was integrated with the eThaksalwa portal with additional tools for teaching online and being implemented island wide. ICTA also introduced a comprehensive, widely used collaboration tool to ensure continuous communication among education authorities and schools.

ICT Tools

National TV Broadcasts: Dedicated time slots in both state and private media channels, to cover all syllabus requirements, supported by the Ministry of Education.

Online interactive web platform: eThaksalwa platform has been designed to cater the increasing demand on education content for students at all levels. This platform enhanced with new features and the video conferencing facility provided by ICTA is also embedded to enhance the teaching and learning process.

SMART text book which has been developed with the consultation of ICTA by Education Publication department has been used heavily during COVID19 lockdown period.

Challenges

Key challenges of this project were:

- 1) Unavailability of online facilities, (both connectivity and devices) over the island; so it created an unequal environment for the students to continue their studies
- 2) Unavailability of material readily available to be broadcast, shared with students (This was partially addressed by material available in the e-libraries created for similar projects previously)
- 3) Cost of connectivity: This cost component is significant given the low income rates of some sections of the society (The students were supposed to use online facilities for a relatively long period.)

These challenges, though crucial, could not discourage the project directors. The intention was to deliver the content to as much as students possible, even if that does not mean perfect coverage. While the virtual delivery could not match the strong features of traditional face-to-face delivery, the students are used to, it was apparent the students took it as a strong feasible alternative.

As for the cost of connectivity, Telecommunication Regulatory Commission of Sri Lanka, with the assistance of all telecommunication firms, supported the students with free access to the channel.

Partnership

We look for partners from government agencies of other countries engaged in education activities or any donors.

Replicability

All programs imitated can be replicated easily if;

- i. Proper engagement models with the private sector are clearly documented and agreed upon
- ii. Ensuring disparity of ownership of devices is reduced
- iii. Ensuring equal connectivity facilities for all children

Sustainability

Since the government of Sri Lanka backs all these initiatives through the Ministry of Education and Information and Communication Technology Agency there is a clear road to sustainability.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 14- Supporting Sri Lanka Technology Startups during COVID-19

Title of the project, Contact Organization Name, Stakeholder type, Country

Supporting Sri Lanka Technology Startups during COVID-19
Information and Communication Technology Agency
Government
Sri Lanka

Beneficiaries

The aim is to collectively lobby on behalf of the technology startups and freelancers in the country. The identification of the market serviced and the maturity of the startup will provide information in order to streamline Government relief during and post COVID-19.

Website

<http://www.icta.lk>

Description

The discussions with Government authorities on supporting startups usually end up with the question, what is a startup? Who are these startups? since SME's were well known the setting apart of startups particularly technology startups which were doing remarkably well in the ecosystem was a requirement. Technology startups have been at the forefront enabling businesses and citizens to operate in the new normal during this pandemic situation. Delivery platforms, digital health, digital education, digital commerce, work from home solutions and Finance technologies were enabled by startups. ICTA estimates a thriving startup ecosystem will result in a minimum of USD 1 billion of foreign exchange revenue by 2025 brought in by exports, investments and startup exits. Therefore all possible measures taken to save these startups now will determine our socioeconomic development in the next 5 years. The gig economy was much prevalent across the country with technology freelancers increasing by the day. For this category, Work from Home was not new but normal. There was much synergy between tech startups and tech freelancers but lacked a common platform. With the view of fulfilling above need, StartupSL initiative was born with the objective of gathering technology startups and freelancers to www.startupsl.lk platform enabling representation of their unique offerings.

ICT Tools

Web development tools, Social Media platforms for activation, SLACK for volunteer coordination, Trello for collaboration, Anydesk for remote support, Whatsapp for communication, JITSI meet for video conferencing, Mailchimp/zoho mail servers for external communication

Beneficiaries: The aim is to collectively lobby on behalf of the technology startups and freelancers in the country. The identification of the market serviced and the maturity of the startup will provide information in order to streamline Government relief during and post COVID-19.

Challenges

The buy-in and recognition from the ecosystem is the key challenge of such a venture. The platform has to be backed by sound initiatives and partnerships in order for the startups and freelancers to gather around it.

Partnership

We look for organisations involved in similar types of projects for collaboration.

Replicability

This is an initiative which is imperative for the future of the country. Developing the website with required functionalities for onboarding is stage 1 but the most essential is the roadmap of the platform and what it promises for its beneficiaries. This is unique for each ecosystem.

Sustainability

StartupSL was an initiative by the then Ministry of Digital Infrastructure & Information Technology and is currently being operated under the Digital Infrastructure and Information Technology Division, Ministry of Defence, Sri Lanka together with ICTA and the volunteers of the startup community. Even with the political changes, the Ministry continues its support, while ICTA has ensured the management of the platform while coordinating with a number of volunteers.

Action Lines

AL C4. Capacity building|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-employment

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 10: Reduce inequality within and among countries

Case 15- Sri Lanka's Government meets at meet.gov.lk amidst COVID-19

Title of the project, Contact Organization Name, Stakeholder type, Country
Sri Lanka's Government meets at meet.gov.lk amidst COVID-19 Information and Communication Technology Agency Government Sri Lanka
Beneficiaries
<p>Virtually the direct beneficiaries are all state sector employees, amounting to nearly 1.5 million with the entire population indirectly benefit from the activity. However, since the project is still at its inception, not all expected to reap the benefits. In the first rounds it was estimated the number of senior staff who used the facility in multiple organizations were nearly 4,000. They found this, an easy to use cost free facility to exchange their information and views in the middle of a biological crisis that seriously enforced social distancing. Since this has been fully hosted locally at Government cloud, whoever in government offices are accessing it through the Government owned network called Lanka Government Network. More over all key telecom operators white listed this platform so that any government officer can communicate using meet.gov.lk free of charge.</p> <p>With the success of this platform, various other segments (associations/NGOs) have also been requested the access this solution, Hence, open.meet.gov.lk has been established for that purposes.</p>
Website
http://motc.gov.lk
Description
<p>With the entire working population in Sri Lanka, except for few delivering essential services, restricted to their houses as a result of strict social distancing enforced by the Government, the need for reliable, secure and fast communication has arisen as never before. Since government machinery was expected to continue their operations without disruption it was essential to facilitate it through the adoption of suitable tools and technologies almost immediately. In this unprecedented situation Information and Communication Technology Agency (ICTA) has introduced a novel platform based on a popular open source software. The usage is free of charge, with telecom companies waiving the connectivity fee to the site.</p> <p>To host a meeting at meet.gov.lk, a user only has to click on the link to open page on the web browser (Firefox and Chrome are the preferred browsers). After authenticated with valid user name/password provided by ICTA to complete the hosting process, a user can share</p>

the room name (or complete URL) with the remote parties. While one is connected, a desktop window (presentation) can be obtained if necessary. If a user needs a password for a room, he/she can add it, and share it with the remote parties.

ICTA has facilitated continuously to increase the adoption through dedicated consultation and also produced user guides to use this platform.

ICT Tools

The platform, <https://meet.gov.lk> as a free and easy to use video conferencing platform based on Jitsi (open-source project) for Sri Lanka's state sector. It allows one to easily build and deploy secure video conferencing solutions. At the heart of Jitsi are Jitsi Videobridge and Jitsi Meet, which let one conduct conferences on the internet, while other projects in the community enable other features such as audio, dial-in, recording, and simulcasting.

The said platform, meet.gov.lk, associates all features of Jitsi, which includes passing everyone's video and audio to all participants, rather than mixing them first, resulting in lower latency, better quality and, a much more scalable and inexpensive solution. The solution is compatible with WebRTC, the open standard for Web communication and supports advanced video routing concepts such as simulcast, bandwidth estimations and scalable video coding.

This was further extended to K12 education where it was adopted highly successfully and continually being used for teaching and learning process in schools.

Challenges

The biggest challenge was state sector not fully prepared for the transformation. Not all employees were tech-savvy. Some of them could not even set up the facility from their ends following few simple instructions. This challenge was overcome by the sheer necessity. The situation enforced them to join video conferences as no activity would have progressed, if not. Application of a proper adoption strategy which was focused on building trust, dissemination of knowledge and skills with hands on support was implemented at a rapid phase to ensure the government officers are really embrace the transformation. Moreover, primary and secondary level tech support has been provided by ICTA on 24 x 7 basis.

Partnership

We look for government agencies from other countries interested in carrying out similar projects.

Replicability

This project can be replicated easily under similar circumstances if;

- i. For private sector, proper engagement models are clearly defined and agreed upon
- ii. Ensuring disparity of ownership of devices is reduced (not a too serious issue)
- iii. The stakeholders are prepared for the immediate transformation.

Sustainability

Since the government of Sri Lanka backs all these initiatives through Information and Communication Technology Agency there is a clear road to sustainability.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-government

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case 16- Ehteraz -Tracking and Monitoring Smart Platform

Title of the project, Contact Organization Name, Stakeholder type, Country

Ehteraz -Tracking and Monitoring Smart Platform
Ministry of Transport and Communications
Government
Qatar

Beneficiaries

If a case of coronavirus infection is discovered, the application enables the competent authorities to track the areas where this person was present in - from the time of downloading the app until the moment of infection. In the process, the authorities can also ascertain all the people, or a large percentage of people who have had contact with the infected, as long as the application is used. After identifying these people, they will receive messages through the app that they may have had contact with an infected person and will have priority in testing.

Website

<http://motc.gov.qa>

Description

The app uses a GPS feature and Bluetooth to track and control COVID-19 cases. The profile of each user is linked to QR Code by automatically extracting the user's health information from official entities. If a case of Coronavirus infection is discovered, the application enables the competent authorities to track the areas where this person was present in - from the time of downloading the app until the moment of infection.

ICT Tools

The technology that Ehteraz was based on is the technology of Analytics. The latter would use certain inputs and then come up with a customized analysis. In our case here, the inputs were GPS locations. Analytics is a rising technology that is being used and developed more and more due to its efficiency. It is insightful in areas where decisions need to be taken, and in areas which record a lot of data and information.

Challenges

The main challenge was to persuade the residents of Qatar to download the application and use it on their smartphones. However, we overcame this challenge by educating the people on the importance of this application in maintaining their safety.

Partnership

We are working on Ehteraz in cooperation with the ministry of Public Health in Qatar. We would also like to have partners from the technology, marketing and any other sector that will be an added value to the project

Sustainability

This project was launched specifically to fight the Covid-19 crisis. However, it's considered to be a sustainable project where it can be used in the future for any similar epidemic.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 17- Al-Asas Security Robots

Title of the project, Contact Organization Name, Stakeholder type, Country

AI-Asas Security Robots
Ministry of Transport and Communications
Government
Qatar

Beneficiaries

Our Primary beneficiaries are the people of Qatar and the Qatari Officials. From one end we are ensuring the safety of our officials who should monitor the quarantine, from another end we are trying to contain the virus to protect our people

Website

<http://motc.gov.qa>

Description

AI-Asas security robots are robots that perform patrols in both residential and public areas of the country to educate the community on the importance of preventing gatherings. The goal of these robots is to spread awareness about Covid-19, and to detect violators of rules and regulations.

ICT Tools

The main technology adopted for this project, was the technology of Robotics. The field of robotics has greatly advanced with several new general technological achievements. One is the rise of big data, which offers more opportunity to build programming capability into robotic systems. Another is the use of new kinds of sensors and connected devices to monitor environmental aspects like temperature, air pressure, light, motion and more. Internationally, when a task is dangerous for a human to do, as is the case today in regards to Covid-19, the role of robots comes into place.

Challenges

The existing robots technology challenges are related to Signal and functionality mainly. It can be overcome by embedding third party technology to avoid the challenges

Partnership

AI-Asas Security Robots Project Partners needs will depend on the additional knowledge and technology in the same field of Robots, functionality and transmitting that can add to the existing project . If so we are always keen and have open vision to the future

Replicability

If the same robots can be procured, then the project can be replicable

Sustainability

The project is sustainable in the sense that it was already used previously and now, it's being used in different types of events with different tasks each time. That's been done by having standardization and guideline with fix procedure to accommodate the project requirements and needs

Action Lines

AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-environment

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case 18- Drones

Title of the project, Contact Organization Name, Stakeholder type, Country

Drones
Ministry of Transport and Communications
Government
Qatar

Beneficiaries

People of Qatar by ensuring their safety and Qatari officials by assisting them in doing their job of monitoring the situation

Website

<http://motc.gov.qa>

Description

The goal is to spread awareness related to Covid-19 and prevent gatherings to limit the spread of the virus. Drones were launched in several areas to spread awareness messages through speakers about the importance of aiding by the social distancing measures to limit the spread of the virus.

ICT Tools

Unmanned aerial vehicle technology covers everything from the aerodynamics of the drone, materials in the manufacture of the physical UAV, to the circuit boards, chip set and software, which are the brains of the drone. Drones are gaining popularity more and more as

they eliminate the need for workers to physically access hostile environments, where factors such as height, wind, waves, weather, and radiation can lead to accidents or health issues.

Challenges

The existing drones technology challenges are related to signal and data streaming mainly. It can be overcome by embedding third party technology to avoid the challenges

Partnership

The Partners needs will depend on the additional knowledge and technology in the same field of drones, connectivity and transmitting that can add to the existing project. If so we are always keen and have open vision to the future

Replicability

If you can procure the same drones, then the project is replicable

Sustainability

The project is sustainable in the sense that it was already used previously and now, it's being used in different types of events with different tasks each time. That's been done by having standardization and guideline with fix procedure to accommodate the project requirements and needs

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-environment

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case 19- e-Court

Title of the project, Contact Organization Name, Stakeholder type, Country

e-Court
Ministry of Transport and Communications
Government
Qatar

Beneficiaries

People of Qatar; have access to justice from home during the Covid-19 Crisis

Website

<http://www.radiocaibarien.icrt.cu>

Description

In light of the Covid-19 situation, Qatar leveraged e-Court to ensure accessibility to justice is maintained during the social distancing period. E-Court is a paperless e-case management solution that covers the full court process life cycle- from case filing to issuance of a judgement. It allows parties to file and access case papers and communications with the court and regulatory tribunal. e-court can be accessed from any portable electronic device to retrieve case files, attend virtual court hearings, and send or receive communications from anywhere in the world. Available in both English and Arabic.

ICT Tools

For this project to be implemented successfully Webinar and Appointment Tools were utilized to enable the virtual court hearings. Webinar tools are playing an immense role in the digital transformation of our nation, and specially during these times where personal interaction is risky. Also, clouds play a major role in this project, as they store data of uploads.

Challenges

The main challenges are: Manage provision of budget approval, logistics of delivery for End users devices , applications and tools Supply, such as laptops / Notepads , networking and internet.

Partnership

Yes, we are looking for partners in the remote communication area

Replicability

Yes, the project is replicable; the project is based on an interface where people can access these services

Sustainability

Yes .

Our project focuses on meeting the needs of the present with compromising the ability of future generations to meet their needs. Our Remote communication project includes: Communication via e-communication, conference telephone, video conference, the internet, to enable the office tasks remote for staff / judges/ clerks who are not physically present in office to communicate with each other and Litigated on a substantially simultaneous basis.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 16: Promote just, peaceful and inclusive societies

Case 20- Media

Title of the project, Contact Organization Name, Stakeholder type, Country

Media
CMHS - ICRT
Government
Cuba

Beneficiaries

All people get information from our radial signal and from our live audio at website in Internet.

This information have been shared on sites of the national press bodies, such is the case of Cubadebate, Naturaleza Secreta, Casa Editora Abril, company of Construction and Assembly of Granma, CMHW, Santa Mambisa, among others, as well as international sites such as: Rodexo from Spain and Walter Lippmann from the United States.

Website

<https://www.mtc.gov.om>

Description

Since the first positive cases of COVID-19 were diagnosed in Cuba (March 2020), the Radio Caibarien website started a series of publications using in particular journalistic genres to provide a real information for people about the COVID-19.

ICT Tools

The information provided by our website always use all accompanied by ICT linked to the hypermedia journalism and it use in the articles texts, images, audio, etc; all to provided a real information about the COVID-19 in Cuba and in the world.

Challenges

The principal challenges encountered is work from home, finding day by day the problems with internet connection and work with others journalist to provide information not only for Caibarien but for all Cuba.

Partnership

In esencial, media information. We would like to get and set informations about the COVID-19, media, science, ICT, all information verificated to provided a real information to our people.

Replicability

Yes this project is possible to replicate, just need to copy the information provided from this website for set information for the people, always talking about the source, in this case, about our website.

Action Lines

AL C3. Access to information and knowledge|AL C9. Media|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case 21- Work from Home Initiative

Title of the project, Contact Organization Name, Stakeholder type, Country

Work from Home Initiative
Ministry of Technology and Communications
Government
Oman

Beneficiaries
The remote work initiative aims to enable government entities to achieve continuity and sustainability in service provision in all sectors, to improve the culture and work environment and enhance proactivity to deal proactively with the repercussions of the exceptional circumstances
Website
https://www.ama.gov.pt/
Description
The Ministry of Technology and Communications in cooperation with the National Supreme Committee on Covid19 has launched Work from Home Initiative since March 2020. The initiative aim is to provide the government entities and staff all required infrastructure and tools to continue the government tasks like providing e-service, meetings, conferences and daily tasks from home. The Ministry also created Technological Innovation committee to oversee all IT initiatives to ensure diversity, strength the partnership between sectors to implement the new projects accurately and provide innovative IT solutions.
The ministry exerted great efforts to support all government entities, and provide secure connections, environment on government cloud.
Action Lines
AL C5. Building confidence and security in use of ICTs AL C7. ICT applications: benefits in all aspects of life – E-government
SDGs
Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case 22- Digital Mobile Key

Title of the project, Contact Organization Name, Stakeholder type, Country
Digital Mobile Key AMA - Administrative Modernisation Agency Government Portugal
Beneficiaries

While digital public services could already be accessed before the release of the DMK, namely through the citizen's ID smart card, this option wasn't as user-friendly, since a smart card reader was also needed – a constraint that was successfully surpassed with the Digital Mobile Key.

Nowadays, our citizens (both national and foreign) have a secure and easy-to-use electronic means of authentication and signature, completely user-driven as there is only one PIN for every online service using the DMK (over 60 and growing).

The Digital Mobile Key enables both public and private entities to provide a better and simpler authentication method, while decreasing communication problems, lowering operations and development costs and diminishing the human resources needed. This allows them to make available a variety of digital services that they could not previously provide, such as the renewal of the Identity Card, the opening of a bank account, the changing home address, or the request of a medical ePrescription, for instance.

Website

<https://www.ama.gov.pt/>

Description

The Digital Mobile Key (DMK) is the national mobile eID solution, provided by the Administrative Modernisation Agency (AMA), which serves to authenticate national and foreign citizens when accessing online services.

Besides the citizen's phone, whose number is registered during the enrolment process, authentication requires a user-defined PIN to receive a one-time password, which is then validated by the authentication services. There's also a mobile app that allows citizens to receive the code through a push notification.

This way, citizens can access digital services anywhere and anytime, in a secure, free-of-charge and user-friendly way.

Besides authentication, the DMK also allows to digitally (and remotely) sign documents, both as a regular citizen or in a professional capacity, thanks to the added value of the Professional Attributes Certification System, that links attributes from different sources to the DMK - for instance, as a public official (through the official journal) or as an attorney (through the bar association).

With the outbreak of COVID-19 and as Portugal entered a state of emergency, developments were made to ensure any DMK remains active until June 30, regardless of the expiration date on the physical ID card, to avoid unnecessary travels to onsite services.

ICT Tools

The Digital Mobile Key is implemented over the National Identity Provider and receives SAML requests from external Portal and Systems.

This solution is supported in a SQL Server 2008 R2 database and a .NET application that provides services to external components.

Digital Mobile Key also uses the national SMS Gateway supported in the national interoperability framework as an external component that is invoked by the application to send SMS.

DMK technology, as with any others in use by the Portuguese Government, is used to promote digital interaction between citizens, businesses and Public Administration, reducing context costs, saving time and boosting effectiveness and efficiency.

Furthermore, DMK is developed with the assurance of high security and personal data protection in mind, hence promoting trust in digital services. Its database ciphers all the holder's data with standard cryptographic protocols and keys that are resistant against attackers with high attack potential. The personal data stored on the CMD database are subject to strict access control and access to any personal data stored in the CMD database is only possible after successful authentication of the citizen and after the citizen gives their consent to provide the needed attributes to the relying party.

Challenges

The main challenges relate to the uptake of the solution, both by citizens and private entities. The former because, culturally, the use of digital public services was not the norm in Portugal and the latter because they had their own authentication mechanisms and were set in the "old" ways.

To overcome both, AMA proactively contacted potential stakeholders for straightforward communication of the concrete advantages and benefits of adopting the Digital Mobile Key. AMA's participation in MUDA - Movement for Active Digital Participation, was also beneficial. MUDA is an initiative that brings together businesses, academia and public entities with the common goal of encouraging participation in the digital space and maximizing the use of digital services - in fact, the first private entities that implemented the Digital Mobile Key are members of MUDA.

This, in turn, also promoted the uptake of the DMK by citizens, as many private services are accessed more often than public services (e.g., bank accounts over tax submissions).

Also, there's in place a nonstop communication strategy to disseminate the DMK, including promotional products, the development of a single concept and image, the participation in public events to target multiple audiences, the publication of tutorial videos on the youtube and social media, etc.

Partnership

Not at the time, but opportunities to promote the uptake and usage of the DMK may be welcomed.

Replicability

The Digital Mobile Key source code can be reused by public or private organizations under the EUPL license, and the solution is based on the open standard SAML specification. There are, however, some requirements for full replicability such as authentic sources of information, to provide the required attributes (personal data), an interoperability platform that ensures data exchange between entities (we reinforce that this is only after the citizen consents to it) and an SMS gateway to send the OTP for every authentication/signature.

Sustainability

The fact that the Digital Mobile Key embodies the mission and strategy of public services modernization performed in Portugal, in itself guarantees sustainable governance of the solution.

This is further assured by the strong political support of the DMK as a central building block of the Portuguese e-ID Framework.

The DMK's sustainability also benefits from specific legislation providing legal support: Law n°. 37/2014, establishes the DMK as an alternative and voluntary authentication system of citizens in portals and websites of the Public Administration, and the introduction of law n°32/2017, of 26 June which further allows citizens to digitally sign documents with this mobile eID mechanism.

Financially wise, the Digital Mobile Key is fully funded by the National State Budget

The costs inherent to the use of this mobile authentication mechanism by public entities are supported by AMA, while the costs arising from the use by private entities (e.g., the cost of sending the OTPs via SMS) are supported by the companies themselves. This financial model is formally described in the (mandatory) protocols signed between AMA and the entities adhering to the Digital Mobile Key.

Action Lines

AL C2. Information and communication infrastructure|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 16: Promote just, peaceful and inclusive societies

Case 23- GAP - SMS Gateway for the Public

Administration

Title of the project, Contact Organization Name, Stakeholder type, Country

GAP - SMS Gateway for the Public Administration

AMA - Administrative Modernisation Agency

Government

Portugal

Beneficiaries

The main beneficiaries are the public entities that use a reliable, inexpensive service and, of course, the citizens as end-users.

The most notable services are the national mobile authentication mechanism – the Digital Mobile Key, the operational system of the Portuguese civil protection and the electronic medical prescriptions, but there are many different services that use the Portuguese SMS gateway, such as polls registration service, towing Service or the management of virtual queue tickets.

IN the current context, e-prescriptions are an important case-study for its impact in public administration and the dramatic changes brought to the healthcare system.

It resulted in cost savings, and a more efficient and seamless service, and it also played an important role in the fight against fraud, which has decreased 80% just one year after implementing the system.

Since February 2019, doctors can also prescribe through their smartphones, easing, even more, the “interaction” with their patients.

Website

<https://www.aiti.gov.bn>

Description

Although not specifically created to address the COVID-19 outbreak, the pandemic has highlighted the importance of solutions such as the Public Administration’s SMS Gateway (GAP), a central technology platform that enables mobile messaging (SMS and MMS) between Portuguese public entities from different sectors and citizens.

It was created with the focus of interlinking and streamlining communications between the Public Administration and citizens, enabling informational services (such as alerts and notifications) and transactional ones.

Managed by the Administrative Modernization Agency (AMA), the GAP is available for public entities that wish to reuse it for their communication services with citizens, as it is the case of the Ministries of Health, Internal Affairs, and Transportation, among others.

Through technologies and languages fit for the mobile world, GAP provides the scalability, reliability and performance needed by the most demanding organizations.

What makes this system unique is its simplicity: simple services for simple tasks. It uses simple technology, SMS, which has been implemented for several years and of easy access to the ordinary citizen. Its major advantages are the: 1) simplicity of the service, 2) number and diversity of available services within the Portuguese public landscape and 3) shared nature of the service.

ICT Tools

In technological terms, the Portuguese SMS Gateway – GAP - presents a modular, layered service-oriented architecture distributed across application servers and database servers that support services. The services are designed according to a service-oriented architecture through the provision of SOAP and REST web services.

AMA as a provider through VPN or dedicated communications circuits ensures secure communication channels, provides access to the platform and guarantees the operability and reuse of communication software with national mobile network operators, according to their SLA contractors.

The connection between the SMS Gateway and the “consumer entities” information system is based on web services developed to that effect. The terms of usage of the Platform are established in the protocols previously signed with AMA.

The provision of public services through a simple system (SMS) that is deep-rooted in the Portuguese culture is quite effective and simultaneously addresses the problem of low digital literacy that Portugal still fights. From ePrescriptions to civil security warnings during this pandemic, citizens can count on the government to always be at hand.

Challenges

The main challenge encountered was assuring the service was financially sustainable, while still offering economic savings to the public administrations that used it. For this end, we needed to bring as many entities as possible to use the GAP, and we’ve done so by offering the service free-of-charge at the beginning (supported by AMA’s budget) until there were enough entities using the GAP the costs truly became competitive.

Partnership

Not at the time

Replicability

The GAP provides two basic types of communication with the user, which ensures its replicability:

- A first and simpler informational communication (one way);
- And a second, transactional communication, based on a short number sent by the user/citizen that triggers the interaction with the public entity (i.e., its information system) and consequent dedicated response.

On the first mode, we find information such as scheduled appointments, service subscription confirmations or notification of deadlines for compliance with legal obligations. On the second we have examples where the user provides the civil identification number and date of birth and the system returns information about the polling place and polling station in the electoral processes.

We also have extensions to these functionalities, like the combination of information systems that allow, for example, the authentication with double validation factor, which already happens in the medical electronic prescriptions or in the Digital Mobile Key. This latter is the Portuguese mobile eID scheme, in which the user’s PIN is entered through the

Internet and is complemented with a token received by the citizen in his/her mobile phone, which is sent through GAP, thus conferring an increased degree of security.

Sustainability

Favourable legislation/political support, a financial model with shared costs, and savings based on the reuse of an existing platform make GAP a very sustainable solution. National legislation is increasingly focusing on the Portuguese Interoperability Platform as the preferred – and exclusive – means to exchange data in the public administration, given its financial benefits.

The return on investment is mainly attained from the benefits of using a shared IT solution such as GAP, that represents significant savings.

In order to promote the penetration of GAP in the public sector landscape, at the first stage, some of the entities did not pay for SMSs, being such cost covered by AMA. Nowadays though, entities joining the GAP community are paying for their SMS, which is still more convenient for them, as they did not have to develop their own payments platform, and have no burden of maintaining and updating the platform.

Additionally, because of its large scale usage, the cost of each SMS is very competitive and entities using the GAP pay only the cost of their SMS, plus a small fee to cover the maintenance costs of the SMS Gateway.

Action Lines

AL C2. Information and communication infrastructure|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 16: Promote just, peaceful and inclusive societies

Case 24- eKadaiBrunei.bn

Title of the project, Contact Organization Name, Stakeholder type, Country

eKadaiBrunei.bn

The Authority for Info-communications and Technology Industry of Brunei Darussalam (AITI)
Government

Brunei Darussalam

Beneficiaries

The primary beneficiaries are the eCommerce vendors. Since the launch of eKadaiBrunei, the total no. of visitors is 15836 since 5th April. We have received a total of 355 enquiries from MSMEs where 65% are from the food and beverage MSMEs. The team had conducted 4 business matching sessions and 75 MSME have been registered to the eCommerce

Platforms. Since the launch of the website, the no. of orders had steadily grown up to 100 to 200 orders per day especially from food eCommerce platform providers. Due to the high demand of orders, about 80 to 100 runners had also been employed to ensure the ordered item are delivered on time especially during this fasting month where the delivery period is between 4pm to 6pm. With the help of eKadaiBrunei, it helps to promote and market local eCommerce Vendors more to the general public and helps to attracts more businesses to venture into eCommerce activities.

Website

<https://www.aiti.gov.bn>

Description

[eKadaiBrunei.Bn is a directory website that connects the general public and businesses to local eCommerce Platform, eCommerce Vendors, logistic and delivery services. The website serves as a business matching platform between local businesses in adopting eCommerce activities by the Micro, Small and Medium enterprise \(MSMEs\) especially home base businesses. At the moment there are 14 eCommerce Platforms, 6 eCommerce Vendors and 18 logistic and delivery services registered to the platform since the date of initiation, 1 April 2020. eKadaiBrunei.bn enables MSMEs to select the any available local eCommerce platforms to sell their products or services in accordance to their preference.](#)

[In relation to the COVID-19 Situation, the website provides awareness to enables general public for online purchasing of their daily need items such as food, groceries, clothings, home items and many more without any social interaction. This is to provide the general public to experience the ease of eCommerce tractions in daily activities especially to those individual who are in the quarantine period. Meanwhile for businesses, the website provides an alternative solution for businesses to gain more customer and sell their products via online.](#)

ICT Tools

The website uses a website as the ICT tools. The website is created via [wix.com](https://www.wix.com). The website comprises of list of local eCommerce Platform providers, eCommerce Vendors, logistic and delivery services including the product from the Village Legislative Councils. The website also includes a contact us tab, it enables the project owners to identify new local ecommerce platform/vendors and also provides a business matching sessions between the MSMEs and the eCommerce Platforms.

By providing the website, it is hoped that local MSMEs are open to transform their traditional business method to via online, this will enable the MSMEs especially home base businesses to gain more potential customer and provides alternative business methods which is eCommerce platforms. Meanwhile for the general public, due to the difficulties of going out shopping to purchase their daily need items, this provides an opportunity for the members of the public to explore the opportunity of online shopping as well as to increase the awareness of eCommerce vendors in Brunei Darussalam.

Challenges

The main challenges faced during the project implementation is the how to convince the small businesses especially businesses who are used to traditional selling methods. The team had conducted a webinar business matching session with the interested vendors. However, the session was not very effective due to not many attendees attended the session.

The team had conducted one on one closed session with the vendors from all the four district in Brunei Darussalam and had identified the following issue:

1. eCommerce Platforms registration fees are expensive
2. Seller must be technologically savvy
3. The delivery cost is borne by the seller

During the one-on-one closed session, the team had explained and verified on the general concept of eCommerce Platform including registration process which does not require too much ICT savviness from the seller. In the session, the potential seller was also given the opportunity to engage the eCommerce Vendors for clarification.

Partnership

The project is a collaborative project between the Authority of Info-Communication Technology Industry for Brunei Darussalam (AITI) and Darussalam Enterprise (DARe) and supported by the Ministry of Transport and Info Communication and the Ministry of Home Affairs.

AITI is responsible for maintaining and hosting of eKadaiBrunei website. The scope also includes identifying the local eCommerce Platform providers and updating the list of companies in the website. Meanwhile as for our partner DARe, they are responsible for business matching of local MSMEs especially businesses under the purview of Ministry of Home Affairs to the local eCommerce Platform providers.

Together with our partners, the team had provided promotion on the initiatives through our social media, interviews, TV and Radio Channels, Government information Channel and also including one-on-one engagement sessions throughout Brunei Darussalam.

In the future we would like to engage a partner on data analytics to compile all the given data and to enable the team to create more program for eCommerce technology adoption for MSMEs.

Replicability

The project is replicable. The concept of the project is to provide a directory list of local eCommerce platforms providers, logistic and delivery services. The objective of the project is to encourage the general public to conduct contactless transaction which is via online transactions and to move towards to cashless society. Also, to provide alternative solutions for businesses to conduct their businesses especially during this COVID-19 pandemic situation where some local businesses are forced to be close.

Sustainability

We hope to brand eKadaibrunei.Bn website to become a one stop portal for public to look for available online businesses by adding more selections of eCommerce vendors in eKadaiBrunei ranging from food providers, household necessities, car parts, health supplements and many more.

Action Lines

AL C3. Access to information and knowledge|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-business

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case 25- AITI Business Continuity Plan for COVID-19

Title of the project, Contact Organization Name, Stakeholder type, Country
AITI Business Continuity Plan for COVID-19 The Authority for Info-communications and Technology Industry of Brunei Darussalam (AITI) Government Brunei Darussalam
Beneficiaries
AITI employees and relevant stakeholders such as customers, vendors, licensees, dealers and ICT businesses. The BCP was prepared and develop to ensure that the critical business functions continue and the needs of the customers and stakeholder are address accordingly.
Website
https://ishaninstitution.edu.bd
Description
<u>It is a guideline for the preparation and prevention of COVID-19 in AITI that needs to be implemented according to the directions of the Prime Minister's Office. It is also to assist the AITI Management in the business continuity planning in response to the COVID-19 outbreak</u>
ICT Tools
Microsoft Teams, VPN and AITI Online Services. It encourages the employees to utilize the ICT Tools and online platforms more in conducting business operations. This also provides an opportunity to review the current process and test the durability of current online system and services.
Challenges
<ul style="list-style-type: none">• Internet connectivity for Customer Services front-liners when scheduled to Work from Home (WFH) to ensure business operations are uninterrupted for for licensees and dealers applications. The unit is provided with Internet Broadband for this purpose.• Adequate supply of medical equipment for front-liners (e.g. thermometers, surgical masks and disinfectant). The relevant units had contacted various vendors to procure and secure the order as the stocks are very limited at the time.
Replicability

Yes. The Prime Minister's Office had prepared a document on the Guideline for Business Continuity Plan on COVID-19 for Civil Service.

Action Lines

AL C2. Information and communication infrastructure

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case 26- Learn from Sky and At homelshan

Title of the project, Contact Organization Name, Stakeholder type, Country

Learn from Sky and At homelshan
Institution
Government
Bangladesh

Beneficiaries

Parents and their children can learn by watching this project. Children will be able to stay healthy from home and develop their talents by playing this game without wasting their time.

Website

<https://akshi.gov.al/>

Description

Stay at Home. Share with social media. Child stay at home they take care their health and nutrition. So Let the house in Corona be an open stage for the development of the child's talent

ICT Tools

Laptop, Mobile., Internet

Challenges

Mental development can be hindered, it can be dealt with.
Children will take care of their health.

Partnership

Corona has affected the whole world. So it is for everyone in Bangladesh.

Sustainability

Following this project will help the mental development of the children of the country. Otherwise they will feel monotonous.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 27- Permission to leave the house e-services

Title of the project, Contact Organization Name, Stakeholder type, Country

Permission to leave the house e-services
National Agency of Information Society
Government
Albania

Beneficiaries

The beneficiaries are citizens, businesses and public administration employees. In terms of impact, this digital revolution of public services in Albania translates into a reduction of service acquiring costs, facilitation of bureaucratic procedures, reduction of time to obtain services, but also enhancement of transparency and improvement of service provision quality. Citizens and businesses are able to apply 24/7 from their homes or offices, which was crucial especially during the pandemic situation, to avoid gathering in state counters.

Website

<https://nea.ditp.go.th/>

Description

All citizens leaving the house for:

1. Grocery shopping, pharmacies or urgent matters;
2. Working reasons;
3. Health-related reasons;
4. Business-related reasons;

are required to obtain a special permission from the e-Albania portal. Interoperability ensures that:

For case 1: Only one person per family certificate can apply in one day and retired people are not able to apply (they are advised to stay home);

For case 2: Only employees of the businesses allowed to exercise their activity, according to the normative acts, are able to apply;

For case 4: Only businesses allowed to exercise their activity are able to authorize their employees to run their errands or provide their services;

The online form with personal vehicle data already prefilled is provided to the citizens who own a vehicle and have it registered under their name.

After the real-time validation, the permission is sent immediately electronically to the citizen via email/SMS and the QR code ensures the authenticity of the permission when showed to the police officers.

An e-sealed attestation proving that a particular business is allowed to operate during the emergency situation, is also available for download on the e-Albania portal.

ICT Tools

Albania has long embarked on the public services transformation process and we strongly believe in changing the mind-set of the citizens regarding this inevitable new form of communication with state institutions.

e-Albania acts as a front-end point for government institutions to deliver their services, thus operating as a one stop single access point to citizens 24/7. The portal, which currently provides more than 620 e-services, is connected to the Government Interoperability Platform that is the underlying and core architecture allowing the interaction between 53 electronic systems of public institutions.

Found in a long wave of digitalization process, which has started since 2013, Albania is currently undergoing one of the most important transformation processes in its history of public services digitalization.

From January 1, 2020, a new process for public services has begun, that of providing 472 public service applications to citizens and businesses exclusively online. Citizens and businesses apply only online through the e-Albania platform and it is the public administration employees who are required to provide all the associated state documents.

By the end of 2020, we expect more than 90% of the applications of public services to be made online-only.

Challenges

The main challenge is digital literacy in certain age groups. However, we are trying to address this issue by training the civic employees working in counters to assist citizens who will come at the counters, to apply online on e-Albania. We are publishing guidelines and video tutorials on how to apply for various e-services. The helpdesk support sector at our agency is in full disposal to citizens requiring assistance during their applications or usage of the e-Albania portal.

Partnership

We are trying to partner firstly with Western Balkans economies to enable regional interoperability and recognition of trust services.

Sustainability

The Albanian government, as a promoter of the transformation of physical services into online services, is turning the e-Albania governmental portal into a success story, managing to build a serious image of the state and restore citizens' trust in public institutions. The e-Albania portal is a single digital gateway in providing electronic public services in Albania.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case 28- Smart Farmer/ Young Exporter : Online Access to Global Markets

Title of the project, Contact Organization Name, Stakeholder type, Country

Smart Farmer/ Young Exporter : Online Access to Global Markets
New Economy Academy (NEA), The Department of International Trade Promotion,
Ministry of Commerce
Government
Thailand

Beneficiaries

Primary beneficiaries are SMEs and agricultural entrepreneurs, mainly in remote Northeastern provinces that are more rural and statistically more prone to poverty. Their products include rice, vegetables, fruit, processed agricultural products (powdered rice drinks, rice cereals etc.) and others such as silk handicrafts and prepared sauces. The majority are exporters.

The main benefits are upskilling SMEs that need it the most, which is a path to increasing income, enhancing financial stability, reducing the social impact of rural-urban migration, as well as encouraging networking and knowledge-sharing amongst communities.

For instance, by gaining knowledge in international trade and exports, SMEs are better able to weather domestic economic or political stresses that may drive down local demand. The interactive portions of the webinars (and for the YELG, the small-group coaching sessions), offer networking opportunities for rural SMEs.

Indirect beneficiaries are rural agricultural communities, which experience an increase in employment, sustainable businesses and - in the future - a slow-down in rural-urban migration as quality of life increases. Planned community knowledge-sharing webinars are also a path to empowering SMEs to develop even farther.

Website

<http://motc.gov.qa>

Description

Rural, agricultural SMEs are amongst the most vulnerable during periods of economic stress. They are also experiencing greater inequality. Although a third of laborers are in agriculture, they earn a tenth of GDP. During the spread of Covid-19, agricultural exports tumbled further impacting this sector. Meanwhile, low income drives the rural-urban migration of youths, causing agricultural communities to age rapidly.

New Economy Academy (NEA) believes that for rural, agricultural SMEs, education is a path to empowerment, socio-economic equality, financial security and better social outcomes. NEA has created webinars so it can continue to educate agricultural SMEs at the grassroots level. The webinars are hosted by national experts on exports, technology and business and are free.

The “Young Exporter from Local to Global” (YELG) webinars have 450 participants. Small-group coaching sessions (for 120 select participants) are also held to give individual coaching to SMEs. Participants learned about business, operational and export strategies, as well as documentation, logistics, and international law.

The “Smart Farmer - Knowledge Transfer for Online Global Markets” (Smart Farmer) webinars have 203 participants, with a focus on an education session and speaker-audience engagement. Topics include export procedures, online markets, export logistics and online payment.

ICT Tools

NEA uses a variety of technologies to target agricultural SMEs as well as smooth the offline-to-online transition. This allows for greater participation and higher technological literacy amongst its participants, who are concentrated in northeastern regions.

Telephone, social media channels and messaging apps are used to target and nurture relationships with target groups prior to and following the webinars. The webinars and coaching sessions utilize video-conferencing software.

In the pre-webinar stage, NEA offers how-to videos (via Facebook, YouTube and NEA webpage). Trained technical support staff are available by telephone and online chat. Through these, participants practice and gain confidence using video conferencing software on their smartphones, tablets and computers. Staff also reach out to potential participants using text.

Webinars and coaching workshops are conducted using an existing video conferencing platform (Zoom). Zoom is free, widely-known amongst targeted communities, user-friendly and easy to access. The webinars and workshops are two-way, engaging and interactive

learning environments.

Post-webinar materials are generated and repurposed from recorded webinar sessions. They include video clips, posts and comments that are published on NEA's social media pages. These become a reference for past participants and a community-building resource once the webinars conclude.

Challenges

Reaching the target audience, the first of two challenges, is key for any education effort. NEA supports grassroots education, so its target groups are specific. A wider appeal may mean a waste of resources, whereas a narrow focus may miss the target group.

To reach the right audiences, NEA's research team defines audience demographics (eg. occupation, age, sector, and so forth). Then it uses traditional and digital methods to reach out to new participants. During the initial phase, this includes cold-calling, cellular text messages and invitation letters. These methods are effective for targeting SMEs with a knowledge or technology gap. The NEA also regularly publishes and engages with the public via its social media channels and website.

Knowledge and tech gaps are the second challenge. Amongst rural populations, internet access, adoption of computers and the skills required to use technology to access webinars is lower compared to urban groups. New technological developments, such as Zoom, which can be used on smartphones and cheap high-speed cellular internet have solved some issues.

Future, more inclusive efforts could include using community webinars, organized by community leaders, to encourage knowledge-sharing and as an awareness-building effort. Community leaders can host community gatherings and provide locals with the access and equipment to participate in future webinars as a small group.

As for the knowledge gap, participants are given additional preparation prior to webinars. Technical support staff answer queries. How-to video clips are also offered on the most popular social media channels (Facebook and YouTube) and NEA's website.

Partnership

NEA seeks national and international guest lecturers from educational, private and government sectors, with a focus on digital transformation and technological development for agricultural SMEs. This will allow our program to offer a broader range of topics in response to the diverse needs of the millions of agricultural SMEs and households we target.

In addition to established experts, NEA seeks to develop knowledge-sharing webinars to foster community connections, increase knowledge transfer and empower local wisdom. We seek regional and local community experts to impart their knowledge and offer community-level advice and connection, with the goal of building a knowledge-sharing community.

Finally, with the added technological needs and requirements of video-conferencing, participants' needs have changed in some respects and increased in others. Besides the previously mentioned needs, NEA seeks tech firms or startups to help bridge the knowledge gap for less technologically-literate participants. Providing internet access, equipment such as smart devices, microphones and headsets are crucial. Equally important tasks are setting up, trouble-shooting issues and in general increasing tech literacy of target groups, to allow for continued participation in future programs.

Replicability

Currently, NEA is slated to use the YELG and Smart Farmer structure and webinar model for its other seminars. Other seminars are completely offline. Using the webinar model, NEA aims to adapt them into hybrid online-offline classroom environments.

For instance, a series of traditional offline seminars targeting medium and larger enterprises will soon be adapted into hybrid learning environments, allowing more participants and greater impact.

This is possible due to the penetration of smartphones and smart devices within Thailand, relatively widespread cellular internet connectivity throughout Thailand and NEA's deep reach within communities as government agencies. The popularity of social media channels, which are an important part of raising awareness and educating participants, also play an important role.

The NEA believes the webinar model can be replicated in other sectors, regions and across other agencies as well, in particular for grassroots efforts. Thanks to the webinars' online nature, they are relatively scaleable, accessible and low-cost. The model is content-agnostic, allowing it to be replicable across a range of diverse topics.

Sustainability

The YELG and Smart Farmer programs are supported by the Thailand government, popular among target groups and are essential in further developing other webinar programs within NEA. They are already scheduled to recur annually. As a result, the NEA believes the webinars have longevity.

Firstly, the webinars' objectives are in line with the primary goals of government ministries and agencies that fund NEA. For instance, one of the Ministry of Commerce's stated missions is to develop and advance the economy at the grassroots level and agricultural exports. The International Trade Department is tasked with boosting international trade.

Second, NEA's seminars are widely attended, well-regarded and are popular amongst target groups. On average, 12,000 participants take part in NEA agriculture-focused seminars annually, from across the country.

The seminars have broad support from its participants. Over 97% of participants of the Smart Farmer program (prior to Covid) expressed satisfaction with the overall structure of the seminars, with 100% expressing a desire to attend future seminars.

The YELG and Smart Farmer webinars also offer insights and best practices for younger NEA programs, making them essential models for other NEA training activities in the future. As more seminars turn to the webinar model, the Smart Farmer and YELG webinars are likely to play an important role in developing NEA's educational efforts even further.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 29- Better Connections Virtual Consultation

Title of the project, Contact Organization Name, Stakeholder type, Country

Better Connections Virtual Consultation
Ministry of Transport and Communications
Government
Qatar

Beneficiaries

Migrant workers Directly and medical staff indirectly; they have access to medical consultations without risking physical contact which can lead to Virus transmission

Website

<http://motc.gov.qa>

Description

Reduce migrant workers visits to the hospitals and health centers as much as possible in order to comply with the measures of social distancing, while easing the consultation with doctors from labors accommodation compounds. Provided the launched virtual consultations in 5 labor compounds, The Better Connections virtual consultation is a build on the Better Connections infrastructure (Computers installed and connected to the internet in labor camps), to allow the migrant workers to have a successful virtual consultation with physician and doctors in the health centers through online video session instead of physically visit the health center or the hospital.

ICT Tools

For this project to be implemented successfully Webinar Tools and Appointment tools were used. These two tools are main pillars of digital transformation. Specially during these times, these tools play a critical role in contributing to the economy of the country by facilitating remote working. It is thanks to these tools that business continuity was ensured, and people were able to conduct it from home.

Challenges

The main challenges have been faced due to clinical resources to respond to the virtual requests, as it is a change to the current clinical workflow, and needs to be added into the line-up of physical appointment which are still taking place, and this is creating some adoption challenges. It is also difficult to interrupt physical appointments for virtual appointments in the current workflow. This can be overcome with additional dedicated manpower, which can be assigned and ready to respond to virtual appointment requests at any time as and when they present, The other challenge is also related to lack of awareness of the service, which can be overcome with enhanced marketing and awareness plans regarding the new service available for patients

Partnership

Technology partnerships for additional support may be required

Sustainability

Can be sustainable if additional dedicated resources can be committed to the project from the clinical side, it can in the long run support decreased physical appointment load, assuming that workflow challenges can be addressed.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case 30- Digital Transformation of SMEs - DTSME

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital Transformation of SMEs - DTSME
Ministry of Transport and Communications
Government
Qatar

Beneficiaries

SMEs and providers are the main beneficiaries as this project will help them enhance the way they do business and create opportunities to both parties offering them the chance to generate more revenues.

Website

<http://motc.gov.qa>

Description

The program has been designed to support SMEs in being at the cutting edge of ICT Development. It offers exclusive content and events, and focuses on three specific areas : clouds, e-commerce, and web presence. The program enhances awareness of the benefits of using modern technology in the business sector, and helps SMEs to connect with the right service providers and begin the business digital transformation journey.

ICT Tools

The technologies used for this project were mainly Clouds and online interfaces and platforms that enable SMEs to connect with providers. Cloud is the ability to host a software platform or service from a remote location that can be freely accessed and used anywhere via Internet access.

Challenges

Convincing some SMEs to adopt the digital transformation SMEs. We tried to show them the benefits of going digital, and reflected the digital transformation journey the government is embarking on to highlight its importance.

Replicability
The project is replicable; using the same platform of virtual sessions, it can target other audiences or industries
Sustainability
Going digital is becoming the new way of doing business, and the way we adapted to address this Covid-19 crisis proves its efficiency. By implementing this project, we are future-proofing the Qatari SMEs.
Action Lines
AL C4. Capacity building AL C7. ICT applications: benefits in all aspects of life – E-business
SDGs
Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case 31- e-commerce Directory

Title of the project, Contact Organization Name, Stakeholder type, Country
e-commerce Directory Ministry of Transport and Communications Government Qatar
Beneficiaries
People of Qatar; as it will help them buy what they need without going out to comply with social distancing; and shops in Qatar ; as it will help them generate revenues during the current crisis.
Website
http://motc.gov.qa
Description
<u>e-commerce Directory was found to provide an easy way for people in Qatar to reach their favorite shops or services easily via online throughout the current situation of COVID-19. It Facilitates the process of searching the retail stores or services by using clear and easy</u>

categorizing for the user. The category list includes the following: Electronics / Healthcare / Grocery / Fashion / Apparel & Accessories / Home & Kitchen, etc.

Also, it covers the most important services requested by the Citizens and residents of Qatar to prevent them from socializing during these events.

ICT Tools

e-commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems. Businesses are using e-commerce as a way to support their digital transformation journey.

Challenges

The main challenge was to convince some people to choose to buy things online and not physically go to stores. Some of the main points highlighted were security (ex: putting private information on the internet such as CVV of cards). We aimed to ensure these people on the safety of the transactions, and the benefits of shopping online. The current situation around Covid-19 has played a role in encouraging people to shop online.

Replicability

Yes, the project is replicable; the project is based on an online platform that can be replicated to different industries also.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-business

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case 32- Education Sector Response to Covid-19

Title of the project, Contact Organization Name, Stakeholder type, Country

Education Sector Response to Covid-19
Ministry of Transport and Communications
Government
Qatar

Beneficiaries

All stakeholders in the education sector, mainly the students; Despite the difficulty to attend schools, students are being provided with the required education to be able to pursue their degrees and certificates without delaying their progression

Website

<http://motc.gov.qa>

Description

This project is a combination of two main initiatives. The first initiative is to provide remote learning to all students, and the second is to provide the required technical support to enable efficient learning without disruption. The main goal is to deliver high quality education for all levels in a remote manner while maintaining effective and high quality learning. In order to achieve the required outcome, the ministry provided and distributed 2200 tablets to students for them to access their online courses and assignments. Also, 4100 internet broadband devices were distributed to ensure a fast internet connection for classes to be efficient. On another end, the ministry purchased the required licenses to access remote support tools in order to assist the schools teachers and administrations in case they face any problem.

ICT Tools

This project required the distribution of internet broadband, which adopt high speed transmission technologies. Also, Webinar tools are utilized to be able to conduct remote working in cases of virtual classes. These tools have permitted education continuity, and are being used internationally.

Challenges

Some challenges were identified in this project; the first challenge was the effective distribution of all devices to students without causing any delay to their participation in the online courses. The second challenge we faced was to procure a system and system infrastructure capable of to accomodate more tha 120,000 students. The third challenge was the ability of employees to manage the interaction with the remote support specialists in case of problems faced with the remote working tools. The last challenge we faced, was the ability of some students to access their online courses, and to monitor their actual attendance. In order to address all these challenges, these measures were taken :

- We assessed the location of each student, then we tried to put into perspective the date of their lessons to be able to come up with an optimal route to deliver all the devices on the right time.
- We amanged to find a solution to this problem by coordinating and cooperating with Microsoft
- We provided the right training to our teachers and school administrations to be able to manage the interaction with the remote support specialist to ease the process and make it more efficient

- We provided instruction manuals to our students to access their remote courses, and reached out to the parents to make sure the students are attending their classes effectively

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-learning

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case 33- Hack Covid-19

Title of the project, Contact Organization Name, Stakeholder type, Country

Hack Covid-19
Ministry of Transport and Communications
Government
Qatar

Beneficiaries

The beneficiaries of this project are the people of Qatar. They will benefit from the advancements these projects will offer in facing Covid-19

Website

<http://motc.gov.qa>

Description

An online platform to allow innovators to develop their entrepreneurial ideas that will help in dealing with the various problems and challenges posed by the spread of the novel coronavirus epidemic through the online portal. The five winning ideas will receive financing and support of QR250,000 each, to develop and implement their ideas, as well as several services, advisory programs and incubation services that will help the implementation of the ideas. Partnership between QDB and a number of entities and institutions in the country. E.g. MoPH, MoCI, MoTC, Ooredoo, Aspetar Hospital, University of Qatar, Hamad Bin Khalifa University, Virginia Commonwealth University in Qatar, Carnegie Mellon University in Qatar, etc.

ICT Tools

This project was made possible with the use of an online portal that gave access to people to submit their ideas and follow up on their submission. Nationally, and most probably internationally, online portals are being used for governmental websites, as a gateway for people to access Government services digitally during the current crisis.

Challenges

Choose the right project among many to support and implement it effectively and monitor the progression. Constant communication between both parties is constant to align updates, challenges, and advancements

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C4. Capacity building

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case 34- Virtual appointments / Medical Consultation & Electronic Sick Leaves

Title of the project, Contact Organization Name, Stakeholder type, Country

Virtual appointments / Medical Consultation & Electronic Sick Leaves
Ministry of Transport and Communications
Government
Qatar

Beneficiaries

The beneficiaries of this project are the people of Qatar. More specifically, the people that need to see doctors or physicians, without bearing the risk of getting exposed to the Covid-19 Virus

Website

<http://motc.gov.qa>

Description

This virtual service was launched in collaboration between the the Ministry of Public Health (MoPH) and the TASMU Smart Qatar Program (part of the Ministry of Transport and

Communications) to provide telephonic/ video medical consultation/virtual appointments with physicians to patients with medical queries. This would reduce patients' visits to the hospitals and health centers as much as possible in order to comply with the measures of social distancing and reduce the risk of spread of COVID-19. Basicly, services are provided in the convenience and safety of a patient's home

ICT Tools

For this project to be implemented successfully Webinar Tools and Appointment tools were used. These two tools are main pillars of digital transformation. Specially during these times, these tools play a critical role in contributing to the economy of the country by facilitating remote working. It is thanks to these tools that business continuity was ensured, and people were able to conduct it from home.

Challenges

For the virtual consultations and appointments, adoption from clinical staff has been varied, as it is a new technology and new workflow, implemented quickly for the Covid-19 response. Also, adoption from patients because it is a new service that takes adjustment. However, adoption is increasing and services are expanding as the benefits are realized. Electronic sick leaves has been widely adopted, as the system is simpler and does not require a new workflow, however challenges have been there due to technology integration at the beginning to integrate with EMRS, but this has improved, Also, what revealed itself as a challenge in this project was actually the accuracy of diagnosis made by the doctor (diseases can have similar symptoms and may require additional tests) since he can't inspect the patient' condition from up close. In order not to put the patient in danger, the video consultation technology was only implemented in primary and secondary care.

Sustainability

The project is sustainable, as it supports the provision of accessible and convenient health care services, does not require additional workforce, and actually with time will show additional benefits such as decreased burden to the health system for unnecessary visits that can be provided through self care and patient empowerment with clinical support when needed

Action Lines

AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 16: Promote just, peaceful and inclusive societies

Case 35- National Food Security Analytics and Supply and Demand Dashboard

Title of the project, Contact Organization Name, Stakeholder type, Country
National Food Security Analytics and Supply and Demand Dashboard Ministry of Transport and Communications Government Qatar
Beneficiaries
The beneficiaries of this project are the people of Qatar, also, government officials will benefit as it will help them in accomplishing their job in a more efficient way
Website
http://motc.gov.qa
Description
<u>Ensure the supply of essential food items, hygiene products and medical supplies during the crisis, by supporting government officials with a dashboard that monitors stock evolution, provides alerts, simulates future scenarios, and enables contingency planning. Key information from different sources are integrated in a single platform (e.g. imports data, local production data, stock levels of different key food and hygiene/medical products, etc.). A simple visualization interface provides government officials with an immediate view on actual and projected supply, demand, stock, and potential gaps</u>
ICT Tools
In order to implement this project, we had to resort to technology as a major enabler to its success. The main technologies used were supply chain analytics and business intelligence. Supply chain analytics can identify known risks and help to predict future risks by spotting patterns and trends throughout the supply chain. Business intelligence comprises the strategies and technologies used by enterprises for the data analysis of business information. BI technologies provide historical, current, and predictive views of business operations. These two are becoming more and more common for all organizations that are going digital, and proved to be essential in many cases such as this one.
Challenges
The main challenge was ensuring the accuracy of the projections. We are monitoring the projections and comparing them with actual numbers and other factors to make sure of the dashboard's efficiency.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 12: Ensure sustainable consumption and production patterns

Case 36- National Communicable Disease Surveillance and Vaccination System

Title of the project, Contact Organization Name, Stakeholder type, Country

National Communicable Disease Surveillance and Vaccination System
Ministry of Transport and Communications
Government
Qatar

Beneficiaries

The people of Qatar are the primary beneficiaries as the main goal of this project is to protect the people

Website

<http://www.add.gov.ma>

Description

This project revolves around a system that has been developed and accelerated to go live during the Covid-19 Crisis. The system enables the accurate recognition of positive infectious diseases based on lab results and case reports received, including Covid-19 cases, their Geo-location based on address, understanding clusters and locations, and allows for contact-tracing of positive cases

ICT Tools

The project was based on the technology of Analytics. The latter would use raw data as inputs and then interpret meaningful patterns in data. Analytics is a rising technology that is being used and developed more and more due to its efficiency. It is insightful in areas where decisions need to be taken, and in areas which record a lot of data and information.

Challenges

The challenges have been faced due to a roll-out plan which was brought forward in a quicker timeline due to emergency requirements for Covid-19 response. Therefore full and comprehensive implementation and communication plan is still required. Challenges have been with lack of full and comprehensive utilization of all system capabilities due to adoption and training requirements and speed of implementation, however, these are being implemented now, and adoption and utilization is expanding and increasing as the benefits of the national system are being realized

Partnership

Currently the technology partner is onboard , and no need for additional partners at this time

Sustainability

Yes, the implementation of the national surveillance system was planned and required before Covid-19 response, and has always been a part of the national health strategy. Timelines were shortened due to emergency response, however, the system will support and make public health work more efficient and effective in the future and therefore sustainable as it is part of ministry national surveillance requirements.

Action Lines

AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case 37- Bureau d'Ordre Digital

Title of the project, Contact Organization Name, Stakeholder type, Country

Bureau d'Ordre Digital
Digital Development Agency
Government
Morocco

Beneficiaries

Tous les acteurs (citoyens, société civile, entreprises, administrations, etc.) qui s'adressent aux organismes publics

Website

<https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-conocimiento/>

Description

Il s'agit d'une plateforme de digitalisation du Bureau d'Ordre permettant aux administrations et organismes publics de créer des Bureaux d'Ordre Digitaux en vue de gérer électroniquement les flux des courriers entrants et sortants. Tous les acteurs (citoyens, société civile, entreprises, administrations, etc.) qui souhaitent s'adresser aux organismes publics à travers tout le territoire du Maroc pourront ainsi déposer, via cette plateforme centrale, leurs courriers aux organismes concernées avec un accusé de réception.

ICT Tools

Conformément à ses missions, l'Agence de Développement du Digital est chargée, entre autres, de :

- Promouvoir la diffusion des outils numériques et le développement de leur usage auprès des citoyens
 - Procéder, dans le cadre des programmes e-Gov, en étroite coordination avec les autorités et les organismes concernés, à la mise en place des conceptions relatives aux projets de l'administration électronique et au développement des services publics numériques, en garantissant leur interopérabilité et leur intégration, et veiller à leur mise en œuvre dans le cadre des conventions de partenariat avec lesdites autorités et organismes.
- C'est dans ce cadre, qu'elle a mis en ligne cette plateforme électronique.

Challenges

Parmi les principaux défis rencontrés : Changement de conduite

Solutions pour faire face à ces défis: Sensibilisation et implication des Hauts responsables des organismes publics concernés.

Partnership

Oui, nous cherchons des partenaires s'ils souhaitent que nous partageons avec eux cette modeste expérience.

Replicability

Oui, ce projet est duplicable. Le Maroc, à travers l'Agence de Développement du Digital, est disposé à partager cette modeste expérience avec l'ensemble des pays amis qui le souhaitent.

Sustainability

Oui, ce projet est durable. Le gouvernement a adopté une circulaire à travers lequel il exhorte l'ensemble des organismes publics à utiliser cette plateforme

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C7. ICT applications: benefits in all aspects of life – E-government

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case 38- App Covid-19 Uruguay

Title of the project, Contact Organization Name, Stakeholder type, Country

App Covid-19 Uruguay
AGESIC
Government
Uruguay

Beneficiaries

Both citizens and health authorities. The App is associated with a single case assistance tray that is carried out based on a protocol established by the Ministry of Public Health (MSP), and a clinical assistance platform, which provides teleconsultation service to suspected and confirmed cases that do not need other assistance.

To unify and have a single database that allows rationalizing the response of clinically suspicious cases and vectors, organizing demand and assistance to the population, there is a unique form. In addition to digital channels, also the telephone exchanges of all the health providers and a line specially created to face the pandemic, which depends on the MSP provide information.

This entire strategy is developed in accordance with national regulations, regarding the application of personal data protection regulations and their harmonization with other rights, duties and guarantees, as they deal with sensitive data, as established in the Opinion of the data protection control body of Uruguay. <https://www.gub.uy/unidad-reguladora-control-datos-personales/institucional/normativa/dictamen-2020>

Website

<https://www.moe.gov.sa>

Description

The Uruguayan government in collaboration with private sector companies grouped in the Uruguayan Chamber of Information Technologies (CUTI) developed a specific App for attention to the health emergency: Coronavirus UY, which is currently implemented with

more than 330,000 downloads. The App not only gives information, but also assists the population from the beginning of their symptoms, they can communicate with their health provider through Telemedicine (Ref. Law 19.869, on Telemedicine. <https://www.impo.com.uy/bases/laws/19869-2020>). The App is associated with a single case assistance tray that is carried out based on a protocol established by the Ministry of Public Health (MSP), and a clinical assistance platform, which provides teleconsultation service to suspected and confirmed cases that do not need other assistance.

ICT Tools

It is a custom development made by a private company. Ggenexus technology was used.

Challenges

To continue evolving the app and attract as many citizens as possible to download it and use it.

Replicability

Although it is the first experience, the model is replicable yes.

Sustainability

It can be applied to any pandemic to control it. Since it is about sending symptom info, mutual care distribution and video calling for doctors.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media|AL C10. Ethical dimensions of the Information Society

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 39- Future Gate

Title of the project, Contact Organization Name, Stakeholder type, Country

Future Gate
Ministry of Education
Government
Saudi Arabia

Beneficiaries

The primary beneficiaries are Student, Teacher, School Leader, Educational Supervisor, Digital Transformation Coordinator and Parents.

The tools for beneficiaries to do their work through FG Platform which help implement the digital transformation and support the integration of technology into education, they are :

Electronic Assignments
Educational Activities
E-Testing
E-Content
Discussion Forums
Lesson Preparation
Monitoring Attendance and Absence
Virtual Meetings
Direct Messaging

Website

<https://www.ncdmobile.org/>

Description

On March 9th, Saudi Arabia closed all schools to prevent the spread of COVID-19 and protect students. The Saudi Arabia's Minister launched Virtual School Program included "Future Gate Platform" to direct students, teachers, school leaders, educational supervisors for flexible and remote learning. During the COVID-19 outbreak, Future Gate Platform proved successful. Over 64,000 teachers have used and created more than 1,000,000 assignments, 400,000 virtual classrooms, 1,700,000 E-Contents, 1,600,000 discussion forums, and 400,000 tests. Over 700,000 students, 3000 school leader and educational supervisor have engaged and used the platform.

ICT Tools

Future Gate Project provides variety of equipment and infrastructure to schools include:

1. A range of systems including LMS, LOR, and SIS.
2. Broadband connection and wireless access points to schools.
3. Devices (laptops) for the teachers.
4. Smart Interactive Projectors within the classrooms.
5. Building an internal computer web for launching and application.
6. 24-hour technical support to all the schools.

Future Gate seeks to complete digital transformation in all schools by developing an integrated work plan, starting with preparation and concluding with evaluation

Challenges

1- Technical Aspects

Related to some technical aspects that present challenges for the Future Gate Initiative, linking the SIS with the FG platform has been the cause of some pitfalls and that can be overcome by having a one platform involved the LMS and SIS together.

2- Infrastructure Aspects

As far as infrastructure goes, poor internet connectivity or lack in equipment in general, has caused delays and implementation problems in a significant number of classes.

Partnership

Ministry of Education (MoE) collaborated with Tatweer Educational Technologies (TETCO) being a leading educational technology provider in the region to implement and execute the project.

Replicability

The replicability of the project is possible depending on the scale required. In our project we intended to uplift the schools' technical infrastructure, hence, it increased the cost. However, the project could be simplified by providing the Learning Management System to reduce cost.

Sustainability

If yes please describe how this project is sustainable:

In our project, we strived to make sure that the knowledge and expertise is cascaded to all users. Therefore, our students, teachers, principals and school districts were well trained and provided the knowledge required to run their own school.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 40- COVID19 Mobile Phone Survey

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID19 Mobile Phone Survey
Centers for Disease Control and Prevention
Government
United States of America

Beneficiaries

The primary beneficiaries are the Ministry of Health and the public. The Ministry of Health will use the information collected to inform policy decisions and communication strategies for COVID19.

Website

<http://www.dpe.gov.bd>

Description

We implemented a mobile phone survey using Interactive Voice Response in Ecuador. The survey collects information on Knowledge, Attitudes, and Practices, access and availability of testing, and symptomology during the COVID 19 outbreak.

ICT Tools

The survey is utilizing the open-source data collection tool Surveda. In addition, respondents are answering surveys via their mobile phones.

Challenges

Given that the mobile network operator channel was previously established for a mobile phone survey on non-communicable disease, it was fast and efficient to implement the survey and there were no main challenges.

Partnership

We are not looking for partners at the moment.

Replicability

Yes, this project can be replicated. In order to send the COVID19 survey to other populations, a mobile network operator channel would need to be established in the new country where implementation is to take place.

Sustainability

This project is sustainable because the data collection software, Surveda, is open-source and thus free to use. The only cost for implementation is the cost associated with maintaining the mobile network operator channel and airtime costs.

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 41- I learn sitting at home(Ghore bose shikhi)

Title of the project, Contact Organization Name, Stakeholder type, Country

I learn sitting at home(Ghore bose shikhi)
Directorate of Primary Education
Government
Bangladesh

Beneficiaries

My primary beneficiaries are the primary school student. The main services are:

1. Providing financial assistance to the Prime Minister's Relief Fund.
2. Providing stipend Through Mobile Banking.
3. Delivering nutritious biscuits to children's homes under school feeding activitie.
4. Involving primary education families in relief distribution by district and Upozila administrations of primary education.

Website

<https://www.eadn.dz/>

Description

Due to the global outbreak of Covid-19 the Department of Primary Education is conducting home-based learning activities to fill the education gap of primary school student.

In this context, lessons of various subject are being broadcast on Sangsad TV everyday according to the experience teacher.

In addition to home -based learning activities for student, digital content is being created and disseminated through YouTube channe, Facebook page, Messenger group.

To strengthen this activity, area-wise responsibilities have been given to the teacher, conscious parents in the vicinity of the school and the results are being published every wee.

Beside, a recovery plan has been prepared to compensate the loss of Covid-19 including providing financial assistance to the Prime Minister's Relief Fund, providing stipend through Mobile Banking, delivering nutritious biscuits to children's homes under school feeding activitie, involving primary education families in relief distribution by district and Upozila administrations of primary educatio.

Virtual meeting are being held regularly to check the progress and continuity of all these works.

The follow-up meeting is going on in the Zoom app while sitting in the office or at home while maintaining social isolatio.

ICT Tools

Zoom app, Sure -Cash app, YouTub, Messenge, Microsoft Excel, Facebook page.

Challenges

The main challenge of learning at home is to bring all the students and their families under technolog. Many families of primary school students do not have satellite-rich television or smart phone. Many of their parents are still illiterat. Beside, there are also slow learners. To overcome these challenge, area-wise responsibilities have been given to the teacher, conscious parents in the vicinity of the school and the results are being published every week.

Partnership

Yes. America.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-learning

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 5: Achieve gender equality and empower all women and girls

Case 42- Suivre Épidémiologique

Title of the project, Contact Organization Name, Stakeholder type, Country

Suivre Épidémiologique

Entreprise d'Appui au Développement du Numérique (EADN EPE SPA)

Government

Algeria

Beneficiaries

- Care Center
- Blood test laboratory
- Decision Maker

Website

<https://www.cdc.gov>

Description

The project consists of a full web application dedicated to the health practitioner in order to declare and track Covid-19 suspected people and all their contacts in the last 14 days. After the detection of positive cases, our system allows a daily follow-up of the evolution by the coordination of information between the blood test laboratory result and the care centers. We provide to the user an overview with plenty of statistics in real time that can help fast decision-making.

ICT Tools

- Eclipse Jakarta EE (JSF, CDI, JPA, security)
- Eclipse MicroProfile
- PostgreSQL

Challenges

Time: we had to develop the application quickly so it can be used in order to stop the Covid-19 pandemic

Partnership

No, we are not looking for partners as the project is for government ministry of health

Replicability

Yes, this project could be used to track the evolution of any kind of disease or future pandemic, and can be improved by the connection with a GIS system to visualize in real time the evolution of the situation.

Sustainability

The project could be helpful only in a situation of an epidemic and spreading diseases

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 43- Evaluating Medicine Delivery System during COVID-19 in Sri Lanka using Mobile Phone

Title of the project, Contact Organization Name, Stakeholder type, Country

Evaluating Medicine Delivery System during COVID-19 in Sri Lanka using Mobile Phone
Technology
Centers for Disease Control and Prevention
Government
United States of America

Beneficiaries

The primary beneficiaries are the governmental health agencies looking to collect population/sub-population data without the scale of logistical coordination and high cost needed for face-to-face methodologies. Mobile phone surveys are especially useful in situations where face-to-face contact is not feasible.

Website

<https://www.ufpe.br/>

Description

To contain the COVID-19 outbreak in Sri Lanka, an all-island curfew was imposed, causing most of the routine patient care services to be interrupted. Currently, there are access limitations to noncommunicable diseases-related services such as medicine as the health system is struggling to prevent this pandemic. Therefore, Ministry of Health and Indigenous Medical Services introduced a novel mechanism to deliver medicines to the doorstep of patients with NCDs to ensure continuous supply of medicine. A mobile phone survey was launched to assess the utilization and performance of the medicine delivery system for patients with noncommunicable diseases implemented by the Ministry of Health of Sri Lanka.

ICT Tools

An open-source web-based mobile phone data collection tool, Surveda, was used to quickly set up and launch the survey. The survey tool allows for our in-country partners (e.g., ministries of health) to design and conduct a mobile phone survey using various modes (e.g., SMS, IVR, mobile web) and rapidly analyze the data for program and policy decisions.

Challenges

One main challenge for implementing the mobile phone surveys at scale using Surveda is the requirement of mobile network connections. Contracting with mobile network operators can be labor intensive and time consuming. An alternative is to use the services of an aggregator, where it is easier to set up the channels although the cost may be higher.

Partnership

Yes, international partners are welcomed.

Replicability

For countries that have conducted a mobile phone survey using Surveda, the infrastructure and capacity would exist to replicate the survey on any other topic. Zambia, Philippines, Morocco, Malawi, Sri Lanka, and Ecuador have all conducted the Noncommunicable Diseases Mobile Phone Survey, as a component of the Bloomberg Philanthropies Data for Health Initiative.

Sustainability

This project is sustainable given that capacity building and setting up infrastructure for future use are priorities of the project. The in-country partners are trained in using Surveda, so that they are able to field the surveys with minimal assistance if needed.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 44- Clinical Telemonitoring Center for COVID-19

Title of the project, Contact Organization Name, Stakeholder type, Country

Clinical Telemonitoring Center for COVID-19
Federal University of Pernambuco
Government
Brazil

Beneficiaries

People who depend on SUS are our primary beneficiaries by Tele-orientation, teleconsultation, and Remote Patient Monitoring. Increasing the population's access to health services in primary and specialized care, providing a rapid response system and improving medical care in SUS. At the same time, we seek to support health professionals and students in prevention, diagnosis and therapy, supporting the management and conduct of suspected or confirmed cases in order to qualify the referral of the patient, to improve the cost-effectiveness and the quality of care through telehealth and telemedicine.

Website

<http://iuc.kz/>

Description

This project promotes communication between the general population, which depends on the Brazilian Unified System of Health (SUS), and healthcare professionals and students engaged to help the community to face the pandemic of Covid-19. We deployed a telehealth solution named "Clinical Telemonitoring Center" to provide integrated digital health services to facilitate the tracking of cases and guides patients and the population to face COVID-19, impacting early contingency measures (reducing transmission risks, faster isolation precautions, indicating hospitalization in suspected cases), management of suspected and confirmed cases and prevention in SUS.

This is a humanitarian action to help those who need it most: people with no access to healthcare providers, who can't afford medical care, or live in cities with high demographic density or high vulnerability (sites with high spread of coronavirus) or who need specialized consultation (psychiatry, pneumology, geriatrics, etc.) to ensure continuity of care. This project also provides an alternative to healthcare workers in high-risk groups to continue their activities remotely, and to the overloaded and high cost phone-based solutions provided by governments with long waiting lines.

ICT Tools

We provide a responsive hotspot (for web and mobile devices) integrated with applications accessed through a single user registration.

For the population, we provide three channels: a) tele-orientation by chat for a rapid response, b) teleconsultations by video calls, scheduled and integrated with electronic health record (EHR) with digital certificate, and c) remote patient monitoring using the EHR system with notifications by SMS, Whatsapp and e-mail. At first, we chose not to use chatbots, as our purpose is to offer a humanized digital service. A risk classification of the patient is carried out at different levels of care (triage, consultation, monitoring). The risk classification is performed based on the best practices and scientific evidence and the protocols of the Ministry of Health of Brazil.

For health professionals and students, we provide a COVID-19 remote learning environment for keeping the general population and health professionals updated on combat COVID 19 information (courses, virtual library, on-line classes, and others interactive activities), and also a healthcare second opinion platform.

Challenges

The biggest challenge is to reach the largest number of people, especially those at risk and who can not rapidly reach healthcare facilities. This challenge is being overcome by intensifying the publicity of the project through several channels (social media - Facebook, Instagram, website, open media - TV, supporter and partner sites - UFPE, Ministry of Education, Ministry of Health, Hospital Clinics, etc.), and mainly based on our user's experience (word-of-mouth). The second is to incorporate these new digital practices into the routine of health professionals. Awareness and training are being used to overcome this challenge.

Partnership

Yes, to improve project dissemination, to fund the development team and the cost of remote patient monitoring and devices

Replicability

Yes, it is. Our technological strategy can be easily adopted and translated to other languages. However, Internet access must be available, teleconsulting specialist team is according to availability, ethical and regulatory aspects need to be considered, and telecommunications fee can be applied.

Sustainability

This project is organizationally and financially sustainable, since telehealth has already proved to be viable and an important instrument to complement face-to-face healthcare. Partnerships and financial support in the public and private sectors are viable alternatives, due to the scalability of the solution, and recognition of the cost-benefit ratio of digital practices. In addition, our institution is a recognized and solid public university in Brazil, with 73 years of commitment to society, the environment and the country's economy.

Action Lines
AL C4. Capacity building AL C7. ICT applications: benefits in all aspects of life – E-government
SDGs
Goal 3: Ensure healthy lives and promote well-being for all

Case 45- Ensuring the Continuity of

Telecommunications Services in the Age of Coronavirus

Title of the project, Contact Organization Name, Stakeholder type, Country
AgroRuqsat"Information and Account Centre" JSCGovernmentKazakhstan
Beneficiaries
<p>Reduced time to obtain a pass and the passage of police checkpoints along the green corridor.</p> <p>To obtain a pass, the farmer does not need to physically contact the local authorities or law enforcement agencies, which significantly reduces the time for obtaining passes. The procedure is free, simple enough, easy to use and takes about three minutes. One of the main advantages, in addition to the accelerated process, is the transparency of the service. The introduction of AgroRuqsat helped solve the problem of fake passes when using paper badges. The quarantine is undermined and the threat increases if farmers can fake a permit for movement through checkpoints. In our service, all parameters are checked at the stage of approval of the application, so the police at the posts can only make sure that there is a pass and its relevance.</p>
Website
https://www.cybersecurity.my/en/index.html
Description

Coronavirus showed how important the agricultural sector is for the economy, especially for the food security of countries. During the quarantine outbreak in Kazakhstan, a state of emergency was declared and the government decided to prohibit movement across the borders of all villages, districts and regions. Farmers, whose farm fields can be located in several districts and even regions, encountered difficulties in sowing and field work due to difficulties in obtaining paper passes, which put Kazakhstan's food security at risk. Therefore, it was necessary to implement the solution as quickly as possible so that the sowing took place at the right time.

AgroRuqsat is a free online service designed to address the issues of providing transportation permits for farmers and their suppliers in quarantine zones by remotely receiving applications for electronic passes, processing these applications, and maintaining a register of electronic passes. To obtain an electronic pass, you do not need to physically contact government agencies, fill out a lot of papers and collect stamps. The pass is free and valid for the entire period of emergency and quarantine. Within a few minutes to one business day, the applicant receives an electronic document granting the right to cross the roadblocks to proceed to their land plots.

The transparency of the service helped solve the problem with fake passes and minimize the risks of the spread of the virus. Data is automatically uploaded to the “Sergek” system installed at checkpoints and made available to all police officers. In addition, upon receipt of a pass, an automatic check is carried out on state databases, which excludes the receipt of passes by those who are not involved in spring field work and ensures compliance with quarantine measures.

During the first week, all regions joined the Service, including the capital and cities of republican significance. At the moment (a little more than a month since the launch of the service), more than 275 thousand passes were issued, including more than 105 thousand passes for vehicles involved in spring field work.

ICT Tools

Web technology and integration with government databases are one of the main foundations of the work of the AgroRuqsat electronic pass issuing service, which is based on the Qoldau.kz digital platform, where about 200 thousand users (over 90%) of agricultural enterprises, farms and farms of Kazakhstan are located. The service is integrated immediately with several state databases, starting with the database of identifiers of citizens and companies, land cadastre, cars, agricultural machinery, invoices, licenses and ending with the police system "Sergek".

Innovation speeds up the process of issuing passes. The AgroRuqsat electronic pass mechanism allows you to speed up the process of transport and farmers crossing the boundaries of quarantine zones. To receive it, the farmer does not need to physically contact the local authorities or law enforcement agencies. Data on the fields of the agrarian and the vehicles registered in his name are checked automatically with the state land databases. Also, an electronic pass can be obtained by suppliers - companies that supply agricultural equipment to agricultural producers, spare parts or provide mechanical and / or transport services. These data are also verified with the state database "E-licensing" and the state database "Car" in automatic mode.

To apply for a pass, you must register on the website www.qoldau.kz and login into your personal account, where the user identifies himself with digital identification key.

In addition, the electronic pass of the citizen and the vehicle is equipped with an individual QR code. The pass can be printed or photographed on the phone so that it is easier to pass identification outside the checkpoints.

The service contributed to the digitalization of Kazakhstan and made it possible to deliver more convenient, customer-oriented and cost-effective public services for citizens in a timely manner and without bureaucracy.

Challenges

One of the main difficulties in the implementation of the project was a tight timing. A sudden outbreak of the virus required an accelerated decision-making and implementation of the service. For three days, the specialists of the Information and Accounting Center did a lot of work: from negotiations to methodological, legal, technical support and integration with several databases. In case of any errors or system failures, it is necessary to eliminate defects as quickly as possible so as not to interrupt the service, and thereby allow farmers to complete their field work on time.

In addition, the digitalization level of the agricultural sector in some regions of the country is much lower. The service automatically accepts and processes applications, checks against databases, but is not fully automated. The speed of issuance of a pass depends on how quickly employees of local executive bodies work out applications.

Partnership

To launch and use the Service throughout Kazakhstan connection to the Service of all local authorities of regions, cities of the national significance and the capital is required, as well as informing territorial bodies of internal affairs about the need for daily data entry of the Service AgroRuqsat in the Sergek system.

The cooperation agreement was concluded in the manner of accession in accordance with article 389 of the Civil Code of the Republic of Kazakhstan and regulates relations between the local executive body and the Information and Accounting Center JSC, the service operator.

The main objective of the Agreement is to assist the parties in the activities of agribusiness entities in conducting agricultural work and processing agricultural products in the context of measures to counteract the spread of the COVID-19 virus.

The priority areas of cooperation under the Agreement are:

- issuance of electronic passes through the Portal in accordance with the Procedures for the issuance of electronic passes by local executive bodies to agribusiness entities during the period of activities to counteract the spread of the COVID-19 virus;
- development (if necessary) of additional application programs (services) for the modernization and optimization of working business processes necessary to counteract the spread of the COVID-19 virus.

Forms of interaction include:

1. Consultations on issues related to the activities of the Parties
2. Electronic access (exchange) to statistical information and information related to the field of cooperation, including generated through the Portal, based on the conditions of openness and reliability. Access (exchange) of information having personal data can be used in aggregated (generalized) order to support the adoption of economic decisions by government bodies and organizations.

Replicability

The project is successfully working in Kazakhstan in all areas and regions. Initially, it worked only in one area, but then quickly scaled throughout the country, after other regions joining service. We believe that the project concept can be exported and successfully applied in other areas and countries. The same government database integrated platform can be beneficial in other sectors of agriculture. The project is capable of being replicated anywhere with mobile coverage and technological literacy.

Sustainability

We believe that the project is sustainable as it has a potential for a long-term future and it is capable of sustaining itself. Despite the fact that quarantine and emergency state is temporary, the concept and technology of the service can find a place in the community. It

can help to fully replace the paper applications in agriculture sector as well as in any government services. Thus, enhancing the level of country's digitalisation.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-agriculture

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 12: Ensure sustainable consumption and production patterns

Case 46- Cybersecurity Awareness and Development in Responding to the COVID-19 and Continuous Capacity Building for the post Movement Control Order(MCO)

Title of the project, Contact Organization Name, Stakeholder type, Country

Cybersecurity Awareness and Development in Responding to the COVID-19 and Continuous Capacity Building for the post Movement Control Order(MCO)
CyberSecurity Malaysia
Government
Malaysia

Beneficiaries

Malaysian general public
Malaysian government
Cybersecurity Training developers
Cybersecurity training providers and trainers
Working adults
Students
Women
Others

Website

<https://ite.gov.rs>

Description

CyberSecurity Malaysia has constantly prepared materials related to cybersecurity awareness and development, to assist the community in responding to the COVID-19 ensuring the impactful use of the WSIS Action Lines in advancing SDGs. These materials are categorised as Infomedia, Webinars and Online Training programs, released to the public at least once per week.

ICT Tools

Social Media,
Government channel,
Online training platform,
Radio,
Television and
printed publication materials

Challenges

Community practices in responding to the message calls

Partnership

Malaysian in general

Replicability

Yes. Materials delivered are general for the cybersecurity sector. Is very applicable to the WSIS stakeholders. CyberSecurity Malaysia is more than happy to replicate this information to others within the WSIS social sphere.

Sustainability

Yes. Through the online training and some sessions of paid webinars.

Action Lines

AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 17: Revitalize the global partnership for sustainable development

Case 47- Unified Contact Center for COVID-19 at 19819

Title of the project, Contact Organization Name, Stakeholder type, Country

Unified Contact Center for COVID-19 at 19819
Office for Information Technologies and eGovernment of the Government of Serbia
Government
Serbia

Beneficiaries

Primary beneficiaries are Serbian citizens yet support line is available to all persons in the Republic of Serbia, including foreign citizens.

COVID-19 Contact Centre responds to a wide range of the novel coronavirus related questions and offers information about topics including:

- Precautionary measures, recommendations and advice on the safe use of sanitizers, safe treatment of groceries and how to maintain living and working place in hygienic conditions;
- Information about the COVID-19 symptoms, those that require immediate self-isolation and contact with dedicated medical team, as well as information about procedure of testing and, in case of a need, urgent hospitalization;
- Information regarding current state of COVID-19 pandemic in Serbia;
- Information regarding other support services needed as a result of disruptions caused by coronavirus, such as social services, services in the employment, education, utilities, finance, transportation, etc.

During times of crisis, and especially during the current COVID-19 pandemic crisis, contact centers proved to play a more crucial role than ever since issues that arise can be very urgent and complex in nature and at such times people often prefer live interaction that allows for flexible communication.

Website

<https://ite.gov.rs>

Description

As COVID-19 started to spread, the Government of Serbia established several contact centers and information platforms to provide its citizens with accurate and timely information and guidance. A dedicated integrated COVID-19 contact center designed to respond to all their questions related to the novel coronavirus disease COVID-19 has been made available at 19819.

By calling this number, citizens can obtain reliable and up-to-date information and advice regarding precautionary measures and receive recommendations in the fight against coronavirus, as well as contact the competent professional services from different fields of expertise and throughout the country.

Operators are available daily from 8am to 10pm, whereas citizens have the opportunity to

obtain information on COVID-19 24 hours a day. Calling the Contact Center at 19819 is free of charge for users of all landline and mobile networks.

Up to mid-May 2020, more than 8 thousand calls had been received, and the most sought-after operator services by citizens had been those of the Ministry of Health, Institute of Public Health “Dr Milan Jovanovic Batut” and City Secretariat for Public Health Belgrade (around 6,000 calls to these institutions alone).

ICT Tools

COVID-19 Contact Center offers support and advice regarding a wide range of the coronavirus related questions. Due to an unprecedented demand, the novelty of coronavirus and cross-sectorial nature of questions and inquiries, Contact Center operators needed a sophisticated software tool to receive and redistribute calls and inquiries across numerous institutions and throughout the country as well as prioritize them so to address the most critical inquiries first, and to provide well informed and timely responses. On the other hand, aside from its duty to respond to the needs of its citizens and keep them informed during the crisis, most of public services had to undergo rapid shift to work-from-home arrangements in order to keep the operators safe. Therefore, COVID-19 Contact Center operations are supported by a sophisticated web-based contact center software, CRM and ticketing application. Since it is web-based, once trained and equipped, contact center operators do not need to work from their physical workplaces - they can stay safe at home and remain equally productive and efficient in responding to citizens questions and inquiries. Contact center operators are available daily from 8 am to 10 pm, but it is possible to leave a voicemail outside of contact center operators working hours.

Challenges

The first group of challenges was related to the need to establish operational COVID-19 Contact Center in just a few days. The contact center was designed as a single contact point to a complex network of institutions across sectors and throughout the country, and it had to support calls and inquiries, their redistribution, as well as to allow for remote work operations. Aside from that, the contact center operators in some cases did not have any contact center nor customer support experience prior to the pandemic; they usually had to undergo training on the use of contact center tools and applications first.

The second group of challenges emerged once the contact center became operational, when its operators faced sudden, unprecedented demand, that is, a great volume of calls, and were struggling to respond effectively and on time. Immediate decisions and actions were implemented to build capacity and meet high demand, including ensuring additional staff, deploying additional contact centers dedicated to COVID-19 pandemic related sector-specific problems (e.g. assistance to the elderly, or report problems to bodies in charge of inspectorial supervision duties, etc.), as well as introducing multichannel service delivery, through information platforms, AI-driven Chatbot solutions, etc.

Partnership

COVID-19 Contact Centre was established by the Government of Serbia and its Office for Information Technologies and eGovernment, yet numerous institutions, including institutes of public health, the Ministry of Health, primary, secondary and tertiary level healthcare institutions, Health Insurance Fund, public entities in charge of inspectorial supervision duties, local self-government units and other institutions take part in its daily operation and respond to calls and inquiries redistributed from the COVID-19 Contact Centre.

Replicability

As the novel coronavirus disease COVID-19 started to spread, it affected most countries in the world and forced governments to provide an immediate response to the crisis. A need to keep their citizens well informed regarding precautionary measures as well as current testing and hospitalization procedures emerged as a top priority in every country. A wide range of potential COVID-19 related subtopics, a novelty of coronavirus itself, as well as a number of institutions in charge of support and services provision across the country territory required inter-institutional and cross-sectoral collaboration and the establishment of a single point of contact that will operate using sophisticated software and tools.

A manner in which Serbian government and its Office for Information Technologies and eGovernment created a single contact point for all information and inquiries regarding COVID-19 is highly replicable to any country in the world, taking into account specific inner organization of each country.

Sustainability

Solutions implemented during the first wave of the COVID-19 outbreak remain operational, and will certainly continue to serve Serbian citizens until the end of the pandemic. As for now, there is no vaccine to treat coronavirus disease, therefore we do not know for how long will we have to stay alert, will there be a second wave and for how long will we remain threatened by COVID-19. In any case, the Unified Contact Centre solution can always, with minor modifications, be used for purposes other than COVID-19 disease.

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 48- “Be a Volunteer” National Volunteer Application Platform

Title of the project, Contact Organization Name, Stakeholder type, Country

“Be a Volunteer” National Volunteer Application Platform
Office for Information Technologies and eGovernment of the Government of Serbia
Government
Serbia

Beneficiaries

Persons applying for volunteering are young and healthy Serbian citizens having a good will and some spare time to help their neighbors with things such as an essential grocery and medication shopping. For persons from vulnerable groups who have to stay at home and do not have other support networks available, grocery and medication provision is essential, as well as other forms of support that volunteers provide, such as digital support to help them keep in touch with family or friends, or a friendly conversation.

Website

<https://ite.gov.rs>

Description

Solidarity and empathy for the most vulnerable during the coronavirus pandemic is crucial. In the days when it was necessary for the most vulnerable to stay at their homes in order not to become infected with the coronavirus, the help of volunteers was of the utmost importance.

The government has set up a national volunteer application platform at www.budivolonter.gov.rs and issued a public call to all citizens who do not belong to population groups at risk due to their age and/or medical condition, and wish to help, to volunteer for this duty.

All non-at-risk citizens who wish to help our oldest fellow citizens and other at-risk population groups can apply by filling out an application form at www.budivolonter.gov.rs by themselves, or by calling the Unified COVID-19 Contact Center operators to fill out the form for them. Operators can be reached at 19819 free of charge every day from 08 am until 10 pm.

All applications submitted are inspected in order to prevent even the slightest misuse. Once the application is approved by the competent services, volunteers will be contacted by city and municipal centers with detailed instructions and first tasks. Up to mid-May 2020 almost 8,000 volunteer applications had been received.

ICT Tools

National volunteer application platform available at www.budivolonter.gov.rs makes it easy to apply for volunteering with a few clicks and enables the government to keep all relevant information about available volunteers at one place, such as, for example, the number of volunteers owning their own vehicle in a specific municipality/ city, thus the coordination of volunteers becomes more efficient.

Challenges

The platform has been established with an aim to match persons offering their help with vulnerable persons who need help, yet, while performing the matching, we have to ensure adequate level of safety of vulnerable persons since most of them are 65 and older and live alone. It is very important to conduct some kind of volunteers security check before providing them with the address of people who need help. The challenge has been addressed by the platform design because it has enabled the collection of the volunteers' personal information as well as their consent for its processing for the purpose of this volunteering initiative. In collaboration with the Ministry of Interior, every volunteer application is being processed and every volunteer has to undergo security check.

Partnership

The national volunteer application platform "Be a Volunteer" has been implemented by the Office for Information Technologies and eGovernment and the Emergency Sector of the Ministry of Interior, in collaboration with the "Serbia Creates" platform and COMTRADE as one of the leading software development companies in Serbia, and with the support of the United Nations Development Programme in Serbia (UNDP Serbia).

Replicability

"Be a Volunteer" platform is highly replicable. During the COVID-19 outbreak, vulnerable groups in most countries have to stay at home, and many of such persons do not have other support networks and need someone to help them with essential grocery and medication provision. On the other hand, numerous young and healthy individuals are willing to offer their assistance. Under such circumstances a tool is needed that can allow for quick application, volunteer information check, and a central volunteer database.

Sustainability

Solutions implemented during the first wave of the novel coronavirus outbreak remain operational, and will certainly continue to serve Serbia's citizens and administration until the end of the pandemic. As for now, there is no vaccine to treat the coronavirus disease, therefore we do not know for how long will we have to stay alert, will there be a second wave and for how long will we remain threatened by COVID-19.

In any case, the national volunteer application platform can be utilized once the pandemic is over to collect applications for other volunteering opportunities.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all

Case 49- “Be a Donor - Donate Plasma”

Title of the project, Contact Organization Name, Stakeholder type, Country

“Be a Donor - Donate Plasma”

Office for Information Technologies and eGovernment of the Government of Serbia
Government
Serbia

Beneficiaries

People who have fully recovered from COVID-19 for at least three weeks are encouraged to consider donating blood plasma, because it contains COVID-19 antibodies developed by their immune system to fight the infection, and now may help in the treatment of newly infected persons. Convalescent plasma is being investigated for the treatment of patients with serious or immediately life-threatening COVID-19 infections, or those judged by a healthcare provider to be at high risk of progression to severe or life-threatening disease. However, COVID-19 convalescent plasma must only be collected from recovered individuals if they are eligible to donate blood. Individuals who had a prior diagnosis of COVID-19 documented by a laboratory test and had two consecutive negative tests are encouraged to apply via electronic form at <https://www.donirajplazmu.gov.rs/>, 21 days after they tested negative for the second time.

Website

<https://ite.gov.rs>

Description

The service is intended for all citizens who have been recovered from the novel coronavirus disease, COVID-19, caused by the virus SARS-CoV-2, and who can donate their blood plasma, so as to help in the treatment of newly infected patients.

Convalescent plasma is the liquid part of blood that is collected from persons who have recovered from COVID-19. COVID-19 patients develop antibodies in their blood against the virus that might help fight the infection. Convalescent plasma is being investigated for the treatment of COVID-19 because there is no approved treatment for this disease yet there is information that suggests it might help some patients by shortening the duration and severity of the illness, reducing morbidity or preventing death associated with COVID-19. The process of digitizing the procedure for administering COVID-19 plasma and digitizing the COVID-19 plasma bank in Serbia is ongoing, which is very significant in the current pandemic as well as in case of the second wave of COVID-19 pandemic in the fall or winter.

ICT Tools

To encourage persons recovered from COVID-19 to express their will to donate plasma, a web platform <https://www.donirajplazmu.gov.rs/> has been launched. Individuals who had a prior diagnosis of COVID-19 documented by a laboratory test and had two consecutive negative tests are encouraged to apply via electronic form. The digitalisation of the procedure for administering plasma containing COVID-19 antibodies and the establishment of the COVID-19 plasma bank in Serbia is ongoing. In mid-May there were about 800 potential donors in the database.

Challenges

Convalescent plasma is being investigated for the treatment of newly infected persons because there is no approved treatment for this disease yet there is some information that suggests it might help some patients recover from COVID-19. However, further investigation is still necessary to determine if convalescent plasma is safe and effective as a treatment for COVID-19.

Partnership

“Be a donor - donate plasma” platform has been implemented by the Office for the Information Technologies and eGovernment, in partnership with the Health Insurance Fund, the Institute for Blood Transfusion Serbia, and in cooperation with COMTRADE as one of the leading software development companies in Serbia.

Replicability

The novel coronavirus disease COVID-19 affected most countries in the world, and since there is no vaccine to treat coronavirus disease, convalescent plasma therapy remains an emergent treatment for serious COVID-19 cases. Therefore, a solution for digitization of the plasma donation procedure is highly replicable when no other treatments are available.

Sustainability

Solutions implemented during the first wave of the novel coronavirus outbreak remain active, and will certainly continue to serve Serbia’s citizens until the end of the pandemic. As for now, there is no vaccine to treat coronavirus disease, therefore we do not know for how long will we have to stay alert, will there be a second wave and for how long will we remain threatened by COVID-19.

Progressive enhancement of “Be a donor - donate plasma” platform will certainly continue, since such a solution can be used for purposes other than COVID-19 with minor modifications, as well as in case of the second wave of the COVID-19 pandemic.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C7. ICT applications: benefits in all aspects of life — E-science

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 50- Viber Automated COVID-19 Chatbot Serbia

Title of the project, Contact Organization Name, Stakeholder type, Country

Viber Automated COVID-19 Chatbot Serbia

Office for Information Technologies and eGovernment of the Government of Serbia

Government

Serbia

Beneficiaries

Primary beneficiaries are Serbian citizens yet COVID-19 Chatbot Serbia is available to all Viber users, including foreign citizens.

Main benefit of this Chatbot info service, aside from facilitating communication and information flow and being available to a large number of citizens 24/7 for all necessary information with regard to COVID-19, is that it helps citizens obtain reliable information without waiting, and at the same time relieves contact centers and experts so that their focus can be on the most important topics during the SARS-COV2 pandemic.

Website

<https://ite.gov.rs>

Description

In cooperation with Rakuten Viber, the Government of the Republic of Serbia and its Office for Information Technologies and eGovernment launched an automated COVID-19 chatbot info service on the Viber platform, in order to provide citizens with verified information, important news and answers to questions regarding COVID-19. This service provides medical info on the virus, real-time data, precautionary measures and guidelines, important numbers and government decisions with regard to the state of emergency and relaxation of measures.

Automated COVID-19 Chatbot answers all potential citizen questions regarding COVID-19 and it is available 24/7 at official COVID-19 dedicated government website

<https://covid19.rs/> and through Viber application. Citizens can get the information by entering text questions or choosing one of the categories offered.

Initially it covered 65 scenarios and topics related to the virus itself, symptoms, prevention measures, important phones, current data and the Government decisions. In the second phase of the project implementation, based on user inquiries, the number of scenarios has reached more than 80, and the chat bot can now provide information on the rights of employees in isolation, student exams, on raising a pension, electronic application for preschools, online cultural content, how to become a volunteer, and many other questions.

ICT Tools

An automated COVID-19 Chatbot info service on the Viber platform is an AI-driven virtual assistant that answers all potential citizen questions regarding the novel coronavirus disease COVID-19 in Serbia. It covers more than 80 scenarios and topics related to the novel coronavirus, and it is available to citizens 24/7. This virtual assistant solution has been developed by the private company SAGA New Frontier Group within its Intellectual Property Solution department in a very short time, and launched by the Office for Information Technologies and eGovernment in cooperation with the company Rakuten Viber CEE and the Belgrade Business and Arts Academy of Applied Studies.

Challenges

The main challenge addressed by the implementation of automated COVID-19 chatbot was unprecedented demand for authoritative source of information at the beginning of COVID-19 epidemic in Serbia. Contact centers were overwhelmed by a sudden and great volume of calls and were struggling to respond effectively and on time. Automated COVID-19 Chatbot has proven to be an effective tool for overcoming this challenge, since it provides answers to a wide range of questions citizens usually ask, is easily accessible and available to most citizens at any time and free of charge.

Partnership

Viber Automated COVID-19 Chatbot Serbia was launched by the Government of Serbia and its Office for Information Technologies and eGovernment, in cooperation with Rakuten Viber CEE.

SAGA New Frontier Group has donated this virtual assistant solution to the Government of Serbia. The scenarios and topics supported by the chatbot have been elaborated in cooperation with the Ministry of Health and other relevant institutions.

Replicability

As the novel coronavirus disease COVID-19 started to spread, it affected most countries in the world and forced governments to provide immediate response to the crisis. A need to keep their citizens well informed regarding precautionary measures as well as current testing and hospitalization procedures emerged as a top priority in every country. Taking into account a number of people using Viber worldwide, automated chatbot on Viber as a free and 24/7 available service that helps people obtain reliable information without waiting, and at the same time relieves contact centers, is a highly replicable and popular solution.

Sustainability

Solutions implemented during the first wave of the novel coronavirus outbreak remain active, and will certainly continue to serve Serbian citizens until the end of the pandemic. As for now, there is no vaccine to treat coronavirus disease, therefore we do not know for how long will we have to stay alert, will there be a second wave and for how long will we remain threatened by COVID-19. In any case, automated chatbot on the Viber platform has proven

to be very effective, popular and widely accepted communication channel in Serbia, and it will certainly be used in future for purposes other than COVID-19 disease.

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 51- Single Contact Center for Elderly Assistance at 19920

Title of the project, Contact Organization Name, Stakeholder type, Country

Single Contact Center for Elderly Assistance at 19920
Office for Information Technologies and eGovernment of the Government of Serbia
Government
Serbia

Beneficiaries

Primary beneficiaries are persons considered vulnerable due to their age who have to stay at home and do not have other support networks available, yet support is available to persons considered vulnerable due to their medical conditions as well. For these groups-at-risk, groceries and medications provision during the COVID-19 outbreak is essential, as well as other forms of support that volunteers provide, such as digital support to help them keep in touch with family or friends, or a friendly conversation.

Website

<https://ite.gov.rs>

Description

In the days when the nationwide State of Emergency was declared over the novel coronavirus epidemic in Serbia and when the movement of our oldest citizens had to be restricted, it was necessary to establish a single contact point through which they can ask for assistance and ensure adequate support network and coordination.

The Government of the Republic of Serbia has established a single contact center for providing assistance to the elderly that can be reached by dialing 19920, and a network of volunteers. By dialing this number, the elderly can turn for assistance with regard to food, medicines and other needs, to the city and municipal centers where volunteers who provide

their assistance are engaged. Calling the contact center at 19920 is free of charge for users of all landline and mobile networks.

Nearly 20,000 calls had been received from March 24 up to mid-May 2020.

ICT Tools

The Contact Center's operations are supported by a sophisticated web-based contact center software, CRM and ticketing application. Since it is web-based, once trained and equipped, contact center operators do not need to work from their physical workplaces. Operators can stay safe at home and remain equally productive and efficient in responding to our oldest citizens and distributing their inquiries to the city and municipal centers.

Challenges

As COVID-19 started to spread, it was important that citizens older than 65 and other vulnerable persons stay at home, yet many of them did not have their own support networks that could ensure either regular or urgent provision of essential groceries and medications in case of need. The Office for Information Technologies and eGovernment and the Government of Serbia established a contact center that serves as a single contact point for the elderly assistance to ensure that the elderly have everything they need while remaining safe from COVID-19 by staying at their homes.

Partnership

This contact center has been implemented by the Government of Serbia and its Office for Information Technologies and eGovernment, in cooperation with local self-government units, i.e. the city and municipal centers.

Replicability

During the COVID-19 outbreak, vulnerable groups in most countries had to stay at home, yet many of such persons did not have their own support networks and needed someone to help them with essential grocery and medication provision. A dedicated telephone number that the elderly can dial to turn for assistance has proven as an adequate channel and was widely accepted among the elderly in Serbia. Therefore, we consider Contact Center for Elderly Assistance highly replicable.

Sustainability

Solutions implemented during the first wave of the novel coronavirus outbreak remain active, and will certainly continue to serve Serbia's citizens until the end of the pandemic. As for now, there is no vaccine to treat the coronavirus disease, therefore we do not know for how long will we have to stay alert, will there be a second wave and for how long will we remain threatened by COVID-19.

Contact Center for Elderly Assistance can once the pandemic is over be used as a part of a general support network for the elderly and purposes that are not COVID-19 related.

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all

Case 52- Unified Contact Center for National-Level Inspection Bodies

Title of the project, Contact Organization Name, Stakeholder type, Country

Unified Contact Center for National-Level Inspection Bodies
Office for Information Technologies and eGovernment of the Government of Serbia
Government
Serbia

Beneficiaries

Beneficiaries are citizens and businesses that can file complaints and in that way protect themselves from unscrupulous behavior yet this contact center help inspection bodies increase their efficiency and transparency of inspectorial oversight through timely and responsible actions. Citizens and businesses can report irregularities in one place that apply to all inspections without having to know the responsibilities of the individual inspection bodies. The contact center allows for easier reporting business operating in the grey area, unfair competition, violations of consumer rights, doubts regarding the quality or safety of goods and services, and other issues within the jurisdiction of all 44 national-level inspection bodies. Municipal and city authorities remain competent for reports regarding local public utility issues. The contact center deployment was initiated before COVID-19 outbreak and is one of the key measures set out in the National Programme for Countering Shadow Economy. Due to the crisis caused by the novel coronavirus, the launch of the contact center was accelerated, and its scope extended to allow simple reporting of abuses and unfair practices by traders during an emergency.

Website

<https://ite.gov.rs>

Description

Serbia launched an unified contact center for national-level inspection bodies that can be reached at 011/6350-322, with an aim to mitigate the negative effects of the pandemic on the growth of the shadow economy. By dialing 011/6350-322, citizens and business entities can report abuses and unfair practices, such as an illegal price gouging, i.e. raising of the prices of food, medications, medical devices and protective equipment during the COVID-19 pandemic.

Operators are available from 9 am to 4 pm, yet it is possible to file a report outside of business hours by leaving a voicemail, and to submit online complaints via an e-form at www.inspektor.gov.rs. Complaints may be submitted anonymously, but those who leave contact information will receive feedback within 72 hours, since national-level inspections have a legal deadline to notify of the process's course. It is also possible to file a complaint regarding the actions of the national-level inspections' officials. In case of complaints within the provincial and local inspections' jurisdiction, the operators refer them to the competent provincial or local inspection.

Over a thousand citizen reports had been received up to mid-May 2020, and inspections had grounds for acting upon 832 reports and imposed sentences accordingly.

ICT Tools

Sophisticated, web-based contact center software, CRM and ticketing application support the contact center operations. Each complaint is recorded in the CRM system and sent electronically, with a degree of urgency, to the competent inspection body and recorded in the elnspektor information system.

Since the application is web-based, once trained and equipped, contact center operators do not need to work from their physical workplaces - they can stay safe at home and remain equally productive and efficient in responding to citizens questions and inquiries.

Challenges

Main challenge addressed by the implementation of this solution was to mitigate the negative effects of the pandemic on the growth of the shadow economy, such as illegal price gouging, i.e. raising of the prices of food, medications, medical devices and protective equipment, consumers' or workers' rights violation, or questionable safety of products or services offered. Constant aim that will remain once the COVID-19 outbreak passes, is to increase satisfaction of citizens, to offer a level playing field for businesses, increase transparency, effectiveness and efficiency of inspectorial oversight, and counter grey economy and corruption.

Partnership

The contact center was launched by the Office for Information Technologies and eGovernment and the Ministry of Public Administration and Local Self-Government, in cooperation with NALED, and with the support of the European Bank for Reconstruction and Development (EBRD). EBRD supports the inspections reform in Serbia within a two-year project.

In order to help mitigate the negative effects of the pandemic on the growth of the shadow economy, EBRD has made possible for the Contact Center to be set up in just five days.

Replicability

The unified contact center for inspection bodies is highly replicable and forms a part of the unified eInspector Information System solution which was internationally recognized and awarded as Innovation Initiative of the year in 2019.

Sustainability

Following the end of the pandemic, the unified inspections contact center will remain active, and together with eInspector unified information system, will be the focal point of a modernized inspection system in Serbia and will make inspectorial oversight more efficient, as well as strengthen confidence in the inspection system, public administration and the rule of law in our country.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture

SDGs

Goal 16: Promote just, peaceful and inclusive societies

Case 53- Unified Contact Center for National-Level Inspection Bodies

Title of the project, Contact Organization Name, Stakeholder type, Country

Unified Contact Center for National-Level Inspection Bodies
Office for Information Technologies and eGovernment of the Government of Serbia
Government
Serbia

Beneficiaries

Beneficiaries are citizens and businesses that can file complaints and in that way protect themselves from unscrupulous behavior yet this contact center help inspection bodies increase their efficiency and transparency of inspectorial oversight through timely and responsible actions. Citizens and businesses can report irregularities in one place that apply

to all inspections without having to know the responsibilities of the individual inspection bodies. The contact center allows for easier reporting business operating in the grey area, unfair competition, violations of consumer rights, doubts regarding the quality or safety of goods and services, and other issues within the jurisdiction of all 44 national-level inspection bodies. Municipal and city authorities remain competent for reports regarding local public utility issues. The contact center deployment was initiated before COVID-19 outbreak and is one of the key measures set out in the National Programme for Countering Shadow Economy. Due to the crisis caused by the novel coronavirus, the launch of the contact center was accelerated, and its scope extended to allow simple reporting of abuses and unfair practices by traders during an emergency.

Website

<https://ite.gov.rs>

Description

Serbia launched an unified contact center for national-level inspection bodies that can be reached at 011/6350-322, with an aim to mitigate the negative effects of the pandemic on the growth of the shadow economy. By dialing 011/6350-322, citizens and business entities can report abuses and unfair practices, such as an illegal price gouging, i.e. raising of the prices of food, medications, medical devices and protective equipment during the COVID-19 pandemic.

Operators are available from 9 am to 4 pm, yet it is possible to file a report outside of business hours by leaving a voicemail, and to submit online complaints via an e-form at www.inspektor.gov.rs. Complaints may be submitted anonymously, but those who leave contact information will receive feedback within 72 hours, since national-level inspections have a legal deadline to notify of the process's course. It is also possible to file a complaint regarding the actions of the national-level inspections' officials. In case of complaints within the provincial and local inspections' jurisdiction, the operators refer them to the competent provincial or local inspection.

Over a thousand citizen reports had been received up to mid-May 2020, and inspections had grounds for acting upon 832 reports and imposed sentences accordingly.

ICT Tools

Sophisticated, web-based contact center software, CRM and ticketing application support the contact center operations. Each complaint is recorded in the CRM system and sent electronically, with a degree of urgency, to the competent inspection body and recorded in the eInspector information system.

Since the application is web-based, once trained and equipped, contact center operators do not need to work from their physical workplaces - they can stay safe at home and remain equally productive and efficient in responding to citizens questions and inquiries.

Challenges

Main challenge addressed by the implementation of this solution was to mitigate the negative effects of the pandemic on the growth of the shadow economy, such as illegal price gouging, i.e. raising of the prices of food, medications, medical devices and protective equipment, consumers' or workers' rights violation, or questionable safety of products or services offered. Constant aim that will remain once the COVID-19 outbreak passes, is to increase satisfaction of citizens, to offer a level playing field for businesses, increase transparency, effectiveness and efficiency of inspectorial oversight, and counter grey economy and corruption.

Partnership

The contact center was launched by the Office for Information Technologies and eGovernment and the Ministry of Public Administration and Local Self-Government, in cooperation with NALED, and with the support of the European Bank for Reconstruction and Development (EBRD). EBRD supports the inspections reform in Serbia within a two-year project.

In order to help mitigate the negative effects of the pandemic on the growth of the shadow economy, EBRD has made possible for the Contact Center to be set up in just five days.

Replicability

The unified contact center for inspection bodies is highly replicable and forms a part of the unified eInspector Information System solution which was internationally recognized and awarded as Innovation Initiative of the year in 2019.

Sustainability

Following the end of the pandemic, the unified inspections contact center will remain active, and together with eInspector unified information system, will be the focal point of a modernized inspection system in Serbia and will make inspectorial oversight more efficient, as well as strengthen confidence in the inspection system, public administration and the rule of law in our country.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture

SDGs

Goal 16: Promote just, peaceful and inclusive societies

Case 54 -“Be a Volunteer” National Volunteer

Application Platform

Title of the project, Contact Organization Name, Stakeholder type, Country

Unified Contact Center for National-Level Inspection Bodies
Office for Information Technologies and eGovernment of the Government of Serbia
Government
Serbia

Beneficiaries

Beneficiaries are citizens and businesses that can file complaints and in that way protect themselves from unscrupulous behavior yet this contact center help inspection bodies increase their efficiency and transparency of inspectorial oversight through timely and responsible actions. Citizens and businesses can report irregularities in one place that apply to all inspections without having to know the responsibilities of the individual inspection bodies. The contact center allows for easier reporting business operating in the grey area, unfair competition, violations of consumer rights, doubts regarding the quality or safety of goods and services, and other issues within the jurisdiction of all 44 national-level inspection bodies. Municipal and city authorities remain competent for reports regarding local public utility issues. The contact center deployment was initiated before COVID-19 outbreak and is one of the key measures set out in the National Programme for Countering Shadow Economy. Due to the crisis caused by the novel coronavirus, the launch of the contact center was accelerated, and its scope extended to allow simple reporting of abuses and unfair practices by traders during an emergency.

Website

<https://ite.gov.rs>

Description

Serbia launched an unified contact center for national-level inspection bodies that can be reached at 011/6350-322, with an aim to mitigate the negative effects of the pandemic on the growth of the shadow economy. By dialing 011/6350-322, citizens and business entities can report abuses and unfair practices, such as an illegal price gouging, i.e. raising of the prices of food, medications, medical devices and protective equipment during the COVID-19 pandemic.

Operators are available from 9 am to 4 pm, yet it is possible to file a report outside of business hours by leaving a voicemail, and to submit online complaints via an e-form at www.inspektor.gov.rs. Complaints may be submitted anonymously, but those who leave contact information will receive feedback within 72 hours, since national-level inspections have a legal deadline to notify of the process's course. It is also possible to file a complaint

regarding the actions of the national-level inspections' officials. In case of complaints within the provincial and local inspections' jurisdiction, the operators refer them to the competent provincial or local inspection.

Over a thousand citizen reports had been received up to mid-May 2020, and inspections had grounds for acting upon 832 reports and imposed sentences accordingly.

ICT Tools

Sophisticated, web-based contact center software, CRM and ticketing application support the contact center operations. Each complaint is recorded in the CRM system and sent electronically, with a degree of urgency, to the competent inspection body and recorded in the eInspector information system.

Since the application is web-based, once trained and equipped, contact center operators do not need to work from their physical workplaces - they can stay safe at home and remain equally productive and efficient in responding to citizens questions and inquiries.

Challenges

Main challenge addressed by the implementation of this solution was to mitigate the negative effects of the pandemic on the growth of the shadow economy, such as illegal price gouging, i.e. raising of the prices of food, medications, medical devices and protective equipment, consumers' or workers' rights violation, or questionable safety of products or services offered. Constant aim that will remain once the COVID-19 outbreak passes, is to increase satisfaction of citizens, to offer a level playing field for businesses, increase transparency, effectiveness and efficiency of inspectorial oversight, and counter grey economy and corruption.

Partnership

The contact center was launched by the Office for Information Technologies and eGovernment and the Ministry of Public Administration and Local Self-Government, in cooperation with NALED, and with the support of the European Bank for Reconstruction and Development (EBRD). EBRD supports the inspections reform in Serbia within a two-year project.

In order to help mitigate the negative effects of the pandemic on the growth of the shadow economy, EBRD has made possible for the Contact Center to be set up in just five days.

Replicability

The unified contact center for inspection bodies is highly replicable and forms a part of the unified eInspector Information System solution which was internationally recognized and awarded as Innovation Initiative of the year in 2019.

Sustainability

Following the end of the pandemic, the unified inspections contact center will remain active, and together with eInspector unified information system, will be the focal point of a modernized inspection system in Serbia and will make inspectorial oversight more efficient,

as well as strengthen confidence in the inspection system, public administration and the rule of law in our country.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture

SDGs

Goal 16: Promote just, peaceful and inclusive societies

Case 55-“Be a Donor - Donate Plasma”

Title of the project, Contact Organization Name, Stakeholder type, Country

E-GREENMARKET Office for Information Technologies and eGovernment of the Government of Serbia Government Serbia

Beneficiaries

The e-Greenmarket solution is used not only by individual buyers, but also by companies that supply retail chains and cooperatives. Every buyer can directly order goods from "e-greenmarket" by searching for desired products or contacting the manufacturer by phone or e-mail. The delivery is done directly to the home address, or through courier services. One of the main accomplishments was the fact that several retail chains had included products offered by e-Greenmarket farmers on their shelves.

Website

<https://ite.gov.rs>

Description

During the COVID-19 outbreak in Serbia, the Ministry of Agriculture, Forestry, and Water Management in Serbia initiated the first electronic greenmarket portal as a substitute for traditional greenmarket and wholesale facilities that were closed due to the pandemic. e-Greenmarket portal (“ePijaca” in Serbian language), was launched on April 10 2020 to support the trade of fruits, vegetables, dairy products and all other products normally available at green markets throughout Serbia, that is, to connect stores, shoppers and those

who were ready to deliver the goods

e-Greenmarket is available to all agricultural producers in Serbia, majority of which are small or family producers, who due to the pandemics and the country lockdown could not sell their products on the green markets.

The registration of buyers, sellers and distributors is very simple. On the map, a buyer can easily identify a food producer in his area, check through the offering, select products, and ask for delivery. Organic food is specially marked.

On the first day of operations of the electronic green market, 771 food producers registered and more than 19,000 people visited e-Greenmarket. It managed to attract over 2,000 registering farmers as sellers of farm products, and mapped 1.300 agro producers in April 2020.

ICT Tools

e-Greenmarket (“ePijaca”) is a web portal that connects those who want to buy, those who want to sell, but also those who deliver those goods from point A to point B. If a producer has something to offer, he can register it electronically. All interested citizens can, after completing a simple registration process, buy online a wide variety of fruits, vegetables, meat, cheese, milk, eggs, honey, as well as a variety of other traditional Serbian food products. Ordered goods can be shipped directly from the producer, as well as through a number of courier services. Call center operators provide assistance with the registration process free of charge at several phone numbers.

Challenges

During the novel coronavirus pandemic, the portal proved that online sale was an ideal solution for many producers; yet, sustainability, logistics, and food safety remain the challenging aspect of such online platforms. However, expectations that even when green markets open again, the retail chains will continue to use the portal for procuring goods from domestic producers proved to be true. Now, a month after the declared state of emergency over coronavirus has ended, there are about 1300 producers active on the portal. The end of the coronavirus emergency did not mean the end of the e-sales of farm products in Serbia.

Partnership

The e-Greenmarket platform was launched by the Ministry of Agriculture, Forestry and Water Management of the Republic of Serbia in partnership with the Office for Information Technologies and eGovernment.

Replicability

e-Greenmarket solution is highly replicable. The Ministry of Agriculture, Forestry, and Water Management informed the public that the World Bank is willing to support the project financially and to “copy” the comprehensive e-Greenmarket solution implemented in Serbia to the surrounding counties of the Western Balkans.

Sustainability

Initially, e-Greenmarket was established to serve as a substitute for traditional green markets, yet the end of the state of emergency over coronavirus did not mean the end of the e-sales of farm products in Serbia. Expectations that even when green markets open again, the retail chains will continue to use the portal for procuring goods from domestic producers proved to be true. Now, a month after the state of emergency over coronavirus ended, there are about 1300 producers active on the portal.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all

Case 55-Viber Automated COVID-19 Chatbot Serbia

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Self-Assessment Tool|Office for Information Technologies and eGovernment of the Government of Serbia|Government|Serbia

Beneficiaries

Primary beneficiaries are people worried because of the exposure to the virus and those experiencing COVID-19 symptoms. COVID-19 self-assessment tool was of a great importance in days when the healthcare institutions faced sudden and unprecedented demand for testing since it provided some sort of initial triage and helped worried citizens determine if they were good candidates for testing, should they self-isolate themselves or should they seek medical care. E-Health portal, besides this electronic question form and recommendations, offers citizens information about the novel coronavirus and a possibility to get in contact with their doctor.

Website

<https://ite.gov.rs>

Description

As the novel coronavirus epidemic started to spread throughout Serbia and put healthcare institutions and laboratories performing COVID-19 disease testing under increasing pressure, the Ministry of Health and the Office for Information Technologies and eGovernment decided to launch an online COVID-19 self-assessment tool and to encourage citizens to use it.

Serbian COVID-19 Self-Assessment Tool has been developed to help citizens worried because of the exposure to the virus and those experiencing COVID-19 symptoms determine if a COVID-19 test is recommended for them and to refer them for testing. It offers guidance on when to seek medical care and what to do in the meantime.

Concerned person should access Self-Assessment Tool either by logging in or registering at Serbian e-Health portal, fill out an electronic question form, and follow the guidelines that are provided based on their answers. If their answers are indicating a possible case of COVID-19 infection and they leave their phone number, a physician will contact them to arrange their testing in one of the dedicated healthcare institutions.

ICT Tools

Interactive COVID-19 self-assessment tool is accessible via e-Health web portal (“portal eZdravlje” in Serbian language). The easiest way to access the self-assessment electronic question form is by using a personal health insurance number printed on each Serbian health insurance card to log in without registering personal account. Non-registered users can access the COVID-19 self-assessment tool but have limited access to the portal features.

Single Sign-On is supported through the national portal for eGovernment users identification and authentication (<https://eid.gov.rs>), and it is also possible to register account at the e-Health portal (<https://ezdravlje.gov.rs>) separately.

Challenges

In the time of the novel coronavirus pandemic, the declaration of state of emergency followed by the country lock-down and the healthcare system under great pressure, the biggest challenge was to determine who of the thousands of worried citizens is at the biggest risk and should get the medical care within the shortest possible time. COVID-19 Self-Assessment Tool proved to be of a great help and was widely used among citizens. In the first 6 days after the roll-out, more than 4,000 citizens completed the test.

Partnership

The project was implemented by the Office for Information Technologies and eGovernment of the Government of Serbia in cooperation with the Ministry of Health.

Replicability

COVID-19 Self-Assessment Tool is highly replicable since during the coronavirus outbreak most countries encountered similar problems – a healthcare system under great pressure as well as in the beginning a lack of capacities to provide reliable COVID-19 testing for everyone interested immediately.

Sustainability

Solutions and tools rolled out during the first wave of the novel coronavirus outbreak will remain active, and will certainly continue to serve Serbia's citizens until the end of the pandemic. As for now, there is no vaccine to treat coronavirus disease, therefore we do not know for how long will we have to stay alert, will there be a second wave, and for how long will we remain threatened by COVID-19.

COVID-19 Self-Assessment Tool has proven to be of a great help and widely accepted so similar tools may be created for other purposes.

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Single Contact Center for Elderly Assistance at 19920

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital Solidarity Portal|Office for Information Technologies and eGovernment of the Government of Serbia|Government|Serbia

Beneficiaries

Primary beneficiaries are citizens, yet some solutions offered, such as Microsoft Teams, can be used by businesses, civil society and public organizations.

Website

<https://ite.gov.rs>

Description

The Office for Information Technologies and eGovernment launched the Digital Solidarity Portal, available at www.digitalnasolidarnost.gov.rs, intended to improve the quality of life to all those who are staying at home due to the novel coronavirus pandemic.

www.digitalnasolidarnost.gov.rs is the first government-launched crowd-sourcing platform. It compiles information about free platforms for distance learning, working from home, as well as free books, courses, music, films and other educational and entertaining content during the COVID-19 pandemic. A call has been made to all companies and organisations

that are ready to enable a free-of-charge use of their digital platforms, content and solutions to citizens, businesses and countries to apply and fill out a form.

The Office for Information Technologies and eGovernment publicly promoted those who applied and showed their willingness to participate in this joint venture so that citizens could use the free solutions of these companies as much as possible.

Up to mid-May 2020, there had been 100,000 visitors of the Digital Solidarity Portal, with citizens being most interested in work-from-home platforms, but also theater plays and virtual museum tours.

ICT Tools

Digital Solidarity is a web portal available at <https://digitalnasolidarnost.gov.rs>. Companies and organisations willing to enable a free-of-charge use of their digital platforms, content and solutions to citizens, businesses and countries can apply by filling out an e-form, whereas interested individuals can browse the portal by desired content category (virtual museum tour, education, online books, communication platforms, work-from-home, TV content, art and culture).

Challenges

Main challenge with regard to the Digital Solidarity portal is its sustainability after the coronavirus pandemic. The Digital Solidarity Portal will remain active as long as there are companies and organizations willing to offer their solutions and content free of charge.

Partnership

Serbian government and the Office for Information Technologies and eGovernment firmly believe that solidarity and responsibility are crucial and that only together we can and must be a better and more responsible society. A call has been made to all companies and organisations that are ready to enable a free-of-charge use of their digital platforms, content and solutions to citizens, businesses and countries to apply and fill out a form. A number of socially responsible organisations, such as Microsoft, IBM, Telekom Srbija, IT4BIZ, PKS Partner, VIP, Semos, Petlja, Nutanix and many more supported the initiative by filling out a form and making their resources available to the Serbia's citizens free of charge through the Digital Solidarity portal.

The Digital Solidarity Portal project has been supported by the United Kingdom's Good Governance Fund and the United Nations Development Programme in Serbia.

Replicability

During the COVID-19 disease pandemic the importance of staying at home and keeping social distance in order to prevent the spread of the virus put most countries under the lockdown for some months. In those days it was of a great importance to provide people with access to the tools that can facilitate communication, collaboration and work-from-home, as well as help overcoming the loneliness, and prevent boredom and depression. The Digital Solidarity Portal, besides being highly replicable in the context of the global

pandemic, is potentially very replicable and sustainable platform that we hope will continue to inspire and promote solidarity and corporate responsibility.

Sustainability

Solutions implemented during the first wave of the novel coronavirus outbreak remain active, and will certainly continue to serve Serbian citizens until the end of the pandemic. As for now, there is no vaccine to treat coronavirus disease, therefore we do not know for how long will we have to stay alert, will there be a second wave and for how long will we remain threatened by COVID-19. In any case, the Digital Solidarity Portal will remain active as long as there are companies and organizations willing to offer their solutions and content free of charge.

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C10. Ethical dimensions of the Information Society

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 10: Reduce inequality within and among countries

Case56-Single Contact Center for Elderly Assistance at 19920

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital Solidarity Portal|Office for Information Technologies and eGovernment of the Government of Serbia|Government|Serbia

Beneficiaries

Primary beneficiaries are citizens, yet some solutions offered, such as Microsoft Teams, can be used by businesses, civil society and public organizations.

Website

<https://ite.gov.rs>

Description

The Office for Information Technologies and eGovernment launched the Digital Solidarity Portal, available at www.digitalnasolidarnost.gov.rs, intended to improve the quality of life to all those who are staying at home due to the novel coronavirus pandemic.

www.digitalnasolidarnost.gov.rs is the first government-launched crowd-sourcing platform. It compiles information about free platforms for distance learning, working from home, as well as free books, courses, music, films and other educational and entertaining content during the COVID-19 pandemic. A call has been made to all companies and organisations that are ready to enable a free-of-charge use of their digital platforms, content and solutions to citizens, businesses and countries to apply and fill out a form.

The Office for Information Technologies and eGovernment publicly promoted those who applied and showed their willingness to participate in this joint venture so that citizens could use the free solutions of these companies as much as possible.

Up to mid-May 2020, there had been 100,000 visitors of the Digital Solidarity Portal, with citizens being most interested in work-from-home platforms, but also theater plays and virtual museum tours.

ICT Tools

Digital Solidarity is a web portal available at <https://digitalnasolidarnost.gov.rs>. Companies and organisations willing to enable a free-of-charge use of their digital platforms, content and solutions to citizens, businesses and countries can apply by filling out an e-form, whereas interested individuals can browse the portal by desired content category (virtual museum tour, education, online books, communication platforms, work-from-home, TV content, art and culture).

Challenges

Main challenge with regard to the Digital Solidarity portal is its sustainability after the coronavirus pandemic. The Digital Solidarity Portal will remain active as long as there are companies and organizations willing to offer their solutions and content free of charge.

Partnership

Serbian government and the Office for Information Technologies and eGovernment firmly believe that solidarity and responsibility are crucial and that only together we can and must be a better and more responsible society. A call has been made to all companies and organisations that are ready to enable a free-of-charge use of their digital platforms, content and solutions to citizens, businesses and countries to apply and fill out a form. A number of socially responsible organisations, such as Microsoft, IBM, Telekom Srbija, IT4BIZ, PKS Partner, VIP, Semos, Petlja, Nutanix and many more supported the initiative by filling out a form and making their resources available to the Serbia's citizens free of charge through the Digital Solidarity portal.

The Digital Solidarity Portal project has been supported by the United Kingdom's Good Governance Fund and the United Nations Development Programme in Serbia.

Replicability

During the COVID-19 disease pandemic the importance of staying at home and keeping social distance in order to prevent the spread of the virus put most countries under the lockdown for some months. In those days it was of a great importance to provide people with access to the tools that can facilitate communication, collaboration and work-from-home, as well as help overcoming the loneliness, and prevent boredom and depression. The Digital Solidarity Portal, besides being highly replicable in the context of the global pandemic, is potentially very replicable and sustainable platform that we hope will continue to inspire and promote solidarity and corporate responsibility.

Sustainability

Solutions implemented during the first wave of the novel coronavirus outbreak remain active, and will certainly continue to serve Serbian citizens until the end of the pandemic. As for now, there is no vaccine to treat coronavirus disease, therefore we do not know for how long will we have to stay alert, will there be a second wave and for how long will we remain threatened by COVID-19. In any case, the Digital Solidarity Portal will remain active as long as there are companies and organizations willing to offer their solutions and content free of charge.

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C10. Ethical dimensions of the Information Society

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 10: Reduce inequality within and among countries

Case57-Unified Contact Center for National-Level Inspection Bodies

Title of the project, Contact Organization Name, Stakeholder type, Country

Expression of Interest for Enrollment in Schools (Interim Service to e-Enrollment)Office for Information Technologies and eGovernment of the Government of SerbiaGovernmentSerbia

Beneficiaries

The service was intended for all parents on the territory of the Republic of Serbia planning to enroll their children in the first grade of elementary school this year, yet it was of a great importance for elementary schools as well, since it provided them with an opportunity to continue some of their regular activities with regard to enrollment, and plan ahead.

Website

<https://ite.gov.rs>

Description

The enrollment of children in the first grade of elementary schools, which traditionally begins on April 1, started later this year due to the novel coronavirus outbreak and the state of emergency. As of Wednesday, April 1, 2020, instead of enrollment, parents and other legal representatives were encouraged to use the interim service, called “Expression of interest”, through the redesigned e-Government portal. The aim of this service was to establish the "initial" parent-school contact and to assure the parents that the school is aware of their intention to enroll their children. On the other hand, the service helped the schools to optimize the number and classes and to better prepare for the next school year. In the 6 days of its availability on national e-Government portal, the “expression of interest” service had been used by 11,000 parents.

ICT Tools

“Expression of interest for enrolling in the first grade of elementary schools” is a service that uses national e-government infrastructure, that is, the national e-government portal “eUprava” (available at <https://euprava.gov.rs>), the government service bus central platform for information sharing and reuse, and the national portal for identification and authentication e-government users. Parents did not have to register themselves separately in order to use this service, it was available to them by logging in with their existing accounts at national e-government portal. Serbia aims at ensuring multichannel approach to all public services, therefore the service “Expression of interest for enrolling in the first grade of elementary schools”, was available by telephone as well.

Challenges

Main challenge that both parents and educational system encountered was the COVID-19 pandemic itself and the country lockdown at the time of the year when the communication with regard to enrollment usually begins. That challenge was successfully addressed by the launch of this digital service.

Partnership

This service was designed and implemented by the Office for Information Technologies and eGovernment and the Ministry of Education, Science and Technological Development, in

partnership with all elementary schools throughout the Republic of Serbia since their cooperation was of a great importance.

Replicability

“Expression of interest” service, as a tool which allows for planning and allocating resources ahead in a state of unprecedented emergency and the country lockdown proved to be a precious tool and is highly replicable, both in the light of a possibility of the second wave of the COVID-19 epidemic, but also, slightly modified can be used for other purposes. Aside for providing schools with an opportunity to plan ahead, it also provided parents with some certainty during the crisis.

Sustainability

“Expression of interest” as an interim service had been available until the Ministry of Education, Science and Technological Development officially rolled out the eEnrollment service, on May 28, 2020.

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case58-E-GREENMARKET

Title of the project, Contact Organization Name, Stakeholder type, Country

National COVID-19 Integrated Information System|Office for Information Technologies and eGovernment of the Government of Serbia|Government|Serbia

Beneficiaries

Health care institutions at the primary, secondary and tertiary level, as well as laboratories that perform sample testing, public health institutes, sanitary inspectors and the Ministry of Health.

Website

<https://ite.gov.rs>

Description

National COVID-19 Integrated Information System represents a software support for performing epidemiological surveillance related to the COVID-19. The system enables registration of all persons tested for the SARS-CoV-2 virus on the entire territory of Serbia. It enables aggregation of data from the official records kept by healthcare institutions in which persons suffering from COVID-19 are hospitalized and data from the institutes of public health and laboratories that perform testing and enter data into the system. Data are kept at the level of one or more local self-government units, in accordance with the territories of local and regional institutes for public health. Tested persons can also receive a confirmation of the test results in electronic form by e-mail.

The Institute of Public Health has to submit data on a daily basis, until 2 pm for the previous 24 hours to the Ministry of Health, as well as anonymized data to the Office for Information Technologies and eGovernment that publishes them as open data. The application is designed to support automated data submission to the abovementioned authorities, as well as to the self-isolation software of the Ministry of Interior used for supervising the implementation of the imposed home-isolation measures.

ICT Tools

National COVID-19 Integrated Information System is a web-based application that supports: (1) Online registration of all persons tested for SARS-CoV2 virus on the entire territory of the Republic of Serbia; (2) Aggregation of data from the official records kept by healthcare institutions where persons suffering from COVID-19 are hospitalized, data from institutes for public health and laboratories that perform testing; (3) The provision of data necessary to supervise the implementation of imposed home-isolation measures to the Ministry of Interior; and (4) The provision of anonymized statistical data to the Government of Serbia, the Ministry of Health and the Office for Information Technologies and eGovernment, on a daily basis.

Challenges

Main challenge addressed by the rollout of COVID-19 Integrated Information System was ensuring an adequate level of inter-institutional and cross-sectorial coordination and collaboration with regard to data sharing and data aggregation, and automated reporting and submission of data on a daily basis. COVID-19 IIS has proven to be a valuable tool to overcome this challenge.

Partnership

The National COVID-19 IIS is established and managed by the Institute of Public Health, with a technical support of the Office for Information Technologies and eGovernment, Health Insurance Fund and the Ministry of Health.

Replicability

National COVID-19 Integrated Information System is highly replicable, since, during the COVID-19 outbreak most countries have to ensure inter-institutional and cross-sectorial collaboration, information-sharing, aggregation of data and automated reports generation/data provision on a regular basis.

Sustainability

Solutions implemented during the first wave of the novel coronavirus outbreak remain active, and will certainly continue to serve Serbian administration and healthcare system until the end of the pandemic. As for now, there is no vaccine to treat coronavirus disease, therefore we do not know for how long will we have to stay alert, will there be a second wave and for how long will we remain threatened by COVID-19.

In any case, the National COVID-19 Integrated Information System has proven to be an excellent tool for cross-sectorial and inter-institutional data sharing and reuse, and with some modifications, it can be used for other purposes as well.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-science

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case59-COVID-19 Self-Assessment Tool

Title of the project, Contact Organization Name, Stakeholder type, Country

e-KINDERGARTEN 100Office for Information Technologies and eGovernment of the Government of SerbiaGovernmentSerbia

Beneficiaries

Beneficiaries of this digital public service were parents who wanted to enroll their children in kindergartens, but the regular non-digital procedure was not available as the kindergartens were temporarily closed due to the novel coronavirus outbreak, the state of emergency and the country lock-down.

Website

<https://ite.gov.rs>

Description

The Office for Information Technologies and eGovernment rolled out digital public service that enabled an end-to-end electronic registration of children in preschool institutions through the national e-Government Portal, available at <https://euprava.gov.rs>. The service was available to registered users of the e-Government portal, in all municipalities and cities throughout Serbia.

The service was intended for parents who wanted to e-enroll their children in kindergartens, since regular non-digital procedure was not possible as the kindergartens were temporarily closed due to the novel coronavirus outbreak, the state of emergency and the lockdown. Parents did not have to provide and submit documents by themselves, but these were automatically obtained ex officio. The recommendation for all preschool institutions in case they needed any additional documents which they could not obtain by themselves, was to allow parents to provide these documents by e-mail, and not to ask them to pay visits to the preschool institutions or post offices to physically submit the documents.

2020 was the first year the service was 100% electronic, end-to-end (without the need for parents to visit various counters and obtain other documents), available in 100% of the kindergartens nation-wide, and that 100% children have been enrolled online.

ICT Tools

“eKindergarten 100” is a digital public service that uses existing national e-government infrastructure, that is, the national e-government portal “eUprava” (available at <https://euprava.gov.rs>), its government service bus for information sharing and reuse, and the national portal for e-government users identification and authentication. Parents do not have to register separately in order to use this service, it is available to them by logging in with their existing accounts at the national e-government identification and authentication portal.

Challenges

Main challenge that both parents and preschool institutions encountered was the COVID-19 pandemic itself and the country lockdown at the time of the year when the communication with regard to enrollment usually begins. That challenge was successfully addressed by the launch of this digital service.

Partnership

This service has been designed and rolled out by the Office for Information Technologies and eGovernment in cooperation with all municipalities and preschool institutions in Serbia.

Replicability

In a state of unprecedented emergency and the country lockdown this service proved to be a precious tool and is highly replicable, both in the light of a possibility of the second wave of the COVID-19 epidemic, but also, slightly modified, it can be used for other purposes.

Sustainability

eKindergarten 100 is a digital public service that is relevant only at the time of the year when enrollment to preschools usually occurs. Nevertheless, the service is completely sustainable since digital service delivery should remain default even under regular circumstances and the service will certainly be used in Serbia again next year and in future.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case60-Digital Solidarity Portal

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital Education: Leave No One Behind|Office for Information Technologies and eGovernment of the Government of Serbia|Government|Serbia

Beneficiaries

Beneficiaries were eight-grade students from elementary schools who had to prepare themselves for the final exam. In the first phase of the project implementation, a special focus was on students from underprivileged families, about 5% of students, who had to have their access to education resources ensured, in order to prepare for the final exam. All three telco operators and some of the biggest IT companies in Serbia responded immediately to the government request and donated a large number of devices that enabled children to follow online education and practice for the final exam.

Website

<https://ite.gov.rs>

Description

From the day one of the declared state of emergency, the entire primary and secondary education system in Serbia was transferred from classrooms to homes. The classes were taught through the national broadcaster Radio Television of Serbia, and online education, through several platforms.

The government of Serbia decided to launch an online self-assessment test for eighth-grade

students, which would be organised electronically for the first time and allow eight-graders to better prepare for the final exam.

In order to enable children to follow the online education and to practice for the final exam, the government formed a coalition with the private sector and provided smart phones, tablets and internet for 2,800 eight-graders coming from the disadvantaged families. The entire operation was executed in just few days, as several companies responded immediately and showed social responsibility by donating a large number of devices for eighth-graders.

The first trial final exam was conducted from April 22 to 24 2020, with an aim to use the previous results of digitization in the system of education to provide eighth grade students in emergency conditions with additional opportunities to practice and prepare for the final exam, as well as to check the potential for implementation in the coming years.

ICT Tools

Given the epidemiological situation in the country at that moment, the experts from the Cabinet of the Prime Minister, Ministry of Education, Science and Technological Development and the Office for Information Technologies and eGovernment had set up a digital platform “My Classroom” to help them gain insight into how far they had progressed and, where necessary, give additional attention to particular areas of these subjects.

Online testing was conducted from April 22 to 24 2020. The tests had been available to students for 12 hours a day, i.e. from 8.00 to 20.00, and in several languages. The correct answers to the tests were published 12 hours later, and analyses of tests broadcast on TV.

Challenges

Main challenge that both students and education system encountered was the COVID-19 pandemic itself, and the temporary closure of educational institutions in an attempt to contain the spread of the novel coronavirus. The project “Digital Education: Leave No One Behind” was a result of the government effort to mitigate the immediate impact of school closures for students, particularly eight-graders and from disadvantaged families, and to ensure education continuity for all.

Partnership

The “Digital Education: Leave No One Behind” project was implemented by the Ministry of Education, Science and Technological Development and the Government of Serbia Office for Information Technologies and eGovernment, in cooperation with telco operators and private companies, such as Telekom Serbia, Telenor Serbia, Vip, Comtrade, and Huawei.

Replicability

The project and its components/activities (online trial exam, inclusion-ensuring activities), are highly replicable and sustainable, both in the light of the possibility of the second wave of the COVID-19 epidemic, as well as, with minor modifications, under different circumstances, for other purposes.

Sustainability

The project aimed at using the previous results in digitization in the system of education as well as a good will expressed by socially responsible telco operators and private companies, to provide eighth-grade students in emergency conditions with additional opportunities to prepare themselves for the final exam, as well as to check the potential for implementation in the coming years. The project and its components, solutions and activities are highly replicable and can be implemented in other countries, as well as in Serbia under different circumstances and for other purposes, with minor modifications.

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case61-Expression of Interest for Enrollment in Schools (Interim Service to e-Enrollment)

Title of the project, Contact Organization Name, Stakeholder type, Country

Education Non-Stop - Integrated Education Response Serbia|Office for Information Technologies and eGovernment of the Government of Serbia|Government|Serbia

Beneficiaries

Main beneficiaries were students attending schools in Serbia, and the project aimed at enabling them to continue with their schooling and successfully complete their school year.

Website

<https://ite.gov.rs>

Description

From the day 1 of the declared state of emergency, schools in Serbia have been closed. However, the classes for all elementary and high school students continued through distance learning. Classes were broadcast on national RTS2 and RTS3 TV channels, and were available on the RTS Planet online platform. Remote teaching in national minority

languages was broadcast on RTV, as well as on the channel's online platform. In the first 2 weeks, RTS teams had recorded over 1,200 classes, and RTS Planet app had received over 300,000 new users. Together with Telecom, Vip Mobile and Telenor, we provided all users of mobile internet with free internet access to this platform, to enable students to attend classes via mobile phones and tablets free of charge.

Moreover, a unique place "Raspored nastave" (Eng. "Classes schedule"), has been established, where all students and parents could access class schedules, shortcuts to specific classes, as well as online learning tools and tutorials.

The Viber Community "My School" has also been created, where parents and students received notifications on a daily basis. The community consists of nearly 120,000 members. In addition to this, Tesla EDU platform for online education has been rolled out, with more than 68,000 students taking self-assessment test for 8th graders.

ICT Tools

A website "Raspored nastave" (Eng. "Online Classes Schedule"), where all students and parents can access class schedules, shortcuts to specific classes, as well as online learning tools and tutorials;

Viber Community "My School", where parents and students receive notifications on a daily basis;

Tesla EDU platform "My Classroom" for online education;

Online classes are available at <http://mojaskola.rtsplaneta.rs/>.

Challenges

Main challenge that both students and educational system encountered was the COVID-19 pandemic itself and the temporary closure of educational institutions in an attempt to contain the spread of the novel coronavirus. The project was a result of the government effort to mitigate the immediate impact of school closures for students, and to ensure education continuity for all.

Partnership

This project has been implemented by the Ministry of Education, Science and Technological Development and the Office for Information Technologies and eGovernment, and the public broadcaster Radio-Television of Serbia (RTS), in partnership with educational institutions.

Replicability

The project and its components, solutions and activities are highly replicable and can be implemented in other countries, as well as in Serbia under different circumstances and for other purposes, with minor modifications.

Sustainability

Most of the solutions deployed as a part of the integrated response to the COVID-19 pandemic in Serbia will remain active, and can be used both in case of the second wave of epidemic, as well as under regular circumstances.

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case62-National COVID-19 Integrated Information System

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Open Data Serbia|Office for Information Technologies and eGovernment of the Government of Serbia|Government|Serbia

Beneficiaries

Beneficiaries are citizens who are looking for a reliable source of information regarding the COVID-19 pandemic in Serbia, but also researchers, scientists and businesses that can offer valuable insights or come up with some ideas and solutions.

Website

<http://www.uasf.org.bw>

Description

During times of crisis, it is vital that governments provide accurate, useful and up-to-date information. Publishing statistics about the outbreak helps people make informed decisions about their daily routines, builds public trust, as well as enables public authorities to make informed decisions and act decisively to flatten the curve.

A dedicated subdomain on Serbian COVID-19 website, namely covid19.data.gov.rs, was established within the national Open Data Portal (data.gov.rs) for publishing covid19-related open data. To make machine-readable data sets suitable for further analyses and “reading” by the general population (not only by machines), we have visualized the data so that citizens can follow the reports themselves.

Data sets published include daily data on infected persons by a local self-government unit, the number of individuals who are in mandatory self-isolation, the number of tested, hospitalized, and deceased individuals, as well as the number of persons who are on a respirator, as well as the number of those who have been cured. Information on special

COVID-19 outpatient clinics, their working hours and contact information is also available on the Portal.

ICT Tools

A dedicated subdomain on Serbian COVID-19 website, covid19.data.gov.rs, has been established within the national Open Data Portal (data.gov.rs) for publishing covid19-related open data. Aside from publishing COVID-19 data sets in machine-readable form, the Office for Information Technologies and eGovernment in charge of the Open Data Portal infrastructure, has implemented data visualisation tools so as to facilitate „reading“ and analyses of information contained in the data sets. Citizens have been invited to use the data and to contact the Office for IT and eGovernment if they come up with some interesting insight or solution.

Challenges

In Serbia, COVID-19 related data is provided by the reliable source, and is available on national open data portal as open data, therefore the data sets are findable, accessible and reusable, though a need for specific international standards for COVID-19 data has been recognized at international level, so as to facilitate international research of the novel coronavirus.

Partnership

Establishment of the dedicated subdomain and the continual provision and publishing of COVID-19 related open data in Serbia has been ensured by the Government of Serbia's Office for Information Technologies and eGovernment as the government body in charge of the national open data initiative and the open data portal (data.gov.rs) design, development and operating, and its partnership and cooperation with the Institute of Public Health of Serbia "Dr Milan Jovanovic Batut" that provides anonymized data on a daily basis, and the Ministry of Health.

Replicability

This project is highly replicable, since during the times of crisis all countries need to ensure their citizens, as well as national and international researchers, a reliable source of information, that is, in this case, reliable information regarding the COVID-19 situation in their countries.

Sustainability

The dedicated COVID-19 subdomain will surely remain available until the end of the COVID-19 epidemic in Serbia, as well as in case of the second wave. Yet, even after the introduction of approved treatment or vaccine, some mechanism for the utilization of historical data will remain available to serve national and international researchers, i.e. to enable the use of these data sets for scientific purposes.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-science

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case63-e-KINDERGARTEN 100

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID 19 SCHOOL DIGITAL REGISTER
Universal Access Service
FundGovernmentBotswana

Beneficiaries

1.Schools

Avail a stress free screening alternative as compared to using paper registers that cannot instantly find records.

2.Local Clinics

We avail reports of any temperatures above 37.5 for tests.

Website

<https://www.tra.gov.ae>

Description

Our core activities are to reduce queue times,enforce social distancing within our schools and avail instant data to local clinics.SHE officers and teachers team up to screen students temperatures.

ICT Tools

1.Web based technology 2.Offline Technology

These technological approaches are meant to increase usage and coverage of all our regional schools.The hardware tools in use are laptops and tablets.

Challenges

1.Lack of ICT Gadgets in some schools

2.Lack of internet connectivity

3.Technophobia

Solutions to challenges

1. Government to avail laptops/tablets and routes

2. Offline Solution

3. System user training

Partnership

YES, a donation of gadgets to schools in remote underserved communities will help in interconnecting our system and providing real time to the health ministry.

Replicability

Yes, it is replicable as we designed the application in such a way that it can be available both online and offline. Currently the project is in use in 3 regions in Botswana (Gantsi, Kgalagadi, Mabutsane).

Sustainability

Yes, because it has opened a door for our schools to transition into the 4 industrial revolution as it also acts as class digital attendance register which was previously paper based.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case64-Digital Education: Leave No One Behind

Title of the project, Contact Organization Name, Stakeholder type, Country

The United Arab Emirates Telecommunications Regulatory Authority Initiatives in response to COVID-19
Telecommunications Regulatory Authority Government United Arab Emirates

Beneficiaries

The initiatives taken by TRA spans across different sectors thereby including a large number of primary and secondary beneficiaries. The main beneficiaries are the UAE government entities; the TRA assisted the federal government entities within the UAE to enable them to work from home, by:

- Provide suite of services to enable government entities to work from home including collaboration, video conferencing tools and cloud services.
- Increase the infrastructure capacities.

- Create and circulate guidelines and policies on how to securely deploy and use collaboration tools.

By ensuring business continuity, the TRA served all other entities' customers. In addition, and to avoid suspension or deactivation of customers' mobile services due to documents expiry and to ensure service continuity, the TRA instructed the telecom licensees in the country to suspend deactivating the mobile services due to documents expiry. This is in line with the government initiative to enable work from home and distant learning.

Website

<https://fanr.gov.ae>

Description

In the context of its role in supporting the government's precautionary efforts during COVID-19, the TRA launched several initiatives to enhance the ICT sector and ensure the safety of citizens, residents and visitors on the UAE territory.

- Education and Business Continuity:

- Free Internet Data via Mobile phone to enable Distant Learning and the provision of 14.000 students in public schools with tablets by TRA's ICT fund

In coordination between the Ministry of Education in the UAE and the Telecommunications Regulatory Authority (TRA), service providers in the UAE were instructed to provide a package of data needed to access the distance learning feature for families without home internet, free of charge.

- Healthcare:

- Supporting the provision of remote healthcare services

In coordination between the Ministry of Health in the UAE and the Telecommunications Regulatory Authority (TRA), service providers in the UAE were instructed to allow access tele-medicine apps freely without counting against their usage quotas and packages.

- Customer welfare:

- Online training:

In order to make the best of people's time at home, the TRA provides interactive, free of charge online training through its "TRA Academy" by the Center of Digital Innovation at TRA on trending topics of business, technology and soft skills around the clock.

ICT Tools

- Digital Identity & Signing Platform (UAEPASS)

In order to ensure that individuals & entities are able to offer services digitally, TRA developed UAEPASS, which is the first National Digital Identity, was put to real practice.

UAEPASS enables individuals to verify who they are digitally hence enables seamless digital services without the need for physical visit.

- Online grocery

In its effort to encourage people to stay at home and practice social distancing, the TRA announced a list of purchasing apps used in the UAE for consumers to use instead of physically performing daily grocery shopping. The TRA updates the list on a regular basis based on market developments. The online stores included in the list include large shopping centers and cooperatives, in addition to grocery stores, meat and vegetable shops, and other services.

Challenges

The challenges faced in terms of provisioning the students with free internet data included the timely update with respect to the list of students provided by the Ministry of Education. However, service providers swiftly took action in providing the service to those in need and a smooth process was put in place once the points of contacts from each stakeholder were identified.

Partnership

The above mentioned initiatives would not have been successfully implemented without the close corporation and support from the various strategic partners, such as but not limited to, UAE's service providers, the UAE's Ministry of education, and the Ministry of Health and Prevention.

Replicability

Yes.

The mentioned projects were highly impactful and could be applied with ease .

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case65-Education Non-Stop - Integrated Education

Response Serbia

Title of the project, Contact Organization Name, Stakeholder type, Country

FANR Guidance during COVID-19 Federal Authority for Nuclear Regulation Government United Arab Emirates

Beneficiaries

FANR Operation Department and FANR Licensee.

Main Benefits:

1. Faster response to FANR Licensee during COVID-19
2. Support National Covid-19 Eradication Measures
3. Maintaining Effective Oversight of Nuclear Safety and Radiation Protection
4. Documentation of compliance with regulatory requirements
5. Documentation of modification of Conduct Of Regulated Activity

Website

<https://bvkb.gov.lv/en>

Description

Project aims at providing following guidance to FANR Licensee during COVID-19 and maintain the full scope of its regulatory responsibilities and functions

1. Guidelines on Radiation Protection, Safeguards, and Nuclear Safety
2. Advice on the Use Of Mobile Medical X-Ray Equipment Outside Licensed Facilities
3. Provide response to Modify Conduct Of Regulated Activity Due to Covid-19 Impact.

ICT Tools

ICT in collaboration with Operation departments, developed a integrated web portal to help FANR Licensee with guidelines, advise and response to Modify Conduct Of Regulated Activity Due to Covid-19 Impact.

Following tools were integrated together for this project:

1. Web portal to provide necessary information to FANR Stake owner
2. Online Workflow to review FANR Response by different internal departments before providing it to FANR Licensee
3. Task Management Application (FANR Staff Work from Home Portal) to track and review request
4. Online Chat to provide quick response to FANR Licensee Queries
5. Automate Travel Authorization letter for FANR Inspectors to travel across emirates during travel restrictions

6. Digital Signature to provide authorized and secured document response.
7. Helpdesk for register all queries or complaints

Challenges

1. Challenging Project Timelines - Project was developed in phased manner to provide necessary information to FANR Licensee as soon as possible.
2. Work from Home for FANR Staff and Visitor Restriction - Use of Task Management application, Online Chat , Workflow & Digital Signature helped in overcome this challenge
3. Travel Restriction for Inspectors - Collaboration with Government agencies helped to automate and issue travel authorization letter

Partnership

No

Replicability

"FANR Guidance during COVID-19" portal is replicable for any nuclear regulatory authority responsible for conducting nuclear regulatory programmes in safety, security, radiation protection and safeguards.

Following Project activities during COVID-19 are applicable for any nuclear regulatory authority.

1. Maintaining Effective Oversight of Nuclear Safety and Radiation Protection
2. Covid-19 impact on Licensee capacity to comply with regulatory requirements
3. Documentation of compliance with regulatory requirements

Sustainability

"FANR Guidance during COVID-19" portal is sustainable as it supports FANR's mission of ensuring the peaceful uses of Nuclear Material, Nuclear Items and Nuclear Related Dual-Use Items through its licensing and controlling systems. The system is built with a strong infrastructure and is being placed with 2 servers to ensure continuity. Portal underwent several improvements to support its sustainability like developing integration with many internal application.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-government

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all

Case66-COVID-19 Open Data Serbia

Title of the project, Contact Organization Name, Stakeholder type, Country

The Building Information System (BIS)The State Construction Control Bureau of Latvia (SCCB)GovernmentLatvia

Beneficiaries

Stakeholders in the Latvian construction sector, public authorities (incl. institutions supervising construction process), local governments and business organisations involved in the drawing up and coordination of documentation of the construction process. Also every owner of real estate located in the territory of Latvia, a resident or non-resident of Latvia, local/foreign company, investor.

Website

<https://a2i.gov.bd/>

Description

Since 1 January 2020, the processing of construction documentation in Latvia has become completely digital. All the administrative documentation necessary for the construction process – from the coordination of a construction conception to the commissioning of a structure – is only processed electronically in the Building Information System (BIS) established for this purpose. During the period when on-site services provided by public authorities became inaccessible due to the COVID-19 restrictions, the System ensured continuity of the work of the Latvian construction sector and continuous accessibility of remote consultations for users of the System, and also training of the BIS user groups was continued in the acquisition of the new functionality online.

ICT Tools

E-signature and authentication options have been integrated into the BIS enabling it to identify each user individually, as well as to coordinate, sign and issue legally valid documents. The System has also been integrated with 15 other databases of public authorities, thus offering its clients fast, user-friendly, automatic and precise data selection for drawing up any application or document, and re-use of the existing national data. The BIS has also been adapted to the needs of non-residents and foreign companies.

Challenges

The main challenges encountered by the State Construction Control Bureau (SCCB) in the early stage of the COVID-19 pandemic (in March and April) constituted a tenfold increase in the number of users of the System, as well as an increase in the number of construction cases. Over a short period of time the Bureau had to re-plan the initiated training and

information activities for clients. The team, however, responded very quickly and extended the Support Service, as well as ensured achievement of project results providing training and other information activities online, whilst at the same time contributing substantially to the promotion of computer literacy of clients.

Partnership

The SCCB would be happy to share its expertise in the operation of the developed BIS functionality, as well as improve its knowledge not only in the performance of monitoring and supervision of the construction process, but also the provision of other functions of the SCCB, such as that in the energy sector.

Replicability

This project is not replicable, as operation of the System has been adjusted to the existing legal framework. Pursuant to the Construction Law of the Republic of Latvia, starting from 1 January 2020, each new construction conception shall only be registered electronically, namely in the BIS.

Sustainability

Sustainability of the project will be ensured, as the use of the BIS is the only lawful way to perform administrative proceedings related to the construction in Latvia.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 12: Ensure sustainable consumption and production patterns|Goal 16: Promote just, peaceful and inclusive societies

Case67-COVID 19 SCHOOL DIGITAL REGISTER

Title of the project, Contact Organization Name, Stakeholder type, Country

Food For Nation|Aspire to Innovate (a2i) Programme|Government|Bangladesh

Beneficiaries

The platform can be used by everyone involved in the agricultural value chain, from farmers, agri-merchants, warehouse keepers, mokams, large super shops, small retailers to

consumers. Farmers, marketers, stockists, marketers, and institutional consumers can check the price and quality of products on the same platform. Apart from this, they will also get the opportunity to direct commercial communication.

Furthermore, consumers are not always getting the right product at the right price. One of the reasons behind this is lack of proper knowledge and proper platform of the general public including farmers in the use of information technology, violence in the transport system, syndicate of unscrupulous traders, the violence of middlemen, lack of coordination between demand and supply and overall lack of proper management. In this platform, buyers can check the market prices listed directly on the front page (courtesy of the agricultural department) and buy accordingly.

Many e-commerce platforms and shops/stores are using the platform to source groceries and other products to sell through their own platforms.

Website

<https://www.gov.uk/>

Description

The pandemic has disrupted the normal transport and proper marketing of vegetables, seasonal fruits, and other agricultural products. Currently, farming is the most widespread source of income for the majority of Bangladesh's population. In this context, the 'Food for Nation' platform has been launched to enable marginal farmers to get fair prices as well as consumers to get the required food grains and agricultural products as per their demand easily, in a short time and at the right price. It is Bangladesh's first open agricultural platform supported by the government.

All types of buyers and sellers involved here can buy all agricultural products including vegetables or collect information by contacting the mobile number given in the profile. The buyer and seller will pay the price by purchasing the product and will transact by selecting the medium at their convenience. This marketplace is a completely free platform. It can be used to buy, sell, or advertise for free.

The "Food for Nation" platform houses more than 1791 farmers onboarded with more than 2000 products across the country. It has reached 4500 wholesalers and 55 e-commerce companies and 6 logistics companies regularly find agri-suppliers with the assistance of the GIS map.

ICT Tools

Farmers, marketers, stockists, marketers, and institutional consumers can check the price and quality of products on the same platform. Apart from this, they will also get the opportunity to direct commercial communication. Buyers and sellers can register on this

platform with an easy and mobile-friendly interface across the country and select all the categories of agricultural crops or vegetables and can advertise and buy. All types of buyers and sellers involved here can buy all agricultural products including vegetables or collect information by contacting the mobile number given in the profile. The buyer and seller will pay the price by purchasing the product and will transact by selecting the medium at their convenience. It will also have a database of agri-traders, daily market prices of crops and agricultural products, and contact numbers of field level officials of the Department of Agricultural Marketing and the Department of Agricultural Extension for cooperation. To enable a wider reach, a GIS map has been attached to the platform, where information regarding the sellers' location and contact has been set, along with what sort of products they are selling.

Challenges

Retail vegetable and fruits sellers had to keep an empty stock for regular sales due to the wholesaler's unwillingness to take the risk with perishables. While the sellers are adept at selling, properly packing, and delivering perishable goods such as their products and vegetables in a safe and hygienic way has become a challenge. Local government and private organizations have been aiding these farmers by ensuring the health guidelines are followed, as far as their reach is.

Delivery charges and product prices differ from one district to another and are dependent on the mode of transport used, hence the consumers face a disjoint among similar products because those are from different sellers. Farmers are encouraged to follow proper transports modes and keep in accordance with the national market prices.

The platform does not support tracking any sales that takes place, hence service cannot be properly assured. This may be handled by allowing a third-party regulation and adding a payment gateway/cart service.

Farmers are not comfortable with the technologies. Still onboarding them is challenging, district-level govt officers are working.

Partnership

N/A

Replicability

The platform acts as a bridge between buyers and sellers, wherein there is no middleman, and the buyers contact the seller directly to negotiate. The products are listed as advertisements, detailing the prices and descriptions. This model can be applied for any other service such as clothing, crafts, and intangible services as well.

Sustainability

Although the platform is open and free to all (registration does not require money), the model is uplifted by both the buyers and sellers. As long as the demand for products exists and sellers are willing to buy, the platform will work. Furthermore, it can be used as a nationwide product data repository, a rare accumulation of farmers and their products online. It can also be used similarly to other products.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-agriculture

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case68-The United Arab Emirates

Telecommunications Regulatory Authority Initiatives in response to COVID-19

Title of the project, Contact Organization Name, Stakeholder type, Country

GDS support to the UK's digital COVID-19 responseGovernment Digital Service (GDS) - GDS is a unit of the Cabinet OfficeGovernmentUnited Kingdom

Beneficiaries

As the leader of the UK government's digital function, the services that GDS provide are offered to citizens, businesses and civil society. A vast majority of the services created have been aimed at the general public, however, GDS also developed services tailored to meet the needs of the most vulnerable, for example through the Shielded Vulnerable People Service (SVP). GDS rapidly responded to urgent instructions from the Prime Minister's Office to stand up a service for clinically extremely vulnerable people - the SVP. As of July 2020, over 2 million people have used the SVP service, of whom over 335,000 have requested food supplies and over 85,000 have specified a care need. It has enabled delivery of over 2 million food boxes across the UK, access to priority supermarket delivery slots, and the sharing of care needs with local authorities.

In parallel with the SVP service, GDS has developed a Non-Shielded Vulnerable People Service (NSVP) to provide support for people struggling due to COVID-19, but who are not

classified as extremely clinically vulnerable. The service was launched on 10th April as a triage signposting tool, allowing users to select specific needs and be directed to guidance relating to their needs.

Website

<https://sinaloa.gob.mx/>

Description

GDS have been at the forefront of the UK's response to COVID-19. Over 90 new user facing digital services have been developed as part of our COVID-19 response, with a further 43 in the pipeline, in addition to our existing services.

A majority of these services can be found on [GOV.UK](#), which has delivered an extensive programme of activity to host and consolidate all government guidance, tools and live streams of press conferences. Our [GOV.UK](#) content team has been working closely with the Prime Minister's Office to organise the management and improvement of all coronavirus content as well as managing the newly spun up services. At its peak, [GOV.UK](#) had 158 million page views in a single week.

A lot of the services that have been created have involved working across multiple government departments, as well as with the scientific community, civil society and private sector, many of them built in days using common reusable components to deploy a workable service as soon as possible. These include [GOV.UK](#) Notify, the government's messaging platform, [GOV.UK](#) Verify, used to prove identity online and [GOV.UK](#) PaaS, a cloud hosting platform that allows departments to deploy applications without infrastructure specialists.

ICT Tools

Much of the UK's COVID-19 response effort is layered onto years of hard-learned lessons and battles for funding of common components and standards. The UK government's ability to respond quickly and effectively was therefore a consequence of the existing digital leadership and processes that already existed prior to the outbreak of COVID-19 and demonstrate that one of the benefits of a strong digital function is the ability to respond rapidly and flexibly to meet urgent needs.

The UK government was already equipped with the necessary technology and online collaboration and so could quickly continue to deliver critical services at pace and at scale. However, UK's COVID-19 response highlights that good digital projects are based on much more than sole technology, but on strong digital policy, services and standards and embedded skills across the public sector. We've found that digital-ready teams have proved significantly more resilient during the COVID-19 period – for example, adapting to remote working, joining up across government and being able to share data securely.

The COVID-19 crisis has provided an opportunity for GDS to push through new modern ways of working and accelerated digital transformation where needed, which has fostered a more harmonised digital landscape across government.

Challenges

Our work on COVID-19 is going to continue for some time.

To be able to meet the demand for our existing and new services, we've had to reprioritise and adapt our ways of working by redeploying large numbers of staff from across the organisation to the frontlines of new and existing services during the initial phase of the outbreak, all whilst transitioning into a remote setting.

We have ensured that Digital, Data and Technology skills are accessible by other government departments through establishing a DDaT COVID-19 Working Group. This platform has enabled all departments and devolved administrations to have a single, forum to articulate needs, risks and issues. GDS use this to coordinate responses, capture requests and engage or connect industry with demands as needed.

We are continuing to collate data on new services being built in response to COVID-19 as well as areas where there has been a considerable increase in effort. This work aims to identify common problems and areas of best practice being solved across government and get a picture of all services and efforts, which has been used to push for new modern ways of working across UK government.

Partnership

The COVID-19 crisis is an unprecedented situation requiring a coordinated response and large scale, cross-government wide collaboration in the Digital, Data and Technology Profession. We have also built new relationships with private sector entities and non-governmental organizations. For example, GDS developed a new service allowing businesses to inform government what support they can provide.

In addition, we created a GDS COVID-19 Resource Hub that triages demand for support with COVID-19 services from across government and funnels people to areas in need, drawing on a range of internal and commercial channels. The Resource Hub has processed over 400 roles since March 2020. This flexible resource pool and routes to Digital, Data and Technology specialist suppliers enabled us to quickly respond to the surge in demand for Digital, Data and Technology specialists to build new services quickly.

Replicability

The government's response to COVID-19 is going to develop and change over time accordingly with our citizens' needs. However, at its core our services are built on our existing digital infrastructure and existing components which have enabled rapid service

delivery in the context of the crisis. With help from our existing service standards and guidelines, the newly spun up services follow the same process and structure as any of our other services. This means that everything that has been done, can be done again, at scale and at pace.

Therefore, [GOV.UK](https://www.gov.uk) will remain high profile, not only because of the crucial advice for citizens but because we will likely continue to need to host new services at speed and iterate at speed.

Sustainability

The UK's digital response to Covid-19 was a result of 10 years of investment in people, governance and technology. The ability to respond quickly and effectively was a result of the existing digital leadership and processes that already existed prior to COVID-19. Because of that, the sustainability of what we have done is grounded in the fact that the bulk of our response has been built from existing digital services, standards, skills and policies ('digital foundations').

The UK's COVID-19 response has demonstrated the critical importance of having strong underlying cross-government digital foundations that can be a springboard for innovation and moving at pace in a crisis. The crisis underscored the importance of developing digital capabilities in government, the benefits of user centered design, but also how part of digital resilience is having the right technology to support civil servants. It is also what will enable us to scale back up in the face of future shocks.

As a result from COVID-19, we have also learnt new lessons and identified areas for improvement which we have either rectified as we've moved along, or identified them for further work in the future.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C7. ICT applications: benefits in all aspects of life — E-employment|AL C7. ICT applications: benefits in all aspects of life — E-environment|AL C7. ICT applications: benefits in all aspects of life — E-agriculture|AL C7. ICT applications: benefits in all aspects of life — E-science|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case69-FANR Guidance during COVID-19

Title of the project, Contact Organization Name, Stakeholder type, Country

Unidad de atención médica para la detección y seguimiento de COVID-19Gobierno del Estado de SinaloaGovernmentMexico

Beneficiaries

Positive patients

People who contact the Medical Care Unit for the detection and monitoring of COVID-19, which may be:

Suspected of symptoms and contact

Suspected of symptoms

Suspected of symptoms and risk factors

Suspect serious or urgent

Unsuspecting

Website

<https://a2i.gov.bd/>

Description

Online self-assessment test from salud.sinaloa.gob.mx and the App Assistant COVID-19 Creation of the Medical Care Unit for the detection and monitoring of COVID-19, an efficient and safe communication channel that allows reducing the number of infections, hospitalizations, severe cases and high-risk patients with the following results:

24,563 georeferenced and follow-up cases, with intelligence applied by addresses to design effective prevention and care strategies.

85,000 calls received and attention provided through the COVID-19 Call Center

50,743 remote medical consultations

30,540 medical and psychological care

49,000 awareness calls to suspects and risk groups for contagion containment

23,803 contagion chains identified

13,500 suspected cases identified and geographically located at an early stage

5,001 medical kits delivered to positive patients through the Medical Care Unit for the detection and monitoring of COVID-19

123 supports in hospital transfers for patients with severe symptoms

ICT Tools

Internet

Telephony

Cloud services

Mobile apps

Streaming content

Social networks

E -government

Challenges

Avoid hospital saturation, achieving it through the use of technologies for the prevention, location and containment of the virus in Sinaloa.

Partnership

Allies that contribute to the development of new technologies for education and information about the coronavirus in the new normal.

Replicability

The first unit of medical care for the prevention and detection of COVID-19 was created in the Sinaloan capital Culiacan, replicating itself in the city of Mazatlán, and with projects to also operate in the cities of Los Mochis, Guasave and Guamúchil.

Sustainability

It is a project focused on guaranteeing the basic needs of society in matters of health security and quality of life, making greater use of technology to achieve the objectives, reducing the use of resources and involving society, government and companies.

Action Lines

AL C2. Information and communication infrastructure|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-science

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case70-The Building Information System (BIS)

Title of the project, Contact Organization Name, Stakeholder type, Country

Konnect: An adolescents' education, soft skills, and counseling platform
(www.konnect.edu.bd)Aspire to Innovate (a2i) ProgramGovernmentBangladesh

Beneficiaries

Adolescents and youth who are in the age group 10-24 are the primary beneficiaries of Konnect. In this regard, relevant education departments circulated notices for field level officers and teachers to inform students for watching lessons broadcasted on television or konnect. Teachers are communicating with students and their guardians and then instructed them to watch the programs on the konnect website. Konnect is providing the following services to students:

1. Academic program: 600+ academic contents of Grade 5 to 12 based on textbook and curriculum are available on konnect for the students. All these classes have been taken by the expert teachers of the country.
2. Psychosocial counseling and co-curricular program: Weekly 2 sessions for psychosocial counseling and two sessions for a co-curricular program like drawing, communication skills, etc. are telecasted live from Konnect FB Page. Then these contents are uploaded on the konnect website.
3. The popularization of reading habit/Books: The book section of konnect has been enriched with 1000+ books of different categories and all books have been selected according to the target age group 10-24.
4. The popularization of STEM Education: There are 200+ science-based experiments and Comics on konnect to make learners enthusiastic about science and STEM education.

Website

<http://www.nic.gov.sd>

Description

Konnect is an online platform which is working to transform 36 million adolescent and youth into the future-ready workforce through skills, education, and counseling in Bangladesh. The country-wide educational institutions shut-down implemented in Bangladesh on March 17 2020 due to pandemic, affecting the 30 million students across the country. In this context, the government's main priority has been to minimize the disruption of learning to the extent possible. To address this, the Ministry of Education(MoE) is working with konnect as a coordination platform to use it as a national education platform of mass media broadcasting and an online platform to remotely deliver educational content from the school curriculum. The government decided to broadcast recorded classes through national terrestrial TV channels following curriculum and academic calendar for grade 5 to 10. These broadcast, recorded, live online classes and other co-curricular contents are available on কিশোর বাতায়ন (Konnect.edu.bd). Each content brings quizzes and homework. Learners' can ask questions and get feedback. Students can create user accounts to complete quizzes on the material and quiz scores have been saved to their profile automatically. Students can find all routines of live classes, recorded classes, and co-curricular activities on Konnect.

ICT Tools

To continue education in this pandemic situation, the Ministry of education has taken the following alternative measures instantly with the technical support of Konnect to expand the digital transformation in Education:

1. Recorded classes on TV: MoE and Konnect used state-owned television channel called Sangsad TV to broadcast education programs on a specific slot. Every day two classes for Grade 6-8 and three classes for grades 9-10.
2. Live and Recorded classes Social Media: Grade 11-12 are not covered under TV program. Also, not all classes of grade 6-10 can be captured due to limited broadcasting time on TV. So Konnect introduced the central live class program for grade-11 &12 on the konnect FB page. Everyday 4 classes are telecasted and till today 210 classes are taken.
3. Psychosocial Counseling Konnect FB page: Mental health is a crucial issue for the adolescent during the COVID-19 pandemic. Konnect telecast 2 episodes every week called 'Alapon' on psychosocial health and counseling based on GEMS Module.
4. Konnect website as a repository platform: All TV-based recorded classes, live classes, and psychosocial programs of the konnect FB page, class routine, quiz, and homework are available on the Konnect website.

Challenges

In imparting the lessons through a remote learning platform, challenges have been encountered related to infrastructure and connectivity issues. To overcome all the challenges and broaden the scope of the distance education program, MoE and Konnect have thought about telephone-based education. Konnect, a2i along with MoE have designed National Education Helpline: 333-6 which is a telephone-based educational solution for the learners who don't have access to the internet. Above 20% of 50 M learners of different educational levels do not have access to TV and the internet at all. Due to the high bandwidth cost and long duration of online classes, many students cannot afford it

though they might have internet access. Most of the parents and students have only a feature phone. So, 3336 will help marginal and remote learners to get 5 minutes lesson by a teacher directly. These 5 minutes are toll-free service during COVID- pandemic. Also, any learner and parents can get the necessary educational information on 3336. Initially, a pool of 4000+ teachers is registered in 3336 to provide service. Also under the partnership with UNFPA, education and psychosocial counseling support will be available through 3336.

Partnership

Konnect has broadened collaboration and partnership with different government departments and organizations, non-government organizations, and development partners for distance learning purposes. Konnect is working with Government Agencies Directorate of Secondary and Higher Education, Sangshad TV, National Curriculum and Textbook Board, etc for the academic program. Konnect is also working with INGOs like UNICEF, UNESCO, UNDP, and other development partners on academic, non-academic, and psychosocial counseling program i.e. UNICEF is a donor of TV-based academic contents during COVID-19 pandemic. Other non-government organizations i.e. Save the Children, BRAC, Cambrian School, Residential Model School and College, Channel I have also provided relevant support to the academic content. Project Tiktalik is a local organization working on comics. Konnect has developed a partnership with them to take 2 classes every week on how to draw a comic. Konnect is also looking for partners who can support and fund the implementation and scale-up of the programs at the grassroots level. At the same time, konnect is interested in the partners who can develop and assess soft skills like problem-solving, critical thinking, etc. of the learners to make them ready for the job market.

Replicability

This initiative is a comprehensive online and offline platform for adolescents and youth to promote future-ready workforce through skills, education, and counseling. It could be replicated in other countries with similar contexts for developing human resources in different sectors using ICTs as enablers. This initiative is self-evolving and a platform to generate new ideas. So, replicating this initiative could bring some changes in other countries.

Sustainability

1. ICT Division under the Ministry of Communications and Information Technology will take the lead to disseminate ICT based skills development program for the adolescents through this platform.
2. Directorate of secondary and higher Education (DSHE) will take the ownership of connecting students in one platform to give them project-based activities and monitoring them too.
3. Directorate of Health will disseminate the Sexual Reproductive Health and Rights (SRHR) awareness program through this platform to reach and implement a maximum number of adolescents.
4. Sheikh Rasel Digital Lab of Directorate of Information and Communication Technology

will incorporate Konnect as part of their regular lab class activities regarding safe internet uses.

5. 'konnect' technical part is managed by a reputed public university named Shahjalal University of Science and Technology (SUST). Computer Science and Engineering department of SUST maintain the system. Thus government organizations are directly involved as technology and content partner. Also, the private sector and development partners play the role of content production and activity design. A decade long initiative called 'Generation Unlimited' in Bangladesh hosted jointly by UNICEF, a2i, BRAC and World Bank also addressed Konnect as a soft skills development platform within GenU activities.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls

Case71-Food For Nation

Title of the project, Contact Organization Name, Stakeholder type, Country

Risk Mapping National Information Center Government Sudan

Beneficiaries

FMoH
National Emergency Committee

Citizens

NGOS

Benefit is the possibility of monitoring and predicting spread of virus, to make a siege of affected areas to deliver different services

Website

<https://www.knls.ac.ke/index.php/home>

Description

Building base map with different layers such as climate, UV, and health facilities in order to response in timely manner to different risks regarding virus and for fair distribution of resources

ICT Tools

GIS
this intended to be available for decision makers at national level

Challenges

unstable Internet service was solved by offline mode and also lack of awareness among decision makers and solved by training

Partnership

Yes.
Capacity Building

Replicability

Yes.
In every country with similar conditions

Sustainability

Yes.
will improve decision making process in different sectors

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case72-GDS support to the UK's digital COVID-19 response

Title of the project, Contact Organization Name, Stakeholder type, Country

'Handheld Library'Kenya National Library Service - Kibera BranchGovernmentKenya

Beneficiaries

The children and youth are using them to read despite the Covid-19 pandemic. This is happening by the use of the few devices we have managed to acquire through friends. We download the ASb Reader App, educational games, and revision papers on each phone/tablet for children and youth then lend them to them. Phones are loaned out to the children in the company of the parent.

Website

<https://www.bag.admin.ch/bag/de/home.html>

Description

It has been very challenging for children especially within the informal settlements because many of those from the middle class and affluent families can access online lessons since they can afford smartphones and data for internet connection. Kibera slums have no access to ICT and cannot afford data for internet connection. As a librarian, I believe every child deserves the chance to learn. In this case, our focus as a community library in the midst of school and library lockdown is on digital access and inclusion for the remote, socio-economically deprived families living within the informal settlement. The children and youth need to continue reading despite the Covid-19 pandemic. This is happening by the use of the few devices we have managed to acquire through friends. We download the ASb Reader App, educational games, and revision papers on each phone/tablet for children and youth then lend them to them. Phones are loaned out to the children in the company of the parent. They are supposed to return to the librarian after one Month to assess, monitor, and evaluate usage. We are also printing stories and revision papers for the ones who do not get the devices.

ICT Tools

We are using smartphones, tablets, laptops, and Printer. They promote the

Challenges

The main challenge is the lack of devices because we source from friends, internet connection sometimes is an issue because at times we print them at home and later go to the slum to distribute since the library is closed. Also, we meet with the beneficiaries of the devices one by one because of the issue of distancing and meeting place is a problem.

Partnership

Yes, Mostly I am looking for the ones who can donate devices.

Replicability

It is not replicated. It's an innovation we thought about after the library was closed due to Covid-19.

Sustainability

It is sustainable as we can get support for buying more devices and once the library is opened since some challenges will be sorted out.

Action Lines

AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case73-Unidad de atención médica para la detección y seguimiento de COVID-19

Title of the project, Contact Organization Name, Stakeholder type, Country

SwissCovid app|Federal Office of Public Health (FOPH)|Government|Switzerland

Beneficiaries

Primary beneficiaries are the Swiss people as it should help to stop the transmission of covid-19 in Switzerland.

Website

<https://a2i.gov.bd/>

Description

The SwissCovid app for mobile phones (Android/iPhone) is helping to contain the new coronavirus. It complements the conventional contact tracing carried out by the cantons – and thereby helps to break chains of transmission. Anyone who spends a certain amount of time in close proximity to a person who subsequently tests positive for the new coronavirus, will be notified via the app that they may have been infected, and are advised on what to do

next. The person's privacy remains protected at all times. Using the app is voluntary and free of charge.

ICT Tools

The app uses the new exposure notification framework from Google and Apple, which has been developed for proximity tracing apps like ours.

Challenges

As everything had to be done immediately it was difficult to be sure of the efficacy on the technical side as well as the alignment with the legal basis.

Partnership

No.

Replicability

Our app and also all other necessary software components (e.g. the system for generating the activation codes by the cantonal doctors or the contact tracing team) has been created as an open source project. This means that anyone can view our software code and also use it free of charge, as long as they comply with the license terms (which are published here: <https://github.com/DP-3T/dp3t-app-android-ch/blob/master/LICENSE> and <https://github.com/DP-3T/dp3t-app-ios-ch/blob/develop/LICENSE>).

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case74-Konnect: An adolescents' education, soft skills, and counseling platform (www.konnect.edu.bd)

Title of the project, Contact Organization Name, Stakeholder type, Country

Teachers' Portal: A web platform for Teachers' Training and Continuing Professional Development (www.teachers.gov.bd)|Aspire to Innovate (a2i) Programme|Government|Bangladesh

Beneficiaries

Teachers from primary to higher secondary level are the main beneficiaries of Teachers' Portal. Ministry of Education and Ministry of Primary and Mass Education with the technical support of Teachers' Portal-a2i are trying to overcome the crisis during COVID-19. Field level education officers maintaining liaison with ministry are working with educational institutions to implement all initiatives taken by government and local administration. Teachers' Portal is providing the following services to teachers:

1. Academic contents: Teachers' Portal is providing digital contents from primary to higher secondary to the teachers of rural and urban areas too. By using these digital contents teachers are being prepared them to conduct classes through online schools.
2. Online Training: Teachers' Portal organizes weekly training programs on how a teacher can conduct interactive online class. We have got huge response from our teachers in this regard.
3. Recognition: Teachers' Portal is going to launch a new gamification to introduce best online class performer. Pedagogy experts from Government Teacher's Training College will give rating on the quality classes by following the criteria.
4. Popularization of Online School: Teachers' Portal has popularized the new intervention on online school in root level by ICT4E District Teacher Ambassadors.

Website

<https://www.gov.pl/govtech>

Description

The Teachers' Portal, a collaborative, co-creative and problem solving CPD platform, is very popular among teachers to create/share digital content for all subject areas. Due to COVID-19 pandemic education institutions got shut down since 18 March 2020 in Bangladesh. From 25 March 2020, Teachers' Portal recognized ICT4E District Ambassador Teachers from all divisions had started to continue the education using ICT. Preliminary they chose facebook, zoom, google meet and other platforms to respond the emergency to continue education in an alternative way. These ICT4E District Ambassador Teachers boosted the online education system in Bangladesh. Now Teachers' Portal is coordinating divisional, district, upazila and institutional level online school from primary to higher secondary classes. These highly motivated teachers are also promoting government initiatives to reach students as per instruction and planning from institutions' head. Teachers' Portal has developed a new feature 'Online School Dashboard' which counts real-time data in field level. Teachers' Portal has successfully done few online teachers' training with the consent of Ministry of Education and other development partners. This platform has successfully provided exclusive training on 'Interactive Online Class and English Language Proficiency' and planned to start many more very soon.

ICT Tools

Continuing education during COVID-19 pandemic Ministry of Education in Bangladesh is promoting online school with the support of Teachers' Portal. Government stands here to institutionalize this new culture in our education system. With the technical support of Teachers' Portal few major initiatives are running on. The followings are:

1. Live and Recorded classes on facebook: Online schools are broadcasting live and recorded 5 to 10 classes on facebook pages regular basis (<https://www.facebook.com/MymensinghOnlineSchool/>). We have seen enormous response from learners and guardians too to respond this initiative.
2. Recorded classes on Local TV: Teachers' Portal recognized ICT4E District Ambassador Teachers with the help of district administration are broadcasting recorded classes on local cable TV operator's channel.
3. Online class on zoom: Teachers are using zoom to do interactive online classes where interaction and learners reaction both are happening.
4. Online Training: Teachers' Portal is organizing online training for countrywide teachers from primary to higher secondary level. Teachers are participating in these training spontaneously with the help of ICT.
5. Online School Dashboard: It has become very easy to see the current status of online educational initiatives of Bangladesh. It provides us the data of schools, teachers, subjects and number of classes.

Challenges

Right now the major challenges our teachers are facing internet problem, constraints of devices, studio and connectivity to the learners. One major challenge is the communication gap between teacher and student. Teachers, education officers and district administration officers all are concerned about it. They all together are working to reduce the gap and implementing awareness programs, direct communication with students and guardians too. We have seen big coverage on social media to reach the guardians and learners too. ICT4E District Ambassador teachers are coming forward to continue the education continuation initiatives despite having resource limitations. They are sitting with field level education officers, district administration and other stakeholders too. We have seen exemplary response from district administration and education officers to cooperate our teachers to overcome their problem. Teachers in Bangladesh have raised their voice to get special internet data packages to continue online education. Ministry of Education, ICT Division, a2i and other development partners are trying hard to avail special data packages for our teachers. We have seen device problems and in that case mobile producer companies can contribute or give special rate for the teachers to get a handsome device which can improve the quality of online classes.

Partnership

Teachers' Portal was planned and now is being implanted by Ministry of Education, Ministry of Primary and Mass Education and with supervision of a2i. Teachers' Portal is directly working with Ministry of Education, Ministry of Primary and Mass Education, Cabinet Division, ICT Division, Shangshad Bangladesh Television, Unicef Bangladesh, Save the

children, UNCHTDF, Plan International, dnet, and Dhaka Ahsania Mission.

Teacher's Portal is also looking for partners who are working for teachers training and professional development.

Replicability

This initiative is a comprehensive online and offline platform for teachers' training and continuing professional development. It could be replicated in other countries with same contexts for teachers training and their professional development using ICTs as enablers. This initiative is self-evolving and a platform to generate new innovations and leadership. So, replicating this initiative can bring some changes in other countries.

Sustainability

Ministry of Education and Ministry of Primary and Mass Education will take the lead to accomplish honorable prime minister's vision to include all teachers under this platform. ICT Division under the Ministry of communications and Information Technology will take the lead to disseminate ICT based capacity development training for teachers.

British Council Bangladesh, UNDP Bangladesh and Unicef Bangladesh these organizations highlights and promotes this web portal for any kind of teachers training and motivational programs.

Teachers Training of DSHE, Prime Ministers commitment to include all 1 million teachers in Teachers Portal, Teachers Portal as the Change stories dissemination platform, 'Green School, Clean School' Campaign, Increment and MPO facilities defined by performance in the teacher portal can help teachers portal to reach target beneficiaries

Action Lines

AL C4. Capacity building

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case75-Risk Mapping

Title of the project, Contact Organization Name, Stakeholder type, Country

1. Anti-COVID-19 Hackathons / 2. #FakeHunter / 3. ProteGo Safe / 4. e- Debates / 5. Action EducationGovTech PolskaGovernmentPoland

Beneficiaries

Primary beneficiaries are Polish citizens and people live here. They benefit: the opportunity to improve their projects to public sector by hackathons and raise funds for developing technologies; verified information by professionals and base of fake news where can check false information; more safety by using ProteGo Safe and information about the contact with infected person; the participation in discussions and cast their votes remotely in a transparent and secure way; the catalogue of tools to build a "remote class" and schools have assist in the process of adopting online learning.

Citizens have impact on pandemic of coronavirus and they can reduce the number of active cases of the disease. Groups or project's teams could (and they will be able to) participate with thousands of people who create public's innovation for our common benefits. Users of the Internet have the base of fact and fake news about coronavirus.

Website

<https://www.dgda.gov.bd/>

Description

1. In 2019 and 2018 Europe's largest hackathons were held in Poland. In response to the pandemic, we organised three hackathons, bringing many solutions to the public sector's challenges.
2. #FakeHunter is a community-based project for verifying content on the Internet, launched by the Polish Press Agency and GovTech Polska. It aims to demystify and refute fake-news about the SARS-CoV-2 virus.
3. In order to better support the health professionals' work in combating the pandemic, we engaged with a coalition of Polish digital SMEs who, in collaboration with healthcare experts and security professionals, have created one of the world's first apps for contact-tracing which have open-sourced code.
4. During the pandemic, tens of thousands of councils, teams and other bodies were left unable to meet and make decisions. We introduced legislative changes and collaborated with the "eSesja" program to enable 35,000 unique users to hold discussions and cast their votes remotely in a transparent and secure way.
5. We launched the platform where students, teachers and school headmasters have access to educational contents, lesson plans and the catalogue of the tools to build a "remote class". We assisted schools in the process of adopting online learning.

ICT Tools

We launched dedicated platforms which are including best practices to switch to remote work for educational institutions, tens of thousands of councils, teams and other bodies were left unable to meet and make decisions. Moreover, we engaged the technology of

anonymous contact tracking by the use of the Bluetooth protocol. Finally, GovTech Polska with PAP created an application where fake-checkers can check the information reported by users of the Internet (via a browser plug or via a form) for confirmation. The team of professionals confirm the truthfulness of the information.

Challenges

One of our main challenges is giving undeveloped teams a chance for development of creating innovations that support the public sector and use advanced technologies. Also, we wanted to create a tool to fight disinformation about the coronavirus and build the base of verified news and fake news. Our challenge was to create and show the technical possibilities of remote work and to introduce legal changes allowing for the implementation of a remote meeting system. As well as the challenge is to use technology to reduce the spread of the pandemic and notify people who have met an infected person via anonymised notifications based on the Bluetooth technology of tracking.

Partnership

Yes, we are interested in expanding our international cooperation, mainly with other government technology (govtech) agencies and institutions – we want to promote and develop the IT solutions for the public sector (all levels of the public administration, from central to local, state-owned-enterprises/SOEs with a proactive participation and engagement of citizens, to also strengthen the digitally-aware and skilful civil society).

Replicability

Yes, our projects are replicable and can be developed. Most of our solutions are based on the open source code, so the entire global community can use and improve them!

- #FakeHunter is a great opportunity to build the universal app which can help to fight with disinformation on the Internet.
- ProteGo Safe might have input on tracking other infectious diseases which spread by contact.
- E-Debates creates chance to observing or participating citizens in democratic processes from home by the online platform.
- Action-Education can be useful to develop the platform for schools as a tool to raise the level of education. The platform can also be a guidebook how they can implement new tools for communication or cooperation on shared documents.

Sustainability

Yes, we strongly believe our projects are sustainable. We do care about the inclusiveness, to (digitally) engage various target groups, improve digital skills among all citizens – from youth to seniors. We do care about our environment, efficiency and also saving the costs. We focus on small and medium enterprises (SMEs) and start-ups. Our core (not-specifically COVID19-related) service is a platform for public procurement (competitions which we call challenges) to connect the public sector needs and desires with the most innovative and technology-oriented IT solutions provided by citizens and their IT business.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C7. ICT applications: benefits in all aspects of life – E-science|AL C9. Media|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 16: Promote just, peaceful and inclusive societies

Case76-'Handheld Library'

Title of the project, Contact Organization Name, Stakeholder type, Country

DGDA - Drug Verification Directorate General of Drug Administration Government Bangladesh

Beneficiaries

The 160+ million peoples of Bangladesh

Website

<https://www.facebook.com/JoburgLibraries/>

Description

DGDA Drug Verification

(<https://www.dropbox.com/sh/03dp59j0uszib9c/AABavHt3WYMPekurLko8f31ya?dl=0>)

The web and mobile based (push-pull text enabled) application is meant for patients, health care professionals, caregivers and others so that they could directly report ADRs as well as

receive the latest information concerning medicinal products using their mobile devices. Users can access other features i.e. most importantly SF detection ,Price verification , and complaining/informing/ straight to the Authority

The development of the application has been funded within the Access to Information programme (www.a2i.gov.bd) project entitled “Service Innovation Fund” (round 04 # Project ID- 152; <http://ideabank.gov.bd/projects/45>). This is the first innovative proposal ever submitted by any official from DGDA .(<https://www.linkedin.com/in/muhid-pharmacist-university-of-dhaka-ad-dgda-bd-rcc1892/>) The goal of this project is to scale up Nationwide by December 2020 (as per cabinet division selection) develop the easiest and most accessible way of reporting adverse drug reactions via new channels and social networks. enabling citizen centric reporting (see and send, Take and Tell), Analyzing OOP-SCI which will be aiding the governments envisioned target of 3.8 UHC /UHC 2030 Agendas. It’s an exemplary tool emerged from collaboration and sharing expertise’s proactively triggered due to the Governments Innovation Practices

ICT Tools

Web based Platform (<http://103.48.16.179/>)
<http://103.48.16.179/>
<https://play.google.com/store/apps/details?id=com.dgda.adr&hl=bn>
<https://ideabank.gov.bd/projectss/45>

Challenges

What ?

The **DGDA Drug Verification** apps is a free web/smart phone based app for reporting suspected adverse drug reactions, Authenticating Medicines Purchased with Price , Submission of Complaints (regarding Medicines Availability, overpricing, suspicious info on SF etc.) to National Competent Authorities i.e. DGDA (www.dgda.gov.bd)

key features of this application:

- Identifying SF / Authenticating drug
- Complain about over pricing of drugs
- Complain about medicine
- Adverse Drug Reaction Reporting*
- It’s free for ALL (users and stakeholders to secure their products !

Partnership

Actualy The dire need is to sponsor the scale up phase (as we are being one of the top four innovative projects termed by the Jurys of Inter Ministry innovation (Pilot Completion) Showcasing Events 2019.If the planned scale-up goes smooth than it can run on its own

Replicability

Yes

Already an MOU Signed with The NMHRA (COO - Mr Noorshah Kamaawal) of Afghanistan to replicate it there

Sustainability

Yes and thats why its on the top four fo nationwide scaleup among 49 successful pilot

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case77-SwissCovid app

Title of the project, Contact Organization Name, Stakeholder type, Country

CITY OF JOHANNESBURG LIBRARIES FACEBOOK VIDEO SERIES DURING COVID 19 LOCKDOWN
CITY OF JOHANNESBURG MUNICIPALITY LIBRARIES
Government
South Africa

Beneficiaries

Youth (16-35) and Senior Citizens (55years to 65)

Website

<https://ito.gov.ir/>

Description

Covid19 Lockdowns were introduced in South Africa, in March 2020.

In April 7, 2020, City of Joburg libraries begun an online series using Facebook. The series called "eLearning Lockdown Video Series" which involves librarians giving tips, on different activities and online content relevant for education, business and personal development, has reached more than 20 000 video views since it was introduced.

<https://www.facebook.com/JoburgLibraries/>

As part of the Lockdown Video Series, between 01 June-30June, 2020 a youth competition called Teach-a-Senior Citizen Digital Skills was introduced . Participants were expected to

make a short video demonstrating how their senior family members to use tablets, smartphones and computers for various purposes such as reading, doing online transactions, socializing, or surfing the internet. Most of the videos received demonstrated to senior citizens, how to use smart phones for communication, social media and reading needs, and submissions came from all 7 regions of Johannesburg. 17 participating youth were selected for their excellent videos and awarded with tablets donated by MTN Foundation a local telecommunications company. They will use these tables for homeschooling needs COMPETITION VIDEOS CAN BE SEEN ON THE FACEBOOK PAGE

ICT Tools

Through Lockdown series, communities have been introduced to Apps, eresources for students and researchers and Digital Storytelling, this lead to librarians learning to create videos , editing, identifying digital content and it also taught them how to use social media to provide information services.

The competition benefited the community because it was aimed at addressing the following:

- Digital inclusion: Bridging the digital divide between generations to ensure that senior citizens are included in the use of technology for education and personal development.
 - Digital Literacy: For both youth and senior citizens. During the process of teaching another person how to use technology, one also learns new things, so the youth themselves also benefitted and learnt new things.
 - Social cohesion: the competition also encourages young people to interact with senior citizens around them, for them to understand the needs of their senior citizens and assist to embrace 4IR. This creates harmonious family units particularly during and post lockdown
- It was also a competition that was promoted to other regions, and will be conducted again next year 2021 on a bigger scale.

the competition resulted in a campaign called "Donate a Tablet or Data for Youth" which begun in July 2020

Challenges

Lack of connectivity for librarians at home...we had to only identify librarians who do have personal wifi.

Insufficient tablets for youth.

We have had to look for sponsorships and we are driving a campaign where we encourage communities, private companies, and NGOs to sponsor tablets and data. they can submit their interest to jeff.nyoka@yahoo.com . the tablets and data will be distributed to regions from learners through libraries

Partnership

South Africa, UK, USA, DENMARK

Replicability

YES, other libraries can also use social media to provide online services, the competition can also be done by libraries all over the world. A Reliable website/portal and an app can also make such programs work better

Sustainability

Social media is less costly, and accessibility is easier, but we want to also introduce using a reliable elearning portal for library users. We also want to work with organisations who can create an app that is free to use by library users to access information

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 16: Promote just, peaceful and inclusive societies

Case78-Teachers' Portal: A web platform for Teachers' Training and Continuing Professional Development (www.teachers.gov.bd)

Title of the project, Contact Organization Name, Stakeholder type, Country

Activities and Initiatives of the Ministry of ICT in response to the coronavirus (covid -19) crisis|Information Technology Organization of Iran|Government|Iran (Islamic Republic of)

Beneficiaries

More than 19 million households received loans during the two phases in which one million loans were lent to each low-income family.

Preparing packages of 500 million Iranian Rials for 5000 start-up companies

Providing low-cost facilities to service providers and supporting service recipients by presenting about 50 to 100 percent discount

The ICT Ministry has collaborated with other public and private sectors in three areas of education, telecommuting, and businesses in order to implement its social responsibility.

The details of these measures discussed hereunder

The Social Responsibility System (<https://www.noafarincsr.ir>) is a platform which aims to use the capacity of the startup ecosystem, creative enterprises and innovative society to be able to take practical steps in the social empowerment of different individuals and groups in the society.

To design a program for attracting public supports and charities, distributing resources between the poor and fair allocation of donations among the needy, a campaign was launched between Imam Khomeini Relief Foundation and the Ministry of Communications and Information Technology.

Website

<http://www.anatel.gov.br>

Description

- 1-Immediate emergency monitoring and control at the beginning of the coronavirus crisis
- 2- Financial measures to create a protective shield
- 3-Activities in the field of education, teleworking and social responsibility
- 4- Taking advantage of capacities in the areas of ICT

ICT Tools

- 1-Implemented Measures in the fields of Monitoring and Control Technologies: Exploring the outbreak map of disease and congested parts based on the traffic map of infected people by considering telecommunication information of the infected patients for two weeks before hospitalization and evaluating the risk of infection for each Iranian individual based on the collected data from different sectors of the country including POS terminal information from Central Bank, household, Information from Ministry of Cooperatives, Labor, and Social Welfare, Ministry of ICT, Internet taxi transportation system, AC19 software, and Mask software
- 2- SMS support for sending a ten million Rials loan to low-income groups.
- 3-The ICT Ministry has collaborated with the private section to launch the "Buy from Home" campaign.
- 4-The Information Technology Organization of Iran and the Ministry of Education have developed and implemented the campaign to focus on the desirable and standard content production during the outbreak of the coronavirus and the closure of schools. The campaign revolves around identifying and appreciating teachers who have produced content in virtual learning environment. In this campaign, teachers can upload their generated content on the "Aparat" platform (VOD) and can be judged quantitatively and qualitatively in two stages.
- 5-Allocating 7 servers and one storage in one of the data centers of the Information Technology Organization of Iran to Providing the required infrastructure for passive defense
- 6-Providing the required infrastructure for passive defense
- 7-Design and implementation of "AC19" application program : The process of launching this application has been performed by Coronavirus Committee of Tehran and Medical Council of the Islamic Republic of Iran to fight against Coronavirus with more than 4 million users.

The main purpose of this system is to identify and monitor the people who are suspected of having coronavirus, analyze high-risk areas for disinfection by the Basij and charities, enable telephone visit, hospitalize infected people with harsh conditions, provide food and health facilities for two-weeks home isolations of infected people.

8- Payment design using integrated QR code in cooperation with the Central Bank and Tehran Municipality

9-Allocating free Internet to teachers (Accordingly, 588,519 people registered in the system, and were introduced to operators to receive free internet.)

10-Allocating free traffic to universities and higher education institutions

11-Increasing bandwidth capacity of infrastructure customers services (operators)

12-Developing internal network capacities and infrastructure of telecommunication network gateways

13-Live broadcast of daily visits to the country's museums

Challenges

1-Real and legal persons may have failed to fulfill their obligations in the intended time due to the special circumstances, which force them to pay fines. Therefore, it is recommended that a clear rule should be legislated in this regard .

2-The risk of investing on private sector is increasing due to the current crisis: Maximizing the capacity of well-developed organizations to invest and enter the government in these areas

3- Sanctions

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C7. ICT applications: benefits in all aspects of life — E-employment|AL C7. ICT applications: benefits in all aspects of life — E-science

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries

**Case80-1. Anti-COVID-19 Hackathons / 2.
#FakeHunter / 3. ProteGo Safe / 4. e- Debates / 5.
Action Education**

Title of the project, Contact Organization Name, Stakeholder type, Country

Actions by Anatel and the telecommunications sector during the COVID-19 pandemic
National Telecommunications Agency (Anatel) Government Brazil

Beneficiaries

The whole Brazilian population

Website

<http://www.esdp.gov.bd>

Description

Action plans for maintaining services were adopted to respond to COVID-19. Along with the constant network monitoring measures and the Public Commitment Agreement established with the operators for keeping the country connected, two other measures are worth mentioning:

Tridigit services:

Anatel provided free-of-charge tridigit telephone numbers to be used during the pandemic:

The number 196 was made available by Anatel to the Ministry of Health for actions related to the pandemic and the number 111 to get information to Caixa Economica Federal (a Government Bank) emergency aid.

Zero-rating applications:

The Ministry of Health launched the "Coronavirus-SUS app" to provide information on various topics such as symptoms, how to prevent the spread of the virus, the measures for suspected infection, and also a map of nearby health units.

The government also launched the so-called "Caixa App" for enabling an emergency aid as part of the programme for informal workers, the self-employed and unemployed. The purpose of the public policy is providing emergency financial protection in the period of the pandemic. The Operators sent alerts and information messages to the population as

requested by the competent authorities. Free access to the Coronavirus application, developed by the Ministry of Health, will be guaranteed.

ICT Tools

Free-of-charge tridigit telephone numbers and zero-rating applications

Challenges

The main challenges were reach and disclosure those measures to the communities that don't have access to Internet.

Partnership

Any governmental body can request a tridigit telephone number, which shall be enabled by the regulator and are free-of-charge. Any interested actor is welcome to develop social relevant and zero-rating applications.

Replicability

Any telecom regulator can implement similar measures in their geographical areas.

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 16: Promote just, peaceful and inclusive societies

Case81-DGDA - Drug Verification

Title of the project, Contact Organization Name, Stakeholder type, Country

Entrepreneurship development|Entrepreneurship & Skills Development
Project|Government|Bangladesh

Beneficiaries

Entrepreneur

Website

https://dgda.gov.bd
Description
Free Mask Distribution And Online product Delivery
ICT Tools
Entrepreneurship mark and solved their problem
Challenges
Entrepreneur Development
Partnership
Prime Minister's Office Bangladesh
Action Lines
AL C1. The role of governments and all stakeholders in the promotion of ICTs for development AL C3. Access to information and knowledge AL C7. ICT applications: benefits in all aspects of life – E-learning AL C10. Ethical dimensions of the Information Society
SDGs
Goal 1: End poverty in all its forms everywhere Goal 10: Reduce inequality within and among countries

<p>Case82-CITY OF JOHANNESBURG LIBRARIES</p> <p>FACEBOOK VIDEO SERIES DURING COVID 19</p> <p>LOCKDOWNS</p>
Title of the project, Contact Organization Name, Stakeholder type, Country
DGDA DRUG VERIFICATION Directorate General of Drug Administration Government Bangladesh
Beneficiaries

- (i)Initially it's the citizens of Bangladesh (160 million + inhabitant)
- (ii)Safe and Effective Medicinal products for Everyone Everywhere, SDG 3.0 : Target 3.8 Universal Health Coverage.

Website

<https://dgda.gov.bd>

Description

What ?

The ****DGDA Drug Verification**** apps is a free web/smart phone based app for reporting suspected adverse drug reactions, Authenticating Medicines Purchased with Price , Submission of Complaints (regarding Medicines Availability, overpricing, suspicious info on SF etc.) to National Competent Authorities i.e. DGDA (www.dgda.gov.bd)

1. <https://play.google.com/store/apps/details?id=com.dgda.adr>
2. <http://103.48.16.179/>
3. <https://www.thedailystar.net/backpage/news/just-tap-away-1712506>
4. <https://ideabank.gov.bd/projects/45>
5. <https://www.youtube.com/watch?v=VmZytbbybGI&t=3s>

Why use the app?

- Quick and easy to report adverse effects, complaints
 - Instant access to medicines Price info
 - Instant Authentication of Purchased Medicines (PUSH-PULL SMS to 333 and Online Both)
- Help make medicines safer for all
- It's free!

key features of this application:

Identifying SF / Authenticating drug Complain about over pricing of drugs Complain about medicine

Adverse Drug Reaction Reporting*

ICT Tools

Web based and smartphone apps along with feature phone enabled system (PUSH-PULL SMS)

Challenges

Sustainability depends upon the successful Nationwide scale-up and Maintenance throughout the span of Nationwide scaleup. As we got selected from the Ministry level to do

so The sustained nature of this initiative must be a bit revenue generating.the real challenge is to design them and seamlessly integrate them with this system as we got no IT personnel out of 370 Human resources so it's a must to outsource those for which we need funding.

Partnership

Investor /Donor

Replicability

Yes. From Pilot phase to Nationwide scaleup nomination is the proof and at the same time The NMHRA CEO expressed his keen desire to be replicating it in Afghanistan

Sustainability

Considering this issue we already identified few premium features to be adding up with this being coherent with the E Service Roadmap of DGDA 2021 where major 16 modules (Service Delivery) are being listed but a few overlooked. We want to bring in those discarded features here.

For example : Now The system covers only The Allopathic System of Medicines. Midst this covid-19 situation we experienced here ttriggered us to be thinking on Medical Devices and PPEs Authenticity. Here only 6-8% of the total consumed devices /year are being manufactured and rest are being imported;. The total Market size for medical devices is huge considering 180 million people here. Being endorsed by The regulatory authority we plan to offer a paid online services for all Medical devices importers followed by a mandatory integration of Unique code for all lots of imported products.it will serve both ends – one is service automation which is quite in line with Governments Vision of Digital Bangladesh and Other one is revenue generating which make this initiative sustainable.

Like This one there are a few others planned for integration.

Paid services for ADRs of All investigational Drugs (Clinical Trials conducted here)

Paid Services for Online label (Artwork) repositories for all Medicines and Medical devices Manufacturers .

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 17: Revitalize the global partnership for sustainable development

Case83-Activities and Initiatives of the Ministry of ICT in response to the coronavirus (covid -19) crisis

Title of the project, Contact Organization Name, Stakeholder type, Country

DGDA DRUG VERIFICATION Directorate General of Drug Administration Government Bangladesh

Beneficiaries

(i) Initially it's the citizens of Bangladesh (160 million + inhabitant)
(ii) Safe and Effective Medicinal products for Everyone Everywhere, SDG 3.0 : Target 3.8 Universal Health Coverage.

Website

<https://www.tech.gov.sg/>

Description

What ?

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2. <http://103.48.16.179/>
3. <https://www.thedailystar.net/backpage/news/just-tap-away-1712506>
4. <https://ideabank.gov.bd/projects/45>
5. <https://www.youtube.com/watch?v=VmZytbybGI&t=3s>

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- Instant Authentication of Purchased Medicines (PUSH-PULL SMS to 333 and Online Both)

Help make medicines safer for all

- It's free!

key features of this application:

Identifying SF / Authenticating drug Complain about over pricing of drugs Complain about

medicine
Adverse Drug Reaction Reporting*

ICT Tools

Web based and smartphone apps along with feature phone enabled system (PUSH-PULL SMS)

Challenges

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Partnership

Investor /Donor

Replicability

Yes. From Pilot phase to Nationwide scaleup nomination is the proof and at the same time The NMHRA CEO expressed his keen desire to be replicating it in Afghanistan
https://www.dropbox.com/s/c2lhn7lpyy2g76s/DGDA_Drug_Verification.MD_MOHID_ISLAM_eynv8a.ppt?dl=0

Sustainability

Considering this issue we already identified few premium features to be adding up with this being coherent with the E Service Roadmap of DGDA 2021 where major 16 modules (Service Delivery) are being listed but a few overlooked. We want to bring in those discarded features here.

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Like This one there are a few others planned for integration.

Paid services for ADRs of All investigational Drugs (Clinical Trials conducted here)

Paid Services for Online label (Artwork) repositories for all Medicines and Medical devices Manufacturers .

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 17: Revitalize the global partnership for sustainable development

Case84-Actions by Anatel and the telecommunications sector during the COVID-19 pandemic

Title of the project, Contact Organization Name, Stakeholder type, Country

SupplyAlly (Sally)Government Technology Agency (GovTech)GovernmentSingapore

Beneficiaries

Since its launch on 5 April, SupplyAlly has facilitated the management of hundreds of volunteers and the distribution of 4.2 million reusable masks. It has also been used in partnership with the non-profit Engineering Good to provide refurbished laptops to under-privileged children for home-based learning programmes. Over \$20 million in physical credit vouchers for low-income households have also been delivered through the app.

SupplyAlly has also played an integral role in distributing more than 500,000 TraceTogether Tokens (digital contact tracing wearables) to the community, starting with the elderly and other digitally-excluded members of the population. Furthermore, the SupplyAlly team engaged Food from the Heart, a charitable organisation, to give out hot meals to the elderly and other groups in need.

Website

<https://www.tech.gov.sg/>

Description

SupplyAlly is a mobile app that facilitates the process of logistics distribution during COVID-19. During this pandemic period, distributing supplies to the entirety of Singapore's population meant that the coordination of manpower had to take place on a nation-wide

scale, with each item and its intended recipient accounted for.

Responding to the urgent need to distribute reusable face masks to residents across Singapore, GovTech's Government Digital Services team developed SupplyAlly within a short span of four days. The app serves as a single solution for both the management of a flexible pool of supply-distributing volunteers as well as the tracking of collection quotas.

SupplyAlly removes the hassle of requiring volunteers to sign up with personal details. Instead, volunteers are issued a QR code to be scanned using the app on their own device, after which they are authorised to use the app with no further details required. The QR codes are then permanently affiliated with the user's device, meaning that they cannot be used for unauthorised logins even if someone else obtains them.

Using the app, volunteers can scan the identity cards of residents to verify their eligibility and log the successful distribution of the item. No personally identifiable information is ever stored, only a time-stamped digital signature that prevents the same barcode from being used for a duplicate collection.

ICT Tools

To support multiple distribution campaigns through a single app, SupplyAlly makes use of the Government Commercial Cloud. With Cloud technology enabling multiple campaigns to be run concurrently, individuals can then access their specific campaigns by logging in with a unique QR code provided for them.

Since campaigns run for an extended period of time, the SupplyAlly team needed to calculate and determine how much memory was used against the costs charged by the provider. Serverless solutions (where one only pays for the computing power used) were hence adopted, as they allowed for rapid scaling when needed while consuming less resources when campaigns were not active.

Challenges

Some of the error messages and feedback displayed to SupplyAlly's users are not intuitive. Since the messages are more technically-driven than user-driven, they can be a little hard to understand at times. The team has since revamped these messages to help users overcome simple issues while using SupplyAlly.

The QR login code is key for allowing people to log into various environments so that multiple campaigns can be run concurrently. However, there is a risk of losing the code, and the administrative aspect of distribution campaigns has the heavy responsibility of managing thousands of QR login codes for the distributors.

Partnership

We have no specific areas/requirements on partnership and are open to all possibilities.

Replicability

Yes, since running on Cloud technology, Sally can easily create production environments for new distribution campaigns in Singapore.

Sustainability

Yes, Sally has the ability to process 4,500 transactions per second with a 50-millisecond response latency, even when supporting multiple distributions concurrently. Development agility is also made possible with over-the-air update and automatic CI setup.

Action Lines

AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-government

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case85-Entrepreneurship development

Title of the project, Contact Organization Name, Stakeholder type, Country

SPOTON Government Technology Agency (GovTech) Government Singapore

Beneficiaries

SPOTON is useful for temperature scanning in any environment with high footfall, allowing for time and labour savings while keeping operators and visitors safe.

Without the need for manual temperature taking, SPOTON minimises physical contact between staff and the public. With instant readings and ability to screen up to 10 people at once, SPOTON reduces queues and waiting times for entry into buildings, especially during peak hours. With automatic screening and alerts, only one person is needed to operate SPOTON, streamlining operations and overcoming manpower constraints.

Building operators and managers can adopt SPOTON inexpensively – SPOTON's AI

software combined with affordable commercial hardware makes it significantly more affordable (with an estimated hardware cost of \$800) than similar commercial cameras (that can cost more than \$10,000) without accuracy being compromised, making safe and fast thermal scanning operations accessible to more organisations.

The non-exclusive licensing of SPOTON version 1.0 software to 3 local SMEs and a non-profit organisation for free helps develop capabilities of the local ICT sector and provide job and training opportunities to citizens.

Website

<https://www.tech.gov.sg/>

Description

GovTech's Smart Nation Platform Solutions team developed SPOTON, a smart thermal scanner, under the Digital Operations Smart Services (DOSS) platform, producing the first prototype within seven days. SPOTON can screen up to 10 people at once, with a temperature indicator for each face and automated alarms and email alerts when high temperatures (above 37.5°C) are detected. Through SPOTON, operators are alerted to individuals with high temperatures and can speed up crowd temperature screening, minimising physical contact and time spent on manual temperature checks.

SPOTON is also able to distinguish humans from objects, and is not affected by masks, hats and headdresses, or by hot or cold objects like drinks. It can also detect and indicate when a person is not wearing a mask with an accuracy of up to 80%, under optimal lighting conditions with no back lighting.

SPOTON can be deployed at indoor or outdoor environments (away from direct sunlight and with a stable ambient temperature). SPOTON has been tested and deployed in different settings with high footfall, including office buildings, community centres, places of worship and community isolation facilities.

ICT Tools

SPOTON runs on DOSS, which is a high-performance Machine Learning- and Computer Vision-based framework brought together to add Machine Intelligence to otherwise "dumb" devices. The framework is very easy to adopt because core capabilities are all implemented on the software end. The DOSS framework allows for real-time detection of human faces and computation of facial temperatures within an accuracy of 0.3 to 0.5 degrees Celsius.

As a hybrid AI solution, SPOTON combines affordable off-the-shelf hardware (a long-wave infrared camera and RGB-Depth camera) with advanced software capabilities like deep learning human face detection and face mask detection, making SPOTON significantly more affordable than most commercially available scanners without compromising accuracy.

Challenges

The main challenge the team encountered while developing SPOTON was in assessing the accuracy and stability of our thermal scanner.

To benchmark SPOTON's accuracy, we engaged Dr Wang Li, an expert in thermal sensing solutions from the National Metrology Centre (NMC) of Singapore. Dr Wang and her team assisted GovTech to calibrate and assess our thermal scanner performance, and we managed to achieve an accuracy of 0.3 – 0.5°C.

Partnership

GovTech will consider requests by other companies that are interested in licensing the SPOTON software and distributing SPOTON. Interested companies may approach GovTech.

Replicability

The AI-based SPOTON software developed by GovTech is what powers our solution. With hardware components that are commercially available and inexpensive, SPOTON can easily be produced and deployed at scale.

GovTech has licensed the SPOTON software to four Singapore-based distributors to meet the public demand for an affordable, accurate and effective automated temperature screening solution.

Sustainability

Temperature screening will likely be the new normal and the solution will remain relevant beyond the COVID-19 crisis.

GovTech's software team is also continuing to develop new AI features for SPOTON, including human pose estimation and vital signs measurements like blood-oxygen saturation and heart rate, which will enable SPOTON to serve a wider range of medical functions beyond temperature screening.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-environment

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case86-DGDA DRUG VERIFICATION

Title of the project, Contact Organization Name, Stakeholder type, Country

VigilantGantry (VG)Government Technology Agency (GovTech)GovernmentSingapore

Beneficiaries

VigilantGantry is especially suitable for locations with high human traffic, augmenting existing temperature screening efforts. Multiple government agencies in Singapore have expressed interest in large scale deployments of VigilantGantry, including the National Library Board, Maritime and Port Authority, NParks, Singapore Tourism Board and the Ministry of National Development. This is testament that VigilantGantry deployment at public spaces helps to serve the public and citizens who live, work, and play in Singapore.

Website

<https://www.tech.gov.sg/>

Description

As part of a nation-wide effort to prevent and contain COVID-19 transmission, government buildings and public venues have implemented temperature screening and access control measures.

VigilantGantry (VG) is a fully automated, contactless gantry system for temperature screening driven by AI and deep learning that augments existing thermal scanners to improve the rate of contactless scanning, easing queues for entry into buildings and reduces manpower required for temperature screening measures.

ICT Tools

VigilantGantry's technical features and specifications that benefit the end-users and ICT industry include:

Adaptability and scalability – It is product and brand agnostic, designed to integrate with existing access control gantries, thermal scanners, cameras and other VA solutions without the need to purchase new equipment. For building owners, this results in lesser implementation costs, and reduces manpower, adapting to their current processes and plug-and-play scalability according to their needs.

Supports contact tracing efforts – Besides measuring skin temperature and performing facial indexing, VG can also capture location, date and time details to aid contact tracing when required. It can also store health and travel declaration data obtained via questionnaires.

Open-sourced – VG’s face segmentation algorithm has been published on GitHub for the private sector to scale and deploy to sites across Singapore. The algorithm is used to detect visitors wearing headgear or with occlusion which may hinder the effectiveness of current thermal scanners.

Challenges

While VigilantGantry works best with a physical flap-based / turnstile barrier in place, cost-conscious building owners are hesitant in adopting VG due to uncertainties on how long the COVID-19 situation is going to last, and high capital expenditure costs of deploying fixed gantries permanently.

The team has overcome this by advocating leasing model of mobile-gantries as opposed to owning the physical gantries.

Partnership

The team is looking for System Integrators who can leverage VigilantGantry solution.

Replicability

To spur adoption by the ICT industry and cater to different sites’ installation and implementation needs, VG’s face segmentation algorithm was made public, and can be found on GitHub for the private sector to scale and deploy to sites across Singapore.

At present, five ICT companies have adopted VG in their products, serving the public and private sector with commercial deployments. We have also received requests and direct queries on the source codes from local and global companies. These include Echoltech, APM Global, CNS Connections (NEX mall), OneBerry, AxxonSoft, Hitachi Asia, and Balixton (based in South Africa).

Sustainability

The next phase of VG will take in industry feedback on our codes, improve on the codes, integrate with third party devices, and tap on the open-source community for future improvements. We are also in the process of working with Government Agencies to lease or engage in tenders for fixed installation of VG for long term deployment.

We envisage that as even as we approach post-COVID-19, physical barriers with thermal screening to deny entry to visitors with febrile symptoms, coupled with other access controls like facial recognition or card access, may still be part of the new concept-of-operations for building access. VG will definitely continue to benefit building owners with cost savings from automation and enhanced manpower efficiency.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-business

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case87-DGDA DRUG VERIFICATION

Title of the project, Contact Organization Name, Stakeholder type, Country

GoBusiness COVID Portal Government Technology Agency (GovTech) Government Singapore

Beneficiaries

The GoBusiness COVID portal made it easier for both businesses and individuals to be kept up-to-date about the latest COVID-19-related safe management requirements, as well as to obtain updates about the phased reopening of the economy.

Businesses can login with CorpPass (a corporate digital identity for government-to-business transactions) on the GoBusiness COVID Portal to submit their exemptions applications and manpower declarations. Businesses are also able to check the status of their applications through the portal

The pandemic had also affected the lives of individuals and GoBusiness COVID Portal was a key source of information about the latest COVID-19-related guidelines for workplaces and events. For example, couples could check on the guidelines for holding weddings, religious groups could check on guidelines about religious gatherings, etc.

Website

<https://www.tech.gov.sg/>

Description

Jointly developed by Ministry of Trade and Industry (MTI), the Smart Nation and Digital Government Office (SNDGO), and GovTech, the GoBusiness COVID Portal was the key source of information about the latest COVID-19-related guidelines and safe management requirements for both businesses and individuals during the pandemic. The portal was the go-to site for businesses to obtain information about the conduct of their operations, and for them to submit their exemption applications and manpower declarations.

The GoBusiness COVID Portal also provided information about the phased re-opening of the economy and how contact tracing support measures like SafeEntry and TraceTogether could aid in safe reopening. To help businesses adversely affected by the pandemic, the GoBusiness COVID Portal also provided information about the various government support schemes available. This was subsumed under the new GoBusiness Gov Assist portal, which launched in Aug 2020. With over 100 assistance schemes available, it allows businesses to search for support ranging from funding to references and programs for building capabilities, skills and knowledge.

ICT Tools

To accelerate the development of GoBusiness and allowing it to address the immediate needs of the evolving pandemic situation, GovTech leveraged on several SG-Tech Stack and GoBusiness modules:

GovTech's Isomer tool, helped to generate an informational website that was compliant with the Government's digital guidelines and standards.

GovTech's FormSG tool, helped to create forms with customised data fields for the collection of data and information, e.g. applications for exemptions and permissions to continue operations during Singapore's "circuit breaker" period.

GoBusiness' FormBuilder, a customised version of FormSG was used to develop the GoBusiness Gov Assist e-Adviser. It assists businesses adversely affected by the pandemic, by recommending available government assistant schemes based on their business needs.

Challenges

Uncertainty: The pandemic situation was unprecedented, resulting in uncertainty about the business requirements and the design of the portal. To manage the evolving needs of the pandemic, the system had to be easily modified, whilst being user-friendly and easy to navigate. GovTech's tools such as ISOMER and FormSG were vital in addressing these needs.

Limited resources: The resources required to support the effort had not been budgeted but a lean multi-agency team was rapidly assembled. The team had to conceptualise, develop, launch, and support the new portal. Past experience with agile development of cross-agency systems provided the foundations that made this possible.

24-hr online and offline support: The need for rapid deployment meant that businesses were faced with new policies, processes, and systems. Without the luxury of time for gradual change management, the team was faced with high demand for user and system support. We overcame the significant demand for offline user support and 24-hr system support through the dedication of public officers who worked tirelessly around the clock.

Partnership

Due to the short notice, partners were not involved.

Replicability

This project is certainly replicable! GovTech's products are reusable, scalable and interoperable. The aggregated products that GoBusiness COVID Portal had adopted can be easily redeployed and scaled for other purposes.

ISOMER can be adopted for projects that require the display of informational content. For example, Singapore's budget 2020 website was created using ISOMER.

FormSG can be adopted for projects that require the submission of data without integration to any backend. For example, application to other COVID support schemes were built using FormSG.

The e-Adviser can be adopted for projects that require customised results based on user inputs.

Sustainability

A key strategy of the Singapore Government's Digital Government Blueprint is to build common digital and data platforms, to reduce the time and effort to introduce new digital services. This strategy facilitated the development of the tools used to develop this project.

In addition, the system was developed on the Cloud. This provided the project with scalable infrastructure and industry standard tools. The use of commercial Cloud providers reduces the need for dedicated Government data centres and servers.

For these key reasons, we were able to deliver the project with minimal development and operating cost. We believe the project is both sustainable as well as scalable.

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C7. ICT applications: benefits in all aspects of life — E-employment

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case88-SupplyAlly (Sally)

Title of the project, Contact Organization Name, Stakeholder type, Country

GoWhere Suite Government Technology Agency (GovTech) Government Singapore

Beneficiaries

A) Citizens:

- Accurate info
- Timely info
- Location based search
- Inclusivity (All sites are available in 4 languages)
- Consistent design and user experience

B) Government Officers

- Extremely high cost per transaction to launch new initiative from scratch
- Speed
- OpsTech integration (postergowhere) to cut down efforts required

Website

<https://www.tech.gov.sg/>

Description

The GoWhere Suite is a ground-up initiative by GovTech's Government Digital Services (GDS) team. It was created during the Covid-19 crisis to address the following needs:

- Rapid & reliable source of information
- Location/eligibility-based information query/discovery
- Inclusivity to maximise the reach of info
- OpsTech integration to support government distribution ops

Having assisted several government campaigns, GoWhere Suite has evolved to become a mini tech stack by itself (to be explained in the next segment). In less than a year, the GoWhere suite has been used in 11 Government initiatives, totalling 14 million visits and 48 million API transactions. Key highlights of the project activities and results include:

A) Mask GoWhere & Poster GoWhere: Three rounds of mask distribution exercises saw 4 million visits, 2.3 million unique visitors since Feb 2020

- Disseminate mask collection info quickly and accurately during the crisis,
- Support the operation of Government call centre based on the "source of truth" data on

Mask GoWhere

- Poster GoWhere to create standardised multilingual posters with the most up-to-date information on the distribution exercise.

B) Support GoWhere: 2.4 mil visits, 1.3 mil unique visitors since Apr 2020

A single platform for citizens to find the help they need. The eligibility checker function brings clarity on what schemes each person qualifies for.

C) Pass GoWhere & Identity GoWhere: APIs were called 48 mil times

Foreign workers residing in dormitories use this site to apply for an exit pass before going to the Recreation Centres. This information is piped into Safe Entry and SG WorkPass for enforcement purposes.

Other GoWhere websites with similar concepts were developed subsequently as different Government agencies approached GDS to create them:

- GoWhere Directory: 150k visits, 100k unique visitors from Apr 2020
- VoteQ GoWhere: 2.5 mil visits, 1.3 mil unique visitors in Jul 2020
- Flu GoWhere : 1.3 mil visits, 1mil unique visitors from Feb 2020
- SGTogetherPack GoWhere: 1.3mil visits, 800k unique visitors in Jul 2020
- TraceTogether Token GoWhere: 1.2 mil visits, 800k unique visitors from Sep 2020

Gowhere suite of website:

gowhere.gov.sg

maskgowhere.gov.sg

flugowhere.gov.sg

supportgowhere.gov.sg

sgtogetherpack.gowhere.gov.sg

token.gowhere.gov.sg

passgowhere.gov.sg

ICT Tools

Gowhere is an end-to-end distribution stack that promotes strong reusability and increases in efficiency for Covid communications and ops with every iteration. It is a mini tech stack that consists of the following:

I. React Gowhere - A design system library to allow a new location-based query website to be set up within hours, instead of weeks.

II. Identity Gowhere - It constitutes a basic authentication module that we have setup to cover all residents in Singapore (citizens, PRs, workpass holders, long term social visit pass holders, and foreigners).

III. Pass GoWhere - To perform status query of foreign workers staying in dormitories, to find out whether they are allowed to leave the Dorm for work/leisure purposes.

IV. Poster Gowhere - Support OpsTech integration for PA staff members across 89 Constituency Divisions, 109 Community Clubs/Centres to manage several functions e.g. distribution location data entry, poster generation, stock level updates etc).

V. Benefit Engine - It facilitates data capture of different criteria and powers the front-end search.

VI. CDNGowhere - A central content management console that powers multiple Gowheres' frontend.

This continuous and quick improvement led to pervasive use of the stack. Such digital solutions were not adopted by the government before. It also helps to promote a "One-Government, cross-agency, user-centric" narrative.

Challenges

1. Need extremely short time-to-market

Solution: We built GoWhere as a tech stack which drastically improved the time-to-market for any similar digital initiative through reusability.

2. Application Security in the fast paced environment

Solution: Setup central application security team to "shift left" the whole application security process.

3. Continuously discover/improve product imperfections

Solution: Use WOGAA Sentiments as a government tech stack product to continuously monitor feedback. This allows us to fix any legacy and new usability issues/bugs as and when needed.

4. Lean team

Solution: Reusable stack

Partnership

We have been constantly working with design and engineering partners to enhance the product offerings.

Replicability

The GoWhere Suite, as a Singapore Government Distribution Stack product, is all about replicability and reusability.

From the first GoWhere site on 1 February, new GoWhere websites have been added where there is a need to provide access to reliable and timely government information.

Maskgowhere was the first one, and the same concept of entering one's postal code to

retrieve relevant info has since been replicated for Tokengowhere, VoteQgowhere, Flugowhere and SGtogetherpackgowhere.

To facilitate the design and development of the services in the Gowhere suite, a reusable, portable and rigorously tested design-system library, ReactGoWhere was created. For each new service deployed, the team can monitor user experience and consider the improvements that can be made based on feedback received from the live sites. This iterative approach allows the team to continuously improve the different Gowhere services. The design-system library also streamlines the development of new Gowhere services very quickly.

Sustainability

Beyond the Covid-19 crisis, the GoWhere suite will continue to provide up-to-date information to the public in different settings and contexts. The application stack that was built up during covid is relevant to any generic distribution ops or a location/eligibility based query information system which was common even before the crisis. At the same time, we started to see other government agencies approach the Gowhere team for collaborations that extend beyond the Covid period.

For example, MSF, NCSS, SGE and AIC have intentions for Support GoWhere to evolve and become a one-stop social assistance portal. It will continue to have an eligibility checker for residents to find services and schemes that they are eligible for, and apply for them online. We are also considering an appointment feature to allow online booking for consultation and subsequent tracking of action items. Support GoWhere will start with the social service sector and potentially extend beyond the sector in subsequent stages. At the same time, the accelerated creation of a unified social portal will transform how social services are delivered.

React GoWhere will continue to be highly relevant, as it allows us to create similar websites in future with a very short lead time, and it is not limited to Covid use cases.

PosterGowhere will continue to serve as the agency operators backend to drive the frontend functionalities as designed.

Other elements in the tech stack e.g. CDN Gowhere, IdentityGowhere are not Covid specific as well. If there is a similar use case, we can quickly create new services using such elements in the stack.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case89-SPOTON

Title of the project, Contact Organization Name, Stakeholder type, Country

SafeEntry Government Technology Agency (GovTech) Government Singapore

Beneficiaries

The fast and pervasive adoption of SafeEntry has allowed businesses to re-open earlier than projected. Customers at their stores have their time of visits and duration logged into the SafeEntry system to help contact tracers map the activity of any COVID-19 cases.

With the help of an activity map, such information allowed the Singapore Government to plan and decide how best to open the next industry vertical or implement measures to others to prevent and control the transmission of the virus.

Website

<https://www.tech.gov.sg/>

Description

SafeEntry is a national digital check-in system developed by the Government Technology Agency of Singapore (GovTech), which logs an individual's entry into a venue. It was built to resolve the need for an effective and practical visitor management, and control measures deployed at all public locations to allow citizens to move about the community amidst growing concern for the spread of COVID-19.

The pervasiveness of SafeEntry, which at point of writing is deployed at over 200,000 businesses and public venues, enables the relevant authorities to more effectively contain any new infections, drastically reduce time taken for contact tracing, and isolate at-risk individuals as quickly as possible.

Should there be a confirmed case at any location, contact tracing efforts are sped up using information from SafeEntry, which in turn helps prevent new COVID-19 clusters from forming.

ICT Tools

With the Singapore Government's Cloud-first policy, SafeEntry was designed by combining architecture best practices and AWS' well-architected framework together with an

experienced team of GovTech agile engineers, resulting in the following:

- Same-day bug fixes
- No-downtime since launch
- Fully automated development-to-release process
- Minimal human intervention during release
- Scaling from 10,000 to over 2 million daily users on same infrastructure
- Actively monitoring over 1 billion transactional logs daily

The introduction of SafeEntry also drove national level digitalisation. The implementation of SafeEntry QR codes at all venues with added communication efforts on cyber hygiene accelerated our citizens' exposure to technology. On a national level, our citizens are more equipped, supported and informed today.

Challenges

One key challenge was the inevitable resistance from less digitally savvy users, who found it difficult to scan QR codes i.e. they could not understand the concept; they were physically challenged in some aspects or even just being users who may not own a mobile phone. The SafeEntry team, together with venue owners rolled out the barcode scanning option where the users could present their physical identification cards for scanning. This provided an additional SafeEntry option for our users, fulfilling the requirement of logging individuals' access to the venues.

Another challenge was traffic crowding around QR posters – SafeEntry was designed to have users scan a QR code to check-in to the location. During peak periods, crowding around the QR poster location arises, which in turn violates the safe-distancing measures. The SafeEntry team designed and incorporated a location-based check-in feature in the National Digital Identity App (SingPass Mobile). Using GPS, the app allowed users to check-in to locations near them, without scanning a QR code. In addition, users could also 'favourite' locations that they frequently visit for faster check-ins.

Partnership

No.

Replicability

As SafeEntry stabilises, there is a greater push for private-sector collaboration and co-creation. GovTech's National Digital Identity team launched the SafeEntry-API which allows solution providers (e.g. thermal scanners, facial recognition gantries) to integrate it with their current tech solutions. These implementations allow visitors to seamlessly enter a mall or office without having to complete registration and SafeEntry check-in separately.

Sustainability

In order for the project to be sustainable, we must look for more pervasive ways to perform the basic principle of SafeEntry – knowing who was here. To achieve this, our TraceTogether programme will be merged on top of the SafeEntry infrastructure, to provide anonymised proximity tracking to form the missing piece - who you may have met.

The combination of TraceTogether-SafeEntry will give the Government oversight of what is required to swiftly curb the transmission of any COVID-19 cases, while resuming to normalcy as safely as possible.

The data collected via SafeEntry is encrypted and stored in the Government server, which will only be accessed by the authorities when needed for the purpose of preventing or controlling the transmission of COVID-19. The Government is the custodian of the data submitted by individuals, and there are stringent measures in place to safeguard the personal data. Only authorised public officers will have access to the data.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case90-VigilantGantry (VG)

Title of the project, Contact Organization Name, Stakeholder type, Country

TraceTogether National Contact Tracing Programme|Government Technology Agency (GovTech)|Government|Singapore

Beneficiaries

The TraceTogether programme aims to mitigate the spread of the disease in the community by quickly identifying close contacts, providing early treatment and isolating them effectively. This is a long-term goal, complemented by other measures, that can support operations during other epidemics. Digital contact tracing supplements existing efforts by reducing the time to identify close contacts, issue quarantine orders, and prevent the formation of clusters.

To-date, the app has more than 3 million registered users (>50% of population) and more than 750,000 tokens have been distributed. TraceTogether has enabled more efficient

contact tracing operations, resulting in quicker tracing and isolation of close contacts, while the community receives better protection and timely support.

Website

<https://www.srca.org.sa/en>

Description

The TraceTogether programme is the first national Bluetooth contact tracing system. It enhances Singapore's contact tracing efforts in the fight against COVID-19, and comprises the TraceTogether app and TraceTogether Token. The app was released on 20 March, while the token was rolled out on 28 June. Both the app and token use Bluetooth signals to record other nearby TraceTogether devices in an anonymised fashion, to quickly identify users who have close contact with a COVID-19 case and establish links between clusters.

TraceTogether does not rely on the users' memory and works with unacquainted contacts who are also TraceTogether programme participants. It therefore attempts to plug the gap of close contact with unacquainted contacts, by recording who you have been in contact with, but not where.

Its design considerations, namely decentralised data collection and storage, and centralised contact tracing operations balances operational efficacy and user privacy. Users do not have to worry about remembering what they did in the last fourteen days while data collected is stored locally on a user's phone unless it is required by contact tracers to assist with investigation.

ICT Tools

The app is built on the BlueTrace protocol developed by GovTech, which has been made open-source. Several countries have developed similar Bluetooth-enabled contact tracing apps using the BlueTrace protocol. GovTech consulted with Apple and Google prior to the release of the latter companies' Exposure Notification protocol

The TraceTogether Token, a hardware token, was also developed to ensure that all Singaporeans can participate in contact tracing, regardless of one's tech savviness and/or socio-economic background. This addresses a key vulnerable population segment that tends to have more adverse outcomes from a coronavirus infection.

Challenges

The TraceTogether programme has been an iterative process, based on user feedback and constant improvements, to tackle earlier limitations and enable better user experience and active usage.

The development of the programme brought together experts from across government in

the areas of software and mobile app development, radio engineering, security, Internet of Things, privacy and cryptography. Private sector privacy advocates and engineering companies were also involved.

Given the importance of adoption and coverage, the team realised that the app was not enough and not for all, and developed a physical token to complement the app ecosystem. The token provides citizens with a choice and enables a more inclusive society for everyone to benefit from community-driven contact tracing, be it less tech-savvy demographics such as seniors, or those with financial constraints or no access to smartphones that support the app.

Partnership

At the moment, due to technical feasibility and other countries' policy considerations, the TraceTogether programme team is unable to look for partners outside of Singapore. However, a seamless and interoperable TraceTogether programme would be an ideal, especially as international travel opens up.

If you are interested to partner or adapt BlueTrace protocol for your countries' needs, then you may check out BlueTrace.io or write in to the Smart Nation and Digital Government Office or GovTech.

Replicability

TraceTogether's source code has been published. Since TraceTogether's launch, over 50 countries or cities have also indicated interest in adopting a similar solution or learning from the team, with Australia, Canada, and Poland adapting the open-sourced version of TraceTogether. The programme also inspired both Apple and Google to roll out an Exposure Notification service in their respective mobile platforms.

Sustainability

Yes, the TraceTogether programme is a sustainable one.

The programme allows anyone with a smart phone to participate. Even for those who opt for a physical device (Token), it is durable, secure, and cost effective.

The programme as a whole is scalable and delivers value to public health.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case91-GoBusiness COVID Portal

Title of the project, Contact Organization Name, Stakeholder type, Country

Asifny Mobile Application Saudi Red Crescent Authority Government Saudi Arabia

Beneficiaries

Peoples in Saudi Arabia

Website

<https://www.swisseen.ch>

Description

the app allow users to submit permits request via the app during Curfew the COVID-19 pandemic for non-emergency cases (not need to be transported by Ambulance) then assessing the request, after that the request processed by the police for approval.

ICT Tools

Android version:

- Native coding using android studio (Java)
- Google maps
- Morse code
- Webservices
- DBMS >> SQL Server

iOS version:

- Native coding using objective C.
- Google maps
- Morse code
- Webservices
- DBMS >> SQL Server

Challenges

Support hearing impairment: Because they are unable to call Emergency number.

Saving time to get information: the app is prepared with fields for the required information from the users, location sharing, and medical history.

Support 9 languages: most of call center agents are bilingual speakers (Arabic and English),

so the app offers languages especially during Hajj season.

Accurate location: the modern devices support geolocation, so this feature was exploited in the app.

Additional channel: Reducing calls.

First Aid : the app contains first aid awareness.

Partnership

Yes, google & apple services.

Replicability

Yes, it can be customized for other countries by identifying the integration points.

Sustainability

yes, by Increase health coverage .

sufficient ambulance transport to health centers.

support the society to be a first responder for emergency cases by awareness.

Action Lines

AL C2. Information and communication infrastructure|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 16: Promote just, peaceful and inclusive societies

Case92-GoWhere Suite

Title of the project, Contact Organization Name, Stakeholder type, Country

E-GOVERNMENT UNITED NATIONS GLOBAL COMPACT PUBLIC ADMINISTRATION NETWORK-GENEVA (www.intgovforum.org www.unglobalcompact.org) AND THE ADVISORY COUNCIL FOR SCIENCE TECHNOLOGY AND INNOVATION(www.awti.nl www.waitro.org www.esa.int www.cfa.harvard.org www.mars.nasa.gov www.mcc.gov www.usaid.gov www.state.gov ENTERPRISE EUROPE NETWORK-SWITZERLAND(www.swisseen.ch www.icsc.un.org www.undp.org www.usaid.gov www.mcc.gov www.state.gov) AND LORD RAVINDER KUMAR SHARMSLA PROP KUMAR

SHARMA & ASSOCIATES PO BOX 118 GPO SHIMLA PINCODE 171001 HP INDIA PLACE OF BIRTH VILLAGE AND PO TUNNUHATTI DISTT CHAMBA PINCODE 176301 HP
INDIAGovernmentIndia

Beneficiaries

Removal of poverty

Website

<https://www.swisseen.ch>

Description

THE KING SOLOMON POST
OM SHANTI OM (LET THERE BE
PEACE IN THIS WORLD)
THIS IS SWISS/FRENCH/DUTCH/INDIAN/ UNITED NATIONS /BRITISH INTERNATIONAL
DISPATCH ISSUED FROM THE WORLD SECRETARIAAT/DESK OF LORD RAVINDER
(RABBINDER) KUMAR SHARMA(THE ROYAL CROWN/RA-UNCODE(THE SUN GODD-THE
SUPREME POWER-THE HEAD OF STATES-THE ALIEN KING from outer
space)/REXMUNDI/THE MASTER MASON CODE IS LAUSDEO/THE HEAD SUPREME
COUNCIL OF EU@UN(uk)/I.E.F-IN/THE CHAIRMAN-UNESCO & WORLD BANK(IMF) FOR
THE IMMEDIATE RELEASE OF FUNDS ILLEGALLY WITHHELD AND FROZEN FROM THE
YEAR 2006 TO 2019-20 BY GOVT OF INDIA RESERVE BANK OF INDIA AND INDIAN
BANKS NAMELY STATE BANK OF INDIA ACCOUNT NO 20361132765 CENTRAL BANK OF
INDIA ACCOUNT NO 3235787384 PUNJAB NATIONAL BANK ACCOUNT NO
3383000500130237 & 3383000100145213 AND OTHER INDIAN BANKS IN GROSS
VOILATION OF FOREIGN EXCHANGE MANAGEMENT ACT 1999 AND ARTICLE 5 OF
UNITED NATIONS UNIVERSAL DECELERATION OF HUMAN RIGHTS WHICH STATE THAT
NO ONE SHALL BE SUBJECTED TO TORTURE WHETHER PHYSICALLY AND OR
FINANCIALLY AND OR BOTH AND OR DEGRADED INHUMAN AND CRUEL TREATMENT
TO WHICH I HAVE BEEN SUBJECTED TO FROM THE YEAR 2006 TO 2019-20 BY GOVT
OF INDIA RESERVE BANK OF INDIA AND INDIAN BANKS REULTING IN MY ACCIDENT ON
14/10/2019 IN SHIMLA HP INDIA AS A SUV OVERRAN ME CRUSHING ME ALMOST TO
DEATH BREAKING THE BONE OF MY LEG AND NOW I AM BED RIDDEN AS A STEEL
PLATE HAS BEEN PUT IN THE BROKEN BONE OF MY LEG

ICT Tools

E-GOVERNANCE www.intgovforum.org

Challenges

As the banks are holding my money since 2006 to 2019-20 which are owned BY GOVT of india Reserve bank of india

Partnership

www.state.gov

Action Lines

AL C2. Information and communication infrastructure|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 12: Ensure sustainable consumption and production patterns

Case93-SafeEntry

Title of the project, Contact Organization Name, Stakeholder type, Country

FINAL CONNECTION AND FINANCIAL RELEASE AT VILLAGE AND PO TUNNUHATTI DISTT CHAMBA PINCODE 176301 HP INDIAENTERPRISE EUROPE NETWORK-SWIZERLAND(www.swisseen.ch) AND LORD RAVINDER KUMAR SHARMA PROP KUMAR SHARMA & ASSOCIATES PO BOX 118 GPO SHIMLA PINCODE 171001 HP INDIA PLACE OF BIRTH VILLAGE AND PO TUNNUHATTI DISTT CHAMBA PINCODE 176301 HP INDIAGovernmentIndia

Beneficiaries

Asia Pacific Region

Website

<https://www.nic.in/>

Description
E-government united nations GLOBAL COMPACT public administration network
ICT Tools
E-governance
Challenges
Non cooperation by THE GOVT of INDIA RESERVE bank of india AND INDIAN banka for holding my funds from the year 2006 to 2019-20
Partnership
www.awti.nl www.waitro.org www.giz.de www.seco.admin.ch www.digitalindia.gov www.mars.nasa.gov www.mcc.gov www.royal.uk www.diplomatie.GOUV.fr www.oecd.org
Action Lines
AL C1. The role of governments and all stakeholders in the promotion of ICTs for development AL C2. Information and communication infrastructure AL C5. Building confidence and security in use of ICTs
SDGs
Goal 1: End poverty in all its forms everywhere Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case94-TraceTogether National Contact Tracing Programme
Title of the project, Contact Organization Name, Stakeholder type, Country
eOfficeNational Informatics Centre (NIC)GovernmentIndia
Beneficiaries
eOffice is G2G/G2E solution automating government centric services and is being increasingly adopted by Government departments for achieving objective of Governance with Accountability, Transparency and Innovation (GATI) and eliminating delays in

Government offices.

All Government decisions are taken in files and eOffice is helping Government departments in informed and quicker decision making, resulting in better public service delivery. Hence, ultimate beneficiary in the process is citizen. Directly it helps Government officials to work with more efficiency and increases overall productivity of organization. An employee can track status of his files in the system. Some states have provided window to citizens also, resulting in higher transparency and accountability.

Intended benefits: Quick Decision Making & Faster Delivery of Services (Access of Files Anywhere Anytime, Faster movement of files in real-time irrespective of geographical locations); Elimination of Corruption, Venal practices, Red Tapism (Personal priorities/discretions eliminated, Deleting/replacing notings, tearing of files cannot be even thought of); Accountability & Transparency (Pendency Monitoring, Citizen's can track papers submitted to office); Environment Friendly & Go Green Initiative (Tonnes of papers, Infrastructure like Printers, Cupboards, are saved, Saving on Account of travel for transporting files); Always available files never be lost & stored for perpetuity (Readiness to Disasters).

Website

<https://dgda.gov.bd>

Description

eOffice is one of the key IT projects of NIC, aimed at improving internal efficiencies in organization through electronic administration leading to informed and quicker decision making, which in turn results in better public service delivery. It promotes less paper office with greater collaboration and knowledge sharing. During the period of lockdown necessitated by COVID-19, eOffice emerged as a game-changer, by facilitating unhindered work, unfettered and secured access to Government files to officials, that too in the financial year closing period. There is significant rise in use of eOffice and eFiles during this period, as paper-based files can be hosts for corona infection. Moreover, it was difficult to continue to work with traditional paper-based file systems during a complete lockdown state, without significant delays in functioning of any government office. Apart from the fear of COVID-19 infection, two other major factors contributed significantly, towards smooth transition of the Government, from working from office, to working from home. Firstly, most of the Government of India Ministries/Departments, Attached offices, and States with their districts were already working on eOffice and its adoption was on the ascendant. Even several PSUs had also adopted eOffice. Secondly, the availability of interdepartmental file transfers through eOffice.

ICT Tools

The Open Architecture on which eOffice is built, makes it standard reusable product amenable to replication across Governments at central, state, district levels. It is a web-based product that brings together independent functions and systems under single framework. Aspects of extensibility, scalability, security, interoperability and open standards were taken into consideration while defining overall architecture. eOffice is Unicode compliant with localized interface, facilitating to work in local language.

Technologies/ICT tools – eOffice is cloud enabled, developed and deployed using Open Source based software namely, PHP & Java, Apache HTTPD, Apache Tomcat, PostgreSQL, MongoDB, Kafka, Redis, ActiveMQ, Elastic etc. on Linux based servers (RHEL/CentOS).

It is pertinent to mention that eOffice implementation for Government of India is restricted within NICNET environment only. This is where two enabling technologies played their part in smooth transition to work from home during Covid-19 pandemic. These technologies were; WebVPN solution of NIC for secured access to eOffice and eSign technology for digitally signing eFiles. As soon as lockdown was announced, NIC facilitated Government departments in obtaining WebVPN to enable access of eOffice over secure channel, at any time, and from anywhere. Further, eOffice is eSign enabled, therefore, digital signing of noting and drafts continued seamlessly.

Challenges

a) Change in Office Procedures and Conflicting Change Requests: eOffice is based on CSMeOP. For all kinds of organization (Central & State Government, PSU, etc.), 90% of working procedures are similar and 10% variation is found. As automation increases, expectation from users to have more features in eOffice also increases. These users vary from lowest level to highest level decision makers. Many times conflicting change requests are also received from implementing organizations. Feedbacks/Change Requests are implemented in generic manner as configurable parameters to extent possible without compromising on usability/performance.

b) Browser Compatibility: There are continuous efforts in making the product work on different devices (Desktop, Laptop, iPad, etc) and it's ever changing underlying Environment/Platform (OS: Linux-RHEL, Ubuntu, Windows; Browser – Mozilla, IE/Edge, Chrome, Safari, etc.).

c) Changes in policies of Government: Many a times changes in Government policies, for example: storing of AADHAAR in vault, DSC/eSign related specifications, etc., necessitate changes in software. These are accorded highest priority by upgrading and releasing the versions.

d) Securing the Application: New vulnerabilities are discovered in development frameworks/OS/SSL etc. time to time. These vulnerabilities are required to be patched on highest priority by upgrading and releasing the versions.

e) Technology Up-gradation/Adoption on regular basis.

Partnership

We are looking for partnership with Central and State Government training institutes (like ISTM, IIPA, ATIs, LBSNAA, SVPNPA, HIPA, YASHADA, etc.) for developing training modules on eOffice within their courses for officers belonging to various services. This will enable these officers in formulation of the steps and actions that are required to be taken by the implementing organizations for continued growth of eOffice and also to bring in the uninitiated organizations to make a progress towards adoption of eOffice.

Replicability

eOffice covers the entire gamut of office administration, which is amenable to replication across the Governments, at Central, State and District levels. Moreover, the Open Architecture on which eOffice has been built, makes it a standard reusable product amenable to replication across the Governments. eOffice is getting adopted across the country as ONE INDIA ONE PRODUCT, fulfilling the needs of various implementing organizations. As on date, eOffice has been implemented in 622 organizations of Government of India, comprising of nearly all the Central Government Ministries/Departments - 83, Central Government Other Organizations (Apex/ Autonomous/ Statutory Bodies, Attached/ Subordinate Offices, Public Sector Undertakings, etc.) - 192, State/UT Government Secretariats - 28, District Administrations – 188, State Government Other Organizations/PSUs – 131.

eOffice Product is also being accepted at international level. It is pertinent to mention that eOffice Product was implemented in MTDI, Government of Sri Lanka in just a week's time during which it was launched by MTDI Minister, who digitally signed the file using the Digital Signature Certificates (DSCs) issued by Sri Lankan based Certifying Authority (CA). In addition to this, NIC is also in talks with Commonwealth Secretariat and Indian Ocean Rim Association (IORA) for implementation of eOffice in the member countries.

Sustainability

a) Capacity Building: Systematic Capacity Building Exercise becomes important activity for successful and sustained implementation of eOffice. On an average, 52 Capacity Building Programmes (CBP) on eOffice for various categories (Users, Master Trainers, EMD Managers and System Administrators) of 3-5 days duration having 25-30 participants are organized every year as per the calendar released on eOffice training site. CBP are also organized for user departments, based on request received from them.

b) Commitment from Top - eOffice should be mandated by Department. Regular review by top authority for project deliverables & enforcement is required for smooth implementation.

c) Change Management - Moral boosting of employee with appreciation for good

performance, guiding them about how application will help them in official work and increase their productivity & efficiency, give them feeling of direct/indirect contribution of growth and development of country and saving environment by adopting paperless working.

d) Government Process Re-engineering and Preparation of SOP for dealing with different cases like storage of physical paper after digitization, weeding out of legacy files/receipts, etc.

e) Emphasize on concept of “Minimum Government - Maximum Governance”.

f) Rich set of APIs that helps to integrate legacy applications of departments to provide robust governance ecosystem.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-government

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

Case95-Asifny Mobile Application

Title of the project, Contact Organization Name, Stakeholder type, Country

DGDA DRUG VERIFICATION Directorate General of Drug Administration Government Bangladesh

Beneficiaries

Consumers/ citizens

Website

<https://kvkHINGOLI.org/>

Description

What ?

The **DGDA Drug Verification** is a free web/smart phone based app for reporting suspected adverse drug reactions, Complaints , Authenticating Medicines & Prices.

ICT Tools

1. <https://play.google.com/store/apps/details?id=com.dgda.adr>

2. <http://103.48.16.179/>

3. <https://www.thedailystar.net/backpage/news/just-tap-away-1712506>

4. <https://ideabank.gov.bd/projects/45>

Challenges

As my agency got no personnel on IT/MIS out of its 300+ Human Resources so for outsourcing one of the best tech assistance provider (35,000 USD funding for Maintenance and Nationwide scaleup)

Partnership

Funding

Replicability

It's already selected for National Scale up in the Showcasing Event held in last year for Assessment and Evaluation of pilot projects (innovative ideas awarded)

Sustainability

It wins (One of the Four pilots among 29 Pilot projects) Ministries Approval (on the Basis of Sustainability and Utility) for National Scale-up by juries upon Pilot scale evaluation.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 11: Make cities inclusive, safe, resilient and sustainable

**Case96-E-GOVERNMENT UNITED NATIONS GLOBAL
COMPACT PUBLIC ADMINISTRATION NETWORK-
GENEVA (www.intgovforum.org)**

www.unglobalcompact.org) AND THE ADVISORY

COUNCIL FOR SCIENCE TECHNOLOGY AND

INNOVATION(www.awti.nl www.waitro.org

www.esa.int www.cfa.harvard.org

www.mars.nasa.gov www.mcc.gov www.usaid.gov

www.state.gov

Title of the project, Contact Organization Name, Stakeholder type, Country

Use of ICT for Technology Transfer in Agriculture in Hingoli District of Maharashtra KRISHI VIGYAN KENDRA, HINGOLI Government India

Beneficiaries

Our primary beneficiaries are small and marginal farmers and their of the Hingoli District. There are 711 villages covering about 3.5 Lakhs of farmer across the district. Major crops are Soybean, Cotton, Turmeric, Pigeon Pea, Banana and Sugarcane also to some extent. Rainfall is about 100 cms per annum.

Website

<https://www.kmfri.co.ke>

Description

1) Krishi Vigyan Kendra, Hingoli (Hereafter called as KVK) is sponsored by Indian Council of Agricultural Research, New Delhi. It is operating as district level organization in Hingoli District of Maharashtra. It started working since 2002. There are 6 Scientists working in the organization with 10 supporting staff. Staff strength is 16 with an area of operation of 711 villages divided in 5 Talukas.

2) Location of organization is remote from the District Headquarter.

3) Mandate of the Krishi Vigyan Kendra (KVK) is as follows,

a) Collaborate with the subject matter specialists of the state Agricultural University/ Scientist of the Regional Research Station (NARP) and the state extension Personnel in “On-farming testing”, refining and documenting Technologies for developing region specific sustainable land use systems.

b) Organize training to update the extension personnel within the areas of operation with emerging advances in agricultural research on regular basis.

c) Organize front-line demonstrations in various crops to generate production data and feedback information.

d) Organize long-term vocational training courses in agriculture and allied vocations for the rural youths with emphasis on “learning by doing ” for generating self-employment through institutional financing.

4) Effect of Pandemic on Daily Activities: Since the activities of KVK are of direct contact type of nature, it came to stand still during the Lock Down phases 1 to 3.

5) Way Found Out: Facebook was one of the simplest way of communication with the district farmers and stakeholders. We started showing Government initiatives for combating the pandemic. Use of Arogya Setu App was promoted. Its benefits were shown to district people. All the webcasts of Hon'ble Prime Minister, Chief Minister were shared on Facebook page <https://www.facebook.com/krishivigyankendra.hingoli>.

Another option was use of Whatsapp for communicating weather based agro advisories to farmers. We have made many farmers groups and used them to spread the Weather based Agro advisory once or twice a week. This resulted in a good support system for farmers.

In addition many farm produce were also sold to consumers by developing consumer groups and producer farmers in the groups. Many urban citizens were supplied fresh fruits and vegetables at their doorsteps during Lock Down.

Next to this , Google Meet and Zoom were used for communicating farm advisories to farmers. Audio conferences were also organized by making tie up with Reliance Foundation. Use of FM and AM radio was also done for giving relevant radio talks as per need of the farmers.

Finally, we started streaming of weather based agro advisories on You Tube also.

Result:- All of the above activities has developed a modern ICT platform across the Hingoli District, now we can communicate and have impact immediately for all kind of needs of the people of the District.

ICT Tools

List of ICT Tools used is as follows:

1) Face Book 2) Whatsapp 3) Bulk SMS 4) Audio Conferencing 5) Google Meet platform 6) Zoom Platform 7) You Tube Live 8) Kisan app 9) FM Radio 10) AM Radio

Challenges

Main challenge is that the farmers are not tech savvy. They need training and infrastructure support like high speed internet and modern equipment.

Partnership

Yes. High Speed Internet and suitable devices for every family.

Replicability

This type of activities have been done by every KVK in India. About 721 District KVKs have made efforts on similar lines.

Sustainability

Since it is low cost and quick it is going to be sustainable with relevant refinement in the input.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-agriculture

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case97-FINAL CONNECTION AND FINANCIAL RELEASE AT VILLAGE AND PO TUNNUHATTI DISTT CHAMBA PINCODE 176301 HP INDIA

**Title of the project, Contact Organization Name, Stakeholder type,
Country**

Enhanced Fish Market Information Service (EFMIS)Kenya Marine and Fisheries Research Institute (KMFRI)GovernmentKenya

Beneficiaries

Vulnerable fisheries value chain actors who benefit based on reduction in quantity of post-harvest losses by selling fish quickly, time searching for adequate prices, and no price differentials.

Website

<https://www.tic.ir/en/home>

Description

Fisheries value chain actors are using mobile phones to reduce the cost of travel and to know prices and weight during COVID_19 travel restrictions and bridge the gap that could benefit middlemen

ICT Tools

EFMIS is an ICT project is based on mobile phones to relay information as SMS code indicating the landings in terms of species and prices at markets with an automatic response within 10 seconds

Challenges

Meeting the high expectations of the different stakeholders - a second package was attempted for fishing nets and other gear in different shops but still under consideration.

Partnership

Partners in the crop and livestock sector to expand the use in the agriculture area.

Replicability

Could be replicated in other African and developing countries with active fisheries sector and with poor accessibility. The same can apply for other agricultural products such as crops and livestock.

Sustainability

Has raised revenue by charging users a small premium price above the cost of SMS sent to the data centre. Based on 20,000 SMS queries, a total of about USD 2,500 in revenue has been ploughed back.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 14: Conserve and sustainably use the oceans, seas and marine resources

Case98-eOffice

Title of the project, Contact Organization Name, Stakeholder type, Country

ExpertTelecommunication Infrastructure Company (TIC)GovernmentIran (Islamic Republic of)

Beneficiaries

Beneficiaries are all people, and the most important benefits are encouraging the majority of people to use the Internet to do daily chores.

Website

<http://eiar.gov.et>

Description

Expanding the bandwidth to increase the speed of Internet access and the possibility of connecting remote parts of the country to the high-speed Internet for public access to the Internet for daily activities such as sales training, etc.

ICT Tools

Bandwidth enhancement tools such as fiber optics, masts and so on

Challenges

There are many barriers to expanding bandwidth to speed up the Internet, including physical barriers and lack of knowledge and Etc.

Partnership

No

Replicability

No
Sustainability
No , It has not yet reached full stability
Action Lines
AL C1. The role of governments and all stakeholders in the promotion of ICTs for development AL C2. Information and communication infrastructure AL C3. Access to information and knowledge AL C4. Capacity building AL C5. Building confidence and security in use of ICTs AL C7. ICT applications: benefits in all aspects of life – E-government AL C7. ICT applications: benefits in all aspects of life – E-business AL C7. ICT applications: benefits in all aspects of life – E-learning AL C7. ICT applications: benefits in all aspects of life – E-health AL C7. ICT applications: benefits in all aspects of life – E-employment AL C7. ICT applications: benefits in all aspects of life – E-environment AL C7. ICT applications: benefits in all aspects of life – E-agriculture AL C7. ICT applications: benefits in all aspects of life – E-science AL C8. Cultural diversity and identity, linguistic diversity and local content AL C9. Media AL C10. Ethical dimensions of the Information Society AL C11. International and regional cooperation
SDGs
Goal 1: End poverty in all its forms everywhere Goal 3: Ensure healthy lives and promote well-being for all Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all Goal 5: Achieve gender equality and empower all women and girls Goal 6: Ensure access to water and sanitation for all Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case99-DGDA DRUG VERIFICATION
Title of the project, Contact Organization Name, Stakeholder type, Country
Social Media based Agro-Weather Advisory services for small holder farmers in Ethiopia Ethiopian Institute of Agricultural Research Government Ethiopia
Beneficiaries
Small holder farmers and Development agents (DA)
Website

<https://adip.cdmx.gob.mx/>

Description

The objective of this project is to provide Social media based Agro-Weather Advisory services for farmers and Development agents in Ethiopia. The service will be mainly implemented using Telegram bots and farmers will be provided Weather and agronomy related information during the main crop season. The project will be piloted in major wheat growing regions and apart from providing advisory, survey and other input requirement data will be collected from farmers.

ICT Tools

Social media platforms and telecommunication services will be used to provide the service. such service will promote the digital transformation plan in Ethiopia and it will help farmers to adapt the new normal environment which is created due to COVID-19.

Challenges

Internet access in areas without cable internet and 3G coverage is a major challenge and to mitigate that we proposed GPRS based SMS and voice services for those farmers who don't have internet access.

Partnership

Yes, I am looking for funding partners to cover the costs and pilot the project mainly in Wheat growing regions in Ethiopia.

Replicability

Yes, the project can be replicated for other crops mainly for disease monitoring and early warning.

Sustainability

After piloting in selected regions, the project will be transferred to cooperatives and business model will be implemented by providing training and deploying the platform in major four regions of Ethiopia.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-agriculture

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case100-Use of ICT for Technology Transfer in Agriculture in Hingoli District of Maharashtra

Title of the project, Contact Organization Name, Stakeholder type, Country

System for identifying contagions within enclosed spaces Digital Agency for Public Innovation Government Mexico

Beneficiaries

Beneficiaries are all persons who visited a commercial establishment operating in Mexico City, whether or not they are residents of the City. Benefits of the initiative include notice in cases of close proximity to a confirmed case, and follow-up monitoring of symptoms by medical personnel over subsequent days. Participants are invited to take a test at the module closest to their home to rule out contagion and provided with information on available support as it is required.

During its first week of implementation, 92,054 establishments signed up and got their QR code; codes around the city were scanned 1,859,000 times, out of which 440 were linked to a positive case of Covid. Based on this information, 16,782 people were informed of their proximity with a positive case.

Website

<https://www.monshaat.gov.sa/>

Description

A system for identifying infections in enclosed spaces. It consists of generating a QR code for each commercial establishment. People entering must scan the code or send an SMS to "check-in". Telephone numbers are compared with data collected by the National System of Epidemiological Surveillance (SISVER) and the databases of private laboratories. When a match is found between the telephone number of persons who've tested positive, those in the same establishment at approximately the same time are contacted to inform them of their proximity to a positive case. They're asked to remain isolated and referred for a test. Positive individuals are also contacted and asked to remain in isolation to avoid further spreading the infection.

The system was developed in strict adherence to current regulations on personal data

protection. The information collected is only used for the purposes of the program and is automatically deleted after 15 days.

ICT Tools

The tool described uses QR codes to collect telephone numbers and to identify people who've been in contact with a confirmed case of coronavirus in a closed commercial establishment. Data collected through the system is cross-referenced daily with the databases of people who've undergone Covid tests.

The information collected from check-ins by scanning the QR code or sending a text message with the folio of the establishment visited is automatically deleted every 15 days. Within this period of time, periods of contagious status are no longer relevant to those who'd been in close contact to the positive person.

The system encourages all people to use their cell phones as a tool for the prevention of contagion. This was the first initiative of its kind adopted in Mexico City and was developed considering the need to avoid collecting more data than was strictly necessary for the operation of the system, in order to protect citizen's personal data.

Challenges

The main challenge faced in the implementation of this initiative was a resistance by citizens to scan codes at check-in to commercial establishments. This results from a lack of trust in authorities to make proper use of data collected.

This reluctance prevented the program from being more efficient, as in not registering entries to establishments, it is impossible to alert the people at risk. This resulted in people not taking necessary precautions and the continued spread of the contagion.

Partnership

The project does not require outside partners for operation. Current partners for the implementation of the system include only the National Health Ministry and the private laboratories which share phone numbers associated with positive tests. These partners are necessary for system operation.

It would be useful to have a partner to improve the image citizens have of the system, since there is significant resistance to its full use. Distrust limits its usefulness and prevents the system from being more efficient as a method of alerting those at risk of infection.

Replicability

Beyond the system's current use in alerting people at high risk of infection, it could be adapted to strengthen population monitoring during a vaccination phase in any country or city. The process requires timely follow-ups between first and second doses of the vaccine. In either case, the system can be replicated by any local government that needs a system to identify people who have been present in a certain location during a specific period.

Because the tool collects a minimum of information (cell phone number only) it can serve as a communication channel between a government and a targeted group of citizens without compromising their personal information. It can be used to evaluate public services anonymously and with the certainty that people who actually used certain services are being contacted. It could also be used to generate focus groups for the evaluation of new processes implemented and to improve the quality of public services provided.

Sustainability

The project is sustainable in that it was executed using public resources allocated to the Digital Agency for Public Innovation on an annual basis, and on the human resources of the Agency itself. The system operates according to a strict privacy notice made publicly available and in strict compliance with current regulations on personal data.

The project will continue to be sustainable even if its use is modified for some other purpose after the pandemic.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case101-Enhanced Fish Market Information Service (EFMIS)

Title of the project, Contact Organization Name, Stakeholder type, Country

NawafthThe General Authority of Small and Medium EnterprisesGovernmentSaudi Arabia

Beneficiaries

Nawafth app benefits entrepreneurs, ideators, and small and medium enterprises specifically which represent 99.47% of the Saudi job market and are responsible for 60% of jobs provided within the country.

Website

<https://www.ica.gov.ae/en/home.aspx>

Description

Due to the huge economic impact Covid-19 has had on small business owners and SMEs in particular, we built a mobile application to provide consultancy and mentorship services directly from elite experienced contributors through visual, audio, written communication.

ICT Tools

ICT tools

we built native mobile apps to replace physical meetings and cover more geographically stretched out locations

includes:

- Video, audio, written chatting.
- File exchanging.
- Native coding.
- Redis.
- MVC PHP.

Challenges

firstly, our main challenge we faced as a team was delivering a mature product that can fulfill the need we predicted to arise in record time, secondly was to get users familiar with the concept we were inching towards, thirdly it was a challenge to provide around-the-clock sessions but we quickly reworked a join now feature similar to a "walk-in "appointment in physical locations.

Partnership

Nawafth is a product of The General Authority of Small and Medium enterprises and is not currently looking for partnerships at the moment, although we have previously collaborated with many private and government entities such as EY, UPS, Ministry of work, Ministry of commerce.

Replicability

We saw great results from releasing this service to local SMEs and we believe it would be highly beneficial to SMEs and entrepreneurs all over the world.

this project is highly replicable and easy to implement due to the lack of geographical borders of the service.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-business

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case102-Expert

Title of the project, Contact Organization Name, Stakeholder type, Country

ICA Smart ChannelsFederal Authority for Identity and CitizenshipGovernmentUnited Arab Emirates

Beneficiaries

Stops receiving customers During coronavirus

- As a precautionary measure against coronavirus (COVID-19) and to further enhance the smart service offering, ICA is closing customer's happiness centers and amending the business hours of others
- ICA has confirmed to all segments of society, including citizens, residents, and visitors, to apply for their transactions online via ICA UAE smart Mobile Applications and the online platforms and stressed the authority's commitment to providing the highest quality of services.
- These decisions aim to lessen the impacts of the precautionary measures taken by the country and to facilitate procedures for citizens, residents and visitors, ensure their health and safety, and support the work progress and continuity of government work in various entities and sectors

Website

<http://www.industrie.gouv.ci/contact.php>

Description

1. ICA UAE Smart eChannels:

<https://smartservices.ica.gov.ae/echannels/web/client/default.html#/login?langen>

2. Smart Mobile

As UAE is and will always be the homeland for everyone, A set of decisions has been taken to relieve the residents of the state from the effects of the international measures taken in the face of the outbreak of the coronavirus launched a new set of initiatives to enhance the ICT and digitalization sector in this regards

1. The ICA has extended the validity of the residency and visit visas for expatriates in the country. Those visas that have expired after March 1, 2020, will remain valid till December 2020.

2. The expatriate residency, whether they are inside or outside the country, will be considered valid until the end of December of this year, when its expiry date occurred after the 1st of March 2020.
3. Visas and entry permits for those inside the country are valid until the end of December of this year, when it ends on the date after the 1st of March 2020.
4. All ID cards ending on March 1 of this year will be valid until the end of December 2020.
5. Holders of residency visas who don't arrive in the UAE before the grace period, will get their visas renewed without additional fees
6. With the beginning of the outbreak, ICA enhanced the work in the call centers. It is working around the clock and ICA answer the public with different languages.

ICT Tools

1. ICA UAE Smart Channels project served three strategic goals:

- Enabling the people to access high-quality digital Transformation government information and services anywhere, anytime, on any device.
- Create an online resource to share information
- Build Mobile Gov Community

2. Smart Mobile strategy and existing business continuity plans

Improving Mobile Applications is a key initiative of the Administration and an integral part of the mission for all the Government entities. ICA plays a strong leadership role in providing innovative Mobile Applications products, services, and programs to the customers.

In order to handle the fast moving and unknown variables of an outbreak like COVID-19 and to overcome these exceptional circumstances that the world is currently facing. ICA has focus and lead efforts to maintain, and manage the followings steps:

- Accelerating digital transformations
- Protect growth and profitability
- Improve resiliency, and new models that incorporate economic impacts of past pandemics
- Take the pulse of the customers and enabling the people to access high-quality digital government information and services anywhere, anytime, on any device by encouraging the customers to stay at home and to use smart applications of the service

Challenges

Stops receiving customers During coronavirus

- As a precautionary measure against coronavirus (COVID-19) and to further enhance the smart service offering, ICA is closing customer's happiness centers and amending the business hours of others
- ICA has confirmed to all segments of society, including citizens, residents, and visitors, to apply for their transactions online via ICA UAE smart Mobile Applications and the online platforms and stressed the authority's commitment to providing the highest quality of services.
- These decisions aim to lessen the impacts of the precautionary measures taken by the country and to facilitate procedures for citizens, residents and visitors, ensure their health

and safety, and support the work progress and continuity of government work in various entities and sectors

Partnership

No

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-government

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case103-Social Media based Agro-Weather Advisory services for small holder farmers in Ethiopia

Title of the project, Contact Organization Name, Stakeholder type, Country

PLATEFORME OU PORTAIL DU E-COMMERCE EN COTE D'IVOIREMinistère du Commerce et de l'IndustrieGovernmentCôte d'Ivoire

Beneficiaries

Commerçant, Entreprises, jeunesse, étudiants, femmes, planteurs, secteur privé public. Avantage réduction du secteur informel encourager la consommation intérieure réduire le chômage et la pauvreté.

Website

<https://dot.gov.in/>

Description

mise en place d'un portail gouvernemental du e-commerce en Côte d'Ivoire pour l'identification des e-commerçants le développement du e-commerce sur le territoire national.

ICT Tools

les reseaux telecommunications et Internet et des seveurs et des appareils informatique et des systemes de Gestion et d'exploitation sont utilisés pour l'organisation de notre organisation.

Challenges

La prises en charge d'installation des frais d'installation du portail et financement des formations des beneficiaires du projet.

Trouver des financements privés et publics pour la réalisation

Partnership

Oui nous cherchons des partenaires dans le domaine des TIC des Organisations Internationales de commerce, de developpements des jeunes et femmes et des partenaires dans le domaine des finances.

Replicability

ce projet est reproductible dans la sous region en Afrique de l'ouest et ce projet est réalisé en Inde sur les continent Asiatique.

Sustainability

Ce projet est durable parce ce qu'il permettra une reduction à long terme de la pauvreté du commerce informel et permettra le developpement du commerce interieur qui profitera à tous.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C7. ICT applications: benefits in all aspects of life – E-science|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth,

employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 12: Ensure sustainable consumption and production patterns|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case 104-System for identifying contagions within enclosed spaces

Title of the project, Contact Organization Name, Stakeholder type, Country

Covid-19 Quarantine Alert System (CQAS) Department of Telecommunications Government of India Government India

Beneficiaries

1. Citizens
2. National and State Disaster management authorities
3. Ministry of Health, Public Health workers, surveillance teams
4. Local Administration and Law Enforcement Agencies and Covid Nodal Officers

CQAS is plotting quarantine geo-fence breach alerts on NDMA GIS Portal with multi-feature layered map showing present location of target, quarantine location, total breach count & repeated offender count for easier visualization by the higher authorities.

CQAS is sending real time geo-fence breach alerts by quarantined persons to State/UT Govts, right from State Nodal Authority down to District & Zonal Teams only on designated email IDs.

CQAS does not require human intervention of keeping GPS Location always ON for mobile device. It provides an edge over GPS edge based solutions which are dependent on human behavior and works only for smart phones.

CQAS is sending alerts for switched OFF/ unreachable mobile phones as well.

CQAS has provided assistance to State Govts in localizing the migrants for providing timely help & relief to them in terms of food; make shift shelter& travelling facilities.

Website

<https://rabita.az/en/index>

Description

Our team has designed COVID-19 Quarantine Alert System (CQAS), an indigenous, innovative system to contain the spread of Covid-19 pandemic. It is a comprehensive solution for effective monitoring, management and enforcement of the quarantine geo-

fence, a virtual boundary. The solution tracks the breach of geo-fence when the confirmed or the suspected or potential Covid-19 positive person(s) move away from his/her quarantined location with a reasonable accuracy and automatically triggers SMS/email alerts to the authorized Government agency. The location information is received from telecom networks, periodically over a secure network with due protection of data, through automated processes without any user dependency. It caters to smart-phone as well as feature phone targets. So far, CQAS has handled approx. 2.7 million targets (identified Covid +ve or quarantined person) of 18 States of India and generated more than 183 million quarantine breach alerts.

ICT Tools

Location Based Services of Telecom Network is used for fetching the approximate location of the user. Then the location is analyzed in Big Data Analytics Engine of CQAS. The distance between the quarantine location and this real time location is calculated and if the distance is more than the geo fence boundary created, email/SMS alerts are sent to the local administration for taking necessary action. The project has been working on National level since 29th March, 2020 on 24*7 basis. It has catered to 18 State Govts, thereby serving population of approximately 800 millions.

Challenges

Handling the large data sets simultaneously for analyzing the real time distance for quarantine breach was a challenge. Big Data Analytics is working as the core of CQAS for handling large data sets, which went upto .5 million during the month of June when covid-19 was peaking in India.

Also, generating real time alerts was equally important and challenging considering the number of Nodal Officers, Local Administration and Law Enforcement Agencies personnel count. Forking during emailing allowed us to send real time alerts as soon as the breach was detected by CQAS.

Generating real time breaches and mapping on National GIS Portal was also a critical requirement which was achieved with close coordination with National Disaster Management Authorities.

Partnership

From our experience during Covid-19, we have learnt that Big Data Analytics, combined with GIS and automated alert generations and information dissemination systems can play a great role in handling the disaster management. The team is looking forward to developing an end to end solution starting from early warning system tracking of affected people in the disaster, sharing the information with first responders and the safe evacuation of our citizens.

Replicability

Yes, the project is highly scalable and replicable. At the launch time, 2 Indian states started using the system. And till date CQAS has served 18 States of India, handling approx. 2.7

million targets (identified Covid +ve or quarantined person) and generated more than 183 million quarantine breach alerts.

CQAS may be used during any pandemic where quarantine is necessary. Also, The team is looking forward to developing an end to end solution starting from early warning system tracking of affected people in the disaster, sharing the information with first responders and the safe evacuation of our citizens.

Sustainability

Yes the project is sustainable. The entire project has been designed indigenously, by an in house team of DoT Officers, without incurring any additional costs. Also, CQAS is free of any kind of end user dependency unlike other Smartphone based APPs used for quarantine management and monitoring. The system requires very less computing power and the system is taken to sleep mode in between to reduce the power consumption, thereby making it energy efficient as well. CQAS has been designed taking into consideration the protection of personally identifiable information. The data and metadata is deleted in an automated manner as soon as the quarantine period of the target is over.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case105-Nawafth

Title of the project, Contact Organization Name, Stakeholder type, Country

Citizens' Electronic Appeals system>Data Processing Center (DPC) of the Ministry of Transport, Communications and High Technologies of the Republic of Azerbaijan.GovernmentAzerbaijan

Beneficiaries

Advantages for citizens, apply without leaving the place, loss of time and energy is prevented, online tracking of applications. Advantages for government agencies transparency of citizen-official contact, systematisation of appeals, follow-up and

monitoring of appeals, sending real-time notifications and it is easier to determine the effective performance of institutions.

Website

<https://www.jupem.gov.my/>

Description

The "Citizens' Electronic Appeals" system is a joint project of the Data Processing Center and the Executive Power of Shamakhi region. The population of Shamakhi region is about 10% of the country's population. The e-appeals system provides citizens living in the area with online applications, complaints and suggestions without going to various local government agencies. The purpose of the project is to ensure the transition to digitisation in the country and at the same time to minimise physical contact with government agencies in a pandemic. In addition to reducing the number of contacts, it also reduced the time of consideration of appeals. Applications previously considered for 15 days are now considered for 7 days.

ICT Tools

Technical specifications of the system: The front end of the portal is developed by html, CSS and back-end of the portal is developed by PHP (laravel). The database was created via MySQL. The system can be integrated into other e-service platforms, and can be adapted to regulate citizen appeals in many areas.

Challenges

The main difficulties in the implementation of the project were the tight time and informing people to use this platform. As the service is intended for citizens, it was one of the problems in the unequal technological opportunities of all people living in the villages. Also, restrictions imposed by the virus affected the activities of government agencies.

Partnership

Work is underway to improve the project and expand the functionality. Therefore, it is planned to cooperate with government agencies to integrate government agencies with the e-government gateway.

Replicability

This project can be replicated for the other executive power, in other administrative territories, as it is a platform for solving the problems of people living in local territories.

Sustainability

The application of security certificates for the protection of personal data, unlimited number of users, tracking of changes in the status of appeals, monitoring of statistics, interactive

reporting form, ability to export reports to an excel file the convenience for government agencies provide the basis for sustainable and further expansion of the system.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-government

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case106-ICA Smart Channels

Title of the project, Contact Organization Name, Stakeholder type, Country

Effective Monitoring And Analysis Of The Covid-19 Pandemic Through The Defence Geospatial Information Management Application|Department of Survey and Mapping Malaysia (JUPEM)|Government|Malaysia

Beneficiaries

National Security Council (NSC), Ministry of Health Malaysia (MOH), Malaysian Armed Forces (MAF) security agencies and other government agencies.

Website

<https://www.jupem.gov.my/>

Description

Department of Survey and Mapping Malaysia (JUPEM) via Geospatial Defence Division (BGSP) took the initiative to develop a dashboard application to provide latest information of COVID-19 outbreak in Malaysia. The information was gathered from related government entities, among others are National Security Council (NSC), Ministry of Health Malaysia (MOH), Malaysian Armed Forces (MAF) and security agencies. The platform is ESRI's Web Geography Information System (GIS) based and is capable to manage and handle the geospatial data. This made interactive online information enabled. Therefore, BGSP developed an Operation Dashboard to provide the latest information about contagious COVID-19. This Operation Dashboard has been used by NSC where the information is displayed in the National Operations Management Center (PPON). This application provides a Common Operating Picture (COP) to deliver information. Occasionally, the information in

this Operation Dashboard is enhanced according to the requirements to assist NSC in order to monitor the spread of this virus more effectively in real time

BGSP further upgraded this application into a Joint Common Operating Picture (JCOP) where results of latest statistics' analysis are displayed. JCOP is a concept created to mobilised data from various agencies and bunched it into a single vehicle on shared source of information. This greatly helped NSC to prepare, plan and execute policies to fight the advancement of Covid-19.

ICT Tools

Department of Survey and Mapping Malaysia (JUPEM) through its Geospatial Defence Division (BGSP), has developed a Dashboard application using its Defence Geospatial Information Management (DGIM) throughout ESRI's platform.

Challenges

The development of JCOP was well received by all the agencies involved in the fight. The challenge to share information derived from different data formats among agencies, which were critical, was overcome so that accurate analysis by JCOP is achieved. Prior to development of this platform, different agencies will have to work on different working platforms. With the existence of JCOP, these discrepancies were addressed and data sharing efficiency has been accomplished. There were 20 agencies involved in JCOP development in providing vital and comprehensive information. The conceptual collaboration to have a sharable content from each agency through DGIM portal. Various layers have been developed in JCOP as a result of data sharing between agencies. Among the layers are list of points of interest (POI), affected locations, quarantine stations, hot spot areas and others. Through this available data, JCOP is able to make fast and accurate analysis. It gives a visual overview which helps in the execution of further operational plan.

Partnership

Looking for partner that have background especially in Geographical Information System (GIS) for develop more platform to give more impact and solution to restraint the Covid-19.

Sustainability

This project is sustainable because it can be a solution to government especially for monitoring and analyse the pandemic Covis-19 in Malaysia.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case107-PLATEFORME OU PORTAIL DU E-COMMERCE EN COTE D'IVOIRE

Title of the project, Contact Organization Name, Stakeholder type, Country

Effective Monitoring And Analysis Of The Covid-19 Pandemic Through The Defence Geospatial Information Management Application
Department of Survey and Mapping Malaysia (JUPEM)
Government Malaysia

Beneficiaries

National Security Council (NSC), Ministry of Health Malaysia (MOH), Malaysian Armed Forces (MAF) security agencies and other government agencies.

Website

<http://www.telecomdept.gov.bd/>

Description

Department of Survey and Mapping Malaysia (JUPEM) via Geospatial Defence Division (BGSP) took the initiative to develop a dashboard application to provide latest information of COVID-19 outbreak in Malaysia. The information was gathered from related government entities, among others are National Security Council (NSC), Ministry of Health Malaysia (MOH), Malaysian Armed Forces (MAF) and security agencies. The platform is ESRI's Web Geography Information System (GIS) based and is capable to manage and handle the geospatial data. This made interactive online information enabled. Therefore, BGSP developed an Operation Dashboard to provide the latest information about contagious COVID-19. This Operation Dashboard has been used by NSC where the information is displayed in the National Operations Management Center (PPON). This application provides a Common Operating Picture (COP) to deliver information. Occasionally, the information in this Operation Dashboard is enhanced according to the requirements to assist NSC in order to monitor the spread of this virus more effectively in real time

BGSP further upgraded this application into a Joint Common Operating Picture (JCOP) where results of latest statistics' analysis are displayed. JCOP is a concept created to mobilised data from various agencies and bunched it into a single vehicle on shared source of information. This greatly helped NSC to prepare, plan and execute policies to fight the advancement of Covid-19.

ICT Tools

Department of Survey and Mapping Malaysia (JUPEM) through its Geospatial Defence Division (BGSP), has developed a Dashboard application using its Defence Geospatial Information Management (DGIM) throughout ESRI's platform.

Challenges

The development of JCOP was well received by all the agencies involved in the fight. The challenge to share information derived from different data formats among agencies, which were critical, was overcome so that accurate analysis by JCOP is achieved. Prior to development of this platform, different agencies will have to work on different working platforms. With the existence of JCOP, these discrepancies were addressed and data sharing efficiency has been accomplished. There were 20 agencies involved in JCOP development in providing vital and comprehensive information. The conceptual collaboration to have a sharable content from each agency through DGIM portal. Various layers have been developed in JCOP as a result of data sharing between agencies. Among the layers are list of points of interest (POI), affected locations, quarantine stations, hot spot areas and others. Through this available data, JCOP is able to make fast and accurate analysis. It gives a visual overview which helps in the execution of further operational plan.

Partnership

Looking for partner that have background especially in Geographical Information System (GIS) for develop more platform to give more impact and solution to restraint the Covid-19.

Sustainability

This project is sustainable because it can be a solution to government especially for monitoring and analyse the pandemic Covis-19 in Malaysia.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case108-Covid-19 Quarantine Alert System (CQAS)

Title of the project, Contact Organization Name, Stakeholder type, Country

Beneficiaries

Absolute protection from cyber threat is unattainable. The scope of the project is to install a Cyber Security System to implement strategy to deliberately avoid, mitigate, accept or transfer risk from cyber threat.

Beneficiaries from the project are:

- o Law Enforcing Agencies (LEA): LEAs time to time get benefit by blocking unwanted content to ensure safety to individual, group and national.
- o Bangladesh Telecommunications Regulatory Commission (BTRC): DoT provide assistance to perform policies vested on BTRC
- o General Internet Users: General individual get safe internet as the system block porn, betting and unwanted sites.
- o Parents: Parents are little relieved as Internet in Bangladesh contains less pornography.
- o Offended citizens: Offended citizens might request to block certain contents from internet.
- o Women will be empowered and children will be protected.
- o Children & Youth Group: Protected from unethical contents and develop a a patriotic generation inline with norms & Ethics.
- o Government: To run the national and country with peacefully ensuring better life for the citizens.

Main benefits:

- Traffic Measurement
- Traffic usage pattern
- Blocking of Pornography
- Blocking of Betting Sites
- Blocking of unwanted APPs and URL

Website

<https://www.moh.gov.my/>

Description

To ensure quality internet in line with social values & norms and counter anti-state and terrorist activities, Cyber Threat Detection and Response Project have been taken by Department of Telecommunications (DoT) under Post and Telecommunications Division (PTD) to install required equipment system and software at all the International Internet Gateways (IIG) and National Internet Exchange (NIX).

Deep packet inspection system has been installed at all the IIGs along with other network devices and all the national and International Internet traffic are flowing though the installed equipment.

A Network Operation Center (NOC) has been established at DoT from where all the bandwidth of IIGs and NIXs are monitored and required policy have been applied to the devices installed at IIGs and NIXs.

After coronavirus disease (COVID-19) outbreak internet usages have been increased dramatically in Bangladesh and during that time more than 23 (twenty three) thousand porn, gambling and anti-state sites have been blocked to ensure safe internet for all. Also, it is possible to analyze the impact of COVID-19 outbreak on internet in terms of bandwidth usages, usages type considering protocol, application and time of usages.

ICT Tools

Deep Packet Inspection (DPI) based multi service platform deployed all over the country. Bypass Switch is used for bypassing traffic during fault to ensure service continuity of the IIG operators. DPI system steered the traffic which need further processing to Websafe personnel. Particular unwanted content might be identified and process in the Websafe Personnel (WSP) system. Also, Digital Certificate Management Infrastructure (DCMI) system is used to distribute DoT Certificate to end users to ensure trusted communications.

Data Mediation servers are installed to collect the meta data for further processing. Meta data are collected to central management server (netenforcer) to provide real time and short time traffic analysis and monitoring.

A central database server (ClearSee) is used to convert data in to standard formal, generate report to operate the network in better, faster and smarter way. It captures a rich variety of application, device, quality of experience and security of data records in real time and transform it into valuable business intelligence that help to plan and implement actions. The integrated system enables DoT to enforce policy from a single platform instead of manually implementing policies manually at different operators. It also provides national internet traffic statistics which helps policy makers in drafting national Internet Related policy.

Challenges

- Detecting the unwanted content automatically. From signature database porn and betting sites have been blocked. However, there are sites which are not included in the signature database. Also unwanted sites are detected manually. Software might be used to detect the unwanted sites using different algorithm.
- Due to technological limitations (certificate pinning in App) certain content cannot be blocked using App. Also, VPN traffic is a challenge. It is possible to overcome certificate pinning issue of App by developing customized App.
- Installation of Certificate at each user device. National Browser may be developed or awareness program might be taken.
- Capacity need to increase considering increased traffic and new IIG PoP. Expansion of Project capacity vertically and horizontally will resolve the issue.
- Capacity development of Manpower is required to operate and maintenance of the system

by training and hiring new manpower.

- Detection of Traffic which is bypassing the system through IIG automatically. Probe at different user site may be installed to identify the bypass traffic automatically.
- 7X24 service to customer is a challenge due to shortage of Manpower. New manpower with adequate knowledge might be deployed or managed service might be procured.

Replicability

Project might be replicated with same or similar scope at different ISP and Mobile Operator Level. There are nation-wide distributed ISPs and distributed Point of Presence (PoP) of Mobile Operators. If the project is replicated at those level it will be possible to cover every traffic including cache server traffic and any traffic which are passing between two ISP/Mobile Operator connected to same IIG. Also, Project might be replicated at submarine cable landing station and Nationwide Telecommunication Transmission Network (NTTN) Operators which will provide 2nd level of coverage.

Also new features including DDoS protection, antimalware, Bot prevention, parental control etc. might be include in the same system or replicated system or a new system. This will provide additional level of features for safe internet for Internet users of Bangladesh.

The project might be replicated at IIG level to collect national monitoring information with different scope, typology and scale under ministry of Home for the safety and security of Bangladesh.

Sustainability

The project implemented by DoT is very much sustainable in the perspective of the country. DoT is able to continue its mission or goals of the project and project impact will be continued for a long time. The system installed by the project has a social, economic, legal, cultural, educational and political impact and importance. There are distinguished philosophy, mission, vision, values, norms, goals and objectives which have been achieved by the installed system and those will continue for the development of the nation and to provide safe internet service for all. With respect to beneficiary assessment, legal and regulatory framework all are exist in our country and functioning properly. This system or project is only system of this nation or country which governs by a government organization & all other stakeholders are properly coordinated for proper operation. Other factors such as direct or indirect financial aspect, risk analysis, operational plan, training, human resource development, capacity building and community & social aspect, this project is already analyzed and found sustainable. The rationale, demand and supply, costs, anticipated outcomes or outputs and performance metrics which all already met to sustain.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case109-"Citizens' Electronic Appeals" system

Title of the project, Contact Organization Name, Stakeholder type, Country

CPRC Hospital System Ministry Of Government Malaysia

Beneficiaries

1. Ministry Heads – near real time visibility of hospital capacity allows for accurate information dissemination
2. Hospital Directors – capacity planning via online dashboard, quicker call to action.
3. Hospital Personnel – paperless referral and transfer of patients (Step-up or Step-down)

Website

<https://ambon.go.id>

Description

Crisis Preparedness and Response Centre (CPRC) Hospital System was developed as an online reporting tool to monitor hospital preparedness in facing the pandemic COVID19. It leverages on the existing MOH Blood Bank Information System (BBISv2) Cloud Framework and Platform to support data collection during the crisis of Covid-19 and uses Power BI analytics.

The new module was developed rapidly and rolled out to the 40 hospitals designated as COVID19 hospitals nationwide of which 2 were university hospitals and the remaining were the Ministry of Health hospitals. Such arrangements were made to facilitate clinical treatment of patients through centralization of resources such as consumables, equipment, and manpower. This is also to ensure efficient response towards an escalating outbreak. In the early phases of the pandemic, daily bed usage and utilization was monitored manually. Data was submitted by the 15 State Health Departments via several different mediums i.e. emails, excel files, and google drive. This poses risk to data submission error, data reliability, inefficient data transmission and pregnable data security. In response to these threats, an online reporting tool was developed equipped with analytics dashboards for effective daily monitoring and decision making.

ICT Tools

The solution was developed using an existing multitenant based solution framework built for our Blood Bank Information System (BBIS) consisting of opensource backend engine using

Java with Angular frontend and database, PostgreSQL, deployed on OpenStack opensource cloud computing infrastructure. Since the framework was already tested and used in a production environment, development and deployment of CPRC Hospital System took 1 month from ideation/conceptualization.

As a cloud-based solution, there was no need for a separate site installation and reduced time to onboard multiple sites and users.

With the data collected from each hospital, a data analytics solution was built on Microsoft PowerBI to provide analytical view on capacity projection, daily capacity, and capacity hotspots. This allows management to decide on reallocation of Bed, ICU and Ventilators for Covid19 usage.

Challenges

Due to the nature of the pandemic, onboarding and training sessions had to be done virtually via Microsoft Teams and other video call tools. Onboarding and training videos were prepared and uploaded into the system for quick access. A helpdesk module was developed and incorporated into the solution to respond and resolve user issues.

Partnership

No, at this moment the Ministry of Health is working with two local partners to develop and maintain this solution.

Replicability

This project can be replicated and used in many other contexts to track facility capacity and assist in executive decision making. However, there is no such requirement or scenario that fits this yet.

Sustainability

Though this project were developed to cater to Covid19 pandemic, it can be further developed and maintained to cover any types of emergency and future pandemics. Build mostly on opensource libraries, it can be maintained at a very low cost.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case110-Effective Monitoring And Analysis Of The Covid-19 Pandemic Through The Defence Geospatial Information Management Application

Title of the project, Contact Organization Name, Stakeholder type, Country

Sistem Administrasi Kependudukan Kota AmbonRelawan TIK Maluku and Pemerinta Kota AmbonGovernmentIndonesia

Beneficiaries

residents and the city government of Ambon

Website

<https://www.bocra.org.bw/>

Description

We build a cloud-based information system that can be accessed from anywhere. This system provides rt / rw based resident data for each village to facilitate administrative services for residents in the village without having to go to the village office to minimize face-to-face services

ICT Tools

web based application and kios-k

Challenges

the head of the household still needs assistance

Partnership

city government of Ambon

Replicability

yes, the system is cloud-based so it is easy to replicate to other villages.

Sustainability

Yes, with the support of the Ambon city government, 20 villages have used this application. This year there will be 30 more villages.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 3: Ensure healthy lives and promote well-being for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 10: Reduce inequality within and among countries|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case111-Effective Monitoring And Analysis Of The Covid-19 Pandemic Through The Defence Geospatial Information Management Application

Title of the project, Contact Organization Name, Stakeholder type, Country

Connect an Employee Initiative Botswana Communications Regulatory Authority (BOCRA) Government Botswana

Beneficiaries

Employers: Employees are productive and work efficiently from home during the pandemic
Employees: Research, work, training and connect other family members to access digital services from home.

Website

<http://www.kpkt.gov.my>

Description

Connect-an-Employee Initiative: Encourages public and private organisations to connect their employees to residential broadband internet of 10Mbps. This allows employees to work from home.

ICT Tools

Organisations connect their employees to high speed broadband internet to facilitate remote working in public and private sector. Other organisations provide their employees with end user devices.

Challenges

Cost of internet connectivity and budgetary constraints are a hinderance affecting speedy uptake of the Initiative. BOCRA continues to engage service providers to reduce internet prices.

Partnership

Organisations are advised to form partnerships with service providers such that they benefit from volume discounts by connecting more customers to one service provider.

Replicability

Yes . The initiative was initially rolled out in the public sector then extended to the private sector during the pandemic to support working from home. It can also be adopted by other countries.

Sustainability

Yes. As more organisations connect their employees to the internet, the expectation is that internet prices will go down making the Initiative sustainable in the long term.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C10. Ethical dimensions of the Information Society

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 17: Revitalize the global partnership for sustainable development

Case112-Cyber Threat Detection and Response

Project

Title of the project, Contact Organization Name, Stakeholder type, Country

Moneylender Information System (i-KrediKom)Ministry of Housing and Local Government (MHLG)GovernmentMalaysia

Beneficiaries

The WSIS is an effective mechanism for publicizing effective and impactful projects that could be of use to different stakeholders. It provides a venue for knowledge exchange and partnership opportunities for the benefit of participants. In addition, it raises awareness on the WSIS action line for i-KrediKom which is directly linked to SDG Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable. This project shares the information needed to empower our citizen in making a right decision in their life, thus making the community safe and sustainable.

At the same time, i-KrediKom also promotes SDG 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels. By utilizing the information shared via iKrediKom, the public has access to the right information and can participate in issues related to money lending operation by reporting any incompliance to the authorities. In the long term, this inclusive society will help the government to enforce the moneylending regulation more efficiently for a more effective, accountable and inclusive moneylending institution at all levels.

Website

<https://rabita.az/en/index>

Description

Global economic recession and pandemic spread results in many people losing their source of income. In order to continue with their life, they need some help in the form of additional money to either upstart their business, to start another job or just to get by. These needs bring them to the moneylender as they need the money fast but in small amounts without having to go through the rigorous filtering process of getting a loan from the bank. Most of the lower income group may not even qualify for a bank loan.

This is where i-KrediKom comes in. When used as a faster means to validate the legitimacy of a moneylender's information, the public can avoid being conned into taking a high-risk loan by illegal moneylenders. By utilizing the mobile application, they are provided with a list of legitimate moneylender to choose from. Having the information of legally licensed moneylenders in hand means that they get to have reliable options for getting a loan to help with their financial predicament promptly, surely and safely.

Despite being a simple mobile application, the i-KrediKom has high impact on the user's life in that it helps the user to get reliable, true and useful information on legal moneylenders promptly and safely, thereby preventing the user from falling prey to swindles or being

conned by illegal moneylenders. By using the i-KrediKom mobile application, the user can also avoid from wasting time and money just to get the right information on legal moneylenders.

ICT Tools

Government (MHLG) is serious in raising awareness regarding legal moneylending operations to protect the public from illegal moneylenders. This is in line with the United Nation's Sustainable Goal 11 (Sustainable Cities and Communities) and Goal 16 (Peace, Justice and Strong Institutions).

The i-KrediKom mobile application allows users to easily search for information on any legal moneylender such as the moneylender's license expiry date, valid operating premises and contact details. Furthermore, the user can easily utilise the i-KrediKom's built-in map function for directions to their selected moneylender's operating premises. This helps users to easily identify legal moneylenders and avoid falling prey to loan sharks.

i-KrediKom can be easily downloaded from Google Play Store

(<https://play.google.com/store/apps/details?id=my.gov.onegovappstore.iKrediKom&hl=en&gl=US>) and Apple App Store (<https://apps.apple.com/my/app/i-kredikom/id1457648577>).

This mobile application has been downloaded and used by more than 5,000 people and is actively used with more than 500 maps Application Programming Interface (API) usage per day.

In the near future, MHLG intends to coordinate more awareness campaigns for the use of this mobile application in order to reduce loan shark activities in Malaysia, thus providing a harmonized environment and community in our beloved nation.

Challenges

The main challenge in this project was the task of preparing and making sure that all the information provided in the mobile application are up to date at all times. This issue was resolved by having regular monitoring on the enforcement process to make sure that all legal moneylenders are complying with the regulation and obligated to provide their latest information.

From the technical aspect, the biggest concern was on the rising trend of cyber security incidences, which involves data breaches and confidential information leakages. As the mobile application accesses confidential data source, any information leakage would bring a negative impact to the government and to the legal moneylenders. In order to resolve this, security assessment is being done regularly to ensure that the mobile application is not exposed to any major security vulnerabilities, especially preventing unnecessary access to information.

In the future, MHLG intends to have more public awareness campaigns for i-KrediKom

mobile application to ensure that the public has access to the right information for their needs. Additional features for future enhancement includes a mechanism to validate the validity of the legal moneylender's operating license through i-KrediKom.

Partnership

The Ministry of Housing and Local Government's Community Credit Control Division (CCCD) is the authority in regulating and controlling the business of moneylending in Malaysia based on the Moneylenders Act 1951, and thus is the owner of moneylenders information in Malaysia. The CCCD cooperates closely with the Royal Malaysia Police's Commercial Crime Investigation Department especially with regards to the enforcement and legal matters in maintaining the regulation and keeping abreast with information on the operations of legal moneylenders.

At the same time, the CCCD also works closely with the Central Bank of Malaysia (CBM), which is the regulatory body that regulates the handling of moneylending transactions by moneylenders. This joint committee is very important to ensure that all details regarding moneylending operation are in accordance with the National Monetary Policy.

While the Ministry of Housing and Local Government's Corporate Communications Unit is responsible for planning and executing awareness campaigns for the i-KreditKom mobile application, and developing close relationships between MHLG, the media practitioners and citizens; the ministry's Information Technology Division is the developer responsible for the technical aspects of the mobile application.

Replicability

The i-KrediKom application blueprint was based on the Malaysia Public Sector Data Dictionary/Data Dictionary Sektor Awam (DDSA), which describes the standard code and data type to be used in an IT application. iKreditKom was also developed using open source technology environment which is supported by a large open source community in the world.

The uniqueness of iKreditKom does not solely lie on its underlying technical elements, but also on its ability to provide convenience, improve accessibility and quality of interactions between citizens and businesses, as well as improving the information flow and processes within government departments for a speedier and better quality policy development, coordination and enforcement.

By adopting the DDSA standard code and data type, this project can be easily adapted or used by any other entity. It can be widely replicated in any IT project by the public sector, industry, commercial and institution by following the same format and standard.

Sustainability

Best effort has been made to ensure that i-KrediKom will always stay relevant and viable in order to ensure its sustainability. From the beginning, the system development activities

were planned based on the open standard for data and using open source tool for its back-end technologies. Although the system uses enterprise open source solutions supported by international vendors, internal expertise were developed to ensure competent performance of all aspects of technical maintenance.

i-KrediKom has ICT security protocols in place to ensure that it is well protected in the world of web technologies and online services. This mobile application's security risks are reviewed regularly for all types of possible vulnerabilities in order to enable i-KrediKom to function securely and be able to manage security risks.

The i-KrediKom data source is updated regularly by the regulator and the legal moneylenders as part of their conformance to the national Moneylenders Act in order to maintain their operating license legally.

Furthermore, regular enforcement of the licensing regulation and operating procedure compliance by a special task force consisting of personnel from the Registrar office and the police will ensure that all data required for the functionality of this mobile application is always up-to-date and reliable.

Action Lines

AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-science|AL C10. Ethical dimensions of the Information Society

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 3: Ensure healthy lives and promote well-being for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case113-CPRC Hospital System

Title of the project, Contact Organization Name, Stakeholder type, Country

Unified Public Transport Payment System|Data Processing Center (DPC) of the Ministry of Transport, Communications and High Technologies of the Republic of Azerbaijan.GovernmentAzerbaijan

Beneficiaries

Benefits for Citizens: Single card is used for all types of vehicles, ability to use all NFC cards, for those who do not have a bank card, contactless, obtaining a bank card without going to the bank, discounts for special categories of citizens (disabled, pensioners, special privileged), extensive opportunities to increase the balance, ability to use QR code, payment by cards is more convenient, hygienic (especially during the COVID-19 pandemic), minimize the use of cash, possibility to use in other service areas (museums, bicycle rental, trade networks, etc.);

Benefits for Banks: decreased contact during a pandemic, stimulation of electronic payments, increase in turnover on bank cards.

Benefits for the Government: reduction of infection during pandemics, attention to people in the social category, transparency of tariff collection, ensuring transparency in tax collection, support for socio-economic security;

Website

<https://rabita.az/en/index>

Description

"Unified Fair Collection System in Passenger Transportation" implemented in Shamakhi city (about 10% of the country's population). The project allows passengers to use bank cards and a "Prepaid" card minimizing contact, to pay for transport services (NFC technology), make all types of payments, and receive information about tourist facilities. The buses are provided with special NFC (Validator Velitek) devices and the system supports any bank card for paying. The system provides discounts through cards for persons belonging to special social groups (disabled people, pensioners, martyrs' families etc.). In addition, within the project taking into account the activities of banks in order to avoid accumulation of people during the pandemic, easily and non-contact obtained "Prepaid bank" cards were introduced to replace the bank cards. This card can be obtained in the branches and departments of two banks (Azer-Turk Bank OSC, Azerpost LLC), as well as, in devices (Vendomart) installed in different parts of the city. Besides the public transport, these cards are used as payment cards in the markets and in other places, where electronic cards are used.

The project also for agencies responsible for passenger transport to track transactions in real time and receive reports.

ICT Tools

"Unified Public Transport Payment System" is complex system consisting of administrative (back-end) software that allows tracking, NFC devices (Validator Velitek) for reading payments on the buses and terminals (Vendomart) installed to obtain "Prepaid" cards and increase the account. The front interface of the system is developed with HTML, Javascript, Vaadin, back-end with Java11, Spring Integration. The database was developed using Oracle DB, PostgreSQL. The connection between the terminals (validators) and the single payment system is made by the server via the HTTPS protocol. User authentication of the

TLS protocol v1.0, v1.1, or v1.2 is used to protect the exchange of information between terminals and the system. The connection is made from the "question-answer" mode. Queries enter the system as HTTP POST and GET queries. Queries are synchronous and asynchronous. The format of the answers returns to the validator in JavaScript Object Notation (JSON) format. The system authorization process allows passengers to touch the plastic cards to the appropriate authenticators to use the service provider's services. In this case, the validators send a message to the system about the transaction. One terminal can send messages about several transactions at the same time. The system can also receive several transaction messages from different terminals during one session. The structure of a permission message is similar to a standard ISO8583 transaction message. The message consists of a number and predefined fields. Each field has its own number and corresponding value.

Challenges

The first problem with the application of the payment system was related to NFC devices (Validator Velitek) installed on buses. The fact that these devices are portable makes it possible to install them on other buses. This prevented accuracy in reporting. To solve the problem, a unique code was assigned to each validator and this code was combined with the serial number of the vehicle.

The second problem was that many citizens did not use bank cards. To solve this problem, Azerid-Turk Bank OJSC's Prepaid bank cards have been introduced. This card can be obtained from "Azer-Turk Bank" OJSC, branches and departments of "Azerpocht" LLC, as well as from devices installed in different parts of the city (Vendomart). The minimum payment for the card was applied. The passenger can spend 50% of the card payment while using the bus.

Citizens can then use Prepaid bank cards as a debit card.

To stimulate the use of the cards, Mastercard users were given special discounts on travel, taking into account social categories (disabled, pensioners, people with social benefits).

The scope of its use has been expanded so that more citizens can get the card. Using the InMart mobile application, it is possible to get information about tourism facilities, historical places of Shamakhi, to determine the route. To do this, you need to hold the camera, which is opened via the mobile application, on the Prepaid card.

Partnership

Banks, logistics companies, tourism companies and facilities, private and public transport agencies, companies implementing smart solutions in the transport sector and district executive authorities can act as partners. The system is in the interest of travel agencies, companies that provide transportation services to schools and workplaces, and taxi companies. At the same time, one of the main target segments is the logistics services of government agencies. The model of the system, which can be integrated into any infrastructure, allows integration into various portals. It is possible to integrate this system into the payment system of all public transport.

Replicability

“Unified Public Transport Payment System” is a joint project of the Data Processing Center and the Executive Power of Shamakhi city. Shamakhi is the capital of the Shamakhi District of Azerbaijan Republic. Its area is 1670 km², and the population is 107,3 thousand people (about 10% of the country's population). The purpose of the project is to ensure the transition to digitalization in the country and at the same time to minimize physical contact in a pandemic (Cov-19). This project can be replicated for the other regions and cities. Integration into any electronic infrastructure was also taken into account during the development of the system. The system model allows integration into any portal. It is possible to make any changes to the system. Depending on the variety of routes and payments, any tracking of the system is possible. It is also possible to use filtering in any way, depending on the type of data to be registered.

Sustainability

Cashless payments with plastic cards will continue to be used as a means of payment for a long time. In the future, even if this process is replaced by bitcoins, it will allow to improve the structural program on which the system is built. When developing the system, the possibilities of integration into any electronic infrastructure were taken into account.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-government

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 17: Revitalize the global partnership for sustainable development

Case114-Sistem Administrasi Kependudukan Kota

Ambon

Title of the project, Contact Organization Name, Stakeholder type, Country

Unified Public Transport Payment System|Data Processing Center (DPC) of the Ministry of Transport, Communications and High Technologies of the Republic of Azerbaijan.|Government|Azerbaijan

Beneficiaries

Benefits for Citizens: Single card is used for all types of vehicles, ability to use all NFC cards, for those who do not have a bank card, contactless, obtaining a bank card without going to the bank, discounts for special categories of citizens (disabled, pensioners, special privileged), extensive opportunities to increase the balance, ability to use QR code, payment by cards is more convenient, hygienic (especially during the COVID-19 pandemic), minimize the use of cash, possibility to use in other service areas (museums, bicycle rental, trade networks, etc.);

Benefits for Banks: decreased contact during a pandemic, stimulation of electronic payments, increase in turnover on bank cards.

Benefits for the Government: reduction of infection during pandemics, attention to people in the social category, transparency of tariff collection, ensuring transparency in tax collection, support for socio-economic security;

Website

<https://www.mcit.gov.sa>

Description

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The project also for agencies responsible for passenger transport to track transactions in real time and receive reports.

ICT Tools

"Unified Public Transport Payment System" is complex system consisting of administrative (back-end) software that allows tracking, NFC devices (Validator Velitek) for reading payments on the buses and terminals (Vendomart) installed to obtain "Prepaid" cards and increase the account. The front interface of the system is developed with HTML, Javascript, Vaadin, back-end with Java11, Spring Integration. The database was developed using Oracle DB, PostgreSQL. The connection between the terminals (validators) and the single payment system is made by the server via the HTTPS protocol. User authentication of the

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Partnership

Banks, logistics companies, tourism companies and facilities, private and public transport agencies, companies implementing smart solutions in the transport sector and district executive authorities can act as partners. The system is in the interest of travel agencies, companies that provide transportation services to schools and workplaces, and taxi companies. At the same time, one of the main target segments is the logistics services of government agencies. The model of the system, which can be integrated into any infrastructure, allows integration into various portals. It is possible to integrate this system into the payment system of all public transport.

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Sustainability

Cashless payments with plastic cards will continue to be used as a means of payment for a long time. In the future, even if this process is replaced by bitcoins, it will allow to improve the structural program on which the system is built. When developing the system, the possibilities of integration into any electronic infrastructure were taken into account.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case115-Connect an Employee Initiative

Title of the project, Contact Organization Name, Stakeholder type, Country

ThinkTech initiative Ministry of communication and information technology Government Saudi Arabia

Beneficiaries

Saudi Arabia – all regions

Website

<https://cib.govmu.org/SitePages/Index.aspx>

Description

ThinkTech is an umbrella for strategic awareness projects in the Kingdom of Saudi Arabia launched by the Ministry of Communication and Information Technology to anticipate the latest technology and cover the technical Knowledge needs for all speakers to achieve Saudi Vision 2030 in digital transformation, Therefore, to empower the local and global talents amid the unexpected Corona pandemic, Think Tech which is an initiative by the Saudi Ministry of Communications and Information Technology that aims to raise awareness when it comes to technologies, decided to launch a series of online meetups, where more than 50 virtual Meetups (webinars) and had an audience of more than 5 million from more than 60 countries around the world. The topics of these technical events varied, including women's empowerment, Entrepreneurship, the nonprofit sector, the gaming industry, and many other topics. The topics covered were addressed to top executives, business owners, parents, and kids.

ICT Tools

International

Challenges

Overall, the pandemic accelerated digital transformation and dependence on remote work. Technology adoption increased exponentially across all sectors. What we did at Think Tech was to enlighten people on the various uses of technologies and their importance in shaping the future whilst staying safe during the quarantine period. The 180+ guests who were hosted in these Virtual Meetups helped the attendees better understand the situation and better adapt to the technologies that best fit them.

Partnership

yes sure, we have many existing partnerships that support the goals of the initiative and we always aspire to more partnerships that support and achieve the desired goals of the initiative

Replicability

The ThinkTech platform aims to spread awareness about emerging technologies around the world; the initiative platform can access all over the world, and the physical training courses and workshops can be set up anywhere. Therefore, our case can be applied in other countries with different scenarios.

Sustainability

ThinkTech initiative has many programs throughout the year that serve to spread knowledge in emerging technologies (artificial intelligence, internet of things, blockchain and cloud computing...etc.)

Think Tech has created a community that is well aware of the technologies around them and that can always come back to Think Tech for answers and access to specialists in the technological fields they want to empower/develop. Moreover, Think Tech will continue to support those who look for better adoption practices with the best experts in the field of technology.

Moreover, the initiative is accessible to all members of the community who are interested in emerging technologies. This non-profitable initiative provides the community with the information to enhance their knowledge in the latest technologies to cope up with today's rapid technological advancement. The Think Tech initiative depends on partnerships with multinational and local companies as well as the public sector. Those partnerships provide highly qualified experts in emerging technologies who deliver vital knowledge to the community.

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case116-Moneylender Information System (i-KrediKom)

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Laboratory Information Management System (LIMS) and setting up of a passenger LIMS at Seewoosagur Ramgoolam International Airport to test incoming passengers for COVID-19
Central Informatics Bureau
Government
Mauritius

Beneficiaries

The primary beneficiaries of the COVID-19 LIMS and Passenger LIMS laboratory for COVID at the Airport are as follows: -

- Citizens
- Communicable Disease Control Unit (CDCU)
- Regional Hospitals / Flu Clinics
- Prime Minister's Office (PMO)

The setting up of COVID19 LIMS at the CHL and Airport involves the timely delivery of citizens report for COVID through email and SMS. Incoming passengers to Mauritius and citizens, upon request receive a COVID test certificate from the Ministry of Health and wellness (MoHW).

Once a passenger or citizen is tested detected for SARS-CoV-2 (COVID-19) RNA, a copy of the report is delivery electronically to the CDCU. The CDCU takes charge of the patient for transferring the latter to an approved treatment center for the MoHW. This unit is also responsible for contact tracing activities and track other citizens who may have come into contact with this patient and to undergo a COVID-19 test. The contact tracing has been very effective in Mauritius to curb the proliferation of COVID-19 in the community.

As from early March 2020, a high-level committee chaired by the head of government was set up to take stock on all issues in relation to the COVID-19 pandemic on a daily basis. The Director of the laboratory produces daily statistics, reports, number of tests completed, detected, not-detected, by age, gender etc. from the LIMS on a daily basis.

The LIMS support testing of patients, surveillance and outbreak response. These data are valuable to the CHL for monitoring deaths and outbreaks, distribution of workload across regional hospital laboratories, quality assurance and are of significance to epidemiological prevention and control programs. LIMS has also been used to access patient data at multiple regional hospitals, area health centres & community health centres to support patient care.

Website

<https://www.moe.gov.sa/ar/Pages/default.aspx>

Description

To respond to the COVID-19 pandemic efficient, it was critical to have accurate and timely diagnostic data on the infectious disease. Rapid turn-around of diagnostic results was essential to inform clinical management and public health contract tracing. An electronic Laboratory Information System which would allow storage, retrieval and processing of

laboratory tests data was required.

In this context, the UNDP proposed to Government of Mauritius to avail of the OpenELIS Global Software which is an open-source product. OpenELIS software is a version of a Laboratory Information Management System (LIMS) from the Digital Initiatives Group at I-TECH (DIGI) which was originally deployed in Côte d'Ivoire for HIV. OpenELIS has been developed for public health laboratories as both an effective laboratory software solution and business process framework and it supports the effective functioning of public health laboratories.

With the assistance of the UNDP Mauritius, a team from the CIB downloaded the OpenELIS software to the government cloud hosted at the Government Data Centre. OpenELIS has been adapted and customised by a team from the University of Washington to meet user requirements for the COVID-19 LIMS for Mauritius. The software which is a web-based application is accessible through a Wide Area Network at all regional hospitals, flu-clinics, treatment centre and quarantine centres in Mauritius.

The figure 1 below shows the home page for the COVID-19 LIMS.

The Government of Mauritius has setup five (5) flu-clinics at each of the 5 regional hospital to segregate citizens suffering from any types of flu, from other out-patients. The flu-clinics takes respiratory swab samples from citizens and register the patient data together with the specimen sample which is labelled with a barcode, on the COVID-19 LIMS. The specimens are then sent to the Central Health Laboratory on the same day for the PCR testing. The equipment has been interfaced with the LIMS system such that once the tests are completed, the results are readily available to the respective flu-clinics/regional hospitals as depicted at figure 2 below.

Figure 2: Network connectivity between flu-clinics, Test & Treatment Centres

The barcoding of specimen helped in identification of samples, meeting quality standards, decreasing transcription errors and most importantly reducing turnaround time from specimen reception to reporting of results and improving patient outcomes.

This has led to an improvement in the management of PCR tests, from 500 to 1,000 per day. As at date, the system has registered more than 100,000 citizens who have taken the PCR tests and their results in the Database.

This project has gained two international recognitions inter-alia:-

1. Global Centre for Technology, Innovation and Sustainable Development in Singapore where an article was published as mentioned hereunder:

“How open source made a difference in Mauritius’ pandemic response”

The article could be access on the following link.

<https://sgtechcentre.undp.org/content/sgtechcentre/en/home/blogs/open-source-digital-toolkit-mauritius-openelis-undp-global-centre-singapore.html>

2. Chasing COVID-19, A Story of Digital Transformation

The article was published in UNDP website.

https://www.mu.undp.org/content/mauritius_and_seyelles/en/home/blog/2020/chasing-covid-19---a-story-of-digital-transformation.html

ICT Tools

The OpenELIS coreTechnologies/ ICT tools that have been used are as follows: -

- Operating System: - Linux Ubuntu
- Web Server: - Tomcat
- Application Server: - Apache
- Programming Language:- Java Spring, React, Hibernate, Docker, JSP, Liquibase, Maven
- Database:- PostGRES
- SSL certificate.
- Reporting tools :- Sormas, Japer for problem reporting & resolution
- Replication Technologies:- FHIR

The use of COVID-19 LIMS at the CHL has required a complete business process re-engineering to adopting an innovative, digital workflows. The new LIMS workflows focus on the main processes inter-alia:-

- Track laboratory information during the testing process (from specimen registration to reporting)
- Collect, store, archive and analyze laboratory data
- Report test results for patient care
- Report data to laboratory administration, Prime Minister’s Office, Ministry of Health & Wellness & other agencies for contact tracing.

The implementation of OpenELIS at the CHL has allowed diverse systems to communicate through the use of common data standard. The commonly used standard for laboratory data at international level include:-

- Logical Observation Identifiers Names and codes (LOINC)
- An information Interchange/messaging standard (Health Level 7)
- A universal standard for identifying laboratory observations, developed by Regenstrief Institute.

OpenELIS has been written on modern frameworks with a significant IT security upgrade. This software has been certified for use on US Government, and other high-security

networks. OpenELIS Global is now in full compliance with the WHO's Stepwise Laboratory Quality Improvement Process Towards Accreditation (SLIPTA) checklist.

OpenELIS added a FHIR R4 based API for electronic test orders and results reporting. We have a FHIR API which allows OpenELIS Global to accept electronic test requests, electronic transmission of test results and allows the use of a centralized consolidated lab data server for reporting. This interoperability uses LOINC to match ordered tests with the internal catalog.

Challenges

With the outbreak of the Covid-19 pandemic, an Electronic Laboratory Information System was urgently required by the Ministry of Health to cater for the pressing need of Central Health Laboratory to respond to the outbreak and improve clinical decision making and quality of care. Availability of timely and up-to-date statistics was crucial in order for Government to make data-driven, population-level public health decisions.

Due to lock-down, an extreme condition was prevailing which, the whole world has never witnessed before. In this context, rapid procurement of such a system from local service providers who have experience and domain knowledge was very difficult.

A high-level committee chaired by the head of government on a daily basis had approved the implementation of the project using OpenELIS. A team had set-up involving staff from different ministries and departments. Approvals had to be sought from different heads of ministries which added additional responsibilities on the team. WhatsApp groups had been created to solve administrative/technical issues and allocate pending tasks to staff to expedite pending/blocking activities.

A team of Programme Managers from the CIB, downloaded the OpenELIS from I-Tech to customize the LIMS to meet the requirements for the CHL. During that period, the majority of civil servants were on lockdown and this project required ICT staff for the deployment of the system at the Government Data Centre.

Video conferencing solutions had been used by the team for the installation, configuration and customization of the OpenELIS. User requirements were gathered through Webex from users to ensure the LIMS met the requirements.

After successful installation of the online version of OpenELIS, online training on Webex had to be devised and delivered. These trainings were also recorded for future use/reference.

Partnership

No

Replicability

The project has already been replicated successfully with the setting up of a new COVID-19 laboratory at the SSR Airport in Mauritius to test incoming passengers to Mauritius. The laboratory is already operational. Incoming passengers should register on the following address <https://safemauritius.govmu.org/> to pre-register for a covid-19 test at the Airport.

A phased approach has been adopted for the deployment of the OpenELIS with careful consideration given to user requirements. The flexibility of OpenELIS to improve the original solution with more features and capabilities than the baseline version originally deployed has created value for the LIMS. The LIMS should be continuously enhanced to accommodate new/missed-out functionalities from previous phases and priorities, solve any issues discovered post-rollout and leverage upgrades as part of further enhancing the final product.

Mauritius has customized the OpenELIS into a COVID-19 LIMS and is now replicating the LIMS into other regional hospitals departments (Biochemistry, Hematology, Virology, serology etc..) into a full-fledge public health national laboratories. The LIMS has already been successfully deployed in Côte d'Ivoire for gathering patient data for HIV. During the lock-down, UNDP Mauritius has informed the Central Informatics Bureau that Seychelles also wants to implement such a COVID-19 LIMS for their national laboratory.

The OpenELIS LIMS is a Global's initiative that incorporates a community-focused approach to develop open source and customizable LIMS systems specifically designed for low-resource settings. The end result is a powerful, flexible system that provides shared benefit across users and programs.

Sustainability

The CHL charges a fee for the different services they provide to citizens in relation to testing of specimen emanating from private hospitals. Presently, the CHL is generating around Rs10M yearly and with the implementation of the National LIMS, this sum could be drastically increased. The fund could also be used in the running cost and maintenance cost of the project.

Currently, given the implementation of the OpenELIS at the Airport, the Government is charging incoming passengers mandatory additional costs for quarantine and PCR tests, thus ensuring that the Laboratory is self-sustaining.

The LIMS project is sustainable and scaleable.

COVID LIMS being a successful project, the Government has entered into a cost-sharing agreement with UNDP Mauritius to extend the COVID19 LIMS into a National public health laboratories for all regional hospitals. This project is being implemented by University of Washington team, which includes Digital initiative Group at I-TECH for a 2-year period.

Furthermore, additional funds is being earmarked to plan for ICT human resources for LIMS

deployment locally, provide in-house capacity building, maintenance and ongoing support to each regional hospital which is critical for the project success. The plan is to build a strong team with local expertise which would reduce costs, response time for troubleshooting and further improves sustainability.

The OpenELIS has been developed using open source ICT tools & technologies and hence, no licensing cost involved. This is what has made the solution viable for the government in the long run. Moreover, an online community already exists under the OPEN ELIS Global through which peers share ideas and ways and means to improve the tool and allow others to benefit from it.

As per question 25 of this form, we would like that this project be entered in the next edition of WSIS Prizes contest. The WSIS form has already been submitted for this project.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case117-Unified Public Transport Payment System

Title of the project, Contact Organization Name, Stakeholder type, Country

Madrasati Portal|Ministry of Education|Government|Saudi Arabia

Beneficiaries

Students

Students interact daily with their teachers through synchronized and asynchronous virtual classrooms with an average of 1.2 million virtual lessons on Madrasati. It includes the student's schedule, message box, alerts box, learning resource room, personal data, community connections' channels, events and calendar, courses, self-assessment, enrichment bank, teachers' room, reports, statistics, questionnaires, announcements, and electronic tests.

Principals

Principals manage the academic schedule, reports, assignments, statistics, and teacher and student data. They oversee assessment, courses, and announcements; they also are responsible for supporting roles, communicating with school employees, and modifying educational enrichments and personal data. In addition, principals add posts, school

activities, surveys, and instructions for the first virtual lesson.

Teachers

Teachers are in charge of the school interactive community, announcements, reports, tests, activities, calendar and events. They manage personal data, assignments, question banks, course grades, instructor courses, questionnaires, roles, statistics, communication tools, as well as fun education tools. Teachers also provide educational enrichment, educational support, paths of fellow teachers, and educational paths and their contents. In addition, they are responsible for authoring and reviewing lessons, hosting interactive meetings, presenting classroom and enrichment lessons, and giving instructions for the first virtual lesson.

Educational Supervisors

Supervisors have the duties of supporting supervisee teachers using the LMS, performing quality checks, evaluating and monitoring teacher performance. They also oversee teacher enrichment, evaluation of teacher lessons, communication with teachers, reports and statistics, and instructions for the first virtual lesson.

Website

<https://www.moe.gov.sa/ar/Pages/default.aspx>

Description

Madrasati is a national educational portal with two main educational components: first, it's an innovative learning management system called Madrasati; and second, it's an E-learning supportive website named Back to School. Both provide a range of diverse educational services and educational digital content, facilitating for 6 million students; 500,000 teachers; 19,000 school principals; 8,000 supervisors; and 2.8 million parents to access and learn through educational resources, tools, and services in an attractive way free of charge with high-quality standards.

Madrasati provides multiple educational tools to support the planning and implementation of the educational processes through synchronized and asynchronous virtual classes and meetings. The platform also offers e-assignments, discussion forums, electronic questionnaires, multiple lessons in 21st century skills such as, programming and STEM education. In addition, there are various educational resources in the content management system CMS, such as visual videos, augmented reality, 3D resources, educational stories, and e-books on educational curricula approved by the Ministry of Education (MOE).

The platform provides students with multiple tools to actively participate and interact with their peers and their teachers. Discussions tools are supported with collaboration by channels such as Microsoft Teams and official e-mails and Microsoft Office 360 software. Our LMS portal work as an important facilitator for all educational staff and students in "Covid - 19" crisis because the system present a quick and effective solution for educating, communicating, evaluating between the main roles in any education operation for K12 domain (Schools Principles, Teachers, Students, and Parents)

ICT Tools

The MOE integrated innovative ICT tools and services in designing the system infrastructure to ensure the system's continuity and to accommodate the huge number of beneficiaries. The system infrastructure is based on Azure Cloud technology supported through technical containers to allow the system's expansion and enhancement of its efficiency and capacity. The database was broken down by services to ensure algorithms' distribution of resources using Artificial Intelligence while activating a number of database backups supported with service and network firewalls.

The system also included a performance-monitoring dashboard to generate data and reports with indicators to monitor users' performance. Further, the LMS included multiple educational tools and services supported with other integrated content a) educational content broadcasted through iEN YouTube channel that provides recorded lessons, b) interactive content, resources, and tools from MOE repository integrated within Madrasati in the backend of the LMS, and c) 365 Microsoft applications that include Teams, e-mail, forms, and OneDrive with 1 TB storage for each user.

This project is part of the Kingdom's Vision 2030 that aims to create sustainable digital services, accelerate digital transformation across various sectors, increase digital content and its contribution to the digital economy, and promote a culture of innovation.

Challenges

Among the main challenges encountered are a shortage of devices among disadvantaged students, weak Internet connection, and low Internet coverage in some rural areas. The MOE made efforts in coordination with other governmental bodies such as the Ministry of Communications, the Ministry of Trade, and the Takaful Charitable Foundation in supporting students by providing devices and Internet connection.

Another prevalent challenge is the level of digital skills among teachers and supervisors and the need to upskill and reskill educators to enhance their digital competencies. A professional development plan that covers all required knowledge, skills, and values for teachers to succeed in teaching with technology has been developed and supported with a plan raising-awareness through workshops and webinars. The MOE implemented a management plan and provided a comprehensive portal for that initiative of more than 300 instructional and training materials with various topics on digital teaching skills.

Partnership

The MOE through this project has national and international strategic partnerships with multiple entities for the purpose of improving and sharing best practices and evaluating efforts and solutions of E-learning through Madrasati.

Private Sector:

- Tatweer Educational Technologies Company (TETCO), which has several partnerships with local and international companies such as PEARSON, EF Education First, United SIGONG Media, MM Publication, Macmillan, McGraw-Hill

- T4EDU Company
- Microsoft

International Organizations:

- The Arab Bureau of Education for the Gulf States (ABEGS)
- The World Bank (WB); the United Nations Educational, Scientific and Cultural Organization (UNESCO); the Organisation for Economic Co-operation and Development (OECD); Online Learning Consortium (OLC); and Quality Matters

The Ministry is also looking for international partnerships with international virtual schools operating through innovative operating models, international organizations, non-governmental organizations (NGOs), and the private sector

Replicability

The Madrasati project is capable of being replicated in multiple contexts with sufficient ICT infrastructure. The Ministry is planning to replicate the Madrasati Virtual School model with an English version for International schools in Saudi Arabia. Another version will be developed for lifelong learners and illiterate elderly students, and a version will be available for the new high school system of learning paths. Overall, the platform is replicable to fit and serve the needs for different types of beneficiaries.

Sustainability

Madrasati is a nationally developed and owned project and can be used and reused for multiple purposes. It provides a wide range of services for beneficiaries free of charge with high-quality standards that cover the whole spectrum of teachers and students.

- It provides unlimited opportunities of both synchronized and asynchronized teaching and learning supporting both blended and distance education.
- It effectively links the three main components of the learning system: teachers, students, and content.
- It enables flexibility and cloud-based content.
- It provides continuous evaluation and improvement as part of the ecosystem.
- The portal is one of the executive policies for the education development plan in the Kingdom, which has been proven to achieve the education and technology blending goals.
- It provides digital transformation of learning tools, resources, and services that cover all teachers, students, parents, school leaders, and education researchers around the world.
- The portal provides diverse tools and resources to achieve best education outcomes; it is free to access through different devices.
- Education is provided for all students inside and outside of the Kingdom. Education is also provided for elders who have enrolled in illiteracy programs and for special need students at any time convenient for them

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case118-Unified Public Transport Payment System

Title of the project, Contact Organization Name, Stakeholder type, Country

Qualifications (Moahal)Ministry of EducationGovernmentSaudi Arabia

Beneficiaries

Qualification project provide many benefits to the following beneficiaries:

- Graduated students to verify their qualifications.
- Universities and higher educational institutions to access and process new and modification requests on students' qualifications.
- Government and private sectors to search qualifications and calculate statistics need for decision making.

The qualification project provides the following services through an online portal:

- Allow the user (student) to create an add qualifications request.
- Allow the user (student) to create a modify qualification request.
- Allow the qualifications provider representative (university) to approve or reject qualification requests created by users.
- Allow authorized third-party members to search for qualified people based on their employments needs.

The main benefit is to provide an online access for graduated students, educational institutions representative and authorized members to review, verify and inquiry qualifications. This process provides a trusted source of verified and reviewed qualifications to prevent any fraud attempts, facilitates employments processes and provide a way for qualification providers (universities) to search for academic qualification history to facilitates students' admissions process.

Website

<https://www.mohre.gov.ae>

Description

Qualifications is a project aims to provide an online verification service for academic certificates in a convenient way. Specifically, it allows graduated students to add or request modifications on their qualifications certificates through one service integrated with Saudi universities and educational institutions. Additionally, it provides a convenient way for these educations and qualifications providers to apply modification and addition on their servers once approved.

Currently, the service is connected to 28 government universities, 33 private universities and 4 educational institutes which have a live listening connection to the updates applied on their servers.

The service provides a two-way certificate verification, where the students must provide a prove of data integrity and then the certificate provider must approve the request. This approach minimizes the paperwork needed to verify qualifications. Moreover, the service provides a verified data source for third party users such as employers or universities to verify students' qualifications, which facilitates the employment process and student admissions. In additionally, the project provides the authorized people from government and private organizations to easily find qualified people for employment purposes and can help in decision making that relate to open and close majors based on the number of qualifications.

ICT Tools

- IIS – Web Server
- [ASP.NET](#) - Microsoft web platform
- WCF - Windows Communication Foundation
- HTTP – Hypertext Transfer Protocol
- MVC5 – Model, View and Controller pattern based on Microsoft implementation
- MS - SQL – Microsoft database server, relational database management system (RDBMS)
- ServiceNow – Support system
- IDM- Identity Management that manage SSO
- NIC- National Information Center
- DMS – Document Management System.
- Entity Framework 6.2.0
- Java
- Dapper 2.0.35
- Knockout JavaScript library v3.4.2
- jQuery JavaScript Library v1.10.2
- Select2 JavaScript Library
- AutoMapper 9.0.0
- Plupload JavaScript Library 2.3.3
- Microsoft Owin
- Bootstrap v4.3.1
- eModal.js v1.2.6
- PEGA PRPC 7.3.1

Challenges

There are many challenges during the implementation of this service including:

- Integrating with a variety of data sources and different student Information systems.
- Applying data validation on the received data to assure data quality.
- Contacting universities and higher education institutes representatives and coordinate with them to nominate authorized people to process the application requests.
- Follow up with requests and data changes to assure that the updates reflect the required change.
- Ensure that the data processes and migrations does not affect the performance of the client-side portal since we are working with big data and heavy process.

Sustainability

The qualification project is sustainable by serving all higher educational institutes in Saudi Arabia (28 government institutes, 33 private institutes and 4 institutions of higher education) and graduated students from these institutions. Additionally, it provides benefits for graduated students, educational institutions and authorized members. The following benefits are a proof of the sustainability:

- The project is currently serving many universities and institutes and provides an online access to all qualifications through secured web portal.
- The project benefits are distributed to different clients where it provides services to universities and institutes to inquiry qualifications and track students' academic qualification history between universities and provides a way for employers to verify employees' qualifications.
- The project replaces the old way of tracking students' qualifications through universities admission centers with a one centralized data source that even facilitates government educations statistics.
- The project helps to easily find qualified people which increases the likelihood of employment and provide the government with a way of easily target specific projects and fields to invests in based on the local qualifications and manpower.
- The project helps the government in decision making by easily calculate statistics on the centralized data rather than requesting statistics from every data source (universities and institutes).

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 16: Promote just, peaceful and inclusive societies

Case119-ThinkTech initiative

Title of the project, Contact Organization Name, Stakeholder type, Country

The Virtual Labor Market Platform Ministry of Human Resources and Emiratisation Government United Arab Emirates

Beneficiaries

According to the Business Continuity Plan of the Ministry of Human Resources and Emiratisation to support the stability of the labor market, the continuity of providing government services in light of supporting the government's policy in achieving social divergence, ensuring the stability of the labor market and ensuring protection of the rights of both parties to production in a way that contributes to enhancing the efficiency of the labor market in the country through the labor market platform, so that:

1. The virtual labor market platform provided the opportunity for expatriate job seekers to register on the platform and get an opportunity to match their competencies / skills with work permit applications by the establishments in light of the suspension of the recruitment of workers from outside the country, which allowed the establishments to continue their work. In addition to reducing the operational cost, as the number of registered workers in the platform reached 43,639 workers. The total number of migrant workers in the labor market during the first half of 2020 reached 126,142 workers. Which also allowed workers to amend their legal status in the country by registering them as a job-seeker in case they were affected by the precautionary measures of the crisis, which led to the level of satisfaction of employers with the policy of transition in the labor market to 80% for the year 2020.
2. The innovative practices of the platform received great interest from local and international parties, as these practices, experiences and information were published and shared with various parties, internally and externally, as the Ministry worked on developing and implementing a marketing and media plan through all official communication channels and the Ministry's accounts in the social media, as well as the Ministry's departments from joint meetings with government agencies to discuss government cooperation and integration in providing virtual labor market services, which had the effect of requesting some authorities to activate new services, such as a request to create temporary work permits that support the government's policy to reduce loose workers such as the Ministry of Interior - General Administration of Nationality and Residency - The Loose Labor Committee and several other bodies such as the Chamber of Commerce, the General Administration of Identity and the Economic Departments

Website

<https://www.moe.gov.sa/ar/Pages/default.aspx>

Description

Following the fourth industrial revolution, MOHRE strategic plan for smart transformation and as part of the overall initiatives taken by UAE to limit the effects of the emerging coronavirus pandemic on the economy and labor market, MOHRE launched Virtual Labor

Market Platform as pilot project in October 2019. It aims representing a channel for providing quality government services, attracting qualified people and protecting their rights and duties through a smart government platform that covers the shortcomings of private virtual sites that exploit the worker's need in the search for decent work, especially in cases of global crises and disasters.

An innovative platform to provide employment services to job seekers and companies used artificial intelligence, which facilitate the process of matching between job requirements published by companies and job seekers files to achieve the aims of connecting the two parties in an interactive way.

The virtual labor market platform aims to re-employ unemployed workers within the country, in order to support national efforts in maintaining public security in cases of worker strikes, and to serve the policy of job seekers, and to search for competencies in companies wishing to hire through a reliable federal government umbrella that takes into account.

ICT Tools

The platform contributed to enhancing the use of smart electronic services in order to achieve government directions and enhance the country's position in the use of technology and innovation, which will be reflected in the global competitiveness index, which considers innovation and technology one of its pillars, in which the UAE ranked 25th in 2019.

The virtual labor market platform system is characterized by the presence of technical and service features according to the latest standards to meet the requirements of the stakeholders (workers, facility owners, the ministry, legal and regulatory requirements) where:

1. The platform is employing artificial intelligence techniques in determining the suitability between the requirements of the job seeker and the needs of employers in terms of experience and job requirements
2. The platform analyzes and reads the detailed data of all workers registered on the platform, as it analyzes the approved requests in terms of the number of requests based on different nationalities, the distribution of requests to regions according to the emirate within the UAE and the classification of professions according to demand and supply in addition to the total number of advertised jobs and the number of employment of the skilled people who applied to fill these jobs, data on recruitment processes, the number of companies registered on the platform and the most active sectors for employment operations
3. Creating an electronic mechanism that supports the government's policy in achieving social distancing by providing the feature to submit employment applications through a 30-second registration link in which the worker is introduced to himself, his qualifications and experiences
4. Providing the feature of direct TV interviews between the employer and the job seeker without the need to move or an oral interview at the workplace.
5. Activating the registration feature on the platform continuously throughout the week and holidays, in addition to providing a technical support team to respond to inquiries so that it does not exceed the strategic indicator in responding to the comments and inquiries of customers, given the suspension of services in federal and private service centers and the prevention of work permit requests from outside the country and for strengthening The

government's policy to recycle these competencies within the state

6. Providing the ability to receive collective requests for registration on behalf of companies to submit the registration request for troubled companies

Challenges

The virtual labor market platform shall aim to achieve the global competitiveness of the United Arab Emirates, as it is concerned with attracting specialized international competencies and employing them in the labor market in line with the rapid growth of the economy in the country in which there are huge global companies estimated at 350 thousand establishments and the number of not less than 5 million workers an expatriate registered in the Ministry's database, which requires the development of electronic government platforms that attract and maintain the competencies in the country and ensure the flexibility of their transfer from one facility to another in all circumstances, so that it contributes to each of the following:

1. Providing a reliable federal government umbrella that takes into account the interests of production parties.
2. Enhancing companies' capabilities in searching for their labor needs in a shorter period.
3. Reducing the operational cost of the recruitment and recruitment of expatriate workers to companies.
4. Limiting the exploitation of workers by brokers through trading in fake work permits that may affect the country's reputation.
5. Strengthening national security in cases of worker stoppages and strikes, and by making use of the experiences of workers in the country with regard to knowledge of customs and traditions and adherence to laws and regulations.

Thus, the challenges that were studied prior to implementing the idea of the project can be summarized as follows:

1. The lack of a government platform specialized in promoting the internal labor market, and the existence of many employment platforms, most of which are not committed to professionalism and lack credibility.
2. Challenges related to internal corporate recruitment policies, and lack of full compliance with Emiratisation policies and their application in the private sector
3. The presence of those who circumvent the laws in the labor market.
4. The presence of a percentage of complaints submitted by skilled workers to their companies, and the need for mechanisms to ensure flexibility and freedom of labor movement internally between institutions and companies
5. Unemployment and its rates due to the presence of more job seekers than available opportunities
6. Different levels of knowledge and qualifications among workers in the same specialty

Partnership

The Ministry developed the platform in coordination with the Prime Minister's Office and has used a service operator to launch the system without bearing any operational cost. The

Ministry is always looking for partnerships with all sectors at the local and international level to develop the platform's scope of work and achieve added value for all beneficiaries.

Replicability

Not applicable.

Sustainability

MOHRE tried to limit the challenges in achieving competitiveness for work opportunities internally between local and expatriate workers. Therefore; the Ministry studied the best recruitment platforms and expert houses, also link the platform with strategic and operational goals (cultural diversity - Abu Dhabi dialogue), and link the efforts of the ministry with the efforts of external bodies such as the Ministry of Interior to reduce stoppages, workers' strikes and stalled origin by registering these groups in the labor market electronically without fees, with the priority of employment for applications submitted in granting work permits to these groups through a smart platform with the expertise and jobs of those workers

In order to maintain sustainability; MOHRE designed policy and a certain methodology and apply the following :

1. Providing a reliable government platform to search for a job opportunity for workers inside the country in the event that their contracts expire, so that it is considered a distinct pioneering platform because of the government's decision to stop permits from outside the country and with the aim of using permits inside the country.
2. Supporting the accurate and legal selection of workers, which helps the owners of companies to know the suitability of job seekers to the available vacancies without human intervention and thus contributes to creating an atmosphere of stability in the labor market through a smart platform whose systems are linked to the Ministry's systems and eliminating violations of unofficial recruitment sites.
3. Responding to government directives to achieve social distancing without compromising the stability of the labor market by receiving work permit applications, finding job seekers through a reliable platform and promoting employment in troubled enterprises.
4. Enhancing flexibility in job supply and demand and enhancing the labor market in attracting talent, by linking the required work permit application service with vacancies and competencies that are provided through the platform in addition to reducing labor complaints and labor stops
5. Activate the implementation of the ministerial decision to amend the conditions of affected workers by registering on the labor market platform in the event that establishments wish to dispense with surplus funds in the event of cancellation or search for an important work permit for some time until the crisis is over
6. Providing free registration authority during the crisis for affected workers in the labor market to record their data in coordination with the Labor Crisis Management Team

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-employment

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case120-COVID-19 Laboratory Information Management System (LIMS) and setting up of a passenger LIMS at Seewoosagur Ramgoolam International Airport to test incoming passengers for COVID-19

Title of the project, Contact Organization Name, Stakeholder type, Country

Teacher Development System (TDS)Ministry of EducationGovernmentSaudi Arabia

Beneficiaries

Ministry of Education having more than 700000 employees and they are working form 49 different locations. Out of 700000 employees, more than 500000 are teachers who are beneficiaries for this TDS module. Which is accessible over internet through secured communication link

Website

<https://www.tra.gov.ae/>

Description

Ministry of Education having more than 700000 employees and they are working form 49 different locations. Out of 700000 employees, more than 500000 are teachers. As part of promotion process, requires the calculation of their trainings. Therefore, we have implemented the custom TDS module to register their trainings, attend and complete. The main Objective of TDS module is cover full cycle of training. MOE will publish the training schedule with details of date &Time and number of attendances. After that teacher start registering for the trainings and they will make sure that they will attend and complete the training. Completion of training this will get update in the FARIS system with respective

course count/percentage. These points will be considered for the promotion process and calculate their trainings.

First custom Oracle Frame work page has been developed and provided access to respective training depart to record the training schedule. With Date & Time and it will consists whether this training is applicable to all teachers/specific category/Generic. Second page to employee will nominate him/herself for training and he/her will addend for the training. This page is contains update/delete/create new request of training and employee can view the information.

Once the training is finished training administer will update the attendance and make sure that it will be ready for points calculation. These points referred in promotion process.

ICT Tools

Oracle E- Business Suite 12.1.3 which internally uses following technology stack components

è Middleware as Oracle Application Server 10g

è Oracle Forms and Reports 10g

è Oracle Java Framework

è Oracle XML Publisher

è Oracle SOA Suite 11g

è Database as Oracle 12c

è Oracle Workflow Builder

è Oracle Approval Management

Challenges

Below are the High Level Challenges faced while implementing custom TDS module. These were overcome by Experts after due discussion with Business and well planning the project in advance as per the business requirements. Agile approach helped to overcome this implementation challenges

è Enablement of Service over Internet due to large volume of users

è Developing of Custom Pages as per the complex business Logic

è Integrating the same with standard HR module of Oracle E-Business Suite

è Handling of Large set of transactions which created performance impact on System/Servers

Sustainability

This project is sustainable since this cycle will be yearly , the promotion for teacher will take the points from the training that entered and approved for each employee in the ministry

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-business

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls

Case121-Madrasati Portal

Title of the project, Contact Organization Name, Stakeholder type, Country

Enhancing digital awareness -TRA of UAETRAGovernmentUnited Arab Emirates

Beneficiaries

The UAE is a diverse society with more than 200 nationalities. TRA targets all members of society, with different age groups and backgrounds and most of them are tech-savvy.

TRA usually targets a specific group and touches on topics that are relevant to them.

1- The 'Legal whispers' series targets citizens, residents and law students who are interested in knowledge about UAE Cyber Laws. The initiative also serves social media pioneers who combat rumours and false news.

2- TRA's live broadcast sessions target parents, and households in general. These sessions played a major role in enhancing the community compliance with the precautionary measures against COVID-19 and combatting rumours and misinformation. The sessions promoted safe use of internet, the confidentiality of information while shopping online or doing bank transactions.

3- The 'Log In' programme targets social media users and video games fans. The programme highlights specific security features such as parental control and methods to protect children from the dangers of online platforms. The topics of 'Log In' are chosen based on real-life experiences. The programme was recognized by Sharjah Government Communication Awards (SGCA), as best practice in corporate communication in the Arab region.

4- TRA's series of advices and videos about working from home targeted TRA employees and other government and private entities.

Website

<https://rabita.az/en/index>

Description

TRA (www.tra.gov.ae), is the federal entity which is in charge of regulating the telecommunications sector in the UAE and enabling the digital transformation at the national level.

Such mandate made the TRA assumes its corporate responsibility towards large segment of the society, and its role to develop awareness, educational and empowerment plans.

TRA's Media Unit handles community liaison activities, including promoting a digital lifestyle, preparing national competencies and motivating the public to be creative and effective partner in establishing a digital knowledge society.

The TRA has in place a 'Digital Media Strategy' which provides for enhancing digital awareness on TRA's social media platforms. With the outbreak of COVID-19, the TRA's media team, worked diligently to raise public awareness about the pandemic using digital tools. TRA's 'Legal Whispers' initiative worked on disseminating legal knowledge about the UAE's laws to prevent the spread of COVID-19 and laws to combat cybercrimes. TRA's 'Log In' programme helped in raising the public awareness about cyber security features and how a person can protect himself while dealing with digital tools.

ICT Tools

TRA's 'Digital Media Strategy' included several specialized social media campaigns aimed at enhancing digital awareness. These include:

The 'Legal Whispers' initiative, which is a series of videos that highlight texts from the UAE's Cyber Crime Law. The initiative pulled in more than 3 million viewers and was supported by key partners such as the Ministry of Interior and local media networks.

The 'Log In', which is a programme about information security, has gained more than one million views.

In partnership with the UAE's Ministry of Education, TRA hosted live broadcasting sessions about distance learning and partnered with Ministry of Health and Prevention to respond to public queries about COVID-19.

TRA's content is created on smart devices and applications and published through most popular media platforms such as: Facebook, Instagram, Twitter, TikTok, LinkedIn. TRA constantly monitors the dissemination of its content, records its volume, reach and public engagement.

Through digital tools, which are almost accessible to everyone, TRA's social media content has reached with minimal cost to a large segment of people, internally and abroad.

Digital tools spared TRA lots of costs and facilities, the consumption of papers, publications and other traditional means that are not environmentally-friendly.

Challenges

Content creators face many challenges, in particular, content making in the field of government communication. The most prominent challenge is the rapid pace in which content-making technologies and the techniques of brainstorming and story-telling are growing. Content creation would be even harder when it relates to a fast-growing industry such as information technology.

Given the fact that rumours do travel faster in social media channels, especially news about developments in the ICT sector, and misinformation about 5G and other new technologies, such issues have posed a real challenge. TRA team had to predict and monitor trends and impressions in the ICT sector and be fully prepared to promote authentic information and positive ideas about new technologies. The team worked on collecting FAQs and prepared fact-based answers given by specialized teams that monitor and analyze everything new round the clock.

Due to the shortage of media personnel and speakers in the fields of IT and cybersecurity, TRA trained eligible staff to provide the public valuable messages and advice in a concise, understandable manner.

Even amid COVID-19 peak, TRA's social media team was uninterruptedly producing digital materials, infographics, and videos and coordinating with speakers to provide them with the appropriate technologies.

Partnership

Partnership is a power to the success of any organization. TRA promotes and support partnerships at all levels, which include:

- 1- Media and news agencies: Media is an essential partner for the success of any media message and in supporting public digital awareness. News agencies on social media platforms have millions of followers.
- 2- Government and private entities: Promoting government partnerships with the private sector enhances public confidence in media messages and raises levels of awareness.
- 3- International companies and organizations such as Facebook, TikTok, Twitter, the International Telecommunication Union (ITU): TRA constantly enhances means of communication and cooperation with them, and adopts best practices.
- 4- Social media influencers: Media influencers support digital awareness by re-publishing TRA awareness videos on various media channels.
- 5- Universities and educational institutions that offer programs in ICT, as well as communication and new media. TRA has always been keen to benefit from youth's ideas

and to partner with universities to reach the largest segment of talented students. A good example is 'UAE Hackathon', in which UAE universities and their students were key partners.

Replicability

TRA's Social Media Team develops projects in line with the new trends in the sector. TRA has in place a 'Digital Media Strategy' that supports a work plan for its projects. Any project which the TRA initiates has goals that are measured monthly until the initiative is ended.

TRA have started the 'Legal Whispers' initiative since 2018. At the beginning, the whisper was published in a form of an image or text. Later the content was produced in videos and other tools such as graphics and voiceover.

All TRA's social media content can be replicated and updated with new information and facts, including the 'Legal Whisper' programme which raises awareness about UAE's Cyber Crimes Law and the laws designed to limit the spread of COVID-19. The 'Log in 'programme gives tips on cyber security features and updates on related products by global companies.

TRA's projects are executed on a seasonal basis. Each season has its episodes arranged and produced based on the latest updates obtained from Project Preparation Team and a thorough study of the viewers' feedback.

The above-mentioned projects can be replicated on different channels such as television, radio or even through new media ad films industry. They can also be displayed on Netflix and other popular platforms.

Sustainability

TRA's 'Digital Media Strategy' provides for the sustainability and effectiveness of its awareness campaigns. TRA evaluates its projects and media materials on an ongoing basis.

The 'Legal Whispers' is a monthly programme that has been produced since 2018. TRA continuously updates the project according to developments in the sector and media circulated on digital platforms, and monitored by TRA's systems.

We can ensure that TRA's video content is available on digital networks that are viewed by millions of people. These digital platforms, spared TRA the old methods of transmitting information such as printed publications and big budgets spent on awareness campaigns.

TRA employees are trained to produce and present educational programmes and video content internally without the need to outsource the work. This has significantly reduced the costs of the production and helped in investing in employees' skills and talents.

Both 'Legal Whispers' and 'Log in' programmes are produced internally by TRA's social media professionals on a weekly basis.

Action Lines

AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case122-Qualifications (Moahal)

Title of the project, Contact Organization Name, Stakeholder type, Country

SmartCell mobile application
Data Processing Center (DPC) of the Ministry of Transport, Communications and High Technologies of the Republic of Azerbaijan.
Government Azerbaijan

Beneficiaries

Phone numbers sales with the "SmartCell" mobile application have advantages for operators, customers, as well as for government agencies that monitor the overall process:
Benefits for for the client: Opportunity to apply for the service from anywhere, maximum speed, security guarantee.

Benefits for mobile operator: accurate identification, automatic contract formation, electronic archiving of contracts, remote control of the service.

Benefits for the government: fraud disappears, protection of personal data, monitoring of statistical data.

Website

<https://azexport.az/>

Description

The "SmartCell" mobile application is a joint project of the Data Processing Center and "Azercell" mobile operator.

As a pilot project, it is being used for the first time by Azercell mobile operator to automate the process of number sales. Mobile application combines facial recognition (Face ID) and electronic signature. It's allows to identify the real-time image of the customer with the image on the ID card, to sign the subscription agreement with an electronic signature. It's possible to track the whole process electronically during the sale of numbers.

The process of selling a number with the SmartCell mobile application is as follows:

1. The MRZ code of the customer's ID card is read to get the number;
2. a person's ID is formed by automatically calling personal data;
3. A one-time electronic signature of an individual is drawn up for signing the contract;
4. The client takes a picture with the camera and this picture is identified with the picture on the ID card;
5. a contract is formed after the successful identification;
6. The person signs the purchase agreement.

The mobile number is picked up from sales centers or delivered to the customer by courier.

ICT Tools

Technical workflow of the Smartcell:

- Detection of aliveness is carried out by optical scanning of the image;
 - The chip of ID-card is read via NFC;
 - The required identity information is requested from the IAMAS database;
 - Certificate request is made on the basis of information on the creation and verification of an electronic signature for a one-time signature of an individual;
 - The request is sent to the Certification Services Center;
 - The request is accepted by the certification program;
- documents get ready for signing.

Technical specifications :

- Services written in .net core technology
- Android app written in Java
- There are used several databases like MySQL and MSSQL
- Integrated services are IMAS face recognition cognitive services, ca certificate authority issuing services etc.

Challenges

There were some cases that in some places numbers were sold without a contract using the information on the ID-card. Even some did not know that there was a phone number in their names.

The advantage of the SmartCell mobile application is that by recognizing the customer's face, the system will call the ID card information from the information system of the state

agency and automatically form a contract and sign it with the person's electronic signature. The sale will be applied first to the operators' number-selling stores, and then to remote sales. Delivery by sales dealers to any address will be provided to the customer who has a contract with an electronic signature using the mobile application without coming to the store.

The first of the difficulties in creating a SmartCell mobile application occurred during the face recognition phase. In order to spend less time at this stage, the process was optimized by reading the MRZ code of the ID card, then compiling the electronic signature and sorting it by face recognition.

During the test phase, it was observed that it was possible to read the image and video during the fixation of facial recognition, and the failure to check the vitality was revealed. Technically, once again the algorithms of the application have been changed, the validity of the check has been improved.

The next challenge was the sale of the SmartCell mobile application in the marketing phase. Mobile application was presented to the existing mobile operators in the country based on the advantages of traditional sales, and the operator (Azercell) was selected for the implementation of the pilot project. The program has been changed at the request of the operator. The first pilot sale is scheduled for February.

Partnership

The pandemic has required remote recognition and automation of operations using a range of identification services. The SmartCell mobile application provides opportunities for application in many areas where customer identification is required, data is automatically generated and signed with an electronic signature. Although it is currently planned to be used in the sale phone numbers, in the future it will be applied in education, health, various sectors of the economy, as well as in sectors where public safety issues are important. This platform is targeted at both domestic and foreign markets and will be used in areas where this identification, contract formation and signing are required. Therefore, along with domestic market participants, prospects for cooperation with foreign countries were expected.

Replicability

Smartcell mobile application is created on the SDK. It's can be applied to any service area and integrated into any electronic infrastructure.

"SmartCell" mobile application can be integrated into the service portals of government agencies.

Sustainability

The security and stability of the system was tested as it read the information on the identity card (from the IAMAS database) from the identification, signature and government information system.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-business

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 17: Revitalize the global partnership for sustainable development

Case123-The Virtual Labor Market Platform

Title of the project, Contact Organization Name, Stakeholder type, Country

Export PromotionAzexport.az (Internet Portal)GovernmentAzerbaijan

Beneficiaries

All producers of Azerbaijan can use the portal services. Over the entire period of its operation, the portal has received orders worth more than \$ 2 billion from 150 countries of the world.

Website

<https://www.moi.gov.az/en/default.aspx>

Description

The Azexport portal has created an opportunity for exporters to obtain documents for the export of goods without leaving their place of production.

Also, during the coronavirus lockdowns, the portal became a free online platform not only for exporters also for local producers.

ICT Tools

Implementing first in the world online Single exporter application cut the expenses and time spent for export procedures up to 10 times. Due to the coronavirus restrictions, most businesses have closed. The portal gave them the opportunity to place their goods on an electronic platform for sale.

There is no charge for using the portal services. All services are free

Challenges

The main problem is trust.

Unfortunately, there are a lot of fraudulent facts in online sales. This negatively affects the spread of electronic commerce.

The portal Azexport has provided more than 50 training and seminars with buyers and sellers during the 2020 year.

It was explained how not to fall for the trap of scammers. Also, how to boost sales using modern e-commerce opportunities.

Partnership

Yes, E-commerce, E-custom, E-logistics

Replicability

Yes, We are ready for sharing our experience in this field.

Sustainability

The Azexport portal has been operating for over 4 years. During this time, the portal received more than 2 billion export orders. Export orders received by the portal are growing day by day. Also, the export area grows day by day.

This shows that the portal is working successfully.

Action Lines

AL C2. Information and communication infrastructure

SDGs

Goal 17: Revitalize the global partnership for sustainable development

Case124-Teacher Development System (TDS)

Title of the project, Contact Organization Name, Stakeholder type, Country

Electronic System of Covid 19 infected from Security OrganizationMOIGovernmentUnited Arab Emirates

Beneficiaries

MOI employees

Society

Website

<http://www.moj.gov.ga>

Description

Provide work from distance

Ensure office sterilization

Insure include some employees' categorizes in distance work group such as elder worker, pregnant women, mothers' employees whos children are in distance learning.

ICT Tools

,Net

ASP .Net

C#

Oracle DB

Challenges

report the cases by the infected employees.

By increase the employees awarness and keep testing employees before entering the MOI buildings

Partnership

Yes.

All governmental entities.

Replicability

yes

Other entities can get use of the system

Sustainability

yes

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-government

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 13: Take urgent action to combat climate change and its impacts

Case125-Enhancing digital awareness -TRA of UAE

Title of the project, Contact Organization Name, Stakeholder type, Country

Request for Non-Qatari ownership and use of real estateMinistry Of JusticeGovernmentQatar

Beneficiaries

Migrants
Older persons
People with disabilities
Refugees and internally displaced people
Remote and rural communities
Women
Youth
Investors,
Citizens
Residents and visitors

Website

<https://dth.az/>

Description

"This project implemented to allow Non-Qatari ownership and use of real estate with benefits such as residency, healthcare, education, and investment. providing integration with relevant government entities with parallel workflow to minimize the response time to the investor within two hours.

Integration with SAK system to complete the full cycle of ownership.

is one of the most important initiatives aimed at facilitating the launching of the real estate sector in QATAR and creating an attractive environment in which increase the volume of investments in this sector from inside and outside QATAR.

Due to current situation of covid19 in the world the system with fully adopting paperless environment and to without needs to customer visiting to complete the procedure.

Can search for any request easily through an intuitive basic search or an advanced search that lets them specify more details to narrow down your searches.

This system provides a statistic dashboard and tracking to the request flow"

ICT Tools

The project promote for WSIS Value in terms of :

- ICT applications: benefits in all aspects of life The service is provided through a web portal, the verification through the integration with the Ministry of Justice and all related government entities
- Access to information and knowledge: Beneficiaries can access, manage, and inquire about their request online.
- the service provided as fast and accurate as possible.
- Contribution in building a people-centered information society Easy online access to all beneficiaries
- Transparency and fairness
- One of the Ministry's digital transformation initiatives
- Social and gender equality
- Preserving nature by adopting paperless environment
- Cooperation, partnership, and digital solidarity among government entities
- Improve quality of life and well-being of all beneficiaries of the service.
- Human dignity is respected.
- Enhance cyber security and ensure the protection of data and privacy.
- Application is user-friendly and adapted to local language.
- sustainable project that fosters innovation.
- leads to economic growth.
- The project helps in ensuring proper and equitable Persons with Disabilities PwDs and non-PwDs to use this service and send the request without visiting and paperless
- It helps in developing Information and communication infrastructure.
- It facilitates Access to information and knowledge.

Challenges

- "• Legalization of some law related to real estate business
- Change of the business culture
- Applying of the new technologies
- Change resistance of the new processes and system

Replicability

yes

Sustainability

yes
Action Lines
AL C1. The role of governments and all stakeholders in the promotion of ICTs for development AL C2. Information and communication infrastructure AL C4. Capacity building AL C6. Enabling environment AL C7. ICT applications: benefits in all aspects of life – E-government AL C7. ICT applications: benefits in all aspects of life – E-business
SDGs
Goal 5: Achieve gender equality and empower all women and girls Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation Goal 10: Reduce inequality within and among countries Goal 11: Make cities inclusive, safe, resilient and sustainable Goal 17: Revitalize the global partnership for sustainable development

Case126-"SmartCell" mobile application
Title of the project, Contact Organization Name, Stakeholder type, Country
HeadDigital Trade Hub of AzerbaijanGovernmentAzerbaijan
Beneficiaries
Our beneficiaries are non-residents . They can obtain an e or m-residency, set up a company, open a bank account and manage a company online without coming to Azerbaijan.
Website
https://www.mckd.gov.ae/en/contact/
Description
DTH is an online platform that allows non-residents to obtain e or m-residency, set up a company, open a bank account and manage a company online without coming to Azerbaijan. This tool can be considered as a great opportunity, especially in terms of remote operations during the Covid-19.
ICT Tools
The main ICT tool is the DTH platform which is integrated into government and public service systems.

Challenges

The main challenges are system differences between different organizations, We work on matching systems.

Partnership

We would like to integrate into several service systems that could be provided to online managed businesses.

Sustainability

Our Project is very sustainable. There is a very high demand for it. Because digitalization is a global trend and all analog transactions are going to be digital.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C11. International and regional cooperation

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 12: Ensure sustainable consumption and production patterns|Goal 17: Revitalize the global partnership for sustainable development

Case127-Export Promotion

Title of the project, Contact Organization Name, Stakeholder type, Country

National Creative Relief ProgramMinistry of Culture & YouthGovernmentUnited Arab Emirates

Beneficiaries

Independent/freelance creatives working in the creative and cultural industries sectors who are citizens and non-citizens currently residing in the UAE
Small enterprises operating in the cultural and creative industries sector

Website

<https://www.mckd.gov.ae/en/contact/>

Description

digital platform in collaboration between MCY and the Arts Council and the Cultural and Creative Industries. The platform supports efforts from the federal government and cultural institutions to overcome industry challenges in the time of COVID-19.

ICT Tools

online registration for individuals and companies / application evaluation module / COVID-19 initiatives / Fund program/ online donation form/ Dashboards

Challenges

- Artists and creative individuals are an integral part of the creative and cultural economy of the UAE.
- The program aims to ensure the sustainability of cultural production in the country.
- Cementing the UAE's position as an incubator for creativity, arts and culture.
- An appreciation to creatives to continue to support the creative sector in various circumstances.

Action Lines

AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 12: Ensure sustainable consumption and production patterns

Case128-Electronic System of Covid 19 infected from Security Organization

Title of the project, Contact Organization Name, Stakeholder type, Country

National Creative Relief ProgramMinistry of Culture & YouthGovernmentUnited Arab Emirates

Beneficiaries

Independent/freelance creatives working in the creative and cultural industries sectors who are citizens and non-citizens currently residing in the UAE
Small enterprises operating in the cultural and creative industries sector

Website

<https://www.mckd.gov.ae/en/contact/>

Description
digital platform in collaboration between MCY and the Arts Council and the Cultural and Creative Industries. The platform supports efforts from the federal government and cultural institutions to overcome industry challenges in the time of COVID-19.
ICT Tools
online registration for individuals and companies / application evaluation module / COVID-19 initiatives / Fund program/ online donation form/ Dashboards
Challenges
<ul style="list-style-type: none"> -Artists and creative individuals are an integral part of the creative and cultural economy of the UAE. -The program aims to ensure the sustainability of cultural production in the country. -Cementing the UAE's position as an incubator for creativity, arts and culture. -An appreciation to creatives to continue to support the creative sector in various circumstances.
Action Lines
AL C8. Cultural diversity and identity, linguistic diversity and local content
SDGs
Goal 12: Ensure sustainable consumption and production patterns

Case129-Request for Non-Qatari ownership and use of real estate
Title of the project, Contact Organization Name, Stakeholder type, Country
The virtual Summer CampMinistry of Culture & YouthGovernmentUnited Arab Emirates
Beneficiaries
Students/Youth/ Worldwide
Website

http://blod.id
Description
<p>The virtual Summer Camp offers a diverse program with more than 500 activities that include workshops, dialogues and cultural screenings held in partnership with federal, local and private institutions in the UAE.</p> <p>This year, it's exceptionally unusual due to the precautionary measures taken for COVID-19 crisis.</p>
ICT Tools
online workshops/ movie screening / online registration / e-certificates / e-campaign / online conference / snapshots of summer camp
Challenges
The summer camp is exceptionally unusual due to the precautionary measures taken for COVID-19 crisis. Workshops and panel discussions will be offered remotely by a group of experts in their fields of work.
Replicability
yes, summer camp is a project that is implemented annually, during the student summer vacation. to join different activities and be part of cultural events.
Action Lines
AL C8. Cultural diversity and identity, linguistic diversity and local content
SDGs
Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case130-Head
Title of the project, Contact Organization Name, Stakeholder type, Country
Blod.idBlod.idGovernmentIndonesia
Beneficiaries
Patients/Blood recipients who needed aid in real time, and patients that suffers other acute disease such as acute anemia, dengue fever, COVID-19 and other urgent health case that

require blood supply.

As for the blood donor, aside from receiving direct health benefits from donating their blood and increasing their sense of belonging towards society through helping others, Blod.id will come up with rewards system strategy through collaboration with merchant, brand, organizations or communities together with government to reward the blood donor in order to increase the user loyalty in our platform. The reward system aimed to increase the desire of the volunteer to donate their blood through our platform. Blod.id understands the market behavior of millennials as attractive market, according Morena et al 2017 “Millenials are attracted to coupons and discounts.” Therefore adding reward features in the platform will contributes to the increase of voluntarily activity from our user pool.

Health facilities such as hospital, Indonesian red cross society will be able to perform the suitable medical treatment through the real-time fulfilment of blood request.

Government could make a better forecast of the blood supply needed based on the number of request and active blood donor volunteers through our platform. Hence the platform could act as a early warning system for health cases that could potentially become a pandemic in a certain region and Government could act accordingly.

Website

<http://www.iga.gov.bh>

Description

Blood and blood products play an important role in health care. The availability, safety and easy access to blood and blood products must be guaranteed. According to the World Health Assembly (WHA) on Availability, safety and quality of blood products, the ability to fulfill its own needs for blood and blood products (self-sufficiency in the supply of blood and blood products) and guaranteeing its safety is one of the important goals of national health service (Permenkes, 2015).

Blod.id comes as a solution that focuses to improve the health quality of Indonesian through acting as a bridge between blood donor and blood recipient through internet based mobile application (bit.ly/blod_id).

Our commitment in supporting government to provide real time data regarding blood donor case and monitoring the availability donor in certain region is reflected in our services and is part of our mission., to provide the necessary data and tools that can be easily utilized by not only government, but also health facilities and related community.

Apart from providing technological services, our team is also actively educating and recruiting society to increase the awareness of how a modest act as simple as donating blood could improve other’s life quality and volunteering to become blood donor through

offline and online campaign in areas where we see fit.

As of today, more than 2000 volunteers has been participating in our blood donation campaign and currently we have more than 260 active volunteers registered in our platform, willingly to be ready anytime whenever there is a blood donor request popped up in the platform and more than 700 blood pack has been distributed, hence we have aided more than 2100 blood recipient in need.

ICT Tools

Apps: We utilizes android based application for data registration and connecting registered volunteers with society who needs blood donation aid. In the future we will also open the opportunity of web based services to increase our range in terms of reachability towards society.

Monitoring Management System: We are using web based services to monitor and manage volunteers and blood donation request data.

Social Media: To increase public's awareness regarding information related to blood donation or other related facts, we are actively using social media.

Challenges

The challenge of distributing information and education effectively towards society has been our main focus. Especially in the middle of COVID-19 pandemic blood request is increasing more than ever due to the need of having blood plasm transfusion from previous COVID-19 patients that could significantly boost the health recovery of COVID-19 patient.

However, COVID-19 pandemic is slowing down our campaign to educate society and recruiting them to become blood donor and our mission is to reduce the gap of the number of blood donor and blood recipients request to support medical facility services and help our Government to combat COVID-19 patients and increase the mortality rate of Indonesians through educating and inviting not only regional but also nation wide government to utilize our platform in order to integrate all the information services regarding number of available blood stocks, active blood donor, active blood request and manage the data more efficiently. Thus, enabling us to become the most suitable real time platform that could be utilized nationwide.

Partnership

All blood donors registered in Blod.id platform, blood donor community from Gorontalo (Berbagi Darah), Dosis community, Bapak Haris Tome (Head of Communication, Information and Technology Agency in Gorontalo District), Elnino Center, Riden Baruadi Gallery, Ngobar Community, Relawan TIK Gorontalo (ICT Volunteer Gorontalo), Instellar, Nextdev, Gorontalo Red Cross Community.

Replicability

The idea of providing mobile and web based service as a mean of providing tools for people who is willing to become a volunteer for blood donor and patients and also through registering their personal information such as blood type, latest time of blood transfusion/donation, other health information including time of disease contracted, status of recovery, time of recovery, place of health facility treatment providing the required information to the system that will analyze to match and connect between the patient and the blood donor and improve the efficiency while providing convenient service through data filtration such as finding the nearest blood donor that could be accessed real time.

Sustainability

Providing sustainable services with high efficiency and efficacy rate has been our mission and goals. We are confident that the project does not require high expense due to the nature of the ever increasing number of volunteer in our database that will be followed by adjustable server capacity and system. Together with the government and other related strategic partner we are confident to get enough fund through charging the service utilization (contract based), donation support from public, selling merchandise with our current business community model.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case131-National Creative Relief Program

Title of the project, Contact Organization Name, Stakeholder type, Country

BeAware Bahrain|Information & eGovernment Authority|Government|Bahrain

Beneficiaries

The Primary beneficiaries can be summaries to the below:

- Citizens / Residence / Visitors:

o The BeAware app was developed to eliminate the spread of the covid19 across the Kingdom of Bahrain by identifying the contract tracing which helps in saving their life,

furthermore the services available in the app help the users to get the needed information without the need to interact with any government entities, for example if the user is planning to travel outside Bahrain he/she will be able to generate the PCR certificate in the app.

- Home isolations users:

- o The BeAware is becoming a very important part of the home isolation users because they will be interacting with the medical team through the app, for example they are mandate to send a daily report about there health indicators and this will be do through a service in the app, also they are mandate to send a couple of daily random pictures to check location of isolation and ensure that the user is the right place.

- The Government and Private Entities:

- o Ministry of Interior:

- § The BeAware platform provides the Ministry of Interior with a comprehensive monitoring system for the users under home isolation to ensure that all users are not leaving the identifies isolation location.

- o Ministry of Health:

- § The BeAware Platform provide the ministry of health with a comprehensive registration system that is used in the Bahrain International Airport and King Fahad Causeway to facilitate the registration process and streamline the process to complete the registration process in 60 – 120 second.

- o National Contact Center 444:

- § Different systems are helping on facilitating the activities within the contract center like the Appointment management system that help in organizing the all the appointments for the Covid19 test

Website

<https://www.risa.rw>

Description

The Information & eGovernment Authority (IGA) being the entity responsible about the digital transformation in the kingdom of Bahrain developed and introduced different smart application with a full backend system to support the national initiative of overcoming the Covid19 pandemic and element the spread of across the kingdom.

BeAware is a smart mobile application that uses the artificial intelligence (AI) to minimize the spread of the covid19 within the kingdom, the have is directly impacting the society by providing the necessary notifications for the users whenever they come across a positive case in less than 24 hours. The BeAware app contains a group of useful services that are very beneficiary for the different stakeholders below some of the key services:

1. Registration for Coronavirus Vaccine
2. Coronavirus Vaccination Certificate
3. Payment for Arrival Test (Arrivals to Bahrain)
4. Coronavirus Test Result
5. Coronavirus PCR Test Certificate

6. Home isolation services:
 - o Daily Symptoms Report
 - o Daily photo upload
7. Covid19 statistics (Local and internationally)
8. Contact Tracking Service

As part of the BeAware platform IGA also invested on developing different systems that supports the other Government entities in overcoming the covid19 pandemic, the systems were all integrated together to suppose the decision making activities and ensure that the needed information are available in one single platform below are the key systems:

1. Home isolation Monitoring System – Ministry of Interior
2. Appointment Management System – National Contract Center / Ministry of health
3. Dispute Management System - Ministry of health
4. Reports Management System - Ministry of Interior, Ministry of health
5. Registration Management System (Arrivals to Bahrain) - Ministry of health
6. Positive Cases Management System - Ministry of health

Worth to mention that through the BeAware platform contributed in the process of eliminating the spread:

- Total number of suspected identified in by the BeAware = 48,307
- Total number of suspects tested positive = 6,057 (12% on the total)

IGA also invested a dedicated effort during the covid19 pandemic to ensure a full transformation of all the government services to the electronic format without effecting the quality of services, by applying the health care principle and the elimination of the Covid19 spread.

Additionally, IGA invested in ensuring the continue of all government entities work by adopting different tools and mechanisms to allow access of government systems from home with the highest level of security standards.

The ultimate objective was ensuring the continuity of the government work without any effect on the quality of service along with the commitment to ensure the elimination of the Covid19 spread in the kingdom of Bahrain.

ICT Tools

The BeAware platform was developed by adopting the latest technological trends to ensure the effectiveness and efficiency of the platform, the infrastructure was on AWS cloud to ensure the scalability, reliability and Availability of the systems as all time.

The BeAware Platform used different technologies below are some examples about the technologies applied:

- Artificial intelligent technologies which were used mostly in the contract tracking module to identify the potential contracts instantly and automatically notify them about the need to

perform the Covid19 test, this technology was applied based on different smart comparison algorithms to facilitate the search functions.

- Bluetooth Technology to connect the smart bracelet with the BeAware mobile application
- SMS technologies to notify the users about any important notifications about the contact tracing or other notifications
- GPS technologies to identify the location points that are used in the contract tracing algorithms, also the GPS was used in the process of identifying the location home isolation location for isolated cases.

Challenges

• Time constrains: The request was to create the follow up with the supported systems in a very short time frame because of the situation of the covid19, to overcome this constrain the team have to work around the clock in different shifts to meet the targeted deadline

• Cost Constrains: due to the nature of technologies used in the development of the BeAware platform the cost was a raising issues, to overcome such constrain a decision was made that all the development activities (Resources) are going to be IGA internal resources to avoid any kind of cost expansion.

• Technology constrains most of the technologies used in the development of the application was really new a different in nature, to overcome such constrain the research team in the IGA was collecting any technical information about the technologies being used to create a knowledge repository for all the team members which can be used at any time, furthermore multiple technical session were taken place where all the team members will share their experience with each other to help on solving any issues, finally a test environment was provided for the team member to preform different experiments on the new technologies to apply the concept of the trial and error to help them in overcoming any technical limitations.

Partnership

Not at the moment but we are always willing to learn from the other experiences and share our experiences in different fields. The potential areas that might be interesting to explore are:

- Data Analytics
- Artificial Intelligent
- Big Data

Replicability

Yes. it could be replicated in similar situation where people are required to self-isolate and perform contact tracing in a pandemic, to help reduce the strain on medical staff

Sustainability

The project is considered be sustainable because many factors are relying on the availability of the app and supporting platform, as the covid19 pandemic continued the BeAware Platform is always needed. The reliance on the BeAware platform is very crucial that it has become part of the operational activities of some government entities during the Covid19 pandemic period.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-health|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 17: Revitalize the global partnership for sustainable development

Case132-National Creative Relief Program

Title of the project, Contact Organization Name, Stakeholder type, Country

Service Access Points (SAP)Rwanda Information Society Authority(RISA)GovernmentRwanda

Beneficiaries

All population of Rwanda (Rural and urban)

Website

<https://www.risa.rw>

Description

- Service Access Points (SAPs) are physical infrastructure facilities provided at the district and sector levels through which citizens access mainly public services online (Irembo services, RRA services, ect..) as well ICT basic Training other services including printery, scanning, training or internet connectivity.
- Since 2015 the establishment of Irembo services citizens more than 50 citizens reached each SAP located at Sector level per day requesting for irembo, RRA and others e services. 20 citizens are trained to basic Digital literacy, in each District SAP per day others reach districts to have access to information using internet

With the existing of SAP, citizens are able to access Public Services online remotely in their districts and sectors.

ICT Tools

Computers, Internet routers/Modems ,etc

Challenges

- There is no enough equipments (Laptops, Internet, etc) in SAPs and Lack of permanent SAP Managers
- There is no clear sustainability model for operation

Partnership

GoR, MINECOFIN, MIN

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case133-The virtual Summer Camp

Title of the project, Contact Organization Name, Stakeholder type, Country

Electronic Health Management System (EHMIS)Rwanda Information Society Authority(RISA)GovernmentRwanda

Beneficiaries

All Health Sector Facilities,
The main benefits is centralize Health data report timely and effectively.

Website

<https://www.risa.rw>

Description

Electronic Health Management Information System Project have been operational since 2012 and covered all health facilities countrywide to improve Health data reporting

timeliness, completeness accuracy and to show how health data is being collected and used in Rwanda.

ICT Tools

PC, Internet routers/Modem

Challenges

- The system is used by all Health facilities but need to be integrated with other Health system (EMR)
- Need of strong digital literacy for all users at Low level Health facilities like Health Posts.

Sustainability

Yes, the system have been developed since 2011 and operational from 2012 and will continue to survive and improve in the future.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case134-Blod.id

Title of the project, Contact Organization Name, Stakeholder type, Country

Building Permit Management Information System (BPMIS)Rwanda Information Society Authority(RISA)GovernmentRwanda

Beneficiaries

All citizens in Rwanda and outsiders

Website

<https://www.risa.rw>

Description

• This is software project aimed to support the following functions specific to the administration of construction permits: Archiving of data, Support for the enforcement process, Registration of architects into the system, Submission of building proposals for review and approval and Submission of payment evidences.

• Nonetheless, the former permitting procedures could cost a lot to applicants in terms of resources such as time, money, follow-up efforts, spent to get a building permit. Promptly Reacting on this issue, the Government decided to digitize permitting services so that citizens can access them wherever they are.

ICT Tools

PCs, Wireless Network, Modems, etc

The digitization was done through establishment of an online Building Permits Management Information System (BPMS) equipped with features that facilitate applicants to access information, to closely follow-up applications and to be notified on the progress made on them as a result of the assessment undertaken by the City of Kigali or District One Stop Centers.

Challenges

- System coverage not yet achieved as of the main target of the project
- Some technical issues related to the system needed to fixed once for all
- The system not yet deployed in other regions outside Kigali City.

Sustainability

The project have been developed and planned to deploy the system in other regions starting from Secondary Cities (Muhanga, Nyagatare, Rubavu, Huye Musanze and Rusizi). This is one the characteristics of project sustainability

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government

SDGs

Goal 11: Make cities inclusive, safe, resilient and sustainable

Case 135-BeAware Bahrain

Title of the project, Contact Organization Name, Stakeholder type, Country

Land Administration Information System (LAIS)Rwanda Information Society Authority(RISA)GovernmentRwanda

Beneficiaries

All population who have right to Land in Rwanda/Land owners in Rwanda

Website

<https://www.crcm.gov.co/es/pagina/inicio>

Description

Project to support the Rwanda Land Management and Use Authority (RLMUA) in professionalizing land administration processes in Rwanda since 2011. Today the project is mainly focused on the maintenance of the large quantity of legal data (more than 10 million objects).

ICT Tools

Computers, Laptops, Tablets and Smart Phones, Routers/Modem to access internet and get access to benefit the System (LAIS) and support the updating and maintenance of legal as well as spatial data

Challenges

Maintenance and stability issue of the system to be fixed

Partnership

Yes,
The system need to be sustainable and reduces processes in easy and innovative ways to facilitate citizens/Land owners

Replicability

No

Sustainability

Yes, Even if it Still under development and maintenance to fix some technical issues, the system is used since 2011.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-government

SDGs

Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

Case136-Service Access Points (SAP)

Title of the project, Contact Organization Name, Stakeholder type, Country

PostdataComisión de Regulación de ComunicacionesGovernmentColombia

Beneficiaries

Plataforma de Intercambio de Datos

Analizamos la información estadística de los sectores TIC, Postal y de Contenidos Audiovisuales, para que se convierta en una herramienta de consulta de los diferentes agentes (academia, operadores, periodistas, ciudadanos, entidades del gobierno, organismos internacionales).

Website

<https://www.moic.gov.bt/en/>

Description

En cumplimiento de lo ordenado por los Decretos 464 y 555 de 2020 y con el propósito de mantener monitoreado el comportamiento del servicio de Internet en Colombia durante el Estado de Emergencia Sanitaria, como herramienta esencial para que los ciudadanos puedan desarrollar sus actividades de trabajo y educación desde casa, la Comisión de Regulación de Comunicaciones (CRC) publica el Reporte de Tráfico de Internet durante el Aislamiento Preventivo.

Para la elaboración del presente informe, los operadores de servicios de acceso a Internet más representativos, reportaron información a la CRC sobre el comportamiento del tráfico diario desde el 30 de marzo del año 2020 para, a partir de una línea base previamente definida por la Comisión, analizar la demanda de Internet diaria hasta el 28 de febrero del año 2021, dada la extensión del Estado de Emergencia por parte del Gobierno Nacional. Dicho informe de monitoreo ha sido publicado de forma semanal por la Comisión desde el 7 de abril y hasta el 9 de julio, a partir de esta última fecha la Comisión decidió publicar de manera quincenal, con cortes 15 y 30 o 31 de cada mes.

Los últimos resultados pueden ser consultados en

https://www.crc.com.co/uploads/images/files/Reporte%20No_%2027.pdf

ICT Tools

La CRC pone a disposición del público la plataforma colaborativa de datos del sector de comunicaciones en Colombia, que podrá ser consultada en el sitio www.postdata.gov.co. Postdata fue diseñada con el propósito de reducir carencias de información, disminuir los costos de su adquisición, promover la toma de decisiones basada en evidencia, motivar la réplica de las investigaciones del sector y conocer las necesidades de información directamente de los agentes del ecosistema digital con el fin de mejorar los procesos de producción y entrega de ésta.

Como parte de su actividad regulatoria, la Comisión recolecta datos y produce información referente a los servicios de comunicaciones (TIC, TV y Postal), y al seguimiento a temas como el avance de la economía digital o medidas adoptadas por la CRC, entre otros; sin embargo, y hasta hoy, esta información no siempre resultaba de fácil acceso.

Para facilitar dicho acceso, la CRC ha diseñado una plataforma en la que además de obtener la información, los usuarios podrán opinar y aportar para la creación de nuevos contenidos calificando y enviando sus comentarios sobre cada conjunto de datos o informe publicado. Además, cada vez que se publique un nuevo contenido o se abra un foro de discusión, la CRC notificará a los usuarios.

Challenges

El cruce de datos de diferentes tipos para dar información de valor. 1. Manejo de herramientas en tecnologías emergentes (IA, BD, ML) 2. trabajo colaborativo con otros agentes (DataJam)

Partnership

Ciudadanos científicos de datos interesados en utilizar los datos para el cierre de la brecha digital y la transformación del sector TIC

Replicability

Con los datos de cualquier regulador de comunicaciones del mundo

Sustainability

La CRC se encarga de la financiación del proyecto, los agentes interesados ponen su conocimiento y usan la información de valor para toma de decisiones

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-government

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 10: Reduce inequality within and among countries

Case137-Electronic Health Management System (EHMIS)

Title of the project, Contact Organization Name, Stakeholder type, Country

Data discount scheme for students, Druk Trace App, Entry Exit System, Health Facility System, Quarantine Management System, Check Post Management System, National and Central Covid 19 dashboard, Essential Goods Stockpiling system, Vegetable Market Information System Ministry of Information and Communications Government Bhutan

Beneficiaries

The overall general public and the government machineries.

Website

<https://www.dha.gov.ae/ar/Pages/DHAHome.aspx>

Description

Among the many ICT related projects, few critical initiatives have been:

1. Internet data discount for students: With the closure of the schools, students were required to continue their academic session online. For this, the Ministry in collaboration with Telecom Operators introduced discounted data schemes to enable students to learn.
2. Druk Trace App: A tracing app to enable the government to track primary and secondary contact of individuals with possible exposure to COVID-19 positive cases.
3. Check Post management system: A system to enable the law enforcement agencies to enable them have list of people who have travelled in and out of a particular district.
4. Vegetable Market Information System: The system was developed to collect information on availability of vegetables and their demand in all Dzongkhags. The system was built to help the task force team under MoAF to collect the required locally produced information so that they can transport and distribute vegetables in other required dzongkhags. The information in the system is supposed to be fed in by Agriculture extension offices and private vegetable aggregators in the Dzongkhags.

5. Covid-19 middleware

Covid-19 Middleware is a backend system that automates data processing, integration and synchronization of data between the GIS Dashboard and various other COVID19 system's

data sources as well other relevant government data sources such as Immigration and Census

6. Essential Goods Stockpiling system

The system was developed to get the available stock information on the essential items during the pandemic period. The system has all the available registered vendors who had come forward to be part of stockpiling during the period and also the details of the warehouse where stocks have been kept. In addition to it, the system is also integrated with some of MoEA system to display information such as Market Price, Fuel and Gas, etc.

7. National and central covid-19 dashboard

The system is similar to SEP system listed in point number 5 to ensure a comprehensive Contingency Plan development and actions and to report the situation on a daily basis, an online National and central covid-19 dashboard was developed by National and Central - Covid-19 taskforce for remaining 13 dzongkhags.

8. StayHome App

The mobile app is designed for use by the quarantined individuals only. The name of the app is StayHome app. The quarantined individuals can use this app to report any symptoms of the flu. The monitoring/team/user should review the reports and depute health staff case by case. The users (quarantined individuals) can submit scheduled updates such as selfie images as instructed by the quarantine manager. The app can monitor the quarantined individuals moving away from the set quarantine boundary/perimeter set by the management for safety. If a breach is identified, the management team shall be notified for necessary action.

ICT Tools

ICT related apps and systems

Challenges

Availability of data was one challenge. For this volunteer groups were gathered to collect the informations.

Secondly, use of the app such as Druk Trace app was an issues. Though the App was developed, initially it was difficult to get people to use the app regularly. However, after a thorough awareness campaign the App was used by the general public.

Similarly, ICT education was one other critical issue.

Partnership

na

Replicability

All the projects are replicable as it was developed keeping in mind the low level of ICT intake in the country. The project could be used by any country to trace their people, have at

international border to maintain database of people moving in and out of a particular area. Keep stock of essential goods in a country and more importantly, an app to enable people in quarantine to make video and share.

Sustainability

All activities are sustainable as no additional cost, except of maintaining the database cost is involved. All the apps were internally developed with no money paid to external developers

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C7. ICT applications: benefits in all aspects of life — E-agriculture

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case138-Building Permit Management Information System (BPMIS)

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital TransformationDubai Health AuthorityGovernmentUnited Arab Emirates

Beneficiaries

Patients, Healthcare providers with Dubai Health Authority, External Private Healthcare facilities

Website

<https://motc.gov.qa/ar>

Description

- increased telehealth consulting
The program is known as "Doctor for Every Citizen", and during covid the technology for leveraged to ensure 30000 online appointments per quarter. This has improved patient

satisfaction as well as enabled care providers to reach out to patients.

- online appointments/bookings for covid vaccine.

Covid vaccine registrations/bookings were enabled for citizens and residents using medical record number and this eased for smooth roll out.

- EMR roll out to private entities for vaccine administration

DHA rolled out their EMR and provided access rights to approved nurses and admin staff in private entities to ensure vaccine administration for Emirates Airlines crew, private entities for their healthcare staff/front liners and citizens.

- Usage of outbreak management system

DHA used a system called HASANA since April 2020 for ensuring all data related to covid tests and contact tracing across Dubai. the data was updated real time by DHA facilities and private facilities across Dubai. All PCR results were updated in Hasana. The data is update regularly to NCEMA (National database) and AL Hosn App (App for covid results across UAE).

- Paperless transaction for covid vaccine certificates

Electronic certificates are sent to patient and can be viewed online anytime.

- Paperless transaction for covid test results.

Electronic results and SMS are sent to patient and can be viewed online anytime.

- increased homecare visits and usage of smart home care devices

Online appointment bookings, scheduled nurse and doctor visits, usage of SMART homecare kit to record vitals and automatically update EMR system, allow telehealth during home care visits, generate lab orders and collect samples, book next appointments.

- Online Bed Management, ventilators and oxygen cylinders update across all government and private health care facilities thus assisting in better patient care and bed assignment.

- NABIDH Program

Health Information Exchange (HIE) between government and private hospitals across Dubai.

- wave 1 completed in Oct 2020

- Wave 2 completed in Dec 2020

- Wave 3 ongoing

ICT Tools

Unified Electronic Medical Record System, Call Center Technology, Telehealth Software, SMART Home Care Kit, Enhanced Security Tools, HIMSS 6.0 Certification,

Challenges

Ensuring high security, user adoption.

- Enabled additional security tools in place, 24*7 SOC monitoring, and inhouse IT Security team working round the clock hand-in-hand with other IT teams.

Marketing was done and patients were adaptive due to covid circumstances.

Partnership

private healthcare facilities

Replicability

NABIDH HIE program is done in United States, Abu Dhabi (UAE), etc.

Telehealth is widely used across many countries.

The telehealth, smart homecare, NABIDH (HIE) will cut down healthcare costs a lot globally and enable better care across.

Sustainability

This projects will provide benefits for more than 10-15 years, saves lots of cost, investment can be leveraged for private facilities, patient involvement will increase and personalized value based healthcare can be promoted

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case139-Land Administration Information System (LAIS)

Title of the project, Contact Organization Name, Stakeholder type, Country

InprogressMOTCGovernmentQatar

Beneficiaries

All Government entities employees and suppliers, vendors and our constituents and stakeholders.

Website

<http://www.qcc.gov.ae>

Description

During pandemic we have used tools like Microsoft Team for remote meeting and collaboration and working from home. Used Fortigate VPN technologies to secure remote access and management purpose.

ICT Tools

Microsoft Teams, ZOOM and FortiGate VPN and Forti Token Mobile.

Challenges

We have successfully continued and archived our target with limited resources and budget during pandemic.

Partnership

No

Replicability

Yes.

Sustainability

Yes.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 3: Ensure healthy lives and promote well-being for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 14: Conserve and sustainably use the oceans, seas and marine resources

Case140-Postdata

Title of the project, Contact Organization Name, Stakeholder type, Country

Enablement of the Employees, government entities , and customersAbu Dhabi quality and conformity councilGovernmentUnited Arab Emirates

Beneficiaries

Employees
Customers,
Government entities.

Website

<https://www.admin.ch>

Description

Abu Dhabi quality and conformity council provided all the needed enablements for employees, government entities and customers to enable working from a distance and providing high class services for government and customers remotely.

ICT Tools

1. Provided new laptops
2. Secure VPN Connection
3. Enabled remote access to all resources of Abu Dhabi quality and conformity council
4. Provided the meeting and communication platforms.
5. Enabled all employees to work from distance (Home)
6. provide access to all shared government services from distance
7. Providing the services through the website and Tamm portal for all customers.
8. Enabled the UAE PASS for customers for secure log in and access to the services.
9. Provided the electronic payments through AD pay and secure gate way.
10. Provided Touchless card time and attendance system in case of coming to work from Government building.

all of the above is in the organization,
all of the above except no. 10 at national, regional, and international level.

Challenges

We did not have challenges. it only took a decision.

Partnership

Yes, Artificial Intelligence, Machine learning, Block chain, robotic automated processes

Replicability

Yes indeed. It is self explanatory. to all government and private sectors.

Sustainability

Yes, multiple projects acting as chain of enablement tools for the entire processes, service providers , and service beneficial.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-employment

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 11: Make cities inclusive, safe, resilient and sustainable

**Case141-Data discount scheme for students, Druk
Trace App, Entry Exit System, Health Facility
System,Quarantine Management System,Check Post
Managment System,National and Central Covid 19**

dashboard,Essential Goods Stockpiling system,Vegetable Market Information System

Title of the project, Contact Organization Name, Stakeholder type, Country

E-GOVERNMENT UNITED NATIONS GLOBAL COMPACT PUBLIC ADMINISTRATION NETWORK- GENEVA/WASHINGTON/CAIRO/PARIS/LONDON/TOKYO/TUNNUHATTI(CHAMBA HP INDIA) www.intgovforum.org www.dhs.gov www.unglobalcompact.org ENTERPRISE EUROPE NETWORK-SWITZERLAND(www.swisseen.ch www.admin.ch www.unog.ch www.icsc.un.org) AND LORD RAVINDER KUMAR SHARMA PROP KUMAR SHARMA & ASSOCIATES PO BOX 118 GPO SHIMLA PINCODE 171001 HP INDIA PLACE OF BIRTH VILLAGE AND PO TUNNUHATTI DISTT CHAMBA PINCODE 176301 HP INDIA AND OECD & FATF(FINANCIAL ACTION TASK FORCE) HQ 2 rue Andre Pascal 75775 Paris Cedex 16 FRANCE GovernmentIndia

Beneficiaries

Asia Pacific

Website

<https://www.admin.ch>

Description

THE KING SOLOMON POST
OM SHANTI OM (LET THERE BE
PEACE IN THIS WORLD)

ICT Tools

Already given

Challenges

Release OF FUNDS ILLEGALLY WITHHELD from the year 2006 to 2019-20 BY GOVT of INDIA RESERVE bank OF INDIA AND INDIAN banks

Partnership

Swiss govt united Nations www.mars.nasa.gov www.gov.uk www.dhs.gov

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C6. Enabling environment

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 6: Ensure access to water and sanitation for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries

Case142-Digital Transformation

Title of the project, Contact Organization Name, Stakeholder type, Country

E-GOVERNMENT UNITED NATIONS GLOBAL COMPACT PUBLIC ADMINISTRATION NETWORK- GENEVA/WASHINGTON/CAIRO/PARIS/LONDON/TOKYO/TUNNUHATTI(CHAMBA HP INDIA) www.intgovforum.org www.dhs.gov www.unglobalcompact.org ENTERPRISE EUROPE NETWORK-SWITZERLAND(www.swisseen.ch www.admin.ch www.unog.ch www.icsc.un.org) AND LORD RAVINDER KUMAR SHARMA PROP KUMAR SHARMA & ASSOCIATES PO BOX 118 GPO SHIMLA PINCODE 171001 HP INDIA PLACE OF BIRTH VILLAGE AND PO TUNNUHATTI DISTT CHAMBA PINCODE 176301 HP INDIA AND OECD & FATF(FINANCIAL ACTION TASK FORCE) HQ 2 rue Andre Pascal 75775 Paris Cedex 16 FRANCE GovernmentIndia

Beneficiaries

Asia Pacific

Website

<https://www.taguig.gov.ph/>

Description

THE KING SOLOMON POST
OM SHANTI OM (LET THERE BE
PEACE IN THIS WORLD)

ICT Tools

Already given
Challenges
Release OF FUNDS ILLEGALLY WITHHELD from the year 2006 to 2019-20 BY GOVT of INDIA RESERVE bank OF INDIA AND INDIAN banks
Partnership
Swiss govt united Nations www.mars.nasa.gov www.gov.uk www.dhs.gov
Action Lines
AL C1. The role of governments and all stakeholders in the promotion of ICTs for development
SDGs
Goal 1: End poverty in all its forms everywhere

Case143-Inprogress
Title of the project, Contact Organization Name, Stakeholder type, Country
FREE PCR TESTING & VACINCE (Taguig City to open 24/7 Vaccination Center in BGC)CITY GOVERNMENT OF TAGUIGGovernmentPhilippines
Beneficiaries
TAGUIG RESIDENTS
Website
https://www.nic.gov.sa/
Description
Three 24/7 Vaccination Hubs eyed in Taguig Aside from an estimated 40 community vaccination centers, the City of Taguig is eyeing 2 more venues as 24-hour vaccination hubs: one in BGC in Barangay Fort Bonifacio and another near Vista Mall in Barangay Calzada-Tipas. The addition of these facilities would further expand the local government's reach once the roll-out of its comprehensive

vaccination plan commences.

Together with the Lakeshore Vaccine Training and Information Center which the national government hailed as a 'model' facility, the three hubs which are capable of 24-hour operations will be part of a lineup of 40 vaccine centers across Taguig. The target of the City is to be able to establish 200 vaccination teams to vaccinate 630,000 Taguigeños in 60-90 days.

The 24-hour vaccination hubs will not only be more convenient but will also allow a faster turnaround. These vaccination hubs are also strategically positioned in Taguig and are easily accessible to residents.

"Our target here is not only speed but safety, efficiency and accessibility. Our 24-hour hubs and our community vaccine centers will help us hit our objectives, This will open the opportunity for more citizens to get vaccinated and not have them worry about time," said Mayor Lino Cayetano.

ICT Tools

IN THE PROGRESS OF PLANNING

Challenges

NOT SO FAR IN THE DIGITAL TRANSFORMATION

Partnership

YES

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 1: End poverty in all its forms everywhere

Case144-Enablement of the Employees, government entities , and customers

Title of the project, Contact Organization Name, Stakeholder type, Country

TawkalanaSDAIAGovernmentSaudi Arabia

Beneficiaries

Citizens of KSA

Website

<https://sdaia.gov.sa/>

Description

Multiple project and initiatives to ensure that Saudi citizens are protected from COVID-19 and to reduce the risk of spreading the disease

ICT Tools

Variety of tools to ensure reliable, useful and high available solutions provided to the customers

Challenges

The sudden expansion of the coverage of the solution. It was overcome by doing real time testing of all releases

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

**Case145-E-GOVERNMENT UNITED NATIONS
GLOBAL COMPACT PUBLIC ADMINISTRATION
NETWORK-
GENEVA/WASHINGTON/CAIRO/PARIS/LONDON/TOK
YO/TUNNUHATTI(CHAMBA HP INDIA)
www.intgovforum.org www.dhs.gov
www.unglobalcompact.org**

Title of the project, Contact Organization Name, Stakeholder type, Country

RSADIDGovernmentSaudi Arabia

Beneficiaries

المواطنين والمقيمين

Website

<https://m.cicdi.com/login.aspx>

Description

توكلنا
صحتي

ICT Tools

اوركل

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-government

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

**Case146-E-GOVERNMENT UNITED NATIONS
GLOBAL COMPACT PUBLIC ADMINISTRATION
NETWORK-
GENEVA/WASHINGTON/CAIRO/PARIS/LONDON/TOK
YO/TUNNUHATTI(CHAMBA HP INDIA)
www.intgovforum.org www.dhs.gov
www.unglobalcompact.org**

Title of the project, Contact Organization Name, Stakeholder type, Country

Jiangbei New District Enterprise Service Platform in Nanjing 中通服设计研究院
GovernmentChina

Beneficiaries

我儿女 主要福利 是健康保险

Website

<https://nic.gov.sa/>

Description

Jiangbei New District Enterprise Service Platform in Nanjing 利用 5G 网络提升云南传统产业，促进电子就业 w

ICT Tools

5G 信号

Challenges

工作上的挑战，遇到挑战就要不断的学习知识和技能，向别人吸取一点经验或者技巧，寻找突破点，在生活上遇到挑战，先把自己能做的事情做好，经常想这些困难，挑战，只会让自己乱了思路，在一个平静的情况下才会想到更好的解决办法，自己应该调整好心态，勇敢的面对挑战，攻克难关，不卑不亢。

Partnership
是，舞蹈领域
Action Lines
AL C1. The role of governments and all stakeholders in the promotion of ICTs for development
SDGs
Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case147-FREE PCR TESTING & VACINCE (Taguig City to open 24/7 Vaccination Center in BGC)
Title of the project, Contact Organization Name, Stakeholder type, Country
Smart kioskNicGovernmentSaudi Arabia
Beneficiaries
App
Website
https://www.citc.gov.sa/ar/Pages/default.aspx
Description
TwakIna
ICT Tools
App
Challenges
Internet

Partnership
Riyadh
Action Lines
AL C6. Enabling environment
SDGs
Goal 1: End poverty in all its forms everywhere Goal 10: Reduce inequality within and among countries

Case148-Tawkalana
Title of the project, Contact Organization Name, Stakeholder type, Country
noneCITCGovernmentSaudi Arabia
Website
https://www.itu.int/net4/wsis/forum/2020/Files/outcomes/draft/WSISStocktakingICTCaseRepository_TheCoronavirusResponseSpecialReport.pdf
Action Lines
AL C4. Capacity building
SDGs
Goal 11: Make cities inclusive, safe, resilient and sustainable

Case149-R
Title of the project, Contact Organization Name, Stakeholder type, Country
509201231 الرياضGovernmentSaudi Arabia
Beneficiaries

مساعد
Website
https://baz.co.zw/
Description
مساعد
ICT Tools
مواطن
Partnership
الرياض
Replicability
الرياض
Sustainability
مساعد
Action Lines
AL C3. Access to information and knowledge
SDGs
Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Case150-Jiangbei New District Enterprise Service Platform in Nanjing

Title of the project, Contact Organization Name, Stakeholder type, Country

Gender Equity Broadcasting Authority of Zimbabwe Government Zimbabwe
Beneficiaries
Communities
Website
https://www.itu.int/net4/wsis/stocktaking/Surveys/Surveys/Submit/15863048637525604#sf orm
Description
zoom
ICT Tools
zoom
Challenges
ITC use, Capacity Building
Action Lines
AL C4. Capacity building
SDGs
Goal 5: Achieve gender equality and empower all women and girls

Case151-Smart kiosk
Title of the project, Contact Organization Name, Stakeholder type, Country
المملكة العربية السعودية الصحة السعودية Government Saudi Arabia
Beneficiaries

اهل الخبرة أجدر موظفين كل من كان يحسن التعامل أجاد الدور
المهم هو الاهتمام وقصد الاجر وليس الأجرة

Website

<https://smartcity.jakarta.go.id/new/>

Description

بوزن حبي للدين والقرآن وثم اسمي يحيى وحبي لهم

ICT Tools

ليس لدي مؤسسة من مزاج ابدي رائي

Challenges

سهولة بتشكيل لجنة لوعي الترتيب الكلي وفرض الاماكن الحالية من التوظيف وتوظيف لمن هو اهل لها وتغير أو تطوير أو تذكير
الموظفين المهتمين وتوظيف مشرف لتجديد التعقب والنظر في كل ما هو جديد ليهتم ويحرص المكلف ليفهم الأهمية
وتذكر دائما الوظائف عن بعد وطرق الاحتيايل لبد تكون بتوظيف والدوام لجهة أو إدارة مختصة
والله ولي التوفيق

Partnership

اتمنى التواصل وتكلم مع عن طريق رقم جوالي الموبايل بشكل مباشر أو لأخذ أو استفسار عن اي شي او اخذ مني الفهم

Replicability

يجب توجيه الصفحة الي الجهات الحكومية لتحميل وإكمال الواجب اكماله مما تبقى عليه

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C7. ICT applications: benefits in all aspects of life — E-employment|AL C7. ICT applications: benefits in all aspects of life — E-environment|AL C7. ICT applications: benefits in all aspects of life — E-agriculture|AL C7. ICT applications: benefits in all aspects of life — E-science|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case152-none

Title of the project, Contact Organization Name, Stakeholder type, Country

Public Health CityJakarta Smart CityGovernmentIndonesia

Beneficiaries

Jakarta Smart City innovation and technology to make your activities in Jakarta easier

Website

<http://www.dha.gov.ae>

Description

Installation of 40 Handwashing Stations & Hand Sanitizer Automatic at public places around Jakarta (Bus station, City Park, Hawker, Attraction, School, etc.)

ICT Tools

Creating a developed city of Jakarta with IT-based (smart city) public services that solve various city and citizens problems effectively with JAKI

Challenges
We must stick together to defeat Covid-19
Partnership
All of OPD & SKPD in Jakarta
Replicability
One platform for your daily needs in Jakarta From reporting the city's problems to checking today's groceries prices, find all you need in Jakarta super-app
Sustainability
One platform for your daily needs in Jakarta From reporting the city's problems to checking today's groceries prices, find all you need in Jakarta super-app
Action Lines
AL C1. The role of governments and all stakeholders in the promotion of ICTs for development AL C2. Information and communication infrastructure AL C3. Access to information and knowledge AL C5. Building confidence and security in use of ICTs AL C7. ICT applications: benefits in all aspects of life – E-government AL C7. ICT applications: benefits in all aspects of life – E-employment AL C7. ICT applications: benefits in all aspects of life – E-environment AL C7. ICT applications: benefits in all aspects of life – E-science AL C11. International and regional cooperation
SDGs
Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all Goal 10: Reduce inequality within and among countries Goal 11: Make cities inclusive, safe, resilient and sustainable

الرياض-Case153

Title of the project, Contact Organization Name, Stakeholder type, Country

Dubai E-Connected Healthcare Model towards COVID 19 Response
Dubai Health Authority
Government
United Arab Emirates

Beneficiaries

All Dubai Population benefited from this integration project. This was mainly on two spectra:

1. COVID-health services:

1.a. Testing: Thanks to private labs' integration, DHA was able to enhance testing capacity 400 folds the initial daily capacity; which helped maintain PCR reporting timeframe within the 24hours target, with 97% compliance of inter-lab comparison.

1.b. Mass screening: Private Sector integration lead to enhanced capacity for running comprehensive screening for residents in prioritized geographical areas, running 85 mass screening campaigns.

1.c. Unified bed capacity dashboard: The integrated SHERYAN system was a key contributor towards achieving the 24-hour threshold for response rate, through enabling the swift allocation of cases across isolation, quarantine and hospitalization facilities whether public or private.

1.d. Through integrating COVID patients journeys across public and private via HASANA, DHA ensured its case management team was able to effectively conduct case tracing, reaching 85% adherence to the response to positive cases within 24 hours.

2. Non-COVID health services: By enabling the private sector to cater for the extra demand, DHA's non-COVID serving facilities were able to maintain their business continuity without interruption serving non-COVID patients with maintained capacities and quality of care.

Website

<https://industrial-cluster.com/>

Description

In its efforts towards effectively addressing the pandemic, Dubai Health Authority (DHA) opted for a connected healthcare model integrating public and private sector health sectors towards enhanced capacity and offering of high quality testing, mass screening, quarantine, hospitalization and isolation. System & Data Reporting integrations were the key success factor enabling this model which was mirrored through:

a. Dubai connected Testing Network: DHA's laboratories collaborated with 18 licensed private laboratories to raise COVID-19 testing capacity by 400 folds daily tests across Dubai. DHA integrated private sectors labs' systems with its Lab information system (LIS) to unify records, streamline testing and ensure immediate reporting and reflecting of test results on real-time macro-reporting Dashboards.

b. Mass Screenings: DHA collaborated with private healthcare providers and integrated their systems with its public health management platform "HASANA" to widen the scope of field mass screening.

c. Hospitalization, Isolation and Quarantine: During lockdown phase, DHA collaborated with the private sector to convert 22 hotels into isolation facilities, 8 hotels and 26 buildings into quarantine facilities all connected via DHA's Salama (E-health records management system)

and HASANA (public health management system). DHA also assigned the management of some COVID-19 services' locations to private sector for better utilization of resources.

ICT Tools

5.1 SALAMA: DHA's Patient Records Management System SALAMA-Epic (rated stage 6 EMRAM by Healthcare Information Management System Society "HIMSS" analytics 2017). With the agility to create COVID-19 related pathways and features to generate customized reports and ability for integration, SALAMA provided readily accessible records of patient journeys across isolation, quarantine and hospitalization facilities across, both public and private. 50+ new facilities were integrated.

5.2 SHERYAN, is the online healthcare licensing system encompassing all health facilities operating in Dubai. It was used as a real-time capacity platform covering all Dubai's public and private healthcare as well as the temporary isolation & quarantine buildings and hotels.

5.3 HASANA is DHA's integrated system for infectious and communicable disease management used as a primary decision support tool amidst COVID-19 outbreak. HASANA's technology allowed decision makers to have access to Micro-data pertaining to patient journeys as well as overarching Macro statistics involving public & private sectors. HASANA is integrated with public and private sector labs to immediately reflect all lab results into it.

5.4 Eclaim system: Provides a centralized health data tracking system for financial and clinical transactions between payers, providers, and patients, through which DHA was able to understand spending trends pertaining to COVID19 to support decision-making.

Challenges

Information Security: With all these wide-scale integrations, information security posed a key factor to be taken into consideration. DHA's information security office conducted a risk assessment for the new working model, implemented "Privileged Access Management "PAM" Model to manage the privileged users & the new external users accessing DHA systems, and developed specific use cases to manage the new operational models, where DHA cooperated with its stakeholders such as Dubai Police to implement these activities.

Data Integrity: DHA also put in efforts to validate the quality of COVID-19 data uploaded on its system by the external users. DHA provided training to users on its systems and introduced COVID-19 data quality audit process targeting different stakeholders in the COVID-19 patient journey including laboratories, healthcare facilities and others. This was supported by a stringent regulatory framework that resulted in 91% compliance rate, with +300 virtual data-integrity inspections till Dec 2020.

Standardized quality of services: DHA continuously run Inter-laboratory Comparison Evaluations to ensure quality of testing across all facilities, continuously exceeding the 90% target in addition to running 5,399 inspections from Mar – Dec 2020 against COVID guidelines for hospitals, clinics, labs, etc. within both public and private sectors.

Partnership

In the connected healthcare model implementation, DHA collaborated with Dubai private healthcare providers, including clinics, hospitals, specialized centres, day surgery centres, pharmacies, school clinics and laboratories. Furthermore DHA partnered with numerous hotels and private sector facility management entities towards converting hotels and buildings into COVID facilities. On the public sector level, DHA integrated its systems with various entities including: Dubai Police, Dubai Municipality and Dubai Corporation for Ambulance Services among others.

As a result of these joint efforts, the happiness of Dubai society about effective partnership among entities during COVID-19 reached 91% in a survey run by the Dubai Executive council.

Replicability

The Operational Model of having unified dashboards across capacities and customer records is a very useful model across various industries. Especially during the pandemic, the integrated, coherent and connected healthcare model has proven to be key towards enhanced capacities, matched demand and supply for services and more importantly business continuity of services across both sectors. Aligned resources and capacities are a key success factor for business continuity across and distressful situations, whether economic, social or health-related. Such dashboards are especially replicable across all the world's healthcare industries and shall be extra beneficial in healthcare systems where the private sector's capacity extensively overruns that of the public. With the continuum of the pandemic and the pressuring stress on resources, more and more healthcare industries around the world shall opt towards connected, borderless hence more efficient operational model.

Sustainability

This model has proven to be a sustainable way of doing business. System integrations and digital health are paving the road towards the new reality and the new shape of healthcare services across the world. Initiatives initiated during the pandemic such as the connected Testing Network are now a key model of DHA operations and shall be used towards enhanced efficiency and quality of testing operations across non-COVID testing. The Model has been used further in DHA's vaccination campaigns rolled-out in public and private facilities using unified integrated systems. Realizing the efficiency of the connected model, DHA has taken the integration even further lately, with the launch of its new system "NABIDH", which is the unified paper-less medical record across all public and private healthcare providers within Dubai Emirate towards elevated quality and patient safety, reduced cost and evidence-based care not only related to COVID-19 services but across all healthcare services provided with the Emirate.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

154-Gender Equity

Title of the project, Contact Organization Name, Stakeholder type, Country

covid-19barcopharmaGovernmentIraq

Beneficiaries

sick

Website

<https://industrial-cluster.com/>

Description

sick

ICT Tools

computer

Challenges

sick

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere

-Case155-آحب المملكة العربية السعودية-

Title of the project, Contact Organization Name, Stakeholder type, Country

covid-19barcopharmaGovernmentIraq

Beneficiaries

sick

Website

<https://industrial-cluster.com/>

Description

sick

ICT Tools

computer

Challenges

sick

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 1: End poverty in all its forms everywhere

Case156-Public Health City

Title of the project, Contact Organization Name, Stakeholder type, Country

covid-19barcopharmaGovernmentIraq
Beneficiaries
sick
Website
https://industrial-cluster.com/
Description
sick
ICT Tools
computer
Challenges
sick
Action Lines
AL C1. The role of governments and all stakeholders in the promotion of ICTs for development
SDGs
Goal 1: End poverty in all its forms everywhere

Case157-Dubai E-Connected Healthcare Model towards COVID 19 Response
Title of the project, Contact Organization Name, Stakeholder type, Country
covid-19barcopharmaGovernmentIraq
Beneficiaries

sick
Website
https://www.dha.gov.ae/ar/Pages/DHAHome.aspx
Description
sick
ICT Tools
computer
Sustainability
yes
Action Lines
AL C1. The role of governments and all stakeholders in the promotion of ICTs for development
SDGs
Goal 1: End poverty in all its forms everywhere

Case158-covid-19
Title of the project, Contact Organization Name, Stakeholder type, Country
Digital TransformationDubai Health Authority GovernmentGovernmentUnited Arab Emirates
Beneficiaries
Patients, healthcare providers with Dubai Health Authority, external private healthcare facilities
Website

<http://www.cnr.dz>

Description

Increased telehealth consulting

The program is known as "Doctor for Every Citizen", and during covid, the technology for leveraged to ensure 30000 online appointments per quarter. This has improved patient satisfaction as well as enabled care providers to reach out to patients.

- Online appointments/bookings for covid vaccine: Covid vaccine registrations/bookings were enabled for citizens and residents using medical record number and this eased for smooth roll out.
- EMR roll out to private entities for vaccine administration: DHA rolled out their EMR and provided access rights to approved nurses and admin staff in private entities to ensure vaccine administration for Emirates Airlines crew, private entities for their healthcare staff/front liners and citizens.
- Usage of outbreak management system: DHA used a system called HASANA since April 2020 for ensuring all data related to covid tests and contact tracing across Dubai. The data was updated real time by DHA facilities and private facilities across Dubai. All PCR results were updated in Hasana. The data is update regularly to NCEMA (National database) and AL Hosn App (App for covid results across UAE). - Paperless transaction for covid vaccine certificates Electronic certificates are sent to patient and can be viewed online anytime.
- Paperless transaction for covid test results: Electronic results and SMS are sent to patient and can be viewed online anytime.
- Increased homecare visits and usage of smart home care devices: Online appointment bookings, scheduled nurse and doctor visits, usage of SMART homecare kit to record vitals and automatically update EMR system, allow telehealth during home care visits, generate lab orders and collect samples, book next appointments. -
- Online Bed Management: Ventilators and oxygen cylinders update across all government and private health care facilities thus assisting in better patient care and bed assignment.
- NABIDH Program: Health Information Exchange (HIE) between government and private hospitals across Dubai.

Wave 1 completed in Oct 2020, wave 2 completed in Dec 2020, wave 3 ongoing

ICT Tools

Unified Electronic Medical Record System, Call Center Technology, Telehealth Software, SMART Home Care Kit, Enhanced Security Tools, HIMSS 6.0 Certification

Challenges

Ensuring high security, user adoption

Enabled additional security tools in place, 24*7 SOC monitoring, and inhouse IT Security team working round the clock hand-in-hand with other IT teams.

Marketing was done and patients were adaptive due to covid circumstances.

Partnership

No

Replicability

NABIDH HIE program is done in United States, Abu Dhabi (UAE), etc. Telehealth is widely used across many countries. The telehealth, smart homecare, NABIDH (HIE) will cut down healthcare costs a lot globally and enable better care across.

Sustainability

This projects will provide benefits for more than 10-15 years, saves lots of cost, investment can be leveraged for private facilities, patient involvement will increase and personalized value based healthcare can be promoted

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case159-covid-19

Title of the project, Contact Organization Name, Stakeholder type, Country

Online retirement requestsNational Pension FundGovernmentAlgeria

Beneficiaries

The primary beneficiaries are mainly the employees seeking retirement (future retirees) and Employers submitting large amount of retirement request forms.

The solution (full web) aims for increased access for citizens (Employers) to the Fund services through secure web-based solution. It will serve as one of many points of contact for citizens to communicate with the administration. Furthermore, this solution can significantly reduce the workload of the local agencies.

Website

<http://www.cnas.dz>

Description

The solution mainly targets the approximation of the administration to the citizen in general and to the retiree in particular, through the efficient and optimal use of Information and Communication Technologies (ICT).

The solution is intended for Employers only, which consists in submitting (online) the form (employees retirement requests) and following-up the pension file (from admission to payment).

The main goals are as follows:

- Submit information without moving ;
- Have real visibility on the processing of the submitted files ;
- Have traceability on backlog files ;
- Optimize resources (data entry and statistics) at local agencies ;
- Have real time statistics ;
- Promote decision making.

ICT Tools

This solution uses a wide variety of technologies, including web 2.0 tools (HTML, CSS, ...), modern language programming (PHP, JavaScript, ...) and advanced databases systems (SQL Server, MySQL).

The use of ICT is one of the basic conditions and driving forces behind the development and implementation of the IT solutions tailored for the Fund clients (Employers and retirees) which participates, into shaping a brand image and service's professionalism that leads to better control and thus improve the quality of benefits for citizens.

Challenges

The solution led to improve accuracy, consistency, speed and reliability of supplied information (through forms). Therefore, the local agencies will be able to process fast and

effectively high amount of retirement requests. Thus, employees will benefit from retirement as they request in an acceptable period of time.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case160-covid-19

Title of the project, Contact Organization Name, Stakeholder type, Country

e-ChifaCNASGovernmentAlgeria

Beneficiaries

The benefits insured persons and their dependents

Website

<http://www.cnas.dz>

Description

The National Social Insurance Fund, for the sake of efficiency, saving time and expense, has developed an interactive application for smartphone android called e-Chifa , upload through Paly Store application. Available 24 hours a day and 7 days a week. The first objective of the e-Chifa services is to ensure, through a total simplification of procedures, an easy, a fast and a free access to some personalized information related to the benefits insured persons and their dependents.

These informations concern especially :

- Benefits, health care and replacement income, detailed by period and kind reimbursed by the National Social Insurance Fund to the insured persons and their dependents in both systems, the third-party pay system (free of charge) and the direct reimbursement.
- The list of private practitioners, general practitioners and consultants contracted with the social security organism.
- The list of payment centers of the social security organism whose ensure the reception,

care or guidance of insured persons and users.

- Sending and recording for exploitation all requests.

This service lets social insured persons to access a private account in order to benefit from services in pharmacies without using the Chifa card. In addition, several online services are integrated to e-Chifa for example : work stoppage request, maternity leave request, death benefit request and work accident declaration.

ICT Tools

Online services are technologies/ICT tools which are used.

WSIS aims to improve access to information through new ICTs, which contributes significantly to facilitation and modernization in carrying out the various activities at the institutional level. There are about 1million persons using this application with an annual progression of 25 percent since its inception.

Challenges

This application will be improved to better respond to evolutions of needs and activities by integrating functionalities especially related to :

- Enrichment of the space with new online services.
- The extension of the use of space to all categories of social security.
- Reduce citizens travel as much as possible.
- Paperless.

Replicability

The experience gained during the development of this project can be reproduced, this project can be used as a platform experimental to promote the use of ICT in more countries in the world.

Sustainability

On the economic and social level, the portal makes it possible to reduce citizens' travel and ensure optimal care, without excessive and restrictive formalities, or advance payments, thus allowing better accessibility to care and an improvement in the power of household purchasing. It is a sustainable development approach, contributing in particular to empowering people, ensuring inclusion and equality.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case161-covid-19

Title of the project, Contact Organization Name, Stakeholder type, Country

PNCCNAS - National Social Insurance FundGovernmentAlgeria

Beneficiaries

Older persons, People with disabilities
Remote and rural communities
The poor
Women, youth

Website

<http://www.cnas.dz>

Description

PNC space is a service for the social insured persons. It is an accessible web portal. This service is intended for the electronic management of contractual relationships with healthcare professionals, especially the medical transport operators. The PNC portal is in line with the Algerian government policy aimed at ensuring good coverage of social insurance policyholders and their beneficiaries in the context of third-party payment. This system has made it possible to cover most of the health care needs of insured persons and their dependents, without excessive and restrictive formalities, or advance payments, thus allowing better access to care and improved power household purchasing. The portal allows the process of establishing the agreement, passing through the request for support and ending with electronic invoicing. Objectives and goals aimed by this solution are :

- To simplify the administratives procedures;
- It will reduce the displacement of the insured to the service of CNAS;
- The modernization of the cashier service;

This national portal will be improved to better respond to evolutions of needs and activities by integrating functionalities especially related to:

- Enrichment of the space with new online services.
- The extension of the use of space to all categories of social security.
- Reduce citizens travel as much as possible.
- Paperless.

This portal aims to strengthen the series of agreements concluded by the Ministry of Labor, Employment and Social Security with health professionals in the private sector, such as hemodialysis centers, cardiology and of the convention system of the attending physician, for the beneficiaries.

ICT Tools

Online services are technologies/ICT tools which are used.

The portal aims to popularize access to information and increase confidence and security in the use of ICTs, which significantly contributes to the facilitation and modernization of the realization of various activities at the institutional level and promote the role of the state in promoting ICT for development and eliminate geographic disparities by creating a central access point. A population of around 25 million people can benefit from the services offered by this platform.

Challenges

This national portal will be improved to better respond to evolutions of needs and activities by integrating functionalities especially related to:

- Enrichment of the space with new online services.
- The extension of the use of space to all categories of social security.
- Reduce citizens travel as much as possible.
- Paperless.

57.

Replicability

It is recommended that all professional healthcare have a such as portal when contracted with the National Social Insurance Fund, according to their information needs of their own function.

The experience gained during the development of this project can be reproduced, this project can be used as a platform experimental to promote the use of ICT in more countries in the world.

Sustainability

PNC portal was implemented by the staff of the National Social Insurance Fund, no outsiders were required, even improvements are constantly being incorporated. Operation and management is carried out by own staff.

Action Lines

AL C2. Information and communication infrastructure

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case162-Digital Transformation

Title of the project, Contact Organization Name, Stakeholder type, Country

CHIFA ACC Childbirth PortalCNAS - - National Social Insurance FundGovernmentAlgeria

Beneficiaries

Women

Website

<https://www.m-moudjahidine.dz>

Description

For the modernization of the national social security system and the services provided to the insured persons and their dependents especially the pregnant women, the National Social Insurance Fund has engaged a large program to integrate the information and communication technologies in his relations and exchanges with beneficiaries and users contracted structures.

So the Chifa system are extended to the private contracted childbirth clinics, giving birth to CHIFA ACC portal.

Through this portal, the process begins with a request for support made at the checkout by the birthing clinic.

The relevant fund departments issue their response to the request (agreement or rejection) and notify the clinic. In case of agreement, the clinic can carry out the act (vaginal delivery)

In the case of delivery by caesarean section, a request for a post-change of procedure is made by the clinic.

Once the delivery has taken place, the clinic proceeds with electronic invoicing by the Chifa system made available to it through the portal.

The objective of Chifa ACC is to ensure, through a total simplification of procedures, an easy, a fast and a free access to some personalized information related to the Women insured persons and also to benefit from services offered by private contracted childbirth clinics by using their Chifa card.

ICT Tools

Online services are technologies/ICT tools which are used.

Challenges

WSIS aims to improve access to information through new ICTs, which contributes significantly to facilitation and modernization in carrying out the various activities at the institutional level.

This portal will be improved to better respond to evolutions of needs and activities by integrating functionalities especially related to:

- Enrichment of the space with new online services.
- Reduce citizens travel as much as possible.
- Achieve a high level of digitalization.
- Paperless.

Replicability

The experience gained during the development of this project can be reproduced, this project can be used as a platform experimental to promote the use of ICT in others countries in the world.

Sustainability

CHIFA ACC portal, a set of integrated API's with Wareed system -health information system which are connected to the Chifa card system as this model of full integration had been developed and formed effectively , which can quickly reflect the medical history and all service provider documentation directly on portal as the clinic have full access 24/7 on medical record and history of their pregnant women social insured , and have the right to share with the fund, with this workflow , the reduce of printing the paper / medical reports , medical summary , medication and prescription and much more relevant to the operation of childbirth in this context.

On the economic and social level, the portal makes it possible to reduce women travel and ensure optimal care, without excessive and restrictive formalities, or advance payments, thus allowing better accessibility to care and an improvement in the power of household purchasing.

CHIFA ACC was implemented by the National Social Insurance Fund staff, no outsiders were required, even improvements are constantly being incorporated. Operation and management is carried out by own staff.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case163-Online retirement requests

Title of the project, Contact Organization Name, Stakeholder type, Country

Corona virus vaccination schedule application
Ministere des Moudjahidine et Des Ayants Droit (MDMAD)
Government
Algeria

Beneficiaries

all the companions of the Mujahideen and their widows who are difficult to move to health centers to receive the vaccine

Website

<https://www.cre.dz>

Description

The application of managing vaccination appointments against the Corona virus, which allows recording the dates of vaccinations for all the companions of the Mujahideen and their widows who are difficult to move to health centers to receive the vaccine, as the application works to organize appointments and set priorities according to the health status of each registered

What projects and activities has your entity introduced/promoted to respond to the coronavirus disease (COVID-19) outbreak with the use of ICTs and to create a social impact

helping other stakeholders?

Via the development of Coronavirus vaccination schedule application

ICT Tools

- . SQLserver
- .C# language end css ,javascript
- . Active directory authentication

Challenges

hosting of the application and how can secure the API service from attacks

Partnership

Yes
Development area

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-science|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case164-e-Chifa

Title of the project, Contact Organization Name, Stakeholder type, Country

Syclinic (digitization system for the hospital environment)Environmental Research Center
CREGovernmentAlgeria

Beneficiaries

- the system will provide a complete overview and visibility of the entire hospital sector
- complete management of the hospital budget and infrastructure

- prevent epidemics thanks to machine learning: the system references the symptoms of all patients and sends an alert in case of similar symptoms in several subjects
- common and national database to check the vaccination status of each citizen with a QR Code application to check the status of the Health Pass
- reference and store all the medical follow-up of each citizen and the costs

Website

<https://marw.dz>

Description

Syclinic is a modern intelligent and complete hospital automation software that suits to any hospital or medical institution from patient OPD visits to operation to pathology test . It includes +30 modules with 10 inbuilt users like (admin, doctor, accountant, patient...).

Syclinic has several features including:

- state of art IPD
- most powerful hospital charges
- most flexible ward, floor, bed creation
- most efficient OPD
- multi way appointment system and make it from online website or offline
- one click to check the state of the beds and their numbers which are free in the national territory
- intuitive pharmacy module with stock management
- manage all operations and their details
- manage all systems of ambulance and their geolocation
- manage all pathology, radiology test reports in downloadable format
- TPA
- staff complete payroll
- powerful inventory module
- front office module for managing visitors, postals, phone calls and complaints
- Online payment system
- messaging staff and patient with email/SMS
- patient panel to manage their appointment and OPD/IPD
- manage your calendar
- multilingual system with highest 77 languages support
- RBAC
- database backup/restore with automated
- artificial intelligence which makes it possible to track the disease by basing it self on the symptoms and diagnosing them.
- the management of vaccination against the coronavirus on national territory and the follow-up of cases in real time

ICT Tools

Artificial intelligence machine learning / WordPress / cloud / data base “Mysql”

Challenges

Adaptability and agility: software must take into account the changes affecting the environment of health establishments, and Collection of information necessary to define the system architecture And understand the proper functioning of the sector.

While considering the human factors, they include

Awareness of Clinical Management Software advantages & importance.

In general, Experience, and knowledge of using computer applications.

Impressions and Beliefs regarding clinical Management Software and making use of them efficiently.

Shortage of professional healthcare faculty who have in-depth knowledge of HMS and other similar technologies.

Poor acceptance of clinical Management Software.

Shortage of health informatics professionals who are well capable of establishing and implementing the techniques.

the lack of time allowed training and learning on making use of the Syclinic ,

the lack of healthcare professional support, motivation, and more.

While considering the human factors, they include

Awareness of Hospital Management Software advantages & importance.

In general, Experience, and knowledge of using computer applications.

Impressions and Beliefs regarding Clinical Management Software and making use of them efficiently.

Shortage of professional healthcare faculty who have in-depth knowledge of HMS and other similar technologies.

Poor acceptance of clinical Management Software.

Shortage of health informatics professionals who are well capable of establishing and implementing the techniques.

the lack of time allowed training and learning on making use of the Syclinic ,

the lack of healthcare professional support, motivation, and more.

Partnership

Health / Environmental / IT development

Replicability

Yes Is this project replicable If it can be could be replicated in the health sector in any country

Sustainability

Yes, this project is sustainable because it meets present and future health needs without compromising the ability of future generations to meet theirs.

Sustainability is the new frontier for innovation: finding new ways to lower costs by reducing waste, reducing usage of papers, and making a positive impact on the environment and community. Doing this effectively requires a system which integrates our day-to-day business aspects and needs for inputs, in a comprehensive, systematic, transparent and planned manner.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-environment

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case165-PNC

Title of the project, Contact Organization Name, Stakeholder type, Country

Maqra' Al Djazair|Ministry of religious affairs and wakfs|Government|Algeria

Beneficiaries

All members of the local and global community, benefit from distance education and guidelines in social and economic life appropriately with high morals.

Website

<https://and.dz>

Description

We have presented projects that provide educational and guidance services to the local and global community by using information and communication technologies applications in remote dialogue , communication ,and giving directions to all segments of society in all regions and of all ages without locomotion and assembly . avoiding all the causes of Covid disease.

ICT Tools

web app

These applications contribute to encouraging the use of information and communication technologies in various aspects of life. Instead of movement, it is possible to learn, seek advice and talk remotely. And this reduces costs and effort and encourages confidence in using these technologies.

Challenges

Providing the necessary budget for the continuation of the projects and the required modern technologies that are constantly integrated, as well as the training of those in charge of these platforms.

Partnership

no

Replicability

no

Sustainability

This project will continue to meet the people's need for the services it provides. The members of the community cannot give up learning and seeking guidance in their social lives.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C10. Ethical dimensions of the Information Society

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 10: Reduce inequality within and among countries|Goal 16: Promote just, peaceful and inclusive societies

Case166-CHIFA ACC Childbirth Portal

Title of the project, Contact Organization Name, Stakeholder type, Country

Algerian Virtual Waste Exhibition « AVWE » National Waste Agency Government Algeria

Beneficiaries

The primary beneficiaries are :

Companies in waste management

Equipments suppliers

Startups

Services suppliers (services in relation to waste management)

Associations acting in waste management and environment

Public Institutions and organizations

Partners

Professional and non-professional visitors from all the countries

The main benefits for the beneficiaries are:

1- Companies in waste management benefit from international visibility, maintain existing relationships, develop new contacts and minimize logistics costs and travel

2- Startups to present their ideas and projects and look for companies to finance their projects

3- Associations (civil society) to present their programs and actions seeking to find new partners

4- Public institutions to present all their

5- Visitors to visit the exhibition 24/24h without any travel and instant delayed messaging

6- For both exhibitors and visitors, there is no sanitary constraints, less logistics and travel costs and easy to navigate

7- The use of the platform is easy and the research is optimized

Website

<https://www.and.dz>

Description

The Algerian Virtual Waste Exhibition- AVWE- is a virtual event platform where exhibitors (recyclers, equipment suppliers, institutions, service suppliers, startups, associations) from all countries can virtually exhibit their products, equipments and services in waste valuation for a period of three (03) days. The exhibition main objective is to maintain the existing business relationships between companies of waste management learn about new technologies, conduct competitive intelligence and share experiences and know-how. The platform includes different Pavilions (Partners, Institutions, Recyclers, Startups, Associations, Equipments suppliers, services suppliers). The exhibitors receive statistics every day The visitors from all the categories and all over, the world can surf and visit the different pavilions and stands, connect, upload documents and exchange with exhibitors anywhere at any time during the period of the event via audio-vidéo tchat or messages. There are also live-streamed conferences in the platform and the virtual visitors can send their questions to the speaker and have the answer instantly.

ICT Tools

We use a digital platform to reproduce and organize a virtual exhibition that reproduces a real and classical exhibition by offering exhibitors and visitors an environment conducive to exchanges. The event brings an added value to the physical exhibition, optimizing the budget of participation and promoting activities and services to a large target. The platform solution uses PHP and VueJs and is hosted at Amazon cloud.

Challenges

The main challenges encountered in the platform of the AVWE virtual exhibition are :

- 1- The platform is available only during the period of the organization of the exhibition (the preparation of the event and the period of occurrence)
- 2- For the 3rd edition of the event, we are trying to improve the platform to make it easier for the organizer, the exhibitor and for the virtual visitor
- 3- The cost of the platform renting is high and does not last a long period (approximately 06 months)
- 4- As the number of stands exceed a certain limit, every additional stand must be paid (the same amount that the exhibitor has paid)
- 5- The platform does not have the option of matching BtoB meetings

To overcome this, we need a financial help to purchase the license of this platform and develop it to realize BtoB virtual meetings after each edition of the exhibition

Partnership

Yes we are looking for partners mainly in the area of waste management being Algerian or international partners. We aspire to build partnerships with international associations, international institutions, startups and governmental institutions acting in waste management and renewable energies or in any field in relation with waste management. It is also interesting and important to have partners in ICTs field to help us develop and improve the existing platform of the exhibition. Since it is a virtual event, the ICTs companies and startups can be a real support in the managing and the development of the platform.

Another area, which is as interesting as the previous ones, is the industrial area.

Replicability

Yes, the AVWE exhibition project, which is a virtual exhibition, is replicable. It is a yearly event as the classical exhibition. Nevertheless, it could occur every six months, which means two editions in the same year instead of one time, without any risk of contamination risks and without having to put a health protocol. In addition to that, we promote sustainable industrialization and foster innovation since we use the ICTs.

In relation to the costs of participation, the participants can come from all over the world without travel or logistic fees and the visitors can register and participate in each edition without any fees.

In addition to that, we can have more conferences and more speakers from various

countries at any time of the day since it is an event opened 24h/ 24h.

For the area of the exhibition, there is no limit for the number of participants and there is no special place to organize it since it is a virtual event.

Sustainability

Yes, the AVWE exhibition is sustainable since the pandemic crisis is still present. However, even after the pandemic crisis, the AVWE will carry on because it a worldwide event with no physical boundaries.

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case167-Corona virus vaccination schedule application

Title of the project, Contact Organization Name, Stakeholder type, Country

NATIONAL WASTE INFORMATION SYSTEM National Waste Agency Government Algeria

Beneficiaries

- Local actors : municipalities, public companies and establishments.
- Private operators.

Website

<https://www.poste.dz>

Description

Following its missions, the AND is fully committed to the design and commissioning of a National Waste Information System (SNID),

The National Waste Information System (SNID) is an effective decision-making tool for all stakeholders involved in waste management process in local and national level, it allows the transition from a raw database to a dashboard made up of several performance indicators relating to waste management and have better data security for all users.

It is accessible via the link snid.and.dz, and mainly consists of:

§ An input interface: It consists of several forms (input) relating to the different infrastructures (incinerator, landfill centers, recycling centers...etc) and categories of waste (household and similar waste

dangerous waste; inert waste, marine coastal waste);

§ A database hosted at the National Waste Agency (AND) Data Center;

§ A dashboard (output) that carries performance indicators and statistics in the form of figures, graphs, maps and so on.

ICT Tools

SNID is a useful tool to integrate into the national waste management plan as it is part of the process of digitization of the sector, so that it is more efficient in collecting, processing and disseminating information. This greatly helps decision makers to have a zoomed image of the sector, and therefore, to carry out all the activities included in this framework.

The main objective of SNID is to constitute KPIs (Key Performance Indicators) on waste management at the national level as well as at the local level. Thus, it is considered to be a management and monitoring tool.

Ü It constitutes an Inter-connection between organizations and geographically distant operators (DEW, EPIC, AND, private operators...);

Ü Sharing information in real time instead of using traditional means, such as forms, faxes and e-mails, which are not efficient;

Ü It allows the collection, storage and processing of large volumes of Data;

Ü It helps to draw a vision for the medium and long term.

Challenges

The project must be fully commissioned in order to be able to help all local actors to manage their waste-related problems and issues at local and national level, and for this, they must collaborate closely with the NWA, and this, by informing the National Waste Information System (SNID) and providing all the necessary Data and information about Waste production, Collect and transport, valorization and treatment (elimination) and so forth.

For each field, they should provide information about all aspects of waste management such as technical, social and financial performance indicators.

All these information must be provided continuously by every local actor to make the system completely performant.

If all local and national stakeholders, who are involved in waste management process, adopt the national waste information system as a daily used tool to exchange and analyze raw data, the system could be more efficient in term of providing real information and performance indicators concerning every aspect of waste management system in Algeria.

Partnership

No

Replicability
Yes. At local or regional level.
Sustainability
Yes. It could be always used by stakeholders to exchange, collect Data and get indicators.
Action Lines
AL C2. Information and communication infrastructure AL C3. Access to information and knowledge
SDGs
Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all Goal 11: Make cities inclusive, safe, resilient and sustainable Goal 17: Revitalize the global partnership for sustainable development

Case168-Syclinic (digitization system for the hospital environment)

Title of the project, Contact Organization Name, Stakeholder type, Country
BARIDINETALGERIE POSTEGovernmentAlgeria
Beneficiaries
<p>The main beneficiaries are customers and users of postal and postal financial services, who were oriented, during the Covid-19 pandemic, to the remote services provided on the Baridinet web portal as well as the online payment services, accessible at any time and place.</p> <p>The Baridinet portal has made it possible to significantly promote online payment via the Edahabia electronic payment card of Algérie Poste. In 2020, online payment operations have progressed significantly, in value and in volume; where they evolved in volume by 472% and in value by 274%.</p> <p>Employees also represent a category of beneficiaries, as clients and users were informed in time through social networks and oriented to Baridinet, which allowed employees to work in a reassuring climate, despite the pandemic of Covid-19.</p>
Website

<https://www.poste.dz>

Description

Baridinet is the main web portal of Algérie Poste which allows its customers to benefit from a multitude of online services and to take advantage of online payment services thanks to the Edahabia electronic payment card.

The Baridinet web portal offers the following services:

- ordering the Edahabia electronic card and monitoring its delivery
- online payment of electricity, gas and water bills
- online payment of telephone bills and internet subscription
- information on the preliminary formalities for opening a financial postal current account (CCP account)
- access to the web portal dedicated to the consultation of the CCP account and the ordering of cheque books (for CCP account)
- downloading the forms used in daily operations in post offices
- access to the postal tracking service
- purchase of mobile phone credit
- purchase of airline tickets
- taking out an insurance policy (travel and/or life insurance)
- buying philatelic products online
- buying books online

During the Covid-19 pandemic, wide promotion has been provided to orient customers and users to use the services provided by the portal Baridinet, which has proven to be a very convenient and efficient way to pay online.

ICT Tools

It is the combination of new information and communication technologies, in terms of web portal development, online payment and digital communication. It also includes the necessary infrastructure and security measures for this type of project.

The promotion of the use of the Baridinet web portal has been conducted mainly through the social networks popular in Algeria, as part of a multi-channel communication approach of Algérie Poste.

Challenges

The main challenge of the Baridinet portal is to ensure its sustainability, so as to ensure its compatibility with new web browsing technologies in order to preserve the portal's accessibility, adaptability and responsiveness on the various possible devices: computers and smartphones.

To this end, customer satisfaction in particular and portal users in general is the major challenge of the Baridinet portal, where the customer experience is a fundamental element in its sustainability.

In addition, the security of the web portal as well as the continuity of the service are

important and permanent concerns in the development process of the project, which means that they are also significant challenges that need to be taken into consideration, in view of the rapid development of new technologies and the threats that accompany them.

Partnership

No.

Replicability

The replicability of the project is feasible at any time and place thanks to the web technology deployed, in accordance with the global trend in this area, but also with the needs of the clients and users of the multiple services provided.

Sustainability

The sustainability of the project is ensured by the design of the solution architecture that provides the "Baridinet" web portal and is based on a scalable technology that allows it to be up to date with new trends and, above all, to provide value to its users at any time and any place.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C9. Media

SDGs

Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 16: Promote just, peaceful and inclusive societies

Case169-Maqra' Al Djazair

Title of the project, Contact Organization Name, Stakeholder type, Country

Communication via social networksALGERIE POSTEGovernmentAlgeria

Beneficiaries

The main beneficiaries are customers and users of postal and postal financial services, who were kept informed of the arrangements made during the Covid-19 pandemic, and were also oriented to the remote services provided on the Baridinet web portal as well as the online payment services, accessible at any time and place.

Employees also represent a category of beneficiaries, as clients and users were informed in time through social networks, and were able to work in a reassuring climate, despite the pandemic.

Website

<https://a2i.gov.bd/>

Description

The presence of Algeria Post on the main social networks, as part of a multi-channel approach, has enabled customers and users of postal and postal financial services to be informed at all times of the preventive measures taken during the pandemic, including the temporary suspension of certain services or their disruption, the closure of waiting rooms or the obligation to wear a facemask or the passage of mobile post offices in rural areas. Also, communication on social networks promoted the remote services provided through the Baridinet web portal, and in particular, the online payment solutions, which were very convenient for paying bills during the pandemic.

As an example, the number of subscribers of the official facebook page of Algérie Poste has reached one million in 2020, and today, it has nearly 1.2 million subscribers. In figures, the facebook page is animated daily, it has nearly 4000 photos and 300 videos, each publication receives on average between 500 and 1200 reactions and between 50 and 300 comments.

ICT Tools

Social networks are a powerful tool in business communication, especially in sensitive times, such as during the Covid-19 pandemic, when the provision of information and guidance to customers on a regular and reliable basis was necessary, both to alleviate fears and to ensure business continuity.

As part of a multi-channel approach, on the various social networks popular in Algeria, Algérie Poste has promoted its remote services via its Baridinet portal and especially online payment, which has proved very practical for paying bills (electricity, gas, water, telephone and internet).

Challenges

The main challenge of communication via social networks, in a multi-channel approach, is to maintain the dynamics of every channel by ensuring rich, animated and clear content, without deviating from the main objective of the approach and the target population.

Also, another challenge is to preserve the content of each social network channel, including visitors' comments, in accordance with policies and the rules of usage and communication courtesy.

The most important is to ensure a harmonised and permanent communication on the different channels, which are popular in Algeria, in order to be always close to the customers and users of the different postal and financial services provided by Algérie Poste.

Partnership

No.

Replicability

Yes, indeed, it is practical to adapt the typical organisation set up for the project, depending on the desired approach to communication (single-channel, multi-channel or omni-channel), as well as the resources and objectives of each organisation.

It is also important to keep a constant watch on the project in terms of content and feedback, in relation to the communication policy adopted in this framework.

Sustainability

Yes, the project is sustainable under the condition of preserving the working environment and improving it according to the feedback received from the users, as well as the technological evolution related to social networks in particular and communication means in general.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media

SDGs

Goal 5: Achieve gender equality and empower all women and girls|Goal 10: Reduce inequality within and among countries|Goal 12: Ensure sustainable consumption and production patterns|Goal 16: Promote just, peaceful and inclusive societies

Case170-Algerian Virtual Waste Exhibition « AVWE »

Title of the project, Contact Organization Name, Stakeholder type, Country

Beneficiaries

Since this is an inclusive and accessible platform, all the citizens of Bangladesh who can read-write, and speak in Bangla are the primary beneficiaries that extend across different demography and communities. Although the content is grounded in the cultural context and reality of Bangladesh, the benefits and services also extend to those who understand the Bangla language but live outside of Bangladesh and can consume articles and other videos that are highly informative regarding COVID19.

Citizens of Bangladesh include the following beneficiaries who are not limited to this list, as follows:

Government officials, policy advocates, journalists and media professionals, public sector, development organizations and professionals, private sector organizations, financial institutions, academia, civil society organizations, etc. who are able to access nationally important information that is critical in decision making in regards to COVID19 response. Organizations and institutions are highly dependent on this portal's information on making critical decisions on lockdown, school operations, physical office attendance, on-ground activities and community engagements, etc.

Website

<http://www.dha.gov.ae>

Description

The website corona.gov.bd emerged as the single source of authentic and timely information for corona-related queries and solutions since the start of the pandemic from early 2020 till now. The entire website is in simple Bangla language, the mother tongue of Bangladesh, to ensure the inclusion of all communities within the border of the country. The platform is created with a citizen-centric approach to support and connect the citizens with emergency numbers and provide urgent service information such as on the availability of hospitals and hospital beds. It also provides the latest national statistics on parameters such as cases detected, tests done, recovery and, deaths. This platform also anchors the dissemination of government directives in relation to the coronavirus.

To utilize the huge potential of the website, this national tool will be repurposed from just an emergency information service portal to a holistic information hub that anchors discussions, initiatives and introduce new services in regards to not only coronavirus but also public health, and life in general. This platform will be dedicated to helping disseminate the most time-appropriate information and relevant services and solutions that the citizens can benefit from.

ICT Tools

Digital transformation is promoted by:

1. Deploying a website that is exclusively dedicated to anchoring emergency service information on COVID19 where the citizens can directly connect with emergency hotlines to access immediate response. This initiative is helping in digital transformation as citizens are able to directly call emergency numbers and receive information.
2. Citizens are able to access credible collated information on parameters such as cases detected, tests conducted, deaths occurred and recovery for general citizens as well as for advocates and journalists to use for various information purposes.
3. A simple mobile-first website with a clean layout that helps the citizens to navigate easily to consume relevant and time-appropriate information on the go conveniently available at their fingertips in the language they understand.
4. Government directives and other educative content are digitally archived for the citizens to consume
5. Emergency service information on the availability of hospitals and hospital beds as well as other ancillary services such as ambulance and oxygen are also listed in this platform so that people can save time in moments of crisis.

Challenges

One of the main challenges of the pandemic is to ensure that basic hygiene practices are exercised by the people in general. In order to generate awareness and reinforce the basic to-dos, the portal ran campaigns called "Mask-up Bangladesh" and have ongoing social media campaigns online to further advocate the necessity of it. The platform also partnered with many credible international and national organizations to support and share knowledge so that further awareness can be ensured.

Another aspect that the platform is currently exploring is to transform it into an inclusive and accessible platform so that people with disabilities can also receive the information.

In addition, the project identifies that the provision of just emergency service information is not enough and a holistic and comprehensive umbrella approach needs to be taken where all relevant actors can come together to share each other's resources to help the citizens to adjust to the new normal lifestyle.

Partnership

Yes, we are looking for partners who specialize in cutting-edge technology, public health, and many other socio-economic issues.

We believe the website is not the only tool to disseminate information and it needs to have a digital ecosystem that can enable people to access information conveniently, particularly in the hard-to-reach people where internet access is limited.

We also believe for people to adjust to the new normal life they need guidance from credible sources to make informed decisions in order to lead a healthy lifestyle. This change needs to happen on a community and social level so that the whole nation can tackle the burden of adverse scenarios caused by the pandemic. For this, we look forward to partnering with expert organizations who are experts in the subject matter that impact the everyday life of

the general population and community and can contribute to the effort of this re-engineering process.

Replicability

This project has the potential to be replicated in countries that do not yet have a dedicated place to address all public health issues including challenges brought in by the COVID19 pandemic under one umbrella platform. The creation of a platform such as this has the potential to become a national asset, especially in developing and underdeveloped countries where they heavily rely on solutions proposed by developed countries which may not always be fitting in their premise.

The idea of an umbrella approach where all relevant parties join forces to share resources and work together on a common goal towards rebuilding a nation after an unprecedented scenario is also a new approach. In contrast to the traditional approach, this model allows countries to utilize nationally available limited resources at optimum level and maximize the benefit which is particularly crucial for countries facing extreme economic challenges due to these unforeseen circumstances.

Sustainability

The platform built through this project will become a national asset that has the potential to benefit the citizens across all socio-economic levels. Therefore, a government would want to sustain this platform not only because of its benefit to citizens but also the expandability through new information and services of the government.

Development partners and donor organizations will find this as value for money funding and investments opportunity. This project is sustainable through collaboration and partnership to provide support in areas where partners possess the most strength and are in a position to contribute towards the development of a nation.

This project and the platform have business viability if a government chooses to do so. Businesses will be interested to offer their products and services that are relevant to this cause and will be profitable to share the margin with the government. In such a case, the government can look into the public-private partnership (PPP) business model.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C9. Media|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 10: Reduce inequality within

and among countries|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case171-NATIONAL WASTE INFORMATION SYSTEM

Title of the project, Contact Organization Name, Stakeholder type, Country

HealthData DirectGovernmentUnited Arab Emirates

Website

https://instagram.com/kelurahankebonkelapa?utm_medium=copy_link

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case172-BARIDINET

Title of the project, Contact Organization Name, Stakeholder type, Country

Manajemen corona virusKelurahan Kebon KelapaGovernmentIndonesia

Beneficiaries

Masyarakat dengan pelayanan

Website

<https://www.dict.gov.ph>

Description

Menggalakan 5M ke masyarakat

ICT Tools
Melalui instagram kelurahan
Challenges
Masih banyak warga tidak percaya dengan
Partnership
Ya, untuk memaksimalkan upaya penanggulangan covid-19
Replicability
Bisa
Sustainability
Mengurangi mobilitas dan disiplin 5M
Action Lines
AL C6. Enabling environment
SDGs
Goal 10: Reduce inequality within and among countries

Case173-Communication via social networks
Title of the project, Contact Organization Name, Stakeholder type, Country
DICT Vaccine Information Management System Department of Information and Communications Technology Government Philippines
Beneficiaries
There are three (3) main beneficiaries. 1. Our Health care workers and data encoders at the Local Government Units (LGUs) as they are the ones recording the jabs. Before we provided the system, they have been complaining of fatigue because after jabbing, they still have to encode the information

recorded in papers. This normally takes them days sometimes weeks especially if thousands are vaccinated per site, per day.

2. Another beneficiary are the decision makers such as the Health Minister, the Health Officials particularly those from the National Vaccine Operations Center who are making the day-to-day decisions in responding to the pandemic. Apart from knowing what groups or areas they need to focus, they also know how many jabs per site per day were done and they are able also to timely replenish the vaccine supply.

3. The Filipino people who are traveling abroad, most of them are overseas workers, ordinary citizens. With the digital Vaccine certificate (VaxcertPH) system, ordinary citizens get the certificate for free and they do not have to physically line up under the heat of the scorching sun to get their internationally-recognized digital vaccination certificates.

Website

<http://land.gov.bd>

Description

We created the DICT Vaccine Administration System (DVAS) to help the Ministry of Health shorten the vaccination time. DVAS is available online and has an offline mobile version for Local Government Units (LGUs) without internet. DVAS is use by more than 800 LGUs all over the Philippines because of ease in data collection. The data collected in DVAS automatically sync to the Vaccine Certificate (VaxcertPH) system, a system we developed for ease of movement.

In partnership with different government agencies, our Office conducted trainings to capacitate stakeholders. We provided computers through our community e-centers, tablets and Free Wifi or using Long Term Evolution (LTEs).

Objectives

1. Shorten the vaccination time.
2. Aid the national government in making critical and timely decisions in response to the health crisis.
3. Provide citizens with a means to freely move around using a World Health Organization-compliant digital certificate.

Results

1. Government was able to vaccinate more than 140 million as of 25 March 2022.
2. Few covid19 cases in the Philippines due to right and timely decisions made by government leaders using the data collected.
3. Citizens are able to move freely and because of this, our economy has improved.

ICT Tools

Data management at the local level was very challenging when vaccination records were recorded in papers and so reporting was so difficult. Sometimes papers are lost along the way. With the use of the systems, our local government units (LGUs) learned to adopt the digital means of collecting data.

On the national level, Decision makers were amazed at how quickly we can do the analysis as data is readily available as compared to using papers.

We used the different online meeting platforms such as Zoom and GoogleMeet in conducting different trainings to system users as face-to-face meeting is limited due to the pandemic. At first people were having difficulty using the platforms, but constant trainings helped.

For our online DICT Vaccine Administration System (DVAS), we used web-based system and for the mobile offline version of DVAS, we used Android-based system.

We used SnowFlakes for our data warehouse, AWS Cloud technology of Amazon to host our DVAS, and Azure cloud technology for our Vaccine Certificate System which uses an open source DIVOC system.

Challenges

Budget. Like other governments, the government of the Philippines have spent huge amount of money for the pandemic response. Most of the budget goes to aids for poor families who lost their livelihoods during the pandemic so budget for digital systems and ICT tools is really very small. We have asked some partners for funding for more tablets and Long Term Evolution (LTE) devices but we did not get it.

Lack of Local Government Units (LGUs) Leaders' appreciation of digital systems. Allotting the right budget for digital systems and ICT tools is most of the time under appreciated by the local and national leadership. This stem from leaders lack of appreciation of information and communication technologies (ICTs).

These challenges can be overcome by infusing more budget for digital systems in the form of aid, grant or loan and by conducting training sessions for the LGU leaders on digital systems and digital transformation. To be able to do this, we need more people who can help conduct the trainings.

Partnership

Yes, we are looking for partners like the people from the academe who can help us provide more trainings for government leaders and staff on information and communication technologies (ICTs) tools and in digital transformation. We also need partners who can support us in the form of funding for the executive trainings on ICT to help the latter better understand the benefits of digital transformation.

Some local government units also lack ICT tools such as computers or tablets and internet connection especially those in the far-flung areas that cannot be reached by our government programs due to lack of funding or lack of infostructure so we also need partners on this area.

Replicability

Yes, the project is replicable. We have implemented the VIMS particularly the DICT Vaccine Administration System to more than 1,200 local government units (LGUs), that is more than 2,000 vaccination centers in the Philippines as of 25 March 2022. These LGUs have been using our online and offline system in collecting vaccination data.

Our Filipino Overseas Workers have also been using our digital vaccination certificate (VaxcertPH) system as proof of their vaccination when traveling abroad. Almost 1.4 million digital vaccination certificates have been generated through the self-service portal as of 25 March 2022.

We have partnered with the United Nations Development Program (UNDP) in the Philippines in the provision of tablets for LGUs needing devices for their data management tasks and the partnership can be replicated in other countries.

Sustainability

Yes, this project is sustainable. From this site <https://www.undp.org/sustainable-development-goals#good-health> on Sustainable Development Goal 3 – Good Health and Well-Being.

Part of the goal target is to Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks.

With Covid-19 virus causing a global pandemic, it is essential to promote the use of vaccines to protect the citizens from the effects of the virus. Vaccination prevents death especially for those having severe cases. Using digital systems and information and communication technologies (ICTs) to record and manage data efficiently and effectively and use data to make the right analysis and timely decisions is crucial in the pandemic response. Using available data, decision makers are able to save lives from Covid-19.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 17: Revitalize the global partnership for sustainable development

Case174-Living with COVID

Title of the project, Contact Organization Name, Stakeholder type, Country
LandU LAO Office, Chukaibari Government Bangladesh
Beneficiaries
General Public
Website
http://www.pallisanchaybank.gov.bd/
Description
Poster, Hand wash Korner
ICT Tools
Computer, Internet
Challenges
নামজারি জমাখারিজের মাধ্যমে সরকারের ভূমি উন্নয়ন কর আদায় করা
Action Lines
AL C1. The role of governments and all stakeholders in the promotion of ICTs for development AL C2. Information and communication infrastructure AL C3. Access to information and knowledge AL C4. Capacity building AL C5. Building confidence and security in use of ICTs AL C6. Enabling environment AL C7. ICT applications: benefits in all aspects of life – E-government AL C7. ICT applications: benefits in all aspects of life – E-business AL C7. ICT applications: benefits in all aspects of life – E-learning AL C7. ICT applications: benefits in all aspects of life – E-health AL C7. ICT applications: benefits in all aspects of life – E-employment AL C7. ICT applications: benefits in all aspects of life – E-environment AL C7. ICT applications: benefits in all aspects of life – E-agriculture AL C7. ICT applications: benefits in all aspects of life – E-science AL C8. Cultural diversity and identity, linguistic diversity and local content AL C9. Media AL C10. Ethical dimensions of the Information Society AL C11. International and regional cooperation
SDGs
Goal 1: End poverty in all its forms everywhere Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture Goal 3: Ensure healthy lives and

promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case175-Health

Title of the project, Contact Organization Name, Stakeholder type, Country

Branch Manager Palli Sanchay Bank Government Bangladesh

Beneficiaries

Our poor people also with beggar.
By hook or cook we need to work for their and also try to come out.
They are huge people who are not involved are awareness

Website

<http://acl.kendua.netrokona.gov.bd>

Description

We need to awareness by using our mobile operator or satellite for poor people who are in rural area. Specially our farmer who purchase their whole life for production.

ICT Tools

Mobile operator or Satellite

Challenges

We need to awareness by using our mobile operator or satellite for poor people who are in rural area. Specially our farmer who purchase their whole life for production.

Partnership
It might be our rural area
Replicability
We need to awareness by using our mobile operator or satellite for poor people who are in rural area. Specially our farmer who purchase their whole life for production.
Sustainability
yes.
Action Lines
AL C1. The role of governments and all stakeholders in the promotion of ICTs for development AL C3. Access to information and knowledge AL C7. ICT applications: benefits in all aspects of life — E-government AL C9. Media AL C11. International and regional cooperation
SDGs
Goal 1: End poverty in all its forms everywhere Goal 11: Make cities inclusive, safe, resilient and sustainable Goal 14: Conserve and sustainably use the oceans, seas and marine resources

Case176-Manajemen corona virus
Title of the project, Contact Organization Name, Stakeholder type, Country
govacland office kenduaGovernmentBangladesh
Website
https://m.facebook.com/bjmpregion4a/posts/earlierbjmp-teresa-district-jail-just-launched-their-new-program-called-balay-si/2741993065889712/8
Action Lines
AL C5. Building confidence and security in use of ICTs
SDGs

Goal 1: End poverty in all its forms everywhere

Case177-DICT Vaccine Information Management System

Title of the project, Contact Organization Name, Stakeholder type, Country

Bayanihan bakunahan Bureau of jail management and penology Government Philippines

Beneficiaries

PDL ,personnel,and the Bureau

Website

<https://www.itu.int>

Description

Strictly no visitors, all jail activities are restricted,using video calls to communicate pdl's relatives and love ones

ICT Tools

Video call,telephone call

Challenges

Lock down inside jail fascility we overcome through communications

Partnership

Medical aspects

Replicability

Yes because it is effective

Sustainability

Yes weve done our best in implementing guidelines in preventing the spread of disease

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 1: End poverty in all its forms everywhere

Case178-Land

Title of the project, Contact Organization Name, Stakeholder type, Country

vill: Modamudun Post. Vagiroth Mashari Dist. RangpurMd. Akramul HaqueGovernmentBangladesh

Beneficiaries

vill: Modamudun Post. Vagiroth Mashari Dist. Rangpur

Description

vill: Modamudun Post. Vagiroth Mashari Dist. Rangpur

ICT Tools

vill: Modamudun Post. Vagiroth Mashari Dist. Rangpur

Challenges

vill: Modamudun Post. Vagiroth Mashari Dist. Rangpur

Partnership

vill: Modamudun Post. Vagiroth Mashari Dist. Rangpur

Replicability

vill: Modamudun Post. Vagiroth Mashari Dist. Rangpur

Sustainability

vill: Modamudun Post. Vagiroth Mashari Dist. Rangpur

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C7. ICT applications: benefits in all aspects of life – E-science|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Part 2: Academia

Case1-Testing the Form

Title of the project, Contact Organization Name, Stakeholder type, Country

Testing the FormTESTAcademiaZimbabwe

Beneficiaries

How are you using ICTs to help your community respond COVID-19, ensuring the impactful use of the WSIS Action Lines in advancing SDGs? What projects and activities has your organization introduced during the Coronavirus disease to continue working efficiently and to create a social impact helping other stakeholders?

As a part of the WSIS Stocktaking ongoing efforts to promote the good use of ICTs in making social impact, and in order to provide useful, replicable and actionable information to all WSIS community and beyond, the platform is now available for collecting projects and activities on how ICTs are assisting stakeholders in their everyday life, work, and combating challenges caused by this extraordinary pandemic.

The aim of this repository is to help you to continue to partner, collaborate and implement in these exceptional circumstances. Once received, the projects will be reviewed and will be featured on the WSIS Stocktaking Platform and promoted through various channels including the WSIS Flash newsletter, WSIS TalkX and social media channels.

Description

How are you using ICTs to help your community respond COVID-19, ensuring the impactful use of the WSIS Action Lines in advancing SDGs? What projects and activities has your organization introduced during the Coronavirus disease to continue working efficiently and to create a social impact helping other stakeholders?

As a part of the WSIS Stocktaking ongoing efforts to promote the good use of ICTs in making social impact, and in order to provide useful, replicable and actionable information to all WSIS community and beyond, the platform is now available for collecting projects and activities on how ICTs are assisting stakeholders in their everyday life, work, and combating challenges caused by this extraordinary pandemic.

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ICT Tools

How are you using ICTs to help your community respond COVID-19, ensuring the impactful use of the WSIS Action Lines in advancing SDGs? What projects and activities has your organization introduced during the Coronavirus disease to continue working efficiently and to create a social impact helping other stakeholders?

As a part of the WSIS Stocktaking ongoing efforts to promote the good use of ICTs in making social impact, and in order to provide useful, replicable and actionable information to all WSIS community and beyond, the platform is now available for collecting projects and activities on how ICTs are assisting stakeholders in their everyday life, work, and combating challenges caused by this extraordinary pandemic.

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Challenges

How are you using ICTs to help your community respond COVID-19, ensuring the impactful use of the WSIS Action Lines in advancing SDGs? What projects and activities has your organization introduced during the Coronavirus disease to continue working efficiently and to create a social impact helping other stakeholders?

As a part of the WSIS Stocktaking ongoing efforts to promote the good use of ICTs in making social impact, and in order to provide useful, replicable and actionable information to all WSIS community and beyond, the platform is now available for collecting projects and activities on how ICTs are assisting stakeholders in their everyday life, work, and combating challenges caused by this extraordinary pandemic.

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Partnership

How are you using ICTs to help your community respond COVID-19, ensuring the impactful use of the WSIS Action Lines in advancing SDGs? What projects and activities has your organization introduced during the Coronavirus disease to continue working efficiently and to create a social impact helping other stakeholders?

As a part of the WSIS Stocktaking ongoing efforts to promote the good use of ICTs in making social impact, and in order to provide useful, replicable and actionable information to all WSIS community and beyond, the platform is now available for collecting projects and activities on how ICTs are assisting stakeholders in their everyday life, work, and combating challenges caused by this extraordinary pandemic.

The aim of this repository is to help you to continue to partner, collaborate and implement in these exceptional circumstances. Once received, the projects will be reviewed and will be featured on the WSIS Stocktaking Platform and promoted through various channels including the WSIS Flash newsletter, WSIS TalkX and social media channels.

Replicability

How are you using ICTs to help your community respond COVID-19, ensuring the impactful use of the WSIS Action Lines in advancing SDGs? What projects and activities has your organization introduced during the Coronavirus disease to continue working efficiently and to create a social impact helping other stakeholders?

As a part of the WSIS Stocktaking ongoing efforts to promote the good use of ICTs in making social impact, and in order to provide useful, replicable and actionable information to all WSIS community and beyond, the platform is now available for collecting projects and activities on how ICTs are assisting stakeholders in their everyday life, work, and combating challenges caused by this extraordinary pandemic.

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Sustainability

How are you using ICTs to help your community respond COVID-19, ensuring the impactful use of the WSIS Action Lines in advancing SDGs? What projects and activities has your organization introduced during the Coronavirus disease to continue working efficiently and to create a social impact helping other stakeholders?

As a part of the WSIS Stocktaking ongoing efforts to promote the good use of ICTs in making social impact, and in order to provide useful, replicable and actionable information to all WSIS community and beyond, the platform is now available for collecting projects and activities on how ICTs are assisting stakeholders in their everyday life, work, and combating challenges caused by this extraordinary pandemic.

The aim of this repository is to help you to continue to partner, collaborate and implement in these exceptional circumstances. Once received, the projects will be reviewed and will be featured on the WSIS Stocktaking Platform and promoted through various channels including the WSIS Flash newsletter, WSIS TalkX and social media channels.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 1: End poverty in all its forms everywhere

Case2-Scratch4All Contest

Title of the project, Contact Organization Name, Stakeholder type, Country

Scratch4All Contest Universidad de las Ciencias Informáticas (UCI) Academia Cuba

Beneficiaries

We invite all children and adolescents. We invite you to think, create, contribute, innovate, undertake, your project will be a contribution to your school, to your community.

Website

<https://www.uci.cu/>

Description

We invite all children and adolescents to participate in the First Edition of the Science and Technology Projects Contest Scratch4All. We invite you to think, create, contribute, innovate, undertake, your project will be a contribution to your school, to your community. We promote reflection on the usefulness of programs to represent ideas and solve problems. Stimulate trust through the use and execution of programs designed by the participants, with the promotion of a responsible use of technologies and collaborative work.

<https://www.facebook.com/groups/341913109788156>

ICT Tools

With Scratch you can program your own interactive stories, games and animations; and share your creations with others in the online community.

<https://scratch.mit.edu/classes/269291/register/698eb82ae77b45728e8de15c9ab8c25e>

Challenges

The main challenge has been access to the Internet.

Partnership

We are interested in collaboration with other projects in the area of educational technologies, computational thinking and creative learning.

Replicability

The project is replicable, and has been extended to all primary and secondary schools in the country.

Sustainability

The winning works will be promoted in celebration of World Scratch Day during the May activities, in order to make the project presented and its authors and institution more widely known.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C7. ICT applications: benefits in all aspects of life — E-science|AL C9. Media|AL C11. International and regional cooperation

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case3-Volunteered Geographic Information Generates New Spatial Understandings of COVID-19 in Fortaleza, Brazil

Title of the project, Contact Organization Name, Stakeholder type, Country

Volunteered Geographic Information Generates New Spatial Understandings of COVID-19 in Fortaleza, Brazil|Federal University of Ceará - UFC|Academia|Brazil

Beneficiaries

This type of data collection may increase the quantity of data available on the pandemic and offer critical spatial information for decision making among public health authorities.

Website

http://www.labocart.ufc.br/?page_id=798

Volunteered Geographic Information (VGI) on the Covid-19 outbreak in Fortaleza, Brazil, was obtained through an internet-based survey with non-probabilistic snowball procedures from 12,000 respondents during 8-10 April 2020. Analysis of the VGI identified 181 confirmed Covid-19 cases in the city distributed among more than half the neighborhoods, mainly in those with high socio-economic status. VGI also indicated 795 suspected Covid-19 cases distributed in nearly all neighborhoods. 97.5% of research participants considered that social isolation important to combating the spread of Covid-19. 68% of respondents indicated that everyone in the residence was in full compliance with social distancing. The

main reasons for less than full compliance were paid work, purchasing food and medicine, paying bills, and disbelief that social isolation is important to contain Covid-19. The results aim to contribute to geospatial understandings of Brazil's Covid-19, which began 26 February 2020 in São Paulo and had 25,684 confirmed cases and 1,552 deaths by 14 April.

ICT Tools

Our research protocols focused on obtaining VGI directly from residents through a 12-question survey that allowed for one free response regarding the reasons for non- or partial compliance with social distancing recommendations made by Brazil's Ministry of Health on 12 March 2020.

We deployed the survey between 8 and 10 April 2020, obtaining 12,000 responses through an internet platform on the Labocart/Geografia site of the Universidade Federal do Ceará (UFC). On 8 April 2020 we published the survey the Labocart website, which was shared through contact lists through WhatsApp. Within eight hours we were contacted by UFC's upper administration and state authorities who were directly involved in controlling COVID-19. These officials asked us to include the entire Fortaleza metropolitan region and to publish our preliminary findings and maps so that authorities could compare the VGI we collected to their official data. In the next days, we received support from UFC's upper administration to disseminate the survey through WhatsApp. We were invited to participate in TV programs and offer press release of preliminary findings among our collaborators. Each variable at the neighborhood level was transformed into a separate spreadsheet and spatialized in QGIS (La Coruña v. 3.10.4) on a cartographic base of Fortaleza neighborhoods. We then developed categories for each variable and conducted spatial analysis. This resulted in the production of five thematic maps of COVID-19 in Fortaleza.

Challenges

We plan additional work to disseminate the survey and produce maps that show the spatial dynamics of COVID-19, not only in the Fortaleza urban area but also in rural and coastal areas where traditional communities may have less access to health care. We also aim to use data from health agencies, aiming to ascertain relationships with social vulnerability, per capita income, housing types, educational attainment, health infrastructure, among other variables.

Replicability

Yes, to date, five other universities have joined the survey:

UFRN <https://forms.gle/1Ku6YBa1g2L4ZPzS9>

UFMA/ IFMA/ UEMA

<https://docs.google.com/forms/d/e/1FAIpQLSd141Wu8SAh67M7OZs29DBO->

[PG5tRxO8pflL5bTwZbYcO75MQ/viewform](https://docs.google.com/forms/d/e/1FAIpQLScumRgSfQHiNoFKax8eTDCYioHsPB6wYe_xY2XfszPIWB8TEg/viewform)

URCA

https://docs.google.com/forms/d/e/1FAIpQLScumRgSfQHiNoFKax8eTDCYioHsPB6wYe_xY2XfszPIWB8TEg/viewfor

Sustainability

Yes, it is. Because, there is no extra cost involved and we work with infrastructure and the people we already have.

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case4-Wikis, Education & Research

Title of the project, Contact Organization Name, Stakeholder type, Country

Wikis, Education & ResearchInternational Academic Network WEIWER® - Wikis, Education & ResearchAcademiaPortugal

Beneficiaries

Our project is mainly addressed to pupils, students, teachers, and school librarian teachers. The key benefits are the following: developing/improving ICT literacies and social skills through the use of digital tools (due to the global pandemic situation such use has been additionally intensified); strengthening communication and other soft skills by participating in a learning/teaching/training community, in which typically our primary beneficiaries are not usually involved in. Besides those skills and competences, the participants have been having the chance to follow an innovative and unique training, at least in the Portuguese context, and in some cases are also benefiting from the use of certain technological services that are not generally provided by their educational organizations.

Website

<http://www.weiwer.net/>

Description

Due to the global pandemic situation, caused by the SARS-CoV-2, the training sessions that were initially scheduled to take place in a face-to-face scenario had to shift to a b-learning modality. This implied the use of video-conference tools (namely Zoom Colibri), which was not planned in the beginning. There has also been an increase in the use of other technologies/ICT tools (email, Moodle, Word, PowerPoint, Genial.ly, videos, podcasts, WhatsApp), not only to fulfill the training tasks and assignments, but also for communication, mentoring, supervision and support (in some cases additional and extra to what was predicted and planned ahead, due to ongoing changes on the project timeline deemed necessary).

The fact that alternative solutions were proposed, discussed and negotiated with the people involved in the project has helped to overcome any fear of eventually not accomplishing the work. It has also proved to be a way of keeping the group connected and committed in both individual and collaborative work being developed within the project. In addition, the preliminary diagnosis of the ICT skills was updated, so as to make everyone at ease with the following stages of the project.

ICT Tools

We were already using the tools mentioned before (cf. 12), for communication and work (learning, teaching and training tasks). So, the fact that the whole team was already using them, still experiencing differences in confidence, however pretty confident enough, and on a regular basis, can help explain the success in implementing the different scenarios that we were forced to rapidly design and put into practice. Nevertheless, for some people this has yet been a major shift and challenge because most of the communication and working scenarios had to shift from face-to-face to online environments, which is not their normal, nor unique setting with regard to learning, teaching or training activities. These changes and adaptations have fostered a digital transformation, at a very fast pace, in most cases compulsory, which has only been proved possible due to the use of the above mentioned technologies/ICT tools and the extreme resilience and motivation of the people involved. Once again, the sole use of digital tools is not enough to guaranty that its effective use and purposes are achieved. In other words, the participation in a learning/teaching/training community caters for the social (soft) skills needed e.g. in long-life learning, or other daily (personal/school/academic/professional) situations.

Challenges

The main challenges are related to (self) organization, in time and effort, caused by the unexpected current pandemic situation that has forced us to be working/studying at/from home 24/7. It is a fact that being a full-time citizen, parent and worker (learner/teacher), is already challenging in a prior well-known scenario, let alone in a totally unforeseen one (impacting for instance in public confinement, thus, intensifying, in a single place-location, our households, each of our different roles; arising several vulnerabilities and increasing different risks, namely in health). The literature tells us (and also our own experience in distance learning and teaching of more than a decade) that it is more demanding to follow (and succeed in) an online course/training (whether b-learning or e-learning), compared to

face-to-face course/training. And the risk of drop-out is much bigger too than in face-to-face courses/training. These challenges can and have been overcome with continuous assistance and mentoring. Moreover, the fact that the whole planning and previous stages of our project were thoroughly executed and completed, taking into account former assessment, reflections and research studies, most probably adds to the team being successful, including in keeping the will to persist (resist) in attaining the goals set.

Partnership

Funding would be most welcome for instance to further explore one aspect of the project in which an IT specialist is needed, i.e. data science, artificial intelligence, and semantic scholarship. Funding would also allow us to improve our communication strategy, aiming at a continuous dissemination of the results of the project (for instance in social media or in publications by reputed editors/publishers); this could be inspiring for others to join us/our network, become part of the team, hence enhancing the reach of the project. Funding could also be most useful to allow to hire specific services (e.g. administrative support), and/or to provide for scholarships (e.g. research scholarship). Other than these Maecenas partnerships, which are important too from technical and technological providers (hardware and software), other types of partnerships are envisioned, at a higher level, for instance with political/official stakeholders in education. These would prove essential if we were to provide the training and innovating educational change at a national scale (so far, we've been acting locally, i.e. for example, at a school level). All such partners might guarantee the scaling up of the project, meaning widening its scope and providing it to a bigger (global) audience.

Replicability

The project has started in one school, and has been steadily growing. In this school year of 2019-2020 we have been working with 6 schools, and not only with one class (teacher and pupils) per school (as in the beginning), but also involving the school's principle and the school librarian teacher. At start we were reaching only the district of Lisboa, and now we are also reaching the district of Santarém (both in Portugal, but with demographic differences, among others).

Other than these mid-long term training initiatives, short term training activities have been facilitated, in different educational and training organizations, including universities in Portugal and abroad (Brazil and Spain). We expect to keep these national, European and international actions. In the near future, we expect to further replicate the project (e.g. in the United Republic of Tanzania), aiming at continuing to foster the development of digital skills and competences, including ICT and informational, on an individual or global-society scale, ultimately where most needed in close alignment with the United Nations' Sustainable Development Goals.

Sustainability

A strong innovating social entrepreneurship spirit has kept the project self-sustained. Besides, due to the institutional frameworks and partnerships established so far, some

resources (like classrooms, now including online virtual classrooms, due to the COVID-19 confinement) have also been catered for. The principles of open access and open science we have been following are aligned with the Portuguese national strategy for digital skills (Portugal INCoDe.2030) and, at an international level, particularly with the SDG 4. So, we have been targeting at e.g. creative commons licenses and open software, using free and license-free digital repositories and web technologies.

The project has also been sustainable because it has resulted from the voluntary work of a small but very close and committed team, who has been advocating for and implementing open educational resources and open educational practices, inspired by solidarity and pedagogical values. Those features have somehow prevented us from exponentially escalating the project, and eventually risking at losing its humanitarian mission. So, we believe that, in turn, it has shed more light on (one of, if not) the key strengths of our project: the fact that we aim at impacting on people's lives, meaning that its core affordance is the human asset.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-science|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 10: Reduce inequality within and among countries|Goal 17: Revitalize the global partnership for sustainable development

Case5-Wikis, Education & Research

Title of the project, Contact Organization Name, Stakeholder type, Country

Wikis, Education & ResearchInternational Academic Network WEIWER® - Wikis, Education & ResearchAcademiaPortugal

Beneficiaries

Our project is mainly addressed to pupils, students, teachers, and school librarian teachers. The key benefits are the following: developing/improving ICT literacies and social skills through the use of digital tools (due to the global pandemic situation such use has been additionally intensified); strengthening communication and other soft skills by participating in a learning/teaching/training community, in which typically our primary beneficiaries are not usually involved in. Besides those skills and competences, the participants have been having the chance to follow an innovative and unique training, at least in the Portuguese context, and in some cases are also benefiting from the use of certain technological services that are not generally provided by their educational organizations.

Website

<http://www.weiwer.net>

Description

Due to the global pandemic situation, caused by the SARS-CoV-2, the training sessions that were initially scheduled to take place in a face-to-face scenario had to shift to a b-learning modality. This implied the use of video-conference tools (namely Zoom Colibri), which was not planned in the beginning. There has also been an increase in the use of other technologies/ICT tools (email, Moodle, Word, PowerPoint, Genial.ly, videos, podcasts, WhatsApp), not only to fulfill the training tasks and assignments, but also for communication, mentoring, supervision and support (in some cases additional and extra to what was predicted and planned ahead, due to ongoing changes on the project timeline deemed necessary).

The fact that alternative solutions were proposed, discussed and negotiated with the people involved in the project has helped to overcome any fear of eventually not accomplishing the work. It has also proved to be a way of keeping the group connected and committed in both individual and collaborative work being developed within the project. In addition, the preliminary diagnosis of the ICT skills was updated, so as to make everyone at ease with the following stages of the project.

ICT Tools

We were already using the tools mentioned before (cf. 12), for communication and work (learning, teaching and training tasks) – Zoom Colibri, email, Moodle, Word, PowerPoint, Genial.ly, videos, podcasts, WhatsApp. So, the fact that the whole team was already using them, still experiencing differences in confidence, however pretty confident enough, and on a regular basis, can help explain the success in implementing the different scenarios that we were forced to rapidly design and put into practice. Nevertheless, for some people this has yet been a major shift and challenge because most of the communication and working scenarios had to shift from face-to-face to online environments, which is not their normal, nor unique setting with regard to learning, teaching or training activities. These changes and adaptations have fostered a digital transformation, at a very fast pace, in most cases compulsory, which has only been proved possible due to the use of the above mentioned

technologies/ICT tools and the extreme resilience and motivation of the people involved. Once again, the sole use of digital tools is not enough to guaranty that its effective use and purposes are achieved. In other words, the participation in a learning/teaching/training community caters for the social (soft) skills needed e.g. in long-life learning, or other daily (personal/school/academic/professional) situations.

Challenges

The main challenges are related to (self) organization, in time and effort, caused by the unexpected current pandemic situation that has forced us to be working/studying at/from home 24/7. It is a fact that being a full-time citizen, parent and worker (learner/teacher), is already challenging in a prior well-known scenario, let alone in a totally unforeseen one (impacting for instance in public confinement, thus, intensifying, in a single place-location, our households, each of our different roles; arising several vulnerabilities and increasing different risks, namely in health). The literature tells us (and also our own experience in distance learning and teaching of more than a decade) that it is more demanding to follow (and succeed in) an online course/training (whether b-learning or e-learning), compared to face-to-face course/training. And the risk of drop-out is much bigger too than in face-to-face courses/training. These challenges can and have been overcome with continuous assistance and mentoring. Moreover, the fact that the whole planning and previous stages of our project were thoroughly executed and completed, taking into account former assessment, reflections and research studies, most probably adds to the team being successful, including in keeping the will to persist (resist) in attaining the goals set.

Partnership

Partners and funding would be most welcome for instance to further explore one aspect of the project in which an IT specialist is needed, i.e. data science, artificial intelligence, and semantic scholarship. Partners and funding would also allow us to improve our communication strategy, aiming at a continuous dissemination of the results of the project (for instance in social media or in publications by reputed editors/publishers); this could be inspiring for others to join us/our network, become part of the team, hence enhancing the reach of the project. Partners and funding could also be most useful to allow to hire specific services (e.g. administrative support), and/or to provide for scholarships (e.g. research scholarship). Other than these Maecenas partnerships, which are important too from technical and technological providers (hardware and software), other types of partnerships are envisioned, at a higher level, for instance with political/official stakeholders in education. These would prove essential if we were to provide the training and innovating educational change at a national scale (so far, we've been acting locally, i.e. for example, at a school level). All such partners might guarantee the scaling up of the project, meaning widening its scope and providing it to a bigger (global) audience.

Replicability

The project has started in one school, and has been steadily growing. In this school year of 2019-2020 we have been working with 6 schools, and not only with one class (teacher and pupils) per school (as in the beginning), but also involving the school's principle and the school librarian teacher. At start we were reaching only the district of Lisboa, and now we are also reaching the district of Santarém (both in Portugal, but with demographic differences, among others).

Other than these mid-long term training initiatives, short term training activities have been facilitated, in different educational and training organizations, including universities in Portugal and abroad (Brazil and Spain). We expect to keep these national, European and international actions. In the near future, we expect to further replicate the project (e.g. in the United Republic of Tanzania), aiming at continuing to foster the development of digital skills and competences, including ICT and informational, on an individual or global-society scale, ultimately where most needed in close alignment with the United Nations' Sustainable Development Goals.

Sustainability

A strong innovating social entrepreneurship spirit has kept the project self-sustained. Besides, due to the institutional frameworks and partnerships established so far, some resources (like classrooms, now including online virtual classrooms, due to the COVID-19 confinement) have also been catered for. The principles of open access and open science we have been following are aligned with the Portuguese national strategy for digital skills (Portugal INCoDe.2030) and, at an international level, particularly with the SDG 4. So, we have been targeting at e.g. creative commons licenses and open software, using free and license-free digital repositories and web technologies.

The project has also been sustainable because it has resulted from the voluntary work of a small but very close and committed team, who has been advocating for and implementing open educational resources and open educational practices, inspired by solidarity and pedagogical values. Those features have somehow prevented us from exponentially escalating the project, and eventually risking at losing its humanitarian mission. So, we believe that, in turn, it has shed more light on (one of, if not) the key strengths of our project: the fact that we aim at impacting on people's lives, meaning that its core affordance is the human asset.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-science|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 10: Reduce inequality within and among countries|Goal 17: Revitalize the global partnership for sustainable development

Case6-CoronaSurveys Project

Title of the project, Contact Organization Name, Stakeholder type, Country

CoronaSurveys Project|IMDEA Networks Institute|Academia|Spain

Beneficiaries

The decision makers can use our results and estimates to make more informed decisions.

Website

<https://www.networks.imdea.org/>

Description

In the CoronaSurveys project we combine crowdsourcing, the wisdom of the crowds, and the multiplicative effect of indirect reporting to estimate this number and its evolution over time.

ICT Tools

Online surveys to collect data, data repositories (GitHub) to make the data available publicly, data processing tools to estimate pandemic parameters, web technology to show the results.

Challenges

The challenges are many:

- Deploying a system for multiple countries
- Attract participation
- Clean the data from bogus responses
- Generate estimates of number of cases, number of new cases, infection rates, etc from the data
- Present the estimates in a useful form
- Reach decision makers so they use our results

Partnership

From the above challenges the hardest is to deploy the surveys in many geographical areas. Partners that are interested in doing so in their country or region, or are willing to fund promotion campaigns are welcome.

Replicability

It can not be replicated because the data that is not collected at a given point in time is lost.

Sustainability

Yes. We use very limited resources.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C7. ICT applications: benefits in all aspects of life — E-science|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case7-COVID-19 Humanitarian platform

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Humanitarian platform Geneva Centre for Education and Research in Humanitarian Action Academia Switzerland

Beneficiaries

This website is with a cross-disciplinary nature. It hosts both technical guidelines as well as operational field experiences. The information is not only useful for humanitarian actors, but also helpful to health professionals to understand ways the humanitarian sector respond to the COVID-19.

Website

<https://www.cerahgeneve.ch>

Description

The COVID-19 Humanitarian platform is a joint project of:

- Johns Hopkins Center for Humanitarian Health,
- Health in Humanitarian Crises Centre (of the London School of Hygiene and Tropical Medicine), and
- Geneva Centre of Education and Research in Humanitarian Action (of the Graduate Institute of International and Development Studies and the University of Geneva).

The three Centres created the COVID-19 Humanitarian platform to gather, curate, analyze, interpret and disseminate COVID-19-specific and -sensitive interventions that are being implemented in a variety of humanitarian settings. The goal is to facilitate the sharing of context-specific field experiences about how humanitarian actors, with their programs, are responding to and being adapted to the COVID-19 pandemic.

ICT Tools

We use an online platform to invite sharing of experience and co-create knowledge. Our objective is to capture examples of how humanitarian organisations are responding to and adapting their existing programs or innovating new programs to address COVID-19 in their unique environments.

Challenges

Diversity matters: Many of the approaches used to prevent and respond to COVID-19 in the most affected areas thus far (e.g., China, Europe and the United States of America) will not be feasible in most humanitarian settings. Numerous humanitarian organizations are creating guidance and tools for the field, but there is a need for more evidence describing how such programs are being adapted according to varying contexts and socio-cultural settings. These adaptations and innovations need to be shared widely so others can learn from them and adopt or modify them according to their specific setting.

Time constraint: On the platform, users can click on 'Share field experience' to provide inputs. However, knowing that humanitarian actors are busy in responding to COVID-19 and many will not have the time to respond, we have undertaken interviews with colleagues in the field, and then uploading the content to the website using the standardized forms.

Partnership

The three centres and their belonging universities are partners of the COVID-19 Humanitarian platform project. These provide sufficient research and administrative capacity. However, the nature of the project is to engage local partners to share their experience. In addition, partners with ideas on how to improve the flow of information from the field to the platform are of interest.

Replicability

As the project is with a global coverage, replication should avoid duplication and rather consider pooling efforts.

Field experiences are collected and summarized in a standardized form to be ensure consistency when data is collected across many contexts.

Sustainability

The project is designed in a way to facilitate self-reporting, so organisations can continue to share their experiences and learning.

The knowledge captured will be useful for professionals from the humanitarian sectors and health sectors as COVID-19 evolves and in future epidemics and crisis situations. It is also

used for learning in the future in both sectors, as field based experiences can be synthesized and analysed to identify transferable lessons.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case8-The U Project

Title of the project, Contact Organization Name, Stakeholder type, Country

The U Project Sultan Qaboos University Academia Oman

Website

<https://www.theuproject.org>

Description

The Sultan Qaboos University (SQU) launched recently an online tutoring platform for medicine college students called the U Project. The platform provide sessions planned to prep the students through discussion and smart tricks to help them recognize fundamental facts and making every learning experience memorable and easy to recall.

The project founded and created by graduated doctors from college of medicine. The aim is to establish a platform that provide high quality yet simple, interactive teaching online sessions that are precise, high yield, and exhilarating.

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case9-The reBIRTH on the internet (REviver na Rede)

Title of the project, Contact Organization Name, Stakeholder type, Country

The reBIRTH on the internet (REviver na Rede)REviver na RedeAcademiaPortugal

Beneficiaries

The reBIRTH on the internet project (REviver na Rede) is intended to residents in the Madeira Region, Portugal, namely unemployed people. The initiatives we have developed in the context of the coronavirus pandemic (COVID-19) are also intended to all those who were employed, but due to the measures taken by the government to control the pandemic, were forced to suspend their labor activities and were isolated at home in confinement.

In the online spaces of the project learning content about the use of social networks and the incentive to use social networks as a tool for active job search are available, as well as support to doubts and also opportunities to communicate with people in the same situation in a safe way.

The economic crisis is one of the great consequences of this pandemic crisis, and unemployment is a reality felt by the target public of our project. Thus, an important benefit of the project is the sharing of job offers and providing assistance in the application's processes. On the other hand, we support entrepreneurs in designing and sharing job advertisements, in a contribution to bring supply closer to job search in the context of the region.

Website

<http://revivernarede.blogspot.pt>

Description

The reBIRTH on the internet project (REviver na Rede) is an initiative to support online social networks to strengthen new forms of active job search and promote employability, social integration, socialization, and social and digital inclusion in the Madeira Region, Portugal. The aim is to help unemployed adults to take advantage of social networks (e.g. Facebook) to improve their employability. These global social instruments can respond to these needs and contribute to the development of local communities. Currently, the various online spaces involve more than 50,000 people, in a region with less than 255,000 inhabitants. In view of the various implications of the coronavirus pandemic (COVID-19), from the social level of individuals to their professional and economic situation, the project has mobilized a number of initiatives to help the relief of social isolation, improve the good use of social networks, strengthen media literacy and digital skills, and promote job search through social networks.

These initiatives have a strong pedagogical, social and solidarity basis, relying on voluntary work, in a spirit of social entrepreneurship.

ICT Tools

In a context of globalization, both technological and the pandemic, the project applies to a local reality the potential of global online social networks as valid tools that can contribute to solve the problems felt by a specific community.

Although our project privileges Facebook as a practical field of work, including for applied research studies, when we started to address the negative effects caused by the coronavirus pandemic (COVID-19) we decided to expand the presence to other social networks, such as LinkedIn, Twitter and Instagram.

We also had a concern to build new content to share on social networks, advising the good use of these resources, and messages appealing to the adoption of safe behaviors. In fact, the transition from physical lifestyles to the virtual environment may cause a social isolation that can be mitigated using social networks, but it also exposes individuals to various dangers. Therefore, the messages aimed to strengthen media literacy in order to help the interpretation of the media content viewed.

Finally, related to the moderation of spaces in social networks, we tried to build a safe and accessible virtual environment, providing the creation of links of self-help and peer-support between the participants.

Challenges

The project has remained sustainable thanks to a strong spirit of social entrepreneurship combined with volunteering, a dynamism that has become a challenge to manage, but has so far ensured the survival of the project. On the other hand, the use of free tools, services and software, as well as the use of open educational resources, contributed to reduce costs.

Thus, the project has maintained its financial sustainability in its application to the community in which it intends to intervene. However, with the crisis caused by the coronavirus (COVID-19), particularly at the economic and social level, the project needs to invest in its structure, either in technical or human resources, to meet the large increased

requests.

Another challenge is the expansion of the project to other communities, both national and international. After its application in the Region of Madeira - Portugal, we began to have requests for replication to other realities, and it is necessary to develop technical procedures to match the expectations of future partners.

Partnership

Several partnerships with local entities that support unemployed people have already been developed. These entities have been involved with the project, namely in the Facebook page and group, disseminating its objectives and contents. The human resources recruitment companies operating in the region have also associated themselves to our project.

These partnerships, institutional and entrepreneurial, were fundamental to the achievement of our objectives, because they allowed to reach our target public (unemployed people) more easily and with an increased credibility.

As already mentioned, the strategy of replication also implies the existence of partnerships (individual or institutional), especially with institutions of reference in the communities where it is intended to intervene.

Replicability

After the project was applied in the Region of Madeira, it was clear that it could be applied to other (inter)national realities.

In the replication of our model, the Website is able to function as an integrating platform for general content, complemented by the Facebook page to promote them. As for the Facebook Group it can be a tool to promote interaction with the target audience, adding other specific content to the previous content, already made available. This implies the existence of partnerships (individual or institutional), responsible for the maintenance of the group and its moderation, i.e. the replication of the project must be carried out in partnership with other institutions of social solidarity or with an interest in employability, in the communities in which they wish to apply it. These will be responsible for the promotion of the group on Facebook, according to pre-established rules. Hence, our project can be replicated to other (inter)national realities, enhancing the power of ICT as a promoter of global and community development at a local scale.

Sustainability

This is a social and solidarity project, which provides for a voluntary work of the community in a social entrepreneurship basis. We have developed it with free and license-free web technologies, allowing to reduce financial costs and overcoming technical constraints.

The feasibility strategy envisaged collaboration with key partners, such as recruitment companies and large employers through the provision of project funding, sponsorships and donations.

We also developed a support service for the release of recruitment ads, with its dissemination and management in social networks, especially on Facebook, including the

control of the comments made in shares. It is an innovative service, different from other initiatives. The positive reaction to the service has enabled to recognize its achievement and has been contributing to the sustainability of the project.

So far, we have managed to obtain the necessary means to guarantee its sustainability and to reach the main goals we are aiming at, i.e. strengthen new forms of active job search and promote employability, social integration, socialization, and social and digital inclusion, in alignment with the Portuguese national strategy for digital skills, Portugal INCoDe.2030, and the United Nations' 2030 Agenda for Sustainable Development, namely through SDG 4, 5, 8, 10 and 17.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-employment

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case10-Enabling IT literacy and health information dissemination in Covid times

Title of the project, Contact Organization Name, Stakeholder type, Country

Enabling IT literacy and health information dissemination in Covid times Spoken Tutorials, Indian Institute of Technology Bombay, Mumbai, India AcademiaIndia

Beneficiaries

The main objective of this project is to promote IT literacy for education and improve the employment potential of learners in India, using FOSS (free and open source software). ICT is an important area that provides jobs to a large number of our students. Software creation, electronic design automation (IC design), numerical computing, and modelling and simulation are some of the ICT areas. We aim to pass on the knowledge of technology and free and open source software (FOSS) through the website to the millions in our country, who lack opportunities and/or access to learn any software.

Website

<https://spoken-tutorial.org/>

Description

The COVID pandemic has hit us hard impacting all domains of our life. This crisis has ushered in a new era of virtual systems. In this direction, the Spoken Tutorial project at the Indian Institute of Technology Bombay, Mumbai, India is working in the domain of IT literacy and health. The project creates audio-video tutorials in local Indian languages which can be viewed on desktop/laptop and smartphones. The tutorials are self-learning tutorials, uses very little bandwidth for access and can be downloaded in a zip format to be viewed for future and offline learning. The tutorials are on average 10 minutes long and uses screencast technology. Tutorials are created for both IT training using Free Libre and Open Source Software and health awareness during COVID. During these COVID times, these tutorials bridge the prevalent gap of lack of information, lack of proper guidance for skill development and IT literacy, lack of infrastructure facilities available, and difficulty in understanding English. The project has also launched a toll-free helpline number where expert guidance is provided for queries pertaining to premature babies, under-nourished infants, child nutrition, breastfeeding and mother's nutrition.

ICT Tools

The tutorials use screencast technology and is made for self learning. Our self-paced, multi-lingual courses ensure that anybody with a computer and a desire for learning, can learn from any place, at any time and in a language of their choice. All the content published on this website are shared under the CC BY SA license.

Challenges

The project aims to bridge the current digital gap which is often due to i) lack of information, ii) lack of proper guidance, iii) lack of infrastructure facilities available, and iv) difficulty in understanding English. It also addresses the unavailability of good internet access, expensive commercial software packages, and the inability to pay for accessing learning content.

Partnership

Yes, we are looking for partners who can take the tutorials to different countries and cater to the needs of IT literacy and health training. Government agencies, private agencies, individuals and organisations working in this domain can also partner with us.

Replicability

Yes, this project is replicable in any country of the world. We already have the audio-video tutorials. These tutorials are ready of adoption by translating them into the local language of the country. The tutorials are made in such a way that the graphics remain the same and only the audio can be translated. The project has signed a MoU with Afghanistan where these tutorials will be used for IT literacy after translating them.

Sustainability

Using Spoken Tutorials, we have trained 5 million students during past six years. Since August 2018, we went for paid model for online tests and certificates. More than 1,000 colleges have participated in it, simultaneously with the completion rate going up three fold. During the COVID-19 lock down, page views of our portal have gone up dramatically, with about 250,000 page views a day currently. Naturally, our Alexa rank is improving: from about 225,000 three months ago to about 80,000 now, dropping by about 4,000 every day (<https://www.alexa.com/siteinfo/spoken-tutorial.org>). Our India rank is 4,000, dropping by about 400 every day. Coincidentally, our Spoken Tutorial courses also got included in the SWAYAM portal about a month ago, with an AICTE tag.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls

Case11-Taleemkw: Kuwait Portal to Distance Learning

Title of the project, Contact Organization Name, Stakeholder type, Country

Taleemkw: Kuwait Portal to Distance LearningKuwait UniversityAcademiaKuwait

Beneficiaries

The scope of this work is to enable continuation of learning and education of public throughout the COVID-19 crisis by supporting a national forum for online education learning management system (LMS) and all the supporting hardware and technical support relating to LMS operation.

The LMS should support the K-12 pupils that is 683359 total (public and private schools) students according to UNISCO statistics[1].

And according to the Ministry of Education website[2], Kuwait has 1489 schools with 85949 teachers and 16090 classrooms, as well as Colleges and Universities that do not have the infrastructure to support distance learning.

Website

<http://www.ku.edu.kw>

Description

The scope of this work is to enable continuation of learning and education of public throughout the COVID-19 crisis by supporting a national forum for online education learning management system (LMS) and all the supporting hardware and technical support relating to LMS operation.

The LMS should support the K-12 pupils that is 683359 total (public and private schools) students

Kuwait has 1489 schools with 85949 teachers and 16090 classrooms in government schools.

The Ministry of Education stopped public schools and University till beginning of Aug. 2020 to be resumed. Some private schools do not have the needed infrastructure to resume school using distance learning, this portal will service any school need to implement the Emergency Remote Teaching (ERT) using our infrastructure free of charge, this project will also provide the needed help by providing tutorials and guides to teachers never used online learning to help them better produce their materials and post it on the learning management system (LMS).

Month of June will start registration of schools and institutions, July will educate the teachers on how to use the LMS, and starting date will be on Aug as assigned by the Ministry of Education.

ICT Tools

The learning management system is based on a widely used LMS called Moodle, We have customized our copy (Taleemkw LMS) and localized it with some added tools such as:

- a. Communication: chat, forums natively and Streaming Media through plug-ins
- b. Interactive Videos: Quiz questions support adaptivity.
- c. Dialog Cards.
- d. Documentation Tool: goal driven activities.
- e. Find the hotspot on images.
- f. Agamotto image blender: Present a sequence of images that people are supposed to look

at one after the other, e.g. photos of an item that changes over time,

g. Dictation (for English classes): You can add audio samples containing a sentence for dictation and enter the correct transcription. Your students can listen to the samples and enter what they have heard in to a text field. Their answers will be evaluated automatically.

h. Branching scenario: Branching Scenario allow authors to present the learners with a variety of rich interactive content and choices. The choices the learners make will determine the next content they see. May be used to create dilemmas, serious games, and self-paced learning.

i. Virtual Tour 360: 360 (equirectangular) and normal images may be enriched with interactivities like explanations, videos, sounds, and interactive questions.

Challenges

The large number of users (around half million) require highest level of bare-metal servers. Each server will be dedicated to a district that can hold up to 80000 concurrent users with a total capacity of 480000 concurrent users synchronous distance learning. To support this number of users we will scale up servers to the following specification per district :
4x E5-4620v3, 40 cores/80 threads - 2.60GHz, 1536GB (1.5TB) Registered ECC DDR4, 40TB SSD HD: 20x 2TB SSD (at RAID10 fast and resilient the available hard disk space: 20TB) , 3Gbps uplink

The project is currently running on one server that can support one district, servers with the above specifications are expensive to rent, and external funding or grants will solve this problem.

Partnership

Yes, Funding possible scale-up of servers in case more demand on the number of request once the Ministry of education allow start of class using distance learning.

Also we have initial agreement with Microsoft to support our users to use the introductory package of Microsoft 365 that comes with MS Teams, this will be very helpful to support the online broadcasting of lectures.

Replicability

This project can be replicated to all countries that use Arabic as the main language for education that include the GCC countries as well as all Middle East Arab speaking contries with Arabic school system.

Sustainability

The iniatiave once COVID-19 ends will scale down to one server only with minimum number of cuncurent users to support live-long learning courses. The recorded materials will serve as review for students and an educational forum for teachers to keep sharing thier educational experiance.

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 16: Promote just, peaceful and inclusive societies

Case12-Roteco

Title of the project, Contact Organization Name, Stakeholder type, Country

Roteco41 21 693 71 56AcademiaSwitzerland

Beneficiaries

The project “Robotic Teacher Community (Roteco)” aims at creating a community that enable teachers to independently carry out activities in the field of educational robotics, computer science and computational thinking in class or long distance learning in order to prepare children for the digital society. In this community, teachers find, develop and exchange educational activities related to educational robotics and, more generally, to computer sciences. Furthermore, they are informed with the latest news, events and courses in these fields. The project covers all three major language regions of Switzerland. It is supervised by the University of Applied Sciences and Arts of Southern Switzerland (SUPSI), the Swiss Federal Institute of Technology Zurich (ETH Zurich) and the Swiss Federal Institute of Technology Lausanne (EPFL Lausanne) and is founded by the Swiss Academies of Arts and Sciences.

Website

<https://www.epfl.ch/about/fr/>

Description

The digital society requires the acquisition of skills related to computer sciences like computational thinking or competences in coding. Also trans-versal competences like communication, collaboration and creativity are increasingly important. Educational robotics is perceived as a valuable tool to increase such competences and is more and more present in the new school curricula.

The Roteco project (www.roteco.ch) aims to train school teachers in the field of educational robotics and computer science, to develop a community where teachers can find support and to exchange experiences and educational activities in order to increase the presence of robotics in school classes.

A call was made for the community itself to produce activities that can be done at home #learnathome (<https://www.roteco.ch/fr/stories/faire-des-activites-educatives-a-la-maison-comment-et-quoi/>) . The community has remained active in order to best inform teachers about activities that allow children to continue to do robotics, programming and coding activities.

ICT Tools

In the project a collaborative platform have been developed. The platform allows teachers to contact other teachers or experts. Teachers can easily publish, select and download didactic activities of other pairs with the related materials.

The social networks of the project as well as our newsletters have been necessary tools for communication and dissemination of information.

In order to keep the teachers' community stimulated, Roteco has participated in numerous online events to inspire teachers. Webinars have been a tool for disseminating information (Ludoviales, Open Education Halfday, Coding from home #4, etc.)

Challenges

The first results are promising since there are already more than 170 activities that have been shared among around 500 teachers. However, it cannot be excluded that users on the platform are solely the pioneers that share materials among each other. The aim of a community like Roteco is however to engage also the beginners in order to expand the presence of robotics. These teachers need to be supported and followed in the community.

The project is still ongoing and it will be interesting to analyze such questions. During the follow weeks, a survey is planned in order to analyze who are the teachers that are most active in a community, how much they share, how many contacts they build online and what they need in order to foster those elements.

Partnership

We are looking for institutional partners in teacher training such as universities or training centres.

We are looking for partners in the educational robotics research sector who want to publish and share their research.

We are looking for teachers and schools in the private or public sector committed to change!

Replicability

We imagine that this project could be duplicated by educational system or by language according to the needs of teachers.

As the education sector is specific to each region and/or country, it will be necessary to analyse the best way to link strategy and needs.

Sustainability

Some of the activities proposed by the community member are related to the sustainable field. Robotics is used as a tool but the content can be transposed into what the users need.

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case13-Online coding learning platform by games

Title of the project, Contact Organization Name, Stakeholder type, Country

Online coding learning platform by gamesCodingPro CJSCAcademiaArmenia

Beneficiaries

it's possible to use our project by website and by any android device. Android app is available by <https://play.google.com/store/apps/details?id=am.webex.game>

Website

<https://www.web-ex.tech>

Description

We have created online learning platform of programming. Anyone can learn programming by playing mini games. And large action game.

ICT Tools

Social media helped us to solve many ongoing marketing tricks.

Challenges

Anyone can learn programming in an easy(gaming) way and get hired.

Partnership

We want investment for developing our project more(i.e to enter App Store) and for marketing purposes.

Sustainability

The project is very required in status quo. In pandemic state many many students are interested to have stable jobs and this tool will help anyone who is interested in programming to solve this problem.

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case14-Contactless Camera Enabled Infrared Thermal Scanner

Title of the project, Contact Organization Name, Stakeholder type, Country

Contactless Camera Enabled Infrared Thermal Scanner
Birla Vishwakarma Mahavidhyalaya
Academia
India

Beneficiaries

The thermal scanners available right now costs around 7k to 8k Rupees but the over all cost of making this device(prototype) is around 3000/- and once it is converted into mass production(making it as a full scale device) it can cost around 1500/-, this will be very cheap and efficient for the government along with supporting the #makeinIndia movement.

Website

<http://www.bvmengineering.ac.in/>

Description

The contactless infrared thermal scanner is a prototype which is able to scan the body temperature of a person and click its picture as well.

With the infrared sensor it will be able to identify the body temperature of a person and as the device is camera enabled the image of a person is captured with temperature annotated. Now here the images will be taken with the temperature recorded and will be sent

to the servers and so that it will be easier to identify the people who've had high temperature.

As in right now because of Covid-19 to stop further prevention the people who have high temperature are needed to be tracked down and with the images which they already have it will

be easy for the government to track down these people.

ICT Tools

The prototype consists of a Raspberry Pi, MLX96014- Thermal Scanner, 7-inch LCD display and a camera to click the image- RasPi Camera.

- As the hardware is set up, the device runs on Linux OS by running the program that has been developed the camera will be enabled and the temperature sensor as well. The sensor here takes a continuous data and it will be able to show the body temperature annotated on the screen.
- As the camera is enabled the person will be able to see it's face on the 7-inch LCD display screen along with the temperature annotated at the bottom of the display.
- As the person's face is kept near to the temperature sensor the body temperature will be displayed. Now the picture has to be clicked and that picture will consist of the person's face and her/his body temperature.
- This picture will be sent to the server database.

Challenges

Right now, the only option to track the coronavirus patients is to find out with whom they have been in contact where did they go but it becomes quite difficult when tracking down that person. Once the picture is clicked and if that person has high temperature, it will be easier for the government authority to track down that person as they have its photograph and the person's body temperature as well.

Partnership

Yes, I am looking for international organizations working in the field of ICT and Education to support my innovation.

Sustainability

Yes, this prototype is a light weight and very durable and sustainable device. It works on normal power supply/ battery so it can be easily. Also further converting into device it can be made using 3-D printed device

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case15-Provides the largest global information database on serialized materials, and with over 6 500+ age appropriate links to Open Educational Resources (OER) and Open Access elementary and secondary school mathematics materials.

Title of the project, Contact Organization Name, Stakeholder type, Country

Provides the largest global information database on serialized materials, and with over 6 500+ age appropriate links to Open Educational Resources (OER) and Open Access elementary and secondary school mathematics [materials.k-12math.info](https://www.k-12math.info) incAcademiaUnited States of America

Beneficiaries

MERLOT reviewers who evaluated the website indicated that the “Target Student Population would be: College Upper Division, Graduate School, Professional”. The developer of the website also believes it exists to help anyone (or anything) “... to help a 7 year old (second grader) to add whole numbers” . Be they classmates, parents of, teacher of, school content coordinator, reference librarians, materials developer, curriculum designers, undergraduates and graduate students who are preparing to help and artificial intelligence applications.

Website

<https://www.k-12math.info/history.html>

Description

With many of us waiting out the storm (COVID-19), [k-12math.info](https://www.k-12math.info) [a 5 star MERLOT Open Access educational resource and twice recognized by the United Nations] has seen a doubling of global users and in response has added 2 398 age appropriate links to math projects in India and South Africa.

ICT Tools

A simple [no typing needed] user interface to accelerate searches is used. Information is displayed in a “calendar style” format, with over 6 500+ age appropriate links to OER and Open Access resource materials. Some of the series are NCERT (India), Ukuqonda Math (South Africa), CK-12(USA), A+Click (United Kingdom), Khan Academy (USA), AAKnow (USA), and other OER/Open Access materials.

Challenges

Scalability. In order to reach learning communities which can not afford books or computers, learning needs to be made to function on handheld devices. Low cost “Phones” with internet access need to be developed and made available globally.

Partnership

Language, especially globally in the age range of 4 to 8 years; and programming, too much time has been spent on “function” and not enough on “form”.

Replicability

Yes

To repeat? K-12math.info uses a set criteria to catalog materials.

To duplicate? The 1 000+ spreadsheets can be easily copied and pasted in Excel, Numbers and other spreadsheet to serve user’s needs.

Sustainability

Yes, without continued cataloging of information on the latest developments in elementary and secondary school math materials, global mathematics learning, understanding and development would suffer.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 10: Reduce inequality within and among countries

Case16-Provides the largest global information database on serialized materials, and with over 6 500+ age appropriate links to Open Educational Resources (OER) and Open Access elementary and secondary school mathematics materials.

Title of the project, Contact Organization Name, Stakeholder type, Country

Provides the largest global information database on serialized materials, and with over 6 500+ age appropriate links to Open Educational Resources (OER) and Open Access elementary and secondary school mathematics [materials.k-12math.info](https://www.k-12math.info) incAcademiaUnited States of America

Beneficiaries

MERLOT reviewers who evaluated the website indicated that the “Target Student Population would be: College Upper Division, Graduate School, Professional”. The developer of the website also believes it exists to help anyone (or anything) “... to help a 7 year old (second grader) to add whole numbers” . Be they classmates, parents of, teacher of, school content coordinator, reference librarians, materials developer, curriculum designers, undergraduates and graduate students who are preparing to help and artificial intelligence applications.

Website

<https://www.k-12math.info/history.html>

Description

With many of us waiting out the storm (COVID-19), [k-12math.info](https://www.k-12math.info) [a 5 star MERLOT Open Access educational resource and twice recognized by the United Nations] has seen a doubling of global users and in response has added 2 398 age appropriate links to math projects in India and South Africa.

ICT Tools

A simple [no typing needed] user interface to accelerate searches is used. Information is displayed in a “calendar style” format, with over 6 500+ age appropriate links to OER and Open Access resource materials. Some of the series are NCERT (India), Ukuqonda Math (South Africa), CK-12(USA), A+Click (United Kingdom), Khan Academy (USA), AAKnow (USA), and other OER/Open Access materials.

Challenges

Scalability. In order to reach learning communities which can not afford books or computers, learning needs to be made to function on handheld devices. Low cost “Phones” with internet access need to be developed and made available globally.

Partnership

Language, especially globally in the age range of 4 to 8 years; and programming, too much time has been spent on “function” and not enough on “form”.

Replicability

Yes

To repeat? K-12math.info uses a set criteria to catalog materials.

To duplicate? The 1 000+ spreadsheets can be easily copied and pasted in Excel, Numbers and other spreadsheet to serve user’s needs.

Sustainability

Yes, without continued cataloging of information on the latest developments in elementary and secondary school math materials, global mathematics learning, understanding and development would suffer.

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Case17-Pacific Disaster Center and COVID19 Innovation

Title of the project, Contact Organization Name, Stakeholder type, Country

Pacific Disaster Center and COVID19 Innovation Pacific Disaster Center Academia United States of America

Beneficiaries

Beneficiaries include UN and NGO partners, local, provincial and national health stakeholders and the general public who leverages our DisasterAlert mobile app (1.5 million downloads) <https://www.pdc.org/apps/disaster-alert/>

Website

<https://www.pdc.org/contact/>

Description

PDC leverages global UN and NGO partnerships and use of mapping, GIS, Satellite imagery, AI and Open Data for the COVID19 response - <https://www.pdc.org/major-hazard/covid-19/> .

ICT Tools

The objective is data-driven situational awareness for government, UN and NGO partners via our DisasterAWARE application - <https://disasteralert.pdc.org/disasteralert/> .

Challenges

Challenges include proprietary data and formats, non-normalized COVID19 data streams for case counts, hospitalizations etc.

Partnership

We are always looking to partner more so with .com, .int, .org, .edu and NGO partners globally v a v innovative use of GIS, satellite imaging, big data, open data and citizen science.

Replicability

PDC works closely with Open Street Map and HOTOSM to ensure open data and reproducibility <https://www.youtube.com/watch?v=PIGXwlp8nQE>

Sustainability

PDC has been in existence for 25 years and sustainable projects are the core of our efforts.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 17: Revitalize the global partnership for sustainable development

Case18-Contact Tracking System with people with Covid 19

Title of the project, Contact Organization Name, Stakeholder type, Country

Contact Tracking System with people with Covid 19|SUTICA|Academia|Angola

Beneficiaries

Ministry of Health

Website

<https://www.isutic.gov.ao/>

Description

The technological solutions on the Contact Tracking (CT) is a digital tools for analysis of the mobility and tracking data, have as main objective the obtaining of information regarding the potential contacts that people suspected of being infected had during any journey that performed in a national space. The results of analyzes on geographic data allow the identification of the main areas with high potential for local / community contamination, thus allowing local authorities to take preventive and containment measures for the virus, with concrete and targeted actions.

ICT Tools

We use the internet access

Challenges

Type of technology to use to locate each suspect of Covid 19

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-science

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case19-COVID-19 Knowledge and Data Hub

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Knowledge and Data Hub
Institute of Geographical Sciences and Natural Resources Research (IGSNRR), Chinese Academy of Sciences
AcademiaChina

Beneficiaries

The primary beneficiaries are sciences, professors and students, as well as decision makers. Many local communities and citizens in China are also benefited.

Website

<http://english.igsnrr.cas.cn/>

Description

Only a few hours after WHO announced the COVID-19 as PHEIC in the morning of 31 Jan. 2020 in Beijing time, we (CCIT/CCLH-CAST and IGSNRR/CAS) started the joint action to establish a platform on COVID-19 knowledge and database system based on the hub methodology. More than a hundred scientists and students participated the activities at home though online cooperation. 16 groups of the knowledge and data were identified. The radio reported on pandemic, vaccine, virus medicine, clinical medicine, Chinese medicine, new technology applications in China are also online. More than 16,000 computer IP users from 97 countries access these data and information.

ICT Tools

The technology of online data search tool, initial AI technology for information and dataset classification, GIS data mapping and visualizations .

Challenges

The main challenge is how to make the data and information high quality and be trusted. Another one is how to make the data updated in time. The way we practiced is by both AI technology as well human interactive and peer review.

Partnership

Now, we are working with CODATA Task Group in/for/with Developing Countries, World Data System (WDS) of International Science Council (ISC) and World Federation of Engineering Organization (WFEO). We still looking for partners from Indian, Brazil, USA and South Africa, the most cases countries now.

Replicability

Yes, the digital knowledge and data are replicable by mirier site or inter-operational methodology or networking system. Now, we are networking with 52 Journals.

Sustainability

Yes, from scientific research aspect, the knowledge and data about the COVID-19 may last to 2025, although we hope it closes as earlier as possible. The IGSNRR/CAS based on the Academic Journal Support Program, MOST (Ministry of Science and Technology of China) based on the National Data Center program and CAST (Chinese Association for Sciences and Technology) based on special program on COVID-19 and Outstanding Journals Program started in 2020.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-science

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

**Case20-VIRTUAL TRAINING ON USE OF SOME ONLINE PLATFORMS
FOR MEETINGS & TEACHINGS**

Title of the project, Contact Organization Name, Stakeholder type, Country

VIRTUAL TRAINING ON USE OF SOME ONLINE PLATFORMS FOR MEETINGS & TEACHINGS
UNIVERSITY OF NIGERIA
AcademiaNigeria

Beneficiaries

University staff, students and community members. Benefits are; 1. encouragement to use online teaching platforms
2. training on how to use online platforms in teaching

Website

<https://unn.edu.ng>

Description

The Activity was to virtually teach staff of the university on the effective use of some online platforms like Zoom, Google Meet, Google Classroom & Moodle for meetings and teachings

ICT Tools

Laptops, Zoom App & Internet facilities were used in delivering this activity. The promote digital transformations in preparing the university community in embracing online mode of meetings & teaching amidst covid-19 Pandemic

Challenges

difficulty in re-orienting the people, this can be overcome by continuous training.
use of free zoom app which limits time for training - subscription for educational zoom license.
few resource persons as there is no motivation for the instructors

Partnership

Yes, in areas of subscription to Zoom educational license, infrastructures and technical equipments

Replicability

Yes, this project can be replicated for different group of persons.

Sustainability

Yes, because it can be continued and help develop and train the university community on use of online teaching platforms

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C6. Enabling environment

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 16: Promote just, peaceful and inclusive societies

Case21-Online SDG challenge for schools

Title of the project, Contact Organization Name, Stakeholder type, Country

Online SDG challenge for schoolsAddictlab /SDGZINEAcademiaSwitzerland

Beneficiaries

students, schools, remote education

Website

<http://www.sdgzine.org>

Description

Due to cancellation of science and sustainability travel to Geneva for students, we created an online project: schoolkids can take control over our computers and see via video how their robots take part in our Plastic River challenge

ICT Tools

video conferencing, double robotics, online programming, bluetooth, radio, zoom, new collaborative addictlab.com project platform, microbits

Challenges

crew on the ground, internet access, robots

Partnership

yes. Support.

Replicability

students from Montreux, Vermont, Lausanne, France have taken part. Other schools/STEM programs could join

Sustainability

all remote challenges are scenarios created based on the sdgs .Scenarios and decor build at SDGsolutionspace

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C6. Enabling environment|AL C9. Media|AL C11. International and regional cooperation

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 6: Ensure access to water and sanitation for all

Case22-PressXAI-GreenaBank

Title of the project, Contact Organization Name, Stakeholder type, Country

PressXAI-GreenaBankPressXAI-UniversityAcademiaPoland

Beneficiaries

PressXAI-Bank - household owners and their families
PressXAI-Voter - all citizens of the world

Website

https://www.pressiton.com/ines3/?module=pressitonex_business_model_en_EN

Description

https://www.pressiton.com/ines3/?module=press_xai_voting

ICT Tools

Unique PressXAI-Mind framework (Explainable Artificial Intelligence)

Challenges

High project complexity was overcome recently by introducing the PressXAI-Mind framework.

When people see it, they think that there is 1 billion USD needed to complete it.

When in fact, it is almost ready.

Partnership

PressXAI-Bank, Central Banks to finance Climate Change
PressXAI-Voter, Governments to verify solutions

Replicability

It is replicable in each country.

Sustainability

PressXAI-Bank - USA turnover 600 bln USD.
PressXAI-Voter - it is an repeatable process

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

CASE23-Pesquisador Virtual

Title of the project, Contact Organization Name, Stakeholder type, Country

Pesquisador VirtualUniversidad de las Ciencias InformáticasAcademiaCuba

Beneficiaries

Cuban population, doctors, Ministry of Public Health.

Website

<http://www.uci.cu>

Description

"Pesquisador Virtual" is an IT solution that uses surveys to capture information on the Cuban population's health status, as a complement to the active query process of the Cuban health system, in the context of the epidemiological response to the COVID-19 pandemic.

It has a mobile solution and a web solution where people declare their symptoms, among other medical data. The results of the survey (statistical and nominal information) are monitored in real time through graphs and statistics by the different instances of the Ministry of Public Health (national, provincial and municipal levels). As a result of this process, people are treated in less than 24 hours, in their homes, by doctors from the primary health care system, allowing early detection of possible cases of COVID-19.

In three months, the system was used by more than 200,000 citizens, of whom more than 28,000 declared at least one symptom of the disease and received timely medical attention. The system has had an impact recognized by the Cuban medical authorities in confronting the pandemic and the good results obtained so far by the country.

ICT Tools

Internet access, mobile phones, web and android apps, web and database servers

Challenges

The greatest challenge has been the cultural change that the massive use of an IT tool, to report their state of health, implies in the Cuban population.

Partnership

A collaboration for the introduction of this tool in other countries would be convenient.

Replicability

The project is replicable to any country and can be generalized to any environment where population surveys are needed.

Sustainability

The project is sustainable, it is already part of the Cuban health system and has the support of the university where it was developed

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

CASE24-Elementary and secondary school mathematics global content resource.

Title of the project, Contact Organization Name, Stakeholder type, Country

Elementary and secondary school mathematics global content resource.K-12math.info
incAcademiaUnited States of America

Beneficiaries

MERLOT reviewers who evaluated the website indicated that the “Target Student Population would be: College Upper Division, Graduate School, Professional” .
The developer of the website also believes it exists to help anyone (or anything) “... to help a 7 year old (second grader) to add whole numbers” . Be they classmates, parents of, teacher of, school content coordinator, reference librarians, materials developer, curriculum

designers, undergraduates and graduate students who are preparing to help and artificial intelligence applications.

Website

<https://www.k-12math.info/>

Description

K-12math .info provides a tool to help improve global elementary and secondary school mathematical understanding; and to accelerate the development of new materials to meet learning communities mathematical needs.

With many of us waiting out the storm (COVID-19), this is a time to expand our knowledge of new materials [[k-12math.info](https://www.k-12math.info/) has seen a doubling of users] and in response [k-12math.info](https://www.k-12math.info/) has added 2 398 links to new OER materials.

ICT Tools

The website is a MERLOT 5 star rated Open Access educational website. It has been twice (2018/2016) honored by the United Nations.

The website [K-12math.info](https://www.k-12math.info/) focuses on 1 000 terms and concepts that the elementary and secondary school learner needs to be successful in mathematics. A simple to use [no typing needed] user interface to accelerate searches is used. Information is displayed in a “calendar style” format, with over 6 500+ age appropriate links to OER and Open Access educational resources like: CK-12, Khan Academy, AAKnow, NCERT (India), Ukuqonda Math (South Africa), OpenSTAX, A+Click (England) and other OER/Open Access materials.

Challenges

Scalability. In order to reach learning communities which can not afford books or computers, learning needs to be made to function on handheld devices. “Phones” with internet access need to be used and developed for.

Partnership

Yes, there are 2 areas where partners are needed:

Language translators with elementary school mathematics background.

A programmer who could give “form” to the website [“function” has been its concern].

Replicability

Yes

To repeat? K-12math.info uses a set criteria to catalog materials.

To duplicate? The 1 000+ information spreadsheets can be easily copied and pasted by Excel, Numbers and other spreadsheet utilities to serve a user’s needs.

Sustainability

Yes, without continued cataloging of information on the latest developments in elementary and secondary school math materials; global mathematics learning, understanding and development would suffer.

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-business

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies

Case25-Regulation of biocidal products (sterilants, disinfectants, etc.) use for developing countries in the COVID-19 time

**Title of the project, Contact Organization Name, Stakeholder type,
Country**

Regulation of biocidal products (sterilants, disinfectants, etc.) use for developing countries in the COVID-19 time
University of Tehran/ and Sustainable agriculture and environment
AcademiaIran (Islamic Republic of)

Beneficiaries

Please note that this important in dedication job for me with absolutely nothing for profit but with many world level discussions (please see my resume), the last live one in the Cambridge UK Sept. 2019 for the SAICM (Strategic Approach for Chemicals management) been going for a long time and always ICT and online an important part of it but concentrated on the online discussion when the COVID-19 arrived and we had to be only online. So primary beneficiaries like in the past years' people, environment and wildlife to protect them against the toxic compounds/ pollution, for helping food safety and security, for all other environmental issues I have been helping so really a wide national, regional and even global community have benefited from my activities all these years despite my very simple living situation have difficulties even for my daily expenses and thanks to GOD that during the past decade UN agencies helped me to travel and talk widely. Please see some of my talks on the YouTube eg. in the University of Kyoto, for the 2nd UN data forum 2018, etc. to see how much help I provided to the world community and despite my hard financial situation I never allowed myself to work for money perhaps because my science is about dangerous toxic materials.

Website

<https://www.ut.ac.ir>

Description

Wide online discussions about the regulation of biocidal products (sterilants, disinfectants, etc.) use for developing countries in the COVID-19 time. Base on my strong and long background as a regulatory toxicologist in connection to most important regulatory agencies like EPA, ECHA, OECD, Chemical Watch, etc. I am trying to prevent the misuse/ overuse of the biocidal products during the COVID-19 time. These activities have been going for more than 2-3 decades for me and now I am concentrated to use them against the COVID-19. Very wide online discussions in the form of webinars, online discussions, conferences, etc. nearly all by using computers and ICT tools. For me participating in webinars globally is a long time experience and not only after commencing the COVID-19 and so I was able to use it properly to help. Since six months ago we have been discussing very widely and globally about the effects of the COVID-19 on health, on food safety and security, etc. particularly for developing countries, please also see my Instagram: biomahda, my Facebook page, etc.

ICT Tools

Being a long time on ICT since starting my Ph.D. studies in Canada (1985) starting with very basic computer programs and tools like amber and green monitors, 360k big tiny floppies and then 1.4, Word Perfect, Netscape, etc. programs, designing and developing color slides on computers for the first time and then trying to retrieve them remotely eg. I was in Guelph and we did it in Toronto as a scientific photographer, developing a very important Probit analysis computer program by using GW-Basic! please see my resume, this is a life of ICT and connections and connectivity for me as I call it: it is my lifeline! Fortunately, in recent years the ICT tech developed so much that in every aspect of our life we need it and we HAVE to deal with it. I am permanently following the ICT developments by using all types of computer programs and am a member in many globally related ICT agencies like ITU, WSIS, Internet community, many and I am trying to catch the digital tech to be able to follow my science just for helping people, environment and wildlife against toxic compounds but also much wider global issues.

Challenges

As an agri-environmental scientist, I like many others are only users of the beautiful ICT tech, even though during my high school years I was a physics & electronics genius but later being involved mostly in kind of biological/ toxicological sciences I have been only a user and so always struggling to cope with my compute programs especially in a place under different types of the cyberattack. So as a scientist, a retired professor every day we had to deal with learning new ICT tools, programs, etc. and we love it because it gives us the beautiful sense of communications and being connected globally and that is my life, as I said many times the computer, ICT, and internet is my lifeline. You can imagine how many difficulties people like me have to do our online discussions! We are people of DOS later on these big ocean of ICT tech, so challenges are many, unfortunately, some to prevent us from doing this beautiful global help, see what I have been doing: please see my resume, nothing for business but a 12-15 hours work to help. We need to get special attention from different UN agencies like ITU.

Partnership

I am always looking for partners perhaps because I have not been thinking for money but just to help. Surely ITU and WSIS and other related UN agencies would be and should be my partners because this is a really pure and important help that I have been providing to the planet very freely and in generosity, last year when I finally got the help of ITU as the financial support for an ITU conference in India finally I could not go due to problems of sanctions on Iran and so preventing any money transfer, etc. so now that I have been doing this pure help of toxic pollution reductions and regulations all free and for nearly all the planet why ITU and other related agencies do not partner with me? I really need it and please come closer to me to see how much help I need, who I am in purity for help, how much love I have for the world community that brings pain to my hearth, etc. I need partners, I need help for this pure and important job. I need help for my travels and talks, a small project to help with my very simple living situation that because of doing it for years now sometimes feel pressure but it is love that pushes me to do it.

Replicability

The project is going and as I mentioned it is very wide but most for developing countries concentrated on the MENA

Sustainability

Using internet/ ICT widely and globally for toxic pollutions reductions and regulations mostly for developing countries during the past 2-3 decades I am a senior scientist to help people, environment, and wildlife against toxic compounds. When the COVID-19 arrived here in my country Iran, regionally and globally I started to think to do this project to prevent the misuse, abuse and overuse of the biocidal products.

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 12: Ensure sustainable consumption and production patterns|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

Case26-Remote Engineering Education

Title of the project, Contact Organization Name, Stakeholder type, Country

Remote Engineering EducationEcole Nationale Polytechnique (ENP)AcademiaAlgeria

Beneficiaries

The main beneficiaries are undergraduate and graduate students, as well as faculty and administration.

The main benefits are to achieve the teaching objectives and waste as little time as possible while ensuring quality teaching.

Website

<http://www.enp.edu.dz>

Description

the activities carried out are mainly:

- provide lessons during confinement
- follow the students in their end of studies projects
- provide consultations for doctoral students
- consult on the coordination of educational activities with other colleagues

ICT Tools

We use various platforms; local, or available ones such as Google Meet, Zoom, etc.

We introduce the course files into our platform and also send them by email.

This allowed us to test the distance training with all the difficulties, psychological, of mastering modern communication tools despite certain technical problems which have been identified and which we intend to solve.

We will assess the impact on the quality of training after the renewal of the experience while improving the conditions of execution.

Challenges

The main encountered challenges were to provide for the first time and without prior training, a distance education in its entirety (courses, tutorials and practical work) and effective supervision, both in undergraduation end of studies projects and postgraduate for doctoral theses.

The challenges will be overcome by training teachers and students in the use of the platforms tested and used. It will also be necessary to eliminate all the technical barriers linked to the use of the Internet and the failure of platforms, especially with regard to the evaluation and practical work requiring special equipment for the observation of physical phenomena of which simulation and modeling are still the subject of research investigations. There will therefore be a very wide field of innovation in this area.

Partnership

The main partners at the moment are the other universities to share their experiences and the research centers under the authority of the Ministry of Higher Education.

Replicability

Answered in the previous points

Sustainability

Answered in the previous points

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C7. ICT applications: benefits in all aspects of life – E-science|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 17: Revitalize the global partnership for sustainable development

Case27-Remote Engineering Education

Title of the project, Contact Organization Name, Stakeholder type, Country

Remote Engineering EducationEcole Nationale Polytechnique (ENP)AcademiaAlgeria

Beneficiaries

The main beneficiaries are undergraduate and graduate students, as well as faculty and administration.

The main benefits are to achieve the teaching objectives and waste as little time as possible while ensuring quality teaching.

Website

<http://www.enp.edu.dz>

Description

the activities carried out are mainly:

- provide lessons during confinement
- follow the students in their end of studies projects
- provide consultations for doctoral students
- consult on the coordination of educational activities with other colleagues

ICT Tools

We use various platforms; local, or available ones such as Google Meet, Zoom, etc.

We introduce the course files into our platform and also send them by email.

This allowed us to test the distance training with all the difficulties, psychological, of mastering modern communication tools despite certain technical problems which have been identified and which we intend to solve.

We will assess the impact on the quality of training after the renewal of the experience while improving the conditions of execution.

Challenges

The main encountered challenges were to provide for the first time and without prior training, a distance education in its entirety (courses, tutorials and practical work) and effective supervision, both in undergraduation end of studies projects and postgraduate for doctoral theses.

The challenges will be overcome by training teachers and students in the use of the platforms tested and used. It will also be necessary to eliminate all the technical barriers linked to the use of the Internet and the failure of platforms, especially with regard to the evaluation and practical work requiring special equipment for the observation of physical phenomena of which simulation and modeling are still the subject of research investigations. There will therefore be a very wide field of innovation in this area.

Partnership

The main partners at the moment are the other universities to share their experiences and the research centers under the authority of the Ministry of Higher Education.

Replicability

Answered in the previous points

Sustainability

Answered in the previous points

Action Lines

AL C2. Information and communication infrastructure

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case28-Management System for Isolated Patients by Covid-19

Title of the project, Contact Organization Name, Stakeholder type, Country

Management System for Isolated Patients by Covid-19
Universidad de las Ciencias Informáticas (UCI) AcademiaCuba

Beneficiaries

The main beneficiaries are the Cuban Ministry of Public Health, government officials, patients and health workers.

The main benefit is the security and reliability of the system for data management. In addition, the work time dedicated to the organization and control of information is reduced and human resources can be dedicated to others without having to spend time on information processing

Website

<https://www.uci.cu>

Description

The web application Management System for Isolated Patients by Covid-19 consists of 3 fundamental modules: Patients, Travelers, Administration. The system is designed to monitor the patient from their admission to the isolation center, allows planning for the implementation of PCR in real time and taking into account the result of the test the patient can be discharged or referred to a specialized hospital. The primary data of each patient is stored, as well as the necessary medical data such as: last contact date, admission date, contact person and personal pathology history. From the Patients module, data can be filtered for analysis, taking into account race, gender, age, city of origin, among others. During the use of the system in the isolation center, more than 4000 suspicious patients were treated at Covid-19.

ICT Tools

F framework Symfony v.3.4 based on the PHP v.7.0 programming language. It was used for the Metronic and Bootstrap web layout. For immediate consultation of the data stored by the management system, a dashboard was created in Grafana. The system was used by health area personnel and volunteers, promoting the use of ITCs in strategic sectors of society.

Challenges

The main challenges found correspond to the process of data entry, due to the active flow of patients. It was solved by increasing the field validations, with several samples of the entered data to detect deficiencies and in one occasion the personnel using the system was replaced.

Partnership

No

Replicability

This project is replicable. The project can be used in any isolation center, it just needs to be deployed on a web server to be used.

Sustainability

This project is sustainable. Considering the high propagation of Covid-19 and the daily increase in the number of infected people, it is likely that the isolation centres for suspected patients will persist over time. It can also be used for other pandemics.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case29-Online Learning, Learning Management Systems, Blended Learning Systems

Title of the project, Contact Organization Name, Stakeholder type, Country

Online Learning, Learning Management Systems, Blended Learning Systems
Daffodil International University
Academia
Bangladesh

Beneficiaries

The above initiative has been taken considering the benefit of the following:

- Students
- Learners
- Teachers
- Staffs

As soon as the Covid 19 took epidemic picture, DIU suspended regular classes at campus, started online classes and staffs started virtual office. So all the staffs were given training and also DIU organized mental health session: to make an understanding of the participants about the effect of pandemic crisis on our mental health and develop some strategies to enhance mental well being to survive in this moment.

<https://www.facebook.com/daffodilvarsity.edu.bd/photos/a.278255712202/10157585148937203/?type=3&theater>.

The main objectives were following:

- To keep the academic function uninterrupted
- To keep the students mind cheerful

-To help its member develop the mental health and skills to face the challenges of New Normal.

Website

<https://daffodilvarsity.edu.bd/>

Description

To face the challenges of Covid 19, Daffodil International University has taken several initiative to keep the Academic Operation uninterrupted using technology Most importantly DIU has changed the teaching and learning techniques so that the students can learn from home and they can utilities the time.

DIU Initiated Blended Learning Center: Already 29000+ users are here with 4000+Courses are updated and 20000+ Classes held here. <https://elearn.daffodilvarsity.edu.bd/>

[GoEdu.com](https://goedu.com): To keep up the Education Opportunities for the students Daffodil International University is offering free learning scope through [Goedu.com](https://goedu.com)

<https://goedu.ac/courses/>

Google Class Room: DIU teachers conducted regular classes using Google Class Rom.

Initiated Special Event:CoronaThon_19: “A Hackathon on Combating the #Coronavirus”

(<https://www.facebook.com/daffodilvarsity.edu.bd/videos/537534616955548/>)

Humanoid Robot “Dbot” launched by Daffodil International University (

<http://news.daffodilvarsity.edu.bd/925-humanoid-robot-%E2%80%9Cdbot%E2%80%9D-launched-by-daffodil-international-university.html>)

AI Solution: DIU Invented Artificial Intelligence (AI) Solutions and Services for support Covid-19 Disease Recovery.

(https://daffodilvarsity.edu.bd/photos/other/COVID19.pdf?fbclid=IwAR1W_X1h4_1G6i7D8T_UREWOUjYILyICwSmOzU7j0-YOaXU7z2ENwZIQINbQ)

ICT Tools

Due to Covid 19, DIU had to face sudden crisis and therefore DIU has utilized the available solutions like Google Class Room for conducting Classes,, Google Meet for regular Meeting, Moodle for Learning Management Systems, Live stream for organizing sessions, G suite, Zoom for conducting class. In the Blended Learning Center we used third party solutions and different available and simple tools to develop contents and it is gradually growing.

Go.edu is another developed solution by which we are helping students and professionals to develop their skills. This is another scope for further development and collaboration.

Besides, DIU has developed Smart Education Systems <http://pd.daffodilvarsity.edu.bd/> to manage all activities.

Challenges

To do this we faced the following challenges:

- The mindset of the students and learning on traditional learning initiative
- To break the culture of learning
- Since everyone was giving additional time in adopting culture and developing skills s they were little reluctant to use it
- Sometimes the Internet Connection
- Time in developing systems

Partnership

DIU is very much interested in developing its Learning Management Systems and want to develop its Blended Learning Center and Go edu. DIU would welcome any opportunity to develop the systems following the best practices through expert suggestion or technological integration.

Replicability

Yes, Blended Learning Center and Goede.com can be replicated. Since the world is going to experience a new learning culture so this two features along with Smart edu will be in huge demand in a country like Bangladesh. As e-learning or Distant learning was not in practice in Bangladesh so if we can set a model of Blended learning Center and Go edu that will help other education institution to go forward and adopt the same to face any such challenges like Covid 19.

Sustainability

Yes, of course. Here all the contents will be updated online. And sooner or later the education systems of the country has to adopt technology and therefore this sort of solution will be effective.

Action Lines

AL C2. Information and communication infrastructure|AL C4. Capacity building

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case30-The Implication of COVID-19 pandemic on socioeconomic and psychological well-being of the community: The Crisis management in suburban districts.

Title of the project, Contact Organization Name, Stakeholder type, Country

The Implication of COVID-19 pandemic on socioeconomic and psychological well-being of the community: The Crisis management in suburban districts. Ahfad University for women Academia Sudan

Beneficiaries

The project has covered four villages in the district of North and West Omdurman a number of two villages in each district. The project has covered all community members with especial involvement of the local resistance committees, Youth local Associations, women association, and local stakeholders including, health center, schools, and other locality services.

Website

<http://www.ahfad.edu.sd>

Description

The project will address and involve both community members and community organizations from the beginning. The project has four main objectives these are:

- To investigate on KAP regarding COVID19 through a pilot participatory research;
- To measure the socioeconomic and psychological well-being change due to the pandemic;
- To know experiences and challenges facing them and how are overcome;
- To provide capacity building to community members and organizations in knowledge and skills of pandemic crisis management;
- To exchange and communicate information and research results through media channels and through policy briefing workshops.

ICT Tools

whats-apps, facebook, twitters, emails.

Challenges

The project long term results will imply in many ways; the community will be aware of the process of participatory research, knowing the problems and challenges they faced due to the pandemic. They will be empowered to plan and manage future similar projects, particularly in issues of pandemic crisis management. In addition, the project will enable the community members to know each other better and enable them to gain confidence in doing joint advocacy and research work. Moreover, the project implies clear understanding of socioeconomic problems and challenges resulted from the COVID19 and give the community chance to think, put initiatives, and participate in solving these problems. Furthermore, the project will introduce clear policies and strategies that will help decision makers and planners in future projects in the area regarding health management and alternative livelihood measures.

Partnership

partners can be contacted in area of e-health education, small enterprise organizations and e-education professionals can be involved in some stages of the project implementations.

Replicability

Yes it is possible to be replicated in similar villages around Khartoum State or possibly around other States in Sudan.

Sustainability

the project will be sustainable as it will involve the community members and its organizations from the beginning in the process of the project cycle. Also, create partnership with national organizations in some stages of the project's activities will ensure its sustainability. Moreover, fund from international organization and private sector will enhance the implementation of the project activities.

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 12: Ensure sustainable consumption and production patterns|Goal 17: Revitalize the global partnership for sustainable development

Case31-Augmented Reality (AR) Educational Apps for 8-Million Elementary School Students

Title of the project, Contact Organization Name, Stakeholder type, Country

Augmented Reality (AR) Educational Apps for 8-Million Elementary School StudentsIran
University of Science and TechnologyAcademialran (Islamic Republic of)

Beneficiaries

- Immunity against COVID-19 by distance learning
- “anywhere” and “anytime” education delivery method,
- learn with ease at home by simply touching on the ICT gadget screen
- listen live or asynchronously to a virtual teacher
- interact with a virtual teacher
- solve problems without the stress of having to physically be in a classroom
- cheap and inexpensive

Website

<http://iust.ac.ir/>

Description

The project is to provide Augmented Reality (AR)-based mobile applications to improve the quality of learning in K-6 schools during the COVID-19 pandemic, by bridging AR technology and education for more than 8,000,000 elementary students all over the country. It aims to benefit from distance learning advantages so that students can obtain instruction and learn with ease at home by simply clicking a few buttons on their phone or tablet screen and learn educational subjects in 3D objects close to reality and also listen live or asynchronously to a virtual teacher, interact with the teacher, and solve problems without having to physically be in a classroom. This method of learning speeds up the learning process and makes it exciting for elementary students so they would understand objectives more effectively and become interested in studying. Main advantages of implementing this project are making the low cost ICT-based educational tool which costs only 1 dollar for each textbook, making educational assistance tools available for all segments of society, with a particular focus on the most vulnerable, and synchronizing the education system of the country with the latest ICT technologies. By using these mobile apps, the students can easily watch and experience the theoretical and experimental subjects which might be hard to see in daily life or it costs a lot to explore them. By this, not only the educational system of the country takes advantage of the capacity of ICTs in the best way, but also the growing educational divide within the country will be bridged. This latter achievement also satisfies the Sustainable Development Goals (SDGs), especially the G4, G9 and G10. It should be

noted that the Oak project model can be replicated for the educational system of any other countries.

ICT Tools

Mobile Phones, Tablet, Surface, Touchpad screen laptops, Touchpad screen All-in_one, Internet

Challenges

There were too many challenges without solving which, such a great and useful project could not be implemented and it would be likely to fail. These challenges can be divided into two categories from two different perspectives; production and usage. Following are some of the main challenges in the first category we tried to overcome them by accurate planning:

- Various number of textbooks existing in elementary school level with too many diverse subjects
- Difficulties in coordinating the educational experts from different schools and geographical areas to participate in preparing the application instructions and scenarios
- Difficulties in identifying and recruitment of about 40 technical experts including programmers, graphic designers, mobile app developers, testers and marketers
- Coordinating too many human resources with different expertise to fulfill their own tasks and hand them out to the next stage
- Controlling, monitoring and meeting the milestones of such a mega project in a short period of time so that to be applicable in a school year
- Producing the right content for each age category and precisely based on their course syllabus
- Advertising and marketing the applications to introducing them to a target population including more than 8,000,000 students, more than 16,000,000 parents and more than 400,000 teachers
- Ensuring the parents and teachers to employ the AR-based applications as a useful and effective educational assistance tool along with traditional teaching tools and methods

Following are some of the main challenges in the second category, usage, we frequently face:

- A lack of necessary training: Some teachers might struggle putting these new technologies into practice as their background training doesn't provide the necessary skills. Only the most open-minded teachers and innovative educational institutions are ready to apply augmented reality apps in education.
- Dependence on hardware: Using Augmented Reality in the classroom requires a certain resource base. For example, not all students have smartphones capable of supporting AR applications.
- Content portability issues: The AR app one builds, needs to work equally well on all platforms and devices. However, it is practically impossible to provide the same quality of AR content on any device.

Partnership

Investor and Supporter to provide the necessary fund needed to accomplish this project as soon as possible during COVID-19

Replicability

This project is scalable and internationally replicable approach to be easily adapted and adopted by other countries

Sustainability

Since this project removes physical books, it helps to preserve the environment for the next generation.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries

Case32-Smart risk maps of (COVID-19) outbreak based on distributed motioning PM2.5

Title of the project, Contact Organization Name, Stakeholder type, Country

Smart risk maps of (COVID-19) outbreak based on distributed motioning PM2.5Palestine
Technical University-Kadoorie (PTUK)AcademiaPalestine

Beneficiaries

1)local governments; it helps them to issue more realistic risk maps not only based on tested positive cases but also based on PM2.5. This gonna help them not only to prevent the spread of COVID19 but also to manage air quality.
2)individuals; avoid staying in polluted areas where the possibility to catch the virus is high.

Website

<https://ptuk.edu.ps/>

Description

Currently vulnerable age groups in most countries are affected by the respiratory -corona virus disease 2019 (COVID-19). Long-term-exposure to high levels of PM2.5 (particulate matter with aerodynamic diameter $\leq 2.5 \mu\text{m}$) is also associated positively with repository deaths. Based on the findings of current research studies and the analysis of the data from Japan it was found that old people who are living in prefectures with high levels of PM2.5 could be the most vulnerable to COVID-19. Thus, policy decision makers could consider PM2.5 data to support their efforts not only to minimize the spread of COVID-19, but also to improve air quality. The developed system is an IOT project using the Thingspeak cloud server. It is based on collecting the data by low-cost PM monitors distributed in heavily populated areas. The collected data with the information about COVID19-tested positive cases from hospitals are used to plot the risk maps using IGS.

ICT Tools

The systems is composed of;

1- Hardware: Micro controllers esp8266 wifi module and Arduino, DSM501 and GP2Y1010AU0F PM monitors, also mobile system was developed that is connected via Bluetooth with mobile to give instant information about the levels of PM2.5 in case there is no intent connection.

2-Software: Arduino scratch programming of the microcontroller, Thingspeak cloud server for IOT, GIS for plotting risk maps using interpolation surface option, mobile MIT app inverter .

Challenges

the systems was developed and tested well, however, it requires to increase the number of monitoring stations. This requires not only money but also collaboration from individuals and institutions to deploy the unit in close proximity with their buildings and make use of the wifi internet connections.

-data security

Partnership

No

Replicability

Yes of course, it is almost applicable at any place where there is an internet connection.

Sustainability

it is sustainable because of the followings;

-it is related to monitoring to Air pollution and even if we hopefully managed to prevent COVID 19 there is still problems due to air pollution which caused around 4 million death (WHO, 2016).

-it creates jobs for young graduates in the operation and the maintenance of the system.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case33-Al Quds Open University in response to Corona Virus Crisis

Title of the project, Contact Organization Name, Stakeholder type, Country

AI Quds Open University in response to Corona Virus Crisis
AI-Quds Open University
Academia
Palestine

Beneficiaries

The primary beneficiaries were mainly the students of AI Quds open university distributed in 18 branches among the West bank and Gaza Strip. The new arrangement of the education at QOU made students use virtual classes and were able to present electronic exams in a way that guarantees credibility of its outputs; the developed exams schedule for QOU students in BA and Master degree. The exams will be held through the university's academic portal with the full and direct supervision of the branch administration, where the branch manager forms a committee to follow up on the exams.

University academic staff were consider primary beneficiaries of QOU new education arrangements through the following:

1. QOU provided teachers with instructions manuals, on how to use the e-learning methods, developed portal for the students' activities that can be used during the classes.
2. QOU developed a mobile application for the academic staff enable them classes to upload the teaching materials and follow up with students and can be used on Android or IOS .
3. QOU created the Technical support groups in university branches, through WhatsApp Group, that follow up with faculty members and students all the time, and have at least two technical support team in each branch.

Tawjihi studnets , around (>>>>>) were considered the third primary beneficiary. Students were able to follow up on their classes, through the classes that were broadcasted on teh AI Quds Educational channel.

Website

<https://www.qou.edu/>

Description

AI Quds Open University is the largest university in and its the first one adopted the blended learning system. QOU has extensive experience in distance learning, that make it's easier for QOU and its staff and students to start using the new teaching methods,

During COVID-19 Coronavirus Pandemic. The Presidency of the University and all its departments combined their efforts to develop alternative plan that ensures the progress of the educational process with high quality, while maintaining the safety of the students and staff. Therefore, QOU converted conventional lectures into e-lectures, and conducted mid and final exams online with unprecedented attendance by students. Additionally, the face-to-face lectures were replaced by entirely e-lectures, aided by the already present technological infrastructure of QOU, which is advanced and ready to face such scenarios. in

this context, The University held virtual classes, taught 267 courses in the second semester 2019/2020 over a period of five weeks, recorded lectures for 35 courses and broadcasted them via al-Quds Educational Satellite Channel, besides uploading all lectures on YouTube at al-Quds educational Channel. Moreover, self-learning courses were designed and approved for this purpose, and consisted of short videos to clarify challenging concepts. Continuous communication was available between teachers and students to answer questions and inquiries.

The university set up a clear and fair procedures for exams and developed exams schedule or its students in BA and Master degree which was shared with all students. The exams will be held through the university's academic portal with the full and direct supervision of the branch administration, where the branch manager forms a committee to follow up on the exams.

Al Quds Educational Channel in cooperation with the Ministry of education launched an online initiative to provide support to 12-grade students, who will be taking their general exam on 30 May 2020.

ICT Tools

Al Quds Open University blended education philosophy has facilitated a lot to align the educational process with the COVID-19 Coronavirus Pandemic, by investing in its high technological resources to ensure healthy educational environment. The University took advantage of its current technological infrastructure which is advanced and ready to face such scenarios.

The role the open learning centre was to hold more than 1000 virtual meeting and provide the necessary technical support students and teachers to hold this meeting on time along with the support they provided on emergency cases.

additional the OLC The Open Education Center has created a page that contains all the information related to the university's electronic services, instructional guides, explanatory videos, a mechanism for communicating with technical support, technical support pages on various platforms, and the most frequently asked questions to facilitate access to students and faculty members.

Challenges

Is this project replicable? If so, please describe how and where this project has been or could be replicated.

The description mentioned in the above questions are in a particular way the new arrangement of education at Al Quds open university since the state of emergency was declared in Palestine due to the Coronavirus pandemic (COVID-19)

Partnership

the ministry of education

Replicability

Sustainability

The sustainability of the new arrangement of education and strengthens is its continuity is mainly based on the university's blended education philosophy, where the university invested in its technological, academic and administrative resources to ensure this philosophy before the pandemic and ensure to proceed with the educational process while maintaining the high quality of education during Corona Virus pandemic.

Action Lines

AL C2. Information and communication infrastructure|AL C7. ICT applications: benefits in all aspects of life – E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case34-HAFELA

Title of the project, Contact Organization Name, Stakeholder type, Country

HAFELAKhalifa UniversityAcademiaUnited Arab Emirates

Beneficiaries

Students, employees, entrepreneurs and freelancers. The main benefit is to find the most suitable study/work environment.

Website

<http://www.ku.ac.ae>

Description

Due to (COVID-19) many organisations shifted their systems to working from home such as School's, Universities, Government organisations, Non-Government Organization, freelancers and other business authorities. Our project's objective is to provide the nearest, most comfortable and quiet mobile office's for those users. The mobile office's will have many different services like WIFI, coffee machines and etc

ICT Tools

A user friendly application that provides a map that shows the available mobile office nearby. We will encourage the users to use the app by giving them different incentives

Challenges

- * to make sure the space meets the users needs. (User satisfaction)
- We will provide picture, measurements, detailed information about the places regularly.
- Make users surveys
- * to insure that nothing in the spaces is damaged.
- Make regular tour's to check the spaces
- Make users surveys

Partnership

Internationally and local partners that have different assets that meets our Requirements.
(Co-working space owners)

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case35-University Industry Government Cocreation Platform

Title of the project, Contact Organization Name, Stakeholder type, Country

University Industry Government Cocreation Platform|University of Botswana|Academia|Botswana

Beneficiaries

Universities, Students, Industry, NGOs, Civic Society. Flagship project to address problems submitted by stakeholders are tackled through co-creation by teams of students with university and industry mentors

Website

<https://www.ub.bw/>

Description

The initiative aims to strengthen Universities' innovation ecosystems through development of a universities' centric co-creation platform and its associated activities, processes and services.

The initiative aims to stimulate industry, Government and other societal actors' partnerships and interfaces; facilitate mentorship and run co-creation processes centred around stakeholder defined challenges/problems to be solved by students and young innovators through well-defined mentored flagship capstone projects within a well-defined intellectual property framework favourable to their growth.

The flagship projects include ICT Use cases for Covid-19 Interventions

The envisaged higher-level impact is in skills alignment, reduction of youth employment through stimulation of a National software and ICT technology development sector and growing of locally developed technology solutions driven by vibrant university innovation ecosystems – including education technologies.

The project presents the Universities with an opportunity to strengthen its internal innovation ecosystem, lead National developments in these areas and to provide opportunity for our students base through technology development – including for services that the universities themselves can consume on campus across departments – this to provide a rounded student University experience.

The project aims to deliver –

1. A sustainable Universities-Industry centric co-creation platform & Innovation ecosystem,
2. A robust student Innovation pipeline,
3. Collaborative networks and interfaces with Industry and Government and National stakeholders including civic society
4. Collaborative network with regional and international innovation ecosystems,
5. Future Skills (4IR) Training Academy, Training Programme and Partnerships for training in Software, technologies, innovation and data science - delivered through targeted practical modules through a dedicated 4IR Future skills lab and in partnership with industry partners such as IBM through the IBM Skills Academy
6. Flagship and Capstone projects driven by industry, government and stakeholder and society needs,
7. Extended hands-on training and teamwork through Hackathons, datathons, codejams and bootcamps
8. A stakeholder project and problem repository and skills platform for ICT students and graduates
9. A Data repository to facilitate data innovations
10. STEM outreach through the a STEM Digital Transformation Programme for schools covering Robotics, IoT, Astronomy and Drones

ICT Tools

The initiative runs a robust skills for the future programme through dedicated university campus coding schools and training modules. This training complements rigorous academic training in Computer Science courses across board, including in programming, Mobile Communications, Sensor Networks, Algorithms with skills developments in 4IR technologies such as IoT, AI, Drones, Data science etc grounded in practical use cases of impact - eg. in Smart Agriculture using sensor networks for a farming community stakeholder, Smart Conservation using drones for a Rhino Sanctuary or Institutional Covid-19 Visitor registry & Contact tracing for compliance etc.

Challenges

The main challenges are in building relationships with stakeholders in industry and Government to facilitate the flow of challenges to the co-creation platform, and to provide resources to support implementation. There is also challenges in the Intellectual Property Framework regarding working with industry partners. There is also challenges with adequate well equipped training laboratories , equipment, devices,sensors, drones etc to support the 4IR Training programme. We need to build a strong network of local, regional and global support partners in the areas of mentor-ship, funding, training and technology

Partnership

We need a strong network of local, regional and global support partners in the areas of mentor-ship, funding, training and technology

Replicability

This project is highly replicable, we have partnered with University of Stellenbosch in South Africa for the Southern African Development Community cross boarder regional linkages, sharing lessons and student teams for crossboarder collaborations. We are disseminating information through the Southern African Innovation Support Programme Network - <https://www.saisprogramme.org/>

Sustainability

The projects has developed

1. Future Skills (4IR) Training Academy, Training Programme and Partnerships for training,
2. Robotics Training Academy Initiative and currently engaging FIRST Global Higher Education Network <https://first.global/fghen>

Stem Through Astronomy Initiative and engages in Open Astronomy Schools - <https://open-astronomy-schools.org/2020-call-for-proposals/> - this especially as Botswana will be participating in the Global Square Kilometer Array project and there is need to build pipelines of students including early stage interventions at schools

3. Drones Academy Initiative - This to train students in drones, explore drone use cases and applications - Has engaged and sent our Students to the UNICEF African Drone and Data Academy - <https://www.unicef.org/malawi/tlameko-makati-botswana>

The project has also resulted in numerous flagship projects with solutions developed by students

All the above can contribute to the sustainability of the project

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C11. International and regional cooperation

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries

Case36-AI-aided Precision Medicine against COVID-19

Title of the project, Contact Organization Name, Stakeholder type, Country

AI-aided Precision Medicine against COVID-19|University of Foggia|Academia|Italy

Beneficiaries

The major beneficiaries of the use of these tools are directly healthcare professionals, clinicians, and researchers. Indirectly, patients who need quick and effective treatment.

Website

<https://www.unifg.it>

Description

Our team of researchers analyzed how data analysis using artificial intelligence algorithms has made a contribution in the fight against the pandemic.

ICT Tools

Our analysis of the literature showed that different types of computational statistics and artificial intelligence algorithms have been adopted in four application macro sectors.

Challenges

Provide rapid knowledge of an unknown viral biological agent, develop new treatment protocols, and properly allocate resources.

Replicability

These applications can be replicated in all countries that have a computerized national health system.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case37-Robotics platform

Title of the project, Contact Organization Name, Stakeholder type, Country

Robotics platformRoboticsAcademiaSaudi Arabia

Beneficiaries

E-learning

Website

<https://www.robotics.sa>

Description

Education purposes

ICT Tools

EMS

Challenges

Pandemic

Partnership

Networking

Replicability

Great

Sustainability

Yes

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 1: End poverty in all its forms everywhere

Case38-1

Title of the project, Contact Organization Name, Stakeholder type, Country

11AcademiaAlgeria

Website

<https://www.itu.int>

Action Lines

AL C4. Capacity building

SDGs

Goal 1: End poverty in all its forms everywhere

Case39-Online education

Title of the project, Contact Organization Name, Stakeholder type, Country

Online educationNibras schools platformAcademiaSudan

Beneficiaries

Local schools students.
We help them to study online in their homes safe

Website

<https://www.uvschools.com/nngos/login>

Description

We launched the platform individually from Saudi Arabia but our educational services could reach all students over the Sudan.

We help them to study online and protect themselves during COVID 19 we

ICT Tools

We use an educational platform to enable students to study online, and we use all interactive methods of teaching. Students just need a smart phone or a laptop and a network to join the school.

Challenges

Lack of electricity and weakness of network in rural areas. Students could overcome all of that by being sure to recharge their phones when electricity is available and recording important lessons. S

Partnership

Yes, we look forward to a partnership with the Sudanese government to launch Nibras as a local platform to serve Sudanese students all over the country

Replicability

No

Sustainability

Yes, it protects students during COVID 19 and keeps them safe

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case40-Agf

Title of the project, Contact Organization Name, Stakeholder type, Country

AgfAlmAcademiaSaudi Arabia

Beneficiaries

No

Website

<https://www.itu.int/net4/wsis/stocktaking/Surveys/Surveys/Submit/15863048637525604#sform>

Replicability

Baghsbagcafata

Sustainability

Zvcagaggcsda

Action Lines

AL C2. Information and communication infrastructure|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-learning

SDGs

Goal 5: Achieve gender equality and empower all women and girls

Case41-PVision

Title of the project, Contact Organization Name, Stakeholder type, Country

PVisionMoscow Technical University of Communications and Informatics (MTUCI)AcademiaRussian Federation

Beneficiaries

Plekhanov Russian University of Economics; D. Mendeleev University of Chemical Technology of Russia; Grozny State Oil Technical University; Chechen State University; Moscow Technical University of Communications and Informatics (MTUCI); College of Telecommunications of the Moscow Technical University of Communications and Informatics.

Website

<http://www.mtuci.ru>

Description

Nowadays one of the most important aspects of our life has become personal protective equipment, mostly medical masks, because they help us to prevent spread of viral infections. Our project allows us to automatize process of mask mode control. Also, as a feature, PVision system provides the possibility of contactless temperature measuring. Our system can form mask mode violation reporting in a real time. Another feature of our system is collecting statistics and sending short daily report, that includes amount of people entered, number of people without masks and percentage of violations.

ICT Tools

Server: Linux 20.04; Titan RTX x2; Intel Xeon gold; Nvidia docker; Kubernetes; Kibana; S3; Kafka; Elasticsearch

Challenges

Main challenges: system sustainability, autonomy, portability, high recognition accuracy. Our main future perspective is to install PVision system in every building all over the world to help humanity resist all the diseases, that are appearing with frightening frequency.

Partnership

Yes, we are looking for companies, that need control over the wearing of personal protective equipment. PVision system works with various types of personal protective equipment.

Replicability

Yes, our system is a server solution. It works with the Real Time Streaming Protocol (RTSP). The Pvision system can be integrated into the industrial sector (factories, construction, oil industry, agricultural holding), retail (shopping centers, shops, pharmacies, restaurants), educational institutions (universities, colleges, schools), administrative buildings (business centers, banks , state institutions, metro)

Sustainability

Our system is sustainable, because it is a software as a service solution. PVision project is located on the MTUCI data center, that meets Tier 4 requirements.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case42-PVision

Title of the project, Contact Organization Name, Stakeholder type, Country

PVisionMoscow Technical University of Communications and Informatics (MTUCI)AcademiaRussian Federation

Beneficiaries

Plekhanov Russian University of Economics; D. Mendeleev University of Chemical Technology of Russia; Grozny State Oil Technical University; Chechen State University; Moscow Technical University of Communications and Informatics (MTUCI); College of Telecommunications of the Moscow Technical University of Communications and Informatics.

Website

<http://www.mtuci.ru>

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Sustainability

Our system is sustainable, because it is a software as a service solution. PVision project is located on the MTUCI data center, that meets Tier 4 requirements.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case43-PVision

Title of the project, Contact Organization Name, Stakeholder type, Country

PVisionMoscow Technical University of Communications and Informatics (MTUCI)AcademiaRussian Federation

Beneficiaries

Plekhanov Russian University of Economics; D. Mendeleev University of Chemical Technology of Russia; Grozny State Oil Technical University; Chechen State University; Moscow Technical University of Communications and Informatics (MTUCI); College of Telecommunications of the Moscow Technical University of Communications and Informatics.

Website

<http://www.mtuci.ru>

Description

Nowadays one of the most important aspects of our life has become personal protective equipment, mostly medical masks, because they help us to prevent spread of viral infections. Our project allows us to automatize process of mask mode control. Also, as a feature, PVision system provides the possibility of contactless temperature measuring. Our system can form mask mode violation reporting in a real time. Another feature of our system is collecting statistics and sending short daily report, that includes amount of people entered, number of people without masks and percentage of violations.

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Server: Linux 20.04; Titan RTX x2; Intel Xeon gold; Nvidia docker; Kubernetes; Kibana; S3; Kafka; Elasticsearch

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Replicability

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Sustainability

Our system is sustainable, because it is a software as a service solution. PVision project is located on the MTUCI data center, that meets Tier 4 requirements.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case44-Tech-Win

Title of the project, Contact Organization Name, Stakeholder type, Country

Tech-WinCFPA Zaraa Abdelbaki, Tebessa-2-AcademiaAlgeria

Beneficiaries

Our project is an inclusive administration Management System for colleagues across admissions, academic, finance/accounting and administrative functions instantly making working together simpler, more efficient and effective.

Unique communication and workflow tools for professors, staff, administration workers and trainees ensure daily operations are streamlined, simple and trackable.

The section of billing and institution accounts management provides transparency for financial staff, leadership and trainees, with remote access via secure portals and the Tech-Win App.

It has dynamic reporting, custom dashboards and a range of visualisation options at your fingertips can translate a wealth of data from across the system into valuable knowledge and insights.

Change can be daunting and we know that's why so many institutions continue to battle day to day with the multiple costs and challenges of running different systems across institutions functions.

Our stakeholders receive one-to-one training and unlimited support from our team of education technology experts, no matter where they are in the country.

Website

<https://www.mfep.gov.dz>

Description

Our institution have put in place alternative methods for trainees and professors to continue with their lessons when attending the institutions is not possible and we are still working on methods that will make our institutions fit for working in a safe environment. because our stakeholders have access to digital devices and internet, we worked on establishing effective forms of online training. we also applied ICTs to do the administrative work online. this will free up institutional capacities and resources in order to redirect their focus on delivering alternative learning methods for those trainees who do not have similar opportunities. our project Tech-Win creates methods and resources intended for trainees, professors and workers, aims to support the government and other education leaders as they research and assess different ways to continue educating our youth during the COVID-19 Pandemic. It can be used by those training centtters, schools and universities either directly or indirectly.

ICT Tools

We are going to make our data centers green by focusing on optimizing hardware (by reducing the incidence of overheated servers) and reducing carbon emissions (by increasing the mix of renewable energy that powers them). These techniques are helping to address the problem of global warming ; however, including sustainable software interventions opens new opportunities to save energy

Our software is going to eliminate duplicate copies of data or compressing data into smaller chunks which would save energy. So would deploying graphics-processing units to manage workloads at the edge (near the device or the end user), which creates efficiencies by breaking up large tasks into smaller ones and divvying them up among many processors. In addition our website and application will reduce the amount of paper used by the workers, students, teachers and social partners. This decrease in the consumption of paper product helps reducing the cost of paperwork at all the levels of training centers across all the country which saves a lot of money and resources.

Challenges

Our challenge is to harness the potential of information and communication technology to promote the development goals of the country, namely the eradication of extreme poverty and hunger; achievement of universal training centers; promotion of gender equality and empowerment of women; reduction of youth mortality; improvement of training centers' management; ensuring environmental sustainability; and development of global partnerships for development for the attainment of a more peaceful, just and prosperous world. We also reiterate our commitment to the achievement of sustainable development and agreed development goals.

The Other challenge is to convince the government to adopt our project as a leading website and spread it across the training centers. In addition to the bureaucracy that is wide spread in the administrative environment. Another challenge is the rigid protocols used in the administrative work and the difficulty in changing it. Finally, we think that the most difficult challenge is to convince teachers and administrators to replace their habits in using old methods and techniques and shift to using ICT and new technology.

Partnership

No, I am not looking for any new partners.

Replicability

No, this project is not replicable.

Sustainability

This project is very sustainable and encourages renewability. We are going to make our data centers green by focusing on optimizing hardware (by reducing the incidence of overheated servers) and reducing carbon emissions (by increasing the mix of renewable energy that powers them). These techniques are helping to address the problem of global warming ; however, including sustainable software interventions opens new opportunities to save energy

Our software is going to eliminate duplicate copies of data or compressing data into smaller chunks which would save energy. So would deploying graphics-processing units to manage workloads at the edge (near the device or the end user), which creates efficiencies by breaking up large tasks into smaller ones and divvying them up among many processors. In addition our website and application will reduce the amount of paper used by the workers, students, teachers and social partners. This decrease in the consumption of paper product helps reducing the cost of paperwork at all the levels of training centers across all the country which saves a lot of money and resources.

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case45-Conception and verification of a cryptographic protocol

Title of the project, Contact Organization Name, Stakeholder type, Country

Conception and verification of a cryptographic protocol|University Tahri Mohammed Bechar|Academia|Algeria

Beneficiaries

Internet users are the primary beneficiaries as this study provides security to them firstly.

Website

<https://www.univ-bechar.dz>

Description

As we all know the COVID-19 made all humans stay isolated, but the internet made us feel closer than ever, the field of my study was cryptography in general, on how to secure data from getting spread or hacked via a network, I specified my studies on this Cryptographical Functions that encodes/hides your data or message in the first machine, with the function known between the two (server & consumer) which "jigsaws" the encoded message once again in the other machine. I had the chance to get even closer and go deeper to make and come up with an idea on how to secure data even more without losing it ofcourse, the idea is to have a secret key and a key changer by time between the two machines, so the secret key makes the message encrypted by merging the two by calculating some functions, and the key changer changes the key every "period"(could be minute or hour) the period should also be known by the two.

ICT Tools

Mainly my computer as I didn't get access nto servers or mobile phones or other technologies

Challenges

The first problem was my shortage of technology use as I had only a computer, secondly was the conception and verification as it took a long time to handl, but for me the main and the big problem was coming up with this idea and how to implement it into reality

Partnership

Not at the moment, I'm still looking to develop more at my academic level at crypto and computer science in general but I think in the near future I will try to get the idea to the outter world and then I'll need multiple people to build a community and help.

Replicability

This field of study could be replicable because of how security nowadays work, attack simulations are launched al over the world to come up with a solution to protectdata, But in my study I came up with solution to seize the risk of getting hacked.

Sustainability

The internet and networks in general are a big field of study, there's always the chance of a data leak, but the idea is to be protected as big as possible and in this study we come up with an idea of how to do it.

Action Lines

AL C5. Building confidence and security in use of ICTs

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 16: Promote just, peaceful and inclusive societies

Case46-voting

Title of the project, Contact Organization Name, Stakeholder type, Country

votingJemcer BlacerAcademiaPhilippines

Beneficiaries

wFE

Website

<https://www.itu.int/net4/wsis/stocktaking/Surveys/Surveys/Submit/15863048637525604#sform>

Description

sadfasd

ICT Tools

asdf

Challenges

FAWEF

Partnership

AWEF

Replicability

EFAW

Sustainability

FEWA

Action Lines

AL C2. Information and communication infrastructure|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 3: Ensure healthy lives and promote well-being for all

Part 3: Civil Society

Case1

Title of the project, Contact Organization Name, Stakeholder type, Country

ITUCivil SocietyKenya

Beneficiaries

Who are your primary beneficiaries and what are the main benefits/services?
Please provide a short description in 150 to 200 words.

Description

What projects and activities has your organization introduced during the Coronavirus disease (COVID-19) Pandemic to continue working efficiently and to create a social impact helping other stakeholders? Please provide a short description in 150 to 200 words describing the projects and/or activities and their respective objectives & results

ICT Tools

Which technologies/ICT tools are you using and how is it enhancing digital transformation in your organization? Please provide a short description in 150 to 200 words.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 12: Ensure sustainable consumption and production patterns

Case2

Title of the project, Contact Organization Name, Stakeholder type, Country

N/ACivil SocietySwitzerland

Beneficiaries

Who are your primary beneficiaries and what are the main benefits/services?

Description

What projects and activities has your organization introduced during the Coronavirus disease (COVID-19) Pandemic to continue working efficiently and to create a social impact helping other stakeholders?

ICT Tools

Which technologies/ICT tools are you using and how is it enhancing digital transformation in your organization?

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 12: Ensure sustainable consumption and production patterns

Case3-COMMUNITY RADIO RESPONSE TO THE COVID – 19 PANDEMIC IN BANGLADESH

Title of the project, Contact Organization Name, Stakeholder type, Country

COMMUNITY RADIO RESPONSE TO THE COVID – 19 PANDEMIC IN
BANGLADESH Bangladesh NGOs Network for Radio & Communication (BNNRC) Civil
Society Bangladesh

Beneficiaries

Rural People !

Community Radios stations, as one of the source of information, helping to raise awareness on COVID- 19 and reinforcing Behavior Change Communication (BCC) by CSOs, Government, health officials and locally elected bodies (LEB).

Community Radio stations are building awareness to change attitudes among community people at different points in their daily lives. Community Radio stations, as a platform for those who involve in COVID -19 responses to update rural communities. They are also providing a channel for two-way communication with community people where listeners are sending SMS or call in with questions. Community Radio stations have been coordinating with the District and Upazila level Coronavirus Prevention Committees. Community Radio stations have assigned one broadcaster in each radio stations as the focal person to coordinate COVID – 19 program.

Community Radio stations are broadcasting programs on COVID -19 in local languages or dialects. Community Radio stations are producing contents which speaks directly to localized issues and concerns, and features trusted local people in a way that nationally or regionally produced content cannot.

Website

<http://www.bnnrc.net>

Description

Bangladesh NGOs Network for Radio and Communication (BNNRC) has been mobilizing all community radios for developing and broadcasting awareness building programs on COVID-19: Coronavirus contamination to protect lives and livelihoods since March 1, 2020. www.bnnrc.net

Now 18 Community Radios stations in Bangladesh have been broadcasting 165 hours Coronavirus prevention education in line with the National Preparedness and Response Plan for COVID – 19, published by Directorate General of Health Services, Health Service Division, Ministry of Health and Family Welfare, Government of the People’s Republic of Bangladesh. There are 200 community youth and youth women working as community broadcaster.

Contribution: The COVID -19 demands cooperation among government, CSOs, local business communities, multi-stakeholders. BNNRC are continuing work 24x7 to reach rural communities in Bangladesh with life-changing information through the community radio. It's not easy to get information to the hard-to-reach at the best of times, and we will continue to strive to make sure the needs of these communities are not forgotten. To that note, we'll be continuing to share stories of our work, and the work of community broadcasters and rural people, while also supporting communities in getting the information they need about COVID-19.

In this perspective, BNNRC has been working on COVID -19 covering with the following issues:

Animate CSOs, Government, health service providers and communities for reinforcing collective action.

Keeping community people's daily life normal and livelihood function

Mobilize further cooperation among government, CSOs, local market and communities' response

ICT Tools

Community Visual Radio and Social Media

Challenges

Rapid social distancing & Quarantine/ Isolation have caused massive pressure on the community radio sector extremely due to short notice. Fundraising process have been cancelled and revenues such as advertising income are drying up overnight resulting in immediate cash flow problems, cuts in grant-funded projects & many community radio stations have few or no cash reserve to tide them over situations like this.

Without swift, substantial and simple financial help from government, community radio stations such as sixteen community radio stations will have to face difficulties in the coming days and weeks. Please provide your utmost support to sixteen community radio stations and help to save community people lives.

Partnership

Yes! Financial

Replicability

Yes!

It is really working and having a very positive effect at the rural communities. Community Radio stations help to reduce the panic of COVID – 19 gradually by broadcasting awareness

programs. Now the community people are taking precautionary measures to prevent contamination of COVID – 19.

People now understand more about the COVID – 19. Community Radio stations have already been established a well-trusted source of information for rural people of Bangladesh.

We know community radio programming is an important tool in flattening the curve, tamping down panic in line with misinformation, disinformation, and extending advice and comfort to the people most affected – wherever they live.

Rural areas of the countries this project can successfully explicable!

Sustainability

Community Radios stations, as one of the source of information, helping to raise awareness on COVID- 19 and reinforcing Behavior Change Communication (BCC) by CSOs, Government, health officials and locally elected bodies (LEB).

1. Building mutual trust: the most important thing is to build mutual trust with the community people
2. Community ownership: Community People share in designing and evaluating the project, as the active local NGOs and leaders who are responsible for designing, implementing, and evaluating the results.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C9. Media

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 16: Promote just, peaceful and inclusive societies

Case4-Safe Remote Learning

Title of the project, Contact Organization Name, Stakeholder type, Country

Safe Remote Learning SWGfL Civil Society United Kingdom

Beneficiaries

Schools

Website

<https://www.swgfl.org.uk>

Description

The Covid-19 outbreak has meant many schools have been forced to close. Safe Remote Learning supports schools in planning and carefully and carefully considering how to adequately safeguard children, staff and parents when learning online .

ICT Tools

Guidance and support provided. Also invaluable Information for teachers in working at home as well as

Challenges

There are a number of online live and recorded video options that schools may consider, ranging from merely setting homework or providing access to online resources through video tutorials and interactive video conferencing. Staff capability and the age of your children is going to determine your approach.

Partnership

No, although regional partners to localise

Action Lines

AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case5-Cibervoluntarios Responde (Cibervoluntarios Response)

Title of the project, Contact Organization Name, Stakeholder type, Country

Cibervoluntarios Responde (Cibervoluntarios Response)Fundación CibervoluntariosCivil SocietySpain

Beneficiaries

"Cibervoluntarios Responde" has the support of 1,500 cybervolunteers throughout Spain willing to help all people who need to solve questions related to technology for example for people who has never telework before, help elderly to use video call apps to stay connected with their families or helping parents and kids with online school tasks. Note that all communication is established online, however, because some people may not have access or do not know how to access online, a telephone number is also available to help in this situation.

Website

<https://www.cibervoluntarios.org/>

Description

"Cibervoluntarios Responde" is a Free online support to stay connected, for citizens who may need technological AID during this health crisis. From home, anyone who may have technological questions can ask online to a team of 1.500 cybervolunteers. The platform has offer more than 150 answers in three weeks of confinement in Spain.

ICT Tools

"Cibervoluntarios Responde" is a free online platform that helps and supports citizens in this period. Cibervoluntarios Foundation, make an extra effort in its aim promote the use and knowledge of new technologies as a means to alleviate social gaps and generate a more inclusive society. For example the new service can help elderly people to make online grocery shopping.

Challenges

No major challenges has been encountered so far and the answer to the initiative has already appeared in several TV news and online media. But is difficult to reach all the people that may need this help and is isolated at home and don't know how connect online. The main challenge is to give massive visibility to "Cibervoluntarios responde" because the system can provide more than 100 answers a day, and we need the people who may need it know about it.

Partnership

Fundación Cibervoluntarios is always looking for new partnerships and collaboration between multi-stakeholder organizations, private and public, to amplify our goals. Fundación Cibervoluntarios already collaborates with more than 700 organizations to carry out all our programs.

Replicability

The initiative "Cibervoluntarios Responde" is an online tool and it can be sustainable and replicable with the know how and experience of the cibervoluntarios network.

Sustainability

The initiative "Cibervoluntarios Responde" is an online tool and it can be sustainable and replicable with the know how and experience of the cibervoluntarios network.

Action Lines

AL C5. Building confidence and security in use of ICTs

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case6-#PhilharmonicatHome #сфилармониейдома

Title of the project, Contact Organization Name, Stakeholder type, Country

#PhilharmonicatHome #сфилармониейдомаSverdlovsk PhilharmonicCivil SocietyRussian Federation

Beneficiaries

Citizens of Sverdlovsk region and Yekaterinburg, Russia and any other country, as all the broadcasts are open and free of charge. The main benefits are: access to the high quality musical educational programs for school children of grades 2 through 9 created by the Philharmonic's musicologists, access to recordings of concerts of the Philharmonic's orchestras and choir, and those of guest artists, conductors and groups.

Website

<https://sgaf.ru>

Description

Starting from March 20, 2020, on a daily basis the Sverdlovsk Philharmonic's Digital Concert Hall broadcasts educational programs and concert recordings from its archive collection for free, from 13.00 to 17.00 (Philharmonic lessons, lectures, daytime family concerts) and from 18.30 to 21.00 (evening concert programs). Live streams are also run via our accounts in social networks and partner websites (cultural media, digital cinemas, city news portals), reaching from 70K to 130K views per day.

ICT Tools

We fully utilized our Concert Hall without Borders technology (WSIS Champion 2018) when we faced the lockdown situation. Our goal was to continue the concert activities of the Sverdlovsk Philharmonic and keep on providing the public with free access to musical education and cultural values.

Challenges

Funding for ensuring quality broadcasts is the main challenge. Currently, we are supported by the local government grant, but if the economy needs extra time to recover from the Covid-19 pandemic consequences, we may face the need to explore alternatives.

Partnership

Partners in promoting our programs and networking in providing diverse musical content to audiences.

Replicability

This is a replicable project and can be reproduced by a similar cultural organization which has a capacity to create video programs and broadcast them via internet. The technology we use is described here: <https://en.sgaf.ru/festival/20884/technology>. Besides, it is always possible to join our project and re-broadcast our content to your audiences.

Sustainability

Our Concert Hall without Borders project has been running since 2009. The sustainability is ensured by many factors. The main ones are: the fact that the Philharmonic has its own venue and three symphonic collectives, which perform regularly at the concert hall and are available for recording. The high (and growing) demand from the population is an important factor, especially from our beneficiaries in the remote areas of the region, patients of the welfare institutions, educational system, etc. Another important factor is the financial support, in our case it's the governmental grants. Personnel is important - tech staff, musicologists, editors, admin, etc.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case7-Audiopedia Corona Awarenesses WhatsApp Campaign

Title of the project, Contact Organization Name, Stakeholder type, Country

Audiopedia Corona Awarenesses WhatsApp Campaign URIDU Civil Society Germany

Beneficiaries

Marginalized populations, especially illiterate rural women. They can benefit from accurate, reliable and accessible health information about COVID-19.

Website

<https://www.uridu.org>

Description

The coronavirus affects all of our lives. But in the poorest countries it will be devastating. Especially for women and girls, who will be on the frontlines of the response.

Knowledge about symptoms, transmission, and prevention of COVID-19 is vital. But how can we provide this information to marginalized, often illiterate populations? The audio recording of localized messages and their distribution via WhatsApp is an efficient and timely solution, not only to spread accurate information, but also to counter fake news.

Audiopedia is a non-profit project that makes health knowledge audible. For this project we set up a global Corona Awareness Campaign using WhatsApp Audio which currently includes +62 translations and audio recordings in more than 30 languages (see <https://www.audiopedia.org/corona/>). The campaign provides easily shareable text and audio information on a dedicated web site, which has been optimized for mobile web (www.audiopedia.io/corona). Both smartphones and smart feature phones can access the contents, people can share to WhatsApp with just one click.

Fake news and misinformation are predominantly generated through messaging services like WhatsApp, which play a major role for our target group. In order to convey reliable information and fight fake news one must use the same communication channels and mechanisms.

WhatsApp is a powerful tool for this kind of campaigns for several reasons: (1) messages come directly to the user's phone, from known contacts, and therefore feel personal and credible, (2) the immediacy of message delivery can create a feeling of urgency about particular topics and (3) it can be used to penetrate communities that don't have access to other platforms.

To ensure further credibility of the messages we are cooperating with NGOs that work in health education, disaster risk management, and social and behavior change communication. Being a member in relevant networks enables us to be able to reach out to thousands of NGOs that can act as multipliers with high credibility among the local population. NGOs can become part of our Audiopedia NGO Network (<https://www.audiopedia.org/ngo>) to coordinate their efforts with us.

ICT Tools

Mobile web apps, smart feature phones, smartphones, WhatsApp, social networks.

Challenges

Fake news and misinformation are being generated through messaging services like WhatsApp, which play a major role for our target group. In order to convey reliable information and fight fake news one must use the same communication channels and mechanisms.

WhatsApp is a powerful tool for SBCC campaigns for several reasons: (1) messages come directly to the user's phone, from known contacts, and therefore feel personal and credible, (2) the immediacy of message delivery can create a feeling of urgency about particular topics and (3) it can be used to penetrate communities that don't have access to other platforms. WhatsApp is also the leading messaging platform in the global south and predominantly used by a younger target group, making it an ideal tool to reach out to young people.

Various measures have been taken in the past to curb the viral spread of fake news - with limited success. Fighting misinformation is important. But instead of just reacting, NGOs and government organizations should be enabled to create viral SBCC campaigns for mobile communication channels by themselves.

We are proposing a solution that can act as a framework for this purpose. The framework can be used in many other contexts. It can easily be adapted to other technological settings - the need may arise, as the predominant social networks or messaging services may vary from one country to another or even change over time.

Partnership

Yes, we are looking for NGOs that would partner with us to disseminate this information. And funding partners to expand the project.

Replicability

Yes, we are actually planning to use it in as many languages/regions as possible. And to adapt it to other health related campaigns, such as TB, Ebola, Zika etc.

Sustainability

Yes, it is, as it is entirely digital and open source.

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case8-Protege BR

Title of the project, Contact Organization Name, Stakeholder type, Country

Protege BR Olabi.Org Civil Society Brazil

Beneficiaries

Hospitals and local makers. Hospitals have their demand for PPE supplied and local makers can exchange information regarding the production on a small and large scale. The objective is to build a lexicon common to both groups, which usually work in such different ways. The platform aims to give visibility to a national problem and to pressure agents from industry and public authorities to act while generating a feeling of solidarity with health professionals and calling on citizens for generous actions.

Website

<https://www.olabi.org.br/>

Description

We built a digital platform that organizes information related to the decentralized production of resources for hospitals during the Covid-19 pandemic and connects the necessary stakeholders to make donations of medical supplies viable: producers (makers/designers/players from industry/universities), hospitals, volunteers who help logistics, material producers, possible local donors.

The platform collects demands from hospitals and connects them with local makers who can help, highlighting active initiatives and also hospital protocols.

ICT Tools

When using our platform, the user can find via Google Maps initiatives that are working daily to fight COVID-19 in Brazil. Besides the main goal - aka meet the immediate needs of local hospitals - we use this channel to connect small and big players across the country so they can locate their peers and exchange information and experiences on combating COVID-19. Many of these small players lacked visibility and needed research, studies, and prototypes that were sometimes held back by the big players.

Challenges

Brazil has 8.516 thousand km² and its population is more than 200 million. Our main challenge was to locate small initiatives in states farthest from large capitals, exactly where there is a structural need in the public and private hospitals. This challenge can be

overcome with mass dissemination of our platform through social media, search engines, and specialized debate environments on the fight against COVID-19.

Partnership

Yes. Our main goal now is to expand the coverage area of the platform so we need a partner that can disseminate the platform aiming to connect more players across the country and save lives.

Replicability

Our platform uses Google Maps to search and insert initiatives in Brazil. Therefore, it is possible to use the same principle for other countries that are facing the same difficulty.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case9-"ngabuburit online "with the theme of Downloading Blessings of Ramadan"

Title of the project, Contact Organization Name, Stakeholder type, Country

"ngabuburit online "with the theme of Downloading Blessings of Ramadan" ICT Volunteer
Bojonegoro Civil Society Indonesia

Beneficiaries

Muslim community in Bojonegoro and the speakers at bojonegoro

Website

<http://www.rtikbojonegoro.or.id/>

Description

We went through this year's Ramadhan in a very different atmosphere from previous years, we had to find various ways so that the atmosphere of the fasting month this year was still felt, for that we present the event "ngabuburit online with the theme of Downloading Blessings of Ramadan"

"ngabuburit online" is an Islamic religious lecture carried out during the Ramadan of 2020, due to the Covid-19 outbreak that we have an impact on all aspects of life, we try to help the speakers by utilizing digital technology to still be able to do lectures from their respective homes, this is important for us to do where currently in Indonesia there is a large activity limitation (PSBB). This activity takes place by utilizing the Google Meet application so that the face-to-face atmosphere between lecturers and auditors can still take place from their respective places,

ICT Tools

We use an existing Google Meet application for these activities, ICT Volunteer Bojonegoro since the last three years has received an application grant from Google so this is the time to use it for the benefit of the people in our region.

Challenges

Because this is new, we must be able to provide short training to (lecturers) of lecturers to be able to operate the Google Meet application, besides that we must be able to overcome the lack of signal in certain areas so that this activity can continue well and all of that we can handle it well

Partnership

in carrying out this activity we partnered with religious organizations and boarding schools in Bojonegoro, there were 10 organizations involved together to carry out these activities

Replicability

This program can be explored in any region, especially areas that have similar beliefs with us in Indonesia

Sustainability

Yes, this program is ongoing, we will continue to develop and perfect this program in the future, of course we will also use program techniques for various interests such as education for various levels (elementary to high school) it is very possible to adopt this program

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C10. Ethical dimensions of the Information Society

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case10-#Malezi Bot

Title of the project, Contact Organization Name, Stakeholder type, Country

#Malezi BotC-SemaCivil SocietyUnited Republic of Tanzania

Beneficiaries

- Children, youth and their families

Website

<http://www.sematanzania.org/>

Description

We get services to children through free of cost telephone number 116. With @IWFhotline we remove child abuse images here <http://goo.gl/MCqEqP>

The helpline call centre is providing Protection of children and youth from Sexual Exploitation and Abuse (PSEA) especially during this pandemic. To ensure youth are directly engaged we have built a bot.

#Malezi Bot is a WhatsApp bot targeting youth and community members at large with both interactive-automated and human-to-human chatting features.

The bot helps provide critical information on COVID-19 while keeping youth afloat with Sexual Reproductive Health education, etc.

ICT Tools

- Telephone
- Social Media - WhatsApp Bot

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C9. Media

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 5: Achieve gender equality and empower all women and girls

Case11-Virtual Assistance to Citizens about COVID-19

Title of the project, Contact Organization Name, Stakeholder type, Country

Virtual Assistance to Citizens about COVID-19ESTRATEGO TECHNOLOGIESCivil SocietyEcuador

Beneficiaries

The main beneficiaries are the city that has an immediate information point about COVID 19 from official sources. The main benefits is 24/7 uninterrupted and timely attention to official information.

Website

<http://www.estratego.com.ec>

Description

We made our virtual assistant AMALIA available to the citizens, to give information to citizens from official sources. Through this service, false news is avoided. In addition, day-to-day information is provided on COVID19 cases as well as information of deceased people.

ICT Tools

We use IBM Watson, AWS and Whatsapp to create a chatbot with Artificial Intelligence to making citizens see new forms of customer service, and promote social distancing

Challenges

The most complicated thing was creating trust in the citizen to trust AMALIA, it could be solved by supporting recognized organizations, that support the diffusion

Partnership

Yes, we are looking partners in other countries to promote AMALIA in their cities, and to contribute to give information of COVID and social distancing of the citizens.

Replicability

AMALIA was designed to be able to provide information based on geographic location, therefore it is configurable for any location and can give focused information

Sustainability

The chatbot provides information and at the same time allows you to include messages from sponsors who pay to include their ads in the content of the message

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case12-Digital project for the prevention of COVID-19 in Chad

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital project for the prevention of COVID-19 in Chad
Association des Techniciens en Technologies de l'Information et de la Communication
Civil Society Chad (Republic of)

Beneficiaries

all people without gender exceptions. At least ten thousand people will be direct beneficiaries of this project

Website

https://twitter.com/ticprojec_attic

Description

fighting against the coronavirus epidemic in Chad and more specifically in N'Djamena. This project aims to:

Sensitize, guide, orient Chadians on the potential dangers of the disease

Help the Chadian populations to respect the prevention guidelines decreed by the state or the WHO

Track and report transmissions

Provide reliable updates and alerts from public health authorities

Answer live / direct all questions relating to the coronavirus

door to door awareness campaign against covid-19.

This project pursues a social objective of fighting COVID-19. We are aiming to decrease the rate of contamination of the coronavirus within the population by allowing them to adopt new behaviors. As an example, we can cite the cancellation of groups of more than 5 people, distance at least 2m, protection by helmet or visor, hand washing with chlorine or bleach every 10 minutes.

Awareness campaign focused on barrier measures against COVID-19 and aimed at traders in the markets of N'Djamena town in barrier measures, so that they themselves become awareness agents.

(1) Availability of 2000 complete handwashing kits,

(2) Distribution of 1,000,000 locally produced washable masks,

(3) Activation of a citizen watch committee against COVID-19.

raise public awareness through social networks against COVID-19

ICT Tools

we use Facebook, Google, LinkedIn, Microsoft, Reddit, Twitter and YouTube to train and sensitize the Chadian population against COVID-19 and also to fight against fraud and misinformation linked to Covid-19

Challenges

the main challenges is the pandemic of COVID-19 ravaging the world. And to overcome, it is enough to apply barrier gestures and transmission contexts:

- The individual barrier gestures to be implemented;
- The collective barrier gestures to be implemented;
- The contexts of transmission in rallies and related risks;
- The contexts of transmission in the family.

Partnership

We are looking for partners in ICT area

Replicability

the project will be replicable in the city of moundou in the south of chad where the number of the population is immense.

Sustainability

Yes, We give water in the peripheral districts of N'Djamena to allow them to break the chain of transmission of the virus by disinfecting the environment and promoting individual and collective hygiene;

- make protection kits available to the population (Protection surgical masks, Protection cloth masks, Protection visor, hydroalcoholic gel, soaps, Single-use protection gloves.)
- professional training of young people in IT maintenance and empowerment.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment

SDGs

Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 11: Make cities inclusive, safe, resilient and sustainable

[Case13-CyberVictim.help](#)

Title of the project, Contact Organization Name, Stakeholder type, Country

CyberVictim.help|TaC-Together against Cybercrime International|Civil Society|Switzerland

Beneficiaries

The service is to offer to victims of cybercrime a real-time assistance with the first advice on what to do after the problem has been identified.

The beneficiaries are victims of cybercrime.

Website

<http://www.againstcybercrime.org>

Description

All human activity has gone online since the coronavirus lockdown began. This has resulted in an exponential rise in fraudulent online activity. TaC International has developed a real-time free assistance for victims of cybercrime. The assistance is offered worldwide by trained Youth IGF (www.youthigf.com) Senior Ambassadors located on different continents around the world and able to assist in different languages (Arabic, English, French, Portuguese, Russian) and time zones.

ICT Tools

Online platform is used to deliver the real-time assistance for victims of cybercrime. An app is foreseen to be developed as well.

Challenges

The main challenge is to be able to assist all victims that come with the need for help. It can be encountered by having a big number of people present online and delivering real-time assistance.

Partnership

Yes: support from industry partners and closer cooperation with national CERTs.

Replicability

This real-time assistance platform can be also implemented at national level.

Sustainability

The project has been already tested during the lockdown in Europe and became already sustainable. The sustainability is also based on the fact that the assistance is made by the trained Senior Youth IGF Ambassadors based in different countries.

Action Lines

AL C5. Building confidence and security in use of ICTs

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 16: Promote just, peaceful and inclusive societies

Case14-Covid-19: Policy Briefings

Title of the project, Contact Organization Name, Stakeholder type, Country

Covid-19: Policy Briefings World Wide Web Foundation Civil Society United States of America

Beneficiaries

Governments, companies, and civil society.

Website

<http://www.webfoundation.org>

Description

The Web Foundation has produced a set of policy briefs in response to COVID-19 to ensure the web/the internet stays open and serves as a lifeline during this public emergency. The topics are misinformation, internet access, and data rights. They can be found here: <https://webfoundation.org/research/covid-19-policy-briefings/>

ICT Tools

We focused on ICT policies.

Challenges

We focused our challenges around combating misinformation during this emergency, as well as internet access and affordability.

Action Lines

AL C3. Access to information and knowledge|AL C6. Enabling environment|AL C10. Ethical dimensions of the Information Society

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case15-Educadigital Institute

Title of the project, Contact Organization Name, Stakeholder type, Country

Educadigital Institute|Instituto Educadigital|Civil Society|Brazil

Beneficiaries

We've been trying to support educators and public managers to understand how it is important to promote data protection, specially related to kids and teens.

Website

<https://www.educadigital.org.br>

Description

I'd like to introduce you to our new project Education under Surveillance
<https://aberta.org.br/mapping-surveillance-capitalism/>

ICT Tools

Only open source: jitsi.meet, Big Blue Button, Mumble, Etherpad etc

Challenges

We want to call attention to the lack of transparency and regulation in public-private relations in technological platforms and services, compromising users' rights such as privacy and the protection of personal data.

Partnership

UNESCO Chair on Distance Education at Brasilia University
Federal University of Para
Derechos Digitales

Replicability

Yes. We created a program (script) to access the e-mail server of educational institutions and know whether the servers are allocated to external addresses of companies, or under the control of the educational institutions themselves

Sustainability

Yes, we got a first small grant from Derechos Digitales and now we are trying to amplify the geographical coverage to Latin America. We applied for some international funds and we are waiting for the return.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-science|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Title of the project, Contact Organization Name, Stakeholder type, Country

Educadigital Institute Instituto Educadigital Civil Society Brazil

Beneficiaries

We've been trying to support educators and public managers to understand how it is important to promote data protection, specially related to kids and teens.

Website

<https://www.educadigital.org.br>

Description

I'd like to introduce you to our new project Education under Surveillance
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Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case17-"Life is not about waiting for the storm to pass, it's about learning how to dance in the rain." - Sèneque.

Title of the project, Contact Organization Name, Stakeholder type, Country

"Life is not about waiting for the storm to pass, it's about learning how to dance in the rain."
- Sèneque.association EseniorsCivil SocietyFrance

Beneficiaries

The primary beneficiaries are seniors all over Paris (but not only!) = the ones who understand French.
We are helping them in practical issues while part of them are alone at home and have no contact with the external world.

Website

<http://www.e-seniors.asso.fr>

Description

Eseniors has sent out to several thousands of seniors who attend association activities and professional partner institutions regular newsletters (every few days) with useful information for physical and mental health

ICT Tools

The whole team has got accustomed to ZOOM meetings
We also sent tutorials to seniors about ZOOM and TeamViewer and offer to further help over the phone

Challenges

We keep the minds of our target population busy with links to cultural online events (free of charge always!)) and fight against loneliness and depression

Partnership

We would be happy to find partners informing us about other activities or news or even just to disseminate our letters to as large as possible an audience

Replicability

The information I sent is mostly written in English so that all the people reading French can read it
but we could do exactly the same in any other country with the local language

Sustainability

This action leads to interaction
and a lot of people who received my newsletters sent me back information that I could publish on the following newsletter

Action Lines

AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case18-#Covid19TechChallenge

Title of the project, Contact Organization Name, Stakeholder type, Country

#Covid19TechChallenge D&D International - Digital Democracy Civil Society Peru

Beneficiaries

Peruvians.

Most proposals were designed for a national scope, even though participants came from 9 regions all over Peru: Ancash, Arequipa, Cajamarca, Cusco, Huanuco, Junín, La Libertad, Lima y Puno. That was a great achievement.

Website

<https://www.democraciadigital.pe>

Description

#Covid19TechChallenge promoted the creation of digital tools that help national authorities and citizens to face Covid-19 in Peru.

Participants registered Apps or online initiatives of various kinds (web, blogs or social networks) that seek to attend, without profit, the current health crisis in Peru as a result of the Covid-19.

- The areas of intervention of the digital proposals were:

- Communication / awareness campaigns
- Preventive measures
- Diagnosis
- Consulting services
- Case monitoring
- Geolocation
- Lockdown control
- Situation of Peruvians abroad
- Identification of fake news or coronafakes
- Another area related to the health crisis Covid-19

ICT Tools

By April 5th we received 70 digital proposals from 9 regions from Peru. Participants registered Apps or online initiatives of various kinds (web, blogs or social networks) that

seek to attend, without profit, the current health crisis in Peru as a result of the Covid-19. Most of proposals were designed for a national scope.

Challenges

- At the beginning, the main challenge was to disseminate the Call for participation to #Covid19TechChallenge all over the country, using mainly our institutional online platforms and social media.
- At the end, the main challenge was related to the support given by the Digital Government Secretary (SEGDI) of the Presidency of the Council of Ministers (PCM) to the digital proposals that won the #Covid19TechChallenge.

Partnership

The Digital Government Secretary (SEGDI) of the Presidency of the Council of Ministers (PCM) was one of the main partners.

We need partners to help our winners (first and second place) and the 12 proposals which were recognized because of their great quality and creativity; to go ahead with their developments.

Replicability

Sure. This can be replicated in every country worldwide. And at a national level could be replicated in every region or federal state.

Sustainability

This project had a start and an end.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case19-Using Drones to urge people to stay home

Title of the project, Contact Organization Name, Stakeholder type, Country
Using Drones to urge people to stay homeRoyal Oman PoliceCivil SocietyOman
Beneficiaries
Society
Website
https://www.rop.gov.om
Description
<p>The Royal Oman Police is using drones to disseminate the critical message of avoiding public spaces, to fight the spread of coronavirus (Covid-19).</p> <p>ROP is utilizing the emerging technologies by using the drones to instruct the citizens and residents to stay home and avoid stepping out unless it is necessary.</p> <p>The messages are in different language urging people to avoid doing anything that jeopardies their lives and public health. The police request the residents to stay home, avoid crowded places and protect themselves and their families.</p>
Action Lines
AL C5. Building confidence and security in use of ICTs
SDGs
Goal 11: Make cities inclusive, safe, resilient and sustainable

Case20-"Call for Articles on the Impact of COVID-19"

Title of the project, Contact Organization Name, Stakeholder type, Country
"Call for Articles on the Impact of COVID-19"Forum for African Women Educationalists - Zimbabwe ChapterCivil SocietyZimbabwe

Beneficiaries

Primary beneficiaries are FAWEZI beneficiaries, alumni, school children, members, and individuals who follow our sites. FAWEZI is using Facebook, Twitter, blog, and WhatsApp as an effort to reach the different groups. Most of the adolescents have mobile phones and can access WhatsApp. These are the people whose stories we are trying to tell. On the other side, beneficiaries include policymakers, international donors, partners, and stakeholders. These are the people we want to influence with the stories.

Website

<http://fawezi.org>

Description

The Forum for African Women Educationalists - Zimbabwe Chapter (FAWEZI) has begun seeking out and sharing "statements, poems, and stories" on the impact of COVID-19. We are interested in promoting stories and narratives from marginalized and often un-heard populations such as Zimbabwean women, students, and residents of rural areas. ICT is essential both to the collection, and dissemination of these stories. In addition, these perspectives are from everyday Zimbabwean citizens - not politicians, not NGO workers, not foreign humanitarian workers, not corporate interests (aka all the people who typically get a seat at the 'stakeholders' table) - therefore they are essential to promote so that all the stakeholders who do have power know the struggles and perspectives on the ground.

ICT Tools

ICT has been essential to this initiative in three ways. First, crowd platforms such as WhatsApp have been our main means of collecting stories from across the country, from urban and rural areas alike. Second, we have been using social media such as Facebook, Twitter, and Zoom to share these stories with our international following, made up of donors, supporters, beneficiaries, and partners. Finally, one of the main topics of these stories has been the inaccessibility of ICT to poor and rural communities, and the fear that ICT, which was beginning to bridge opportunity gaps before the pandemic, is now making them worse than ever, with only those with access able to continue with their education and livelihoods. These perspectives are making FAWEZI think long and hard about how we want to incorporate ICT tools into our organization, and how we want to discuss them at a national, regional, and international level. We believe that while it will be vital to promote access to ICT tools in Zimbabwe, especially in rural areas, it is equally vital that regional and international partners know the growing opportunity gaps that ICT tools are causing.

Challenges

As FAWEZI's national chairperson put it:

"I cannot help thinking of those learners who have disconnected with their studies. There is no reading material at home. Apart from an odd torn book which might not be of their

reading age. For some there is a lot of literature around and support for them to continue. But generally speaking, most learners have been affected negatively by the pandemic. Learning is slowly losing ground. Or is it?

What hurts most is that some private schools are gearing up their online learning. They have had trial runs and now they have taken off at high speed at all levels, materials, teacher skills, learners, and parents.

It reminds me of a book titled Deschooling by Ivan Illich.

Our focus as an organisation is to ensure all children access education. With the way things are going we need to also keep track of where the authors of this new way of doing things are going. What is the impact of all this on education? What will be our role? What will be our focus? Sending girls to school or buying new gadgets for learning from home? Will schools continue or will we be having learning hubs instead?

Let us keep a close track of these changes and be ready with a new strategy. Maybe advocate for electrification of schools so that learners can take part in independent learning? What training is required for teachers? Teaching and learning continue to be redefined as it has always been."

Regarding this project, in particular, one of the most common topics - the inaccessibility of ICT tools - is also one of our challenges on the front end since many people we would like to reach to hear their stories cannot access WhatsApp, the internet, or any of our SMS lists.

Partnership

- Desired partners include, those in ICT who can enhance our skills in using ICT .
- Graphic designers to package these stories.
- Mobile network providers to support with data since the data prices have risen beyond the reach of many.
- Other organisations working with adolescents so as to combine our efforts around messaging on the impact of ICT.

Replicability

Its replicable as other organisation can also use ICT to spread messages on the COVID-19. Depending on the target audience some can also use text messages, online calls etc. This project is also amplifiable: as we share stories to our networks, larger and more powerful organisations will see them and they may be able to share with their network and so on.

Sustainability

We will see. There is a lot of interest in often un-heard narratives right now with COVID-19 going on. Unfortunately, as things change, people may stop paying as much attention, and the people who have been willing to share their stories may find that it is not worth their time and energy if people aren't listening. FAWEZI hopes that we can change with the times and make this a sustainable endeavor. Regardless of the pandemic, stories from marginalized voices need to be listened to. It will be our job to ensure that we use our resources as an NGO to present these stories to a worthy audience. Even if interest dwindles, it will be on us

to continue to find new ways to make people listen and take these perspectives into account.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries

Case21-Covid-19 Online Correspondence Course and Covid-19 Poetry/Essay Anthology (E-BOOK)

Title of the project, Contact Organization Name, Stakeholder type, Country

Covid-19 Online Correspondence Course and Covid-19 Poetry/Essay Anthology (E-BOOK)|Society of Young Nigerian Writers|Civil Society|Nigeria

Beneficiaries

General Public, writers, readers etc

Website

<http://societyofyoungnigerianwritersblog.blogspot.com/>

Description

COVID-19 ONLINE CORRESPONDENCE COURSE

<https://menegiansarowiwacovid19course.blogspot.com/>

Covid-19 Correspondence Course” aim at informing, educating and testing the knowledge and ability of the participant on issues surrounding the Covid-19 pandemic virus. The course covers areas like introduction to the Virus, Transmission, Medical information and Prevention. The course is an internet based and certificate of participation/completion will be issued to individual participant at the end of the course.

"The correspondence course has been rightly renamed after Menegian Saro-Wiwa, son of late playwright, Ken Saro-Wiwa, who recently died of COVID-19 in London.

Objectives of the Course include; To inform and educate the masses on the Covid-19 Pandemic disease; to test the ability/knowledge of the participant on issues surrounding the virus; to help the Federal Government fight against the spread of Covid-19 virus in Nigeria and to help Nigerian government provide advice on how best to fight the virus.

COVID-19 POETRY/ESSAY ANTHOLOGY (E-BOOK)

The anthology is in reaction to the novel COVID-19 pandemic currently 'harassing' the world; and it offers writers copious page to register their views on the pandemic, as well as contribute their penwork towards winning the war against the virus.

WRITERS AGAINST COVID-19 MOVEMENT

<https://writersagainstcovid19movement.blogspot.com/>

The movement was primarily formed to integrate writers in the ongoing fight against COVID-19 pandemic, and to give them platforms to employ their pen, creativity and dexterity towards combating and winning the war against the novel virus, which is currently 'harassing' the world in all ramifications.

The ideation cum formation of the movement is more or less corroboratory to Edward Bulwer-Lytton's age-long pithy saying, that 'pen is mightier than sword'; and is also in keeping with the fact that writers have a plethora of roles to play in this global fight against the novel virus, and to which many of them are very ardent to give their best, if given a platform.

The statement reads in part:

"The pursuit of this new movement is tripartite in nature, with regards to the (equally new) projects it has been launched to undertake.

"One of these is administration of the association's newly launched online certificate course on coronavirus, called 'SYNW Covid-19 Correspondence Course'

We publish poems, articles, essays and other information media on Covid-19 from aspiring and established writers.

COVID-19 INFORMATION HUB

<https://synw covid19 information hub.blogspot.com/>

Our Covid-19 Information hub offers information which covers areas like introduction to the Virus, Transmission, Medical information and Prevention.

ICT Tools

Blogs and social media tools were utilized.

Challenges

Sponsorship is the major challenge. We need fund to make hardcopies of the correspondence course and other Covid-19 IEC materials we have produced. Also the fund to produce the hard copies of our anthology.

Partnership
Yes, Sponsorship
Replicability
Yes, we are currently talking with the Oyo State Government on the need to adopt the correspondence course.
Action Lines
AL C3. Access to information and knowledge AL C4. Capacity building AL C6. Enabling environment AL C7. ICT applications: benefits in all aspects of life – E-learning AL C9. Media
SDGs
Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all Goal 11: Make cities inclusive, safe, resilient and sustainable Goal 16: Promote just, peaceful and inclusive societies

Case22-Coronavirus and its Impact on the Sustainable Development Goals
Title of the project, Contact Organization Name, Stakeholder type, Country
Coronavirus and its Impact on the Sustainable Development Goals Outreach Social Care Project- OSCAR Civil Society South Africa
Beneficiaries
Girls, women and older people
Website
https://www.facebook.com/OutreachSocialCareProjectOscar/
Description

Outreach Social Care Project is a grass-roots non-profit organization based in South Africa and Democratic Republic of Congo since 2008, working with disadvantaged and underprivileged communities in townships and rural areas.

The organization has undertaken the initiative that delivered to and supported people affected and infected by COVID- 19, through the provision of prevention, awareness, livelihood as well the psychosocial support.

South Africa like the rest of the world is gripped by the coronavirus pandemic. Social distancing, promulgated as the most effective way to curb the spread of infection, is impractical for rural and informal settlements in South Africa, where people live in close-knit communities both physically and socially and lack basic housing, water and sanitation facilities. Many models point to the burden of disease being highest amongst poor people because of higher incidences of TB and HIV and weak and overburdened health services.

ICT Tools

Outreach Social Care Project has addressed immediate needs in the townships and rural areas in KwaZulu Natal, South Africa by collecting data and utilizing innovative approaches with the current technology available: mobile technology, SMS, WhatsApp, internet, etc.

Challenges

The health, safety and well-being of all people in South Africa and Democratic Republic of Congo, is and will remain a top priority for all. While we continue to advocate for equal opportunities, justice for all, and access to livelihoods and speaking out against all forms of gender-based violence, United Nations Global Sustainable Development Goals and COVID-19, let's not forget to look out for the women and girls in our circle of influence.

The main challenges are funding, so that the organization will be able to document and to give us a clear picture on the current status of the pandemic as well as the economic and social impacts on vulnerable girls, women and older people. The organization is seeking sustainable funding to carry on this urgent action.

Partnership

Outreach Social Care Project will be unable to contain the COVID- 19 pandemic and manage the cases, and without external support, health infrastructure is likely to collapse, and many lives lost. The virus is rapidly spreading and very complicated to manage as severe cases require isolation and intensive care unit (ICU) services. High prevalence of comorbidities that weaken immune systems like HIV and AIDS, maternal illness and TB are likely to increase risk of infection.

The outbreak is evolving, and Outreach Social Care Project has been and continues to remain extremely concerned about the impact COVID- 19 will have in KwaZulu Natal, particularly amongst the population with high HIV and TB prevalence, or among the

malnourished orphans and vulnerable children as on children headed householders. The organization is welcome any support from local and international organizations and institutions.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 3: Ensure healthy lives and promote well-being for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case23-HUMANITY

Title of the project, Contact Organization Name, Stakeholder type, Country

HUMANITYGGA,USA,global ambassador,peace and hr,india,SRCCivil SocietyEgypt

Beneficiaries

We are looking forward in making the decision to “move to the cloud of things” technology and it is just a first step and then continue working together in Designing for ICT.

We take this opportunity to thank all the Parties.

For their efforts, we are looking forward in making.

The right decision to “move to the Clout/cloud of everything technology and it is just a first step and then continue working together in Designing.

For Cloud of every things global implementation and preparing.

Success strategies to help Africa and the entire world for the imperative.

“Universal adoption of clout tech in fighting coronavirus spreading in the entire world

Website

<https://www.globalgoodwillambassadors.org/>

Description

Universal Adoption of Clout Tech in Fighting Coronavirus Spreading in the Entire World

ICT Tools

CLOUT(5G,IOT,AI,CLOUD)

The internet changed our lives dramatically in the intervening years predating an era of Clout/Cloud of Everything. We can continue to expect more exciting changes. Announcing the launch of its newest technology, Clout/ Cloud of Everything, changes the concept of how we use things; with more intelligence, more efficiently and greater accessibility for all mankind. Developing countries in Africa must embrace and promote the spirit of service through the Cloud of Everything efforts in reaching/meeting the 17th and 169th SDG Goals. True success comes when preparation meets the right opportunity by helping others become successful. This is the case for universal adoption of Clout/ Cloud of everything technology in Africa and the entire world.

As COVID-19 continues to spread widely and claim lives, Clout technology is helping halt the COVID-19 outbreak.

Modern technologies used by Developed countries in CLOUT to combat the Corona virus 19.

Clout include advanced tech like IoT, AI, CLOUD, 5G, 3D.

Challenges

The challenge lies in the possibility of transferring modern technology such as the fifth generation, industrial intelligence, the cloud of things from the cloud, the Internet of Things, and the challenge also in financing for that and in selecting and training their employees.

Partnership

Yes, from specialized technology companies specializing in this field, as well as finance companies, companies and governments for that

Replicability

REPLICATE FROM ONE COUNTRY TO ANOTHER..CHINA IS THE 1ST COUNTRY AS THE ARE PROFESSIONAL IN 5G,AI,IOT,CLOUD.

Sustainability

Building a better connected world, in technological, Industrial, business, life style Revolution, Our Better Connected World is a smart world; Smart connectivity between people, between people and things, and between things and other things, is propelling our world on a new journey. The cloud of every things technology, helping elderly and handicapped people and holds the promise of fixing the millennium-old human problems of poverty, disease, violence, and poor leadership in Africa and the entire world The knowledge that we got from cot tech could change the life of a patient, or change the world, Everything Changes with the Internet of Everything tech. “If cloud of things opportunity does not knock, build a door for it” the only impossible cloud of things journey is the one you never begin My message to all is universal adoption of cloud of everything’s Technology AND Africa to be a main point in this universal adoption... to fix Africa problems in of poverty, disease, violence, and poor leadership.

As the internet changes our live; the cloud of things change and impact our live again. The significance of the dissertation within the following: cot tech tackle the two mankind problem in healthcare and energy, helping elderly and handicapped people and holds the promise of fixing the millennium-old human problems of poverty, disease, violence, and poor leadership.

<https://www.actascientific.com/ASCS/clout-efforts-in-reaching-the-17th-and-169th-sdg-goals-by-2030.php>

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case24-C-DERP (Covid 19- Digital Emergency Relief Program).

Title of the project, Contact Organization Name, Stakeholder type, Country

C-DERP (Covid 19- Digital Emergency Relief Program). Digital Empowerment Foundation Civil Society India

Beneficiaries

Keeping our objectives in mind, our beneficiaries and primary target groups are - low-income groups, daily wagers, poor and vulnerable, widow women, elderly, differently-abled, farmers, students, police officers, labors and frontline health workers. The adverse and wholesome impact of COVID-19 is such that, this catastrophic situation has made the lives of these groups so vulnerable. DEF is helping availing benefits of entitlements and services. The lives of migrant laborers who are stuck, daily wagers, and auto-rickshaw drivers have come to a still. They eat what they earn and since there exists a financial crunch, such people are the ones adversely affected. Our digital foot soldiers has provided ration and have helped them. The weavers' community is badly affected with no work. The payments to previous orders have not been made. In order to support them, a new set of order to weave Indigo Saris has been made by our ground team.

DEF's aim is to reach over 60,0000 households and 3,00,000 individuals by facilitating them with Public schemes, Tele support, spreading awareness about COVID-19 in the remote villages, creating alternate livelihood opportunities for very poor communities, food delivery to the most affected, consultation and counselling etc.

Website

<https://defindia.org/>

Description

As an economic hub with substantial global connectivity and movement of people and goods, India is directly impacted by the COVID-19 pandemic. DEF, keeping this in view, has launched an ICT-enabled and community specific relief programme C-DERP project (Covid 19- Digital Emergency Relief Program) through virtual community and service facilitation. The adverse and wholesome impact of COVID-19 is such that, this catastrophic situation has made the low-income groups, daily wagers, poor, vulnerable. Our Digital Foot soldiers is helping them survive in some way or the other. The priority key areas under the program are:

- Complete Corona Prevention Care
- Provision of SOS Food & Livelihood
- Information, Awareness & Fighting Fakenews
- Access to Government's Covid-19 Entitlements

The 600+ digitally enabled information resource centers and 10,000+ foot soldiers across 25 states and union territories are aid with:

- Public schemes, welfare measure Information, entitlement facilitation and delivery
- Support Tele-health & Tele-medicine
- Internet support;
- Alternate livelihood opportunities in times of distress
- Consultation and counselling

The aim is to reach over 60,000 households and 3,00,000 individuals with above needs and facilitation. Simultaneously, DEF will create a cadre of 600 Covid-19 Digital Volunteer Force (C-DVFs) for facilitation and deliverance of the services under the same program.

ICT Tools

In reference to accomplish the program objectives, DEF is using these ICT tools like Computer, Cell phones, video conferencing and laptops helping us promoting digital transformation in our organization or at a national and regional level as well.

Listed below are the ways emerging digital technologies are helping us in the fight against COVID-19:

1. Researches: It can potentially use natural language processing to skim through scientific papers and scholarly articles to help combat information overload.
2. Video Conferencing: Technologies like augmented reality/virtual reality can be considered as digital alternatives to address the issue. With offices closed and travel being restricted, cloud meetings have kept us from falling apart and have helped them minimize the impact.
3. Social media platforms: In recent years have been a key medium of communication during a crisis. Our social media panels have kept the audience updated and have played a major role in dissipating credible information. Mediums such as Twitter and Facebook have taken concrete steps to ensure that only helpful and credible content is distributed on their platforms by curbing the spread of fake and misleading content.
4. MeraApp: MeraApp the Android-based app developed using cutting edge technology for rural India's vulnerable population with a catalogue of welfare schemes and comprehensive information on entitlements, in an effort to empower them with access to rights and benefits under the core areas of Health, Education, Social security, Finance, differently abled and Livelihood.

Challenges

- In these tough times a lot of basic essential items are getting scarce out of which Food Grains ranks at the top with almost 36%, followed by sanitizer at 20%, have stated that it is not available at all.
- Another challenge that has emerged from this situation is of reverse migration of workers from cities. While the whole physical network, interactions, engagements have come to a standstill, it is the digital resources, platforms, solutions and networks that has and can act as a major support mechanism in this crisis. For the vast majority, there are four set of

issues that requires immediate attention-

- Lack of physical and mental health awareness about Covid-19
- Spread of misinformation, fake news and panic created
- Lack of information, data, linkages, guidance and facilitation related to public entitlements and resources
- Livelihood and income strains and access to opportunities.

DEF, leveraging this, has designed an ICT-enabled and community specific emergency relief programme through virtual community. The 600+ digitally enabled information resource centers and 10,000+ foot soldiers across 25 states and union territories will aid in public schemes, information dissemination, entitlement facilitation and delivery. Internet support will be extended to facilitate tele-health services along with consultation and counselling.

Partnership

Yes, we are looking for a funding partner to get support for basically across 600 locations. The Crisis Planning Checklist presents key areas that organizations can review to ensure that they are prepared for crisis response and operational continuity. In addition, the Continuity and Disaster Recovery Plan our Covid-19 relief kit provides the outline for a thorough and highly detailed action plan that can be used to respond to low, marginal and critical situations. Covid-19 Information Resource Kit is a crowd sourced resource pool for all verified and important information on corona virus and is available in English and Hindi. It can be used by anyone to guide students, community members and trainers, who are seeking and spreading information in the community. The kit is a one-stop information repository on facts about corona virus, measures for sound physical and mental health, dos and don'ts during the pandemic but most importantly it addresses the misinformation around the virus. Here are five things about the partner to seek help from. These are the areas worth emulating.

- To make the target group avail beneficiary Public schemes, welfare measure Information, entitlement facilitation and delivery
- A partner can help achieving Support in providing Tele-health & Tele-medicine
- To Alternate livelihood opportunities in times of distress
- To Provision of SOS Food & Livelihood
- To create Access to Government's Covid-19 Entitlements to more and more beneficiaries.

Replicability

Yes, it is being carried across DEF locations not only as a full fledged based but as per the availability of resources. The program will be replicable in the presence and absence of Internet, which is Important to the vulnerable groups. The program aims to brighten the impact broadband has on our lives, our health, our government, our jobs, and our education while considering who among us does not use the internet and who does not have home broadband access. The program addresses the gaps in information and empowerment to help the rural vulnerable groups. This project has helped empower disadvantaged women, poor, elderly, labours, differently-abled and farmers through imparting digital values to their lives.

The concept of project has been proven to work in one community or region; it can often be exported to other communities or regions in the same States or districts. While there are, of course, vast differences between countries and even between different parts of the same country, our project will often be capable of being replicated elsewhere.

Sustainability

Yes, Digital center will take up the effort beyond the project period. Project sustainability has remained our common approach related to people, and other entities requiring effective and efficient production, marketing, distribution, and the delivery entitlements and services. Generally, for this project to be sustained, certain metrics and standards are set from project identification through feasibility approaches about implementation, monitoring, and evaluation. The project also visions a comprehensive analysis of the social, economic, legal, cultural, educational, and political environments for project implementation. The project philosophy, mission, vision, values, goals, and objectives should be fully articulated and stated in the plan. The involvement of stakeholders and advocates is of paramount importance since it facilitates some logistical preparation. Beneficiary assessment, legal and regulatory framework studies, marketing and competition analysis, partnership development and institutional analysis give room for effective and efficient implementation. Technically, the information, communication, and technology (ICT) infrastructure in the project helps it to sustain for a real long.

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all

Case25-remote learning for students

Title of the project, Contact Organization Name, Stakeholder type, Country

remote learning for studentsGEM instituteCivil SocietyLesotho

Beneficiaries

Students are our primary beneficiaries as we help them continue interacting and collaborating with their teachers for continuity of education

Website

https://web.facebook.com/GEM.Institute.SwiftCodes.ls/?_rdc=1&_rdr

Description

we first held women in ict day when girls students came together to discuss impacts of corona virus on their education and what can be done to maintain education through ict

ICT Tools

Microsoft teams app which help for collaboration of students and teacher through remote learning came very helpful as it helped us stay in contact with students we are teaching STEM

Challenges

some students never had enough data bundles to access Microsoft teams so to help them we created exam practice questions for them using surveys

Partnership

yes we looking for partners to help in assisting students with data for internet connection and reaching students in rural ares

Sustainability

it is sustainable because it has sponsors and is is funded and working under people with right technology knowledge and experience

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls

Case26-Comunidades Digitais (Digital Communities)

Title of the project, Contact Organization Name, Stakeholder type, Country

Comunidades Digitais (Digital Communities)|Instituto Bem Estar Brasil-IBEBrazil|Civil Society|Brazil

Beneficiaries

The rural and peripheral communities in North of Rio de Janeiro are the primary beneficiaries. The benefits/services are: a more accessible, with quality and low cost internet access, guaranteeing the control of the network environment by the own users and the promotion of local digital services and contents to their users. Services like, Community Portal (Wordpress), Local Platforms: E-Commerce, WebTV/Radio, VoD Services, E-Learning and Social Participation are some of the local services that they implemented or are planning to do in this year.

Website

<http://www.ibebrasil.org.br>

Description

Digital Communities is a program of IBEBrasil that are running more than 10 years in the North of Rio de Janeiro, in rural and peripheral areas, in partnerships with public universities. This project foresees a Community Portal, that allows the community to access internet and to create a communication channel with the users, associated in the community provider. Through the self-management process of the community provider is possible to maintain the internet access and to create contents with local digital services. In this scenario, the community of Marrecas (in north of Rio de Janeiro) is feeding their local community portal with information about the prevention and fighting the pandemic, posting information to the residents of the community in how to act in face of COVID19. The local server will be prepared just in time to launch the local webTV/Radio, improving the community communication and generate more interaction with the residents. Since last year, the community internet provider of Marrecas (through the support of APC-LOCNet Grants) is expanding the network to other communities near them, like Quixaba community and in a few months Cazumba community also.

ICT Tools

The community network is basically a hybrid network (wireless/wired) mixing WiFi 5Ghz AC/M and Switches with Reverse POE to serve users that are more near the CPEs. In the community portal, they are using a Debian 10 Server with Wordpress that are integrated with a routerboard with RouterOS with Captive Portal for authentication of the users.

Challenges

The resources are counted to maintain the network and to fit in the actual regulatory framework. The role of IBEBrazil is to help them to absorb the knowledge about the systems that they want to implement and then create a sustainable plan to maintain these services. The other problem about Community Networks is the self-management process, that needs to be improved in the terms of decision making, turning the participation between the local council and all the users widely. About the resources (financial and regulatory), we need to adjust the directions of the public policies and funds to attend these initiatives and about the self-management, all of us (IBEBrazil and the local councils in the communities) are thinking to implement a decision making platform to try to involve more the users about the issues and solutions around their own community internet provider. But it is important to know and understand how each community makes its political decisions.

Partnership

We need to help communities in basically two activities:

- 1 - Access to local engineers (electrical, telecom and electronic) to help them to obtain licenses to use licensed spectrum or to create another kind of technical project in their own community networks
- 2 - More people to make political and regulatory incidence (in national and international level) in the telecom national agencies and the international spaces linked to telecom and internet issues to improve the legal and regulatory framework to create asymmetries benefiting the community networks.

Replicability

Community networks are replicable initiatives, existing in other parts of the world and pointed as an alternative to reduce the digital divide and to connect the unconnected, as highlighted through the IGF and ITU recommendations. There are a few documents that are talking about these initiatives in the Dynamic Coalition - Community Connectivity that address to how CNs works and how it is possible replicate it. Other repository exist in the APC and ISOC website and in the site of IBEBrazil have links and docs about these information also.

- <https://www.intgovforum.org/multilingual/content/dynamic-coalition-on-community-connectivity-dc3-0>

- <https://www.apc.org/en/project/connecting-unconnected-supporting-community-networks-and-other-community-based-connectivity>

- <https://ibebrasil.org.br/blog/>

- <https://www.internetsociety.org/issues/community-networks/>
- <https://www.itu.int/rec/D-REC-D/en>

Sustainability

Yes, through the associative process created by the users to maintain the community network. Sharing the costs, without profit, allows the users to have a more cheaper price to the link and the maintenance, that is paid in a collective way.

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 16: Promote just, peaceful and inclusive societies

Case27-Digital Skills for Women and Girls

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital Skills for Women and Girls|Women in Technology in Nigeria|Civil Society|Nigeria

Beneficiaries

Women and Girls

Website

<http://wit.ng/>

Description

We provided digital skills for girls via our Girls in ICT Day 2020 Celebrations. We are extending to these training with entrepreneurship to women who have lost their jobs this pandemic

ICT Tools

Coding tools and the internet. We are building a Mobile App for women

Challenges

Our main Challenge is funding. We are hoping the ITU would connect us with funders :)

Partnership

Yes. In the development of our app

Replicability

yes. App can be downloaded by anyone

Sustainability

through affiliate link

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case28-Digital Skills for Women and Girls

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital Skills for Women and Girls Women in Technology in Nigeria Civil Society Nigeria

Beneficiaries

Women and Girls

Website

<http://wit.ng/>

Description

We provided digital skills for girls via our Girls in ICT Day 2020 Celebrations. We are extending to these training with entrepreneurship to women who have lost their jobs this pandemic

ICT Tools

Coding tools and the internet. We are building a Mobile App for women

Challenges

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Partnership

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Replicability

yes. App can be downloaded by anyone

Sustainability

through affiliate link

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case29-Technology Enabled Academic Learning

Title of the project, Contact Organization Name, Stakeholder type, Country

Technology Enabled Academic LearningDevelopments in LiteracyCivil SocietyPakistan

Beneficiaries

TEAL learning content was specifically designed to fill the gap in quality education for middle school students, particularly those living in rural and underdeveloped areas of Pakistan. As part of Pakistan's TeleSchool programming, learning videos developed by DIL are being viewed by school aged children across Pakistan.

Developments in Literacy (DIL) was founded with the vision that no child in Pakistan, no matter how poor or underprivileged should be denied access to quality education. Today, a total of 131 schools based in the rural vicinities, shanty towns and urban slum areas of Punjab, KPK, Sindh, and ICT, are operated by DIL directly and in partnership with community based organizations and the government. Direct local presence and where necessary, through partnership, enable DIL to accurately identify and include marginalized groups. The majority of children served by DIL schools, especially girls, would not otherwise have had access to education. DIL provides operational cost, curriculum development, teaching and learning materials, teacher support, and meaningful access to technology to

enhance learning. The admission criteria for DIL schools ensures inclusion of the community's most vulnerable and marginalized groups. "Children, especially girls, from the lowest income households and students living in the immediate neighborhood will be given admission preference. Each grade will have a maximum of 25 students, 70% of which must be girls, children with disabilities will be accommodated, if possible."

Website

<https://www.dilpakistan.org>

Description

Developments in Literacy, DIL, is partnering with the Pakistani Government's PTV Tele School Initiative to bring education to children across Pakistan during this time of school closure due to COVID-19. The daily television broadcast began airing early May 2020, which also marked the beginning of the new academic year in most areas of Pakistan. DIL has contributed locally relevant video lessons giving all children across the country an opportunity to continue learning. These televised lessons from DIL, which the organization has developed and field-tested over the past few years, are especially vital for children living in rural areas who are unlikely to have access to either digital or analog learning materials outside of school. In the classroom the TEAL program, which includes hands-on activities, has effectively boosted learning outcomes across core subjects of mathematics, science, English and Urdu. In addition, DIL is piloting a partnership with a mobile communications service provider to offer free access to its digital content, offering yet another avenue to reach families and children whose education has been interrupted by this pandemic.

ICT Tools

Instructional videos developed as part of Developments in Literacy's TEAL program is being made accessible via Pakistan's first TeleSchool channel made possible by Pakistan Television Ltd and the Ministry of Education. The channel is available nationally via satellite, terrestrial and cable. On a regional level, this digital learning content is being made available to users free of charge through a partnership with a mobile carrier and will soon be accessible via the DIL website. In the classroom, prior to school closure due to COVID-19, TEAL instructional videos, lesson plans and assessments were delivered via the TEAL app developed through a partnership with Netsol. The TEAL app was designed to function with intermittent internet connection to allow users to download content onto android devices, and was designed to capture user performance and growth on specific learning topics.

Challenges

Early quantitative analysis captured by the Android application show impressive gains between pre-lesson and post-lesson quiz performance. For example, users in Khairpur, Sindh showed a growth of about 42% after completing 55 lessons on topics in English, Urdu, math and science. These measures will be triangulated with end of term written performance task data through a quasi-experimental design comparing progress between

intervention and control groups. Overall, early findings suggest TEAL has the greatest impact on low performing students, signaling tremendous potential of this approach to deliver significant academic gains for the intended population. The main challenge DIL is facing is in keeping up with the demand for these instructional videos across four subjects and three grade levels (6, 7 and 8). Each video is meticulously developed to build on previous knowledge and align with the national standards.

Partnership

DIL is open to partnerships that will facilitate the continued development and delivery of its high quality content to contexts in need.

Replicability

TEAL is replicable. DIL is working to adapt the TEAL model to suit both formal and informal education settings. Applying TEAL videos in response to COVID-19 is an apt example of how TEAL is currently being adapted and replicated.

Sustainability

Designed for sustainability and sharing, TEAL is embracing an Open Educational Resources (OER) model in which those in need of quality learning content are able to access it for free. By creating high quality content, TEAL lessons are unencumbered by time bound and costly user licensing agreements. The one-time cost of content development is quickly absorbed as more and more users access each lesson.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C9. Media

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case30-Internet awareness and capacity building

Title of the project, Contact Organization Name, Stakeholder type, Country

Internet awareness and capacity buildingRayZnewsCivil SocietyNepal (Republic of)

Beneficiaries

1. International Community
2. Grassroots community
3. Next generation leaders

Website

<https://www.rayznews.com/>

Description

1. Toolkit on Fact checking
<https://learninternetgovernance.blogspot.com/p/fact-checking-toolkit.html>
2. Internet awareness and Capacity building program
<https://www.youtube.com/watch?v=N0Yu3eAr7Cw&t=314s>
3. Report on Data Breach and PRIVACY in Nepal During COVID19 by Shreedeeep Rayamajhi
<https://www.slideshare.net/ShreedeeepRayamajhi/report-on-data-breach-and-privacy-in-nepal-during-covid19-by-shreedeeep-rayamajhi>

ICT Tools

We used Zoom account for reaching out to youth and have used social media as a major part of our outreach and engagement.

We are zero funded and the work that we have done is an example of the next generation leadership that we want to evolve from LEARNIG.

<https://www.youtube.com/channel/UCiXNaOcnMs1t6fUj71Z4m2Q>

Rayznews is an internet organization working towards bridging the gaps of internet awareness in Asia pacific and Learn Internet governance is a community collaboration concept where we have developed various toolkits and resources to facilitate the community.

<https://learninternetgovernance.blogspot.com/p/documents-and-research-paper.html>

<https://learninternetgovernance.blogspot.com/p/child-safety-online.html>

<https://learninternetgovernance.blogspot.com/p/multistakeholderism-toolkit.html>

Challenges

1. Resources like ZOOM
2. we lack funds for domain hosting and management
3. transportation and communication

Partnership

we are looking for funding opportunity as we lack funds we have recently designed our google beginners class for internet governance which we will be launching soon.

Google class room : <https://classroom.google.com/u/0/h>

Code: 3rfnlr

Replicability

It can be copied and collaborated with all

Sustainability

It a very sustainable project

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C11. International and regional cooperation

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case31-Zen Connect 4 Kids, Families & Teens

Title of the project, Contact Organization Name, Stakeholder type, Country

Zen Connect 4 Kids, Families & Teens
Innovative Trauma Relief Access (INNTRA)
Civil Society
Switzerland

Beneficiaries

Primary beneficiaries are children, adolescents, and their caregivers/parents. Parents have been experiencing severe preoccupations with the implications of COVID-19, which has been reported to compromise their ability to identify and communicate appropriately with their children. Children and adolescents have to cope with their caregiver's distress, as well as with the unpredictability of the crisis's evolution - which is highly anxiogenic.

Our unique and holistic method reduces the symptoms of anxiety and stress in children, teenagers, and their caregivers without the necessity to verbalize anything.

Domestic violence reports have greatly increased during the period of confinement worldwide. Paradoxically, reports of child abuse and neglect have decreased (mostly explained by the fact that 67% of such reports are made by child or victim-serving professionals and 19% by education professionals. (Campbell, 2020).

There are great concerns by child professionals globally to see very soon overwhelming numbers of abuse reports, with a very high demand for mental health professionals' assistance.

Website

<https://www.inntra.ch/>

Description

We are introducing 2 series of 30 minutes live-streaming episodes performed by our team in response to the COVID-19 outbreak.

Each episode proposes 2 carefully orchestrated activities (in art, music, dancing, relaxing body energy movement or singing) of 12 minutes each. This process follows a non-cognitive, holistic, creative, and solution-oriented approach to decrease stress and anxiety. Our episodes will be aired regularly on our website and chosen social media platforms. They are accessible to everyone and are free of charge.

The series, led by high-level professionals with global field experience in child trauma, stress-management, and resilience, will benefit a wide range of stakeholders: families, children, teenagers, child health professionals, educators, and any organizations (private, semi-private or state) in charge of supervising children and adolescents.

Our series' objective will first, help children and teens to cope with the aftermath of the confinement and the ongoing anxiogenic impact of the pandemic; secondly, help parents smooth out possibly tense interactions with their children. Lastly, on a more global scale, these episodes complement efficiently the work of mental health and well-being professionals who are currently heavily solicited due to the traumatic and multi-level impact of the pandemic on individuals nowadays.

ICT Tools

INNTRA collaborators are all located in various countries, so we rely on the use of personal digital infrastructures (personal and/or professional computers and laptops, relevant application and software programs). So far, based on limited technical knowledge and financial means, we will record our sessions using ZOOM meeting, do some editing with Veed.io software or possibly VSDC. We want our videos to be as visually attractive as possible, to be appealing to our young target audience.

We will continually keep on looking for options to improve both sound and visual quality.

Storage and posting are planned on our website (currently migrating from Wix to Wordpress in order to secure and improve viewing speed quality), and on Facebook and YouTube.

Challenges

Four main challenges are identified:

- 1) Weak technical proficiency in video-editing-making to ensure the quality of our video is visually engaging (inserting a soundtrack, additional visual bits to enhance aesthetics as well as subtitles in regional language). We want to avoid our episode to look “home-made” or too “business-like”.
- 2) Funding (staff remuneration, purchasing appropriate technological service to create properly our episodes, operational funds). We are currently fundraising.
- 3) Understanding the IP restriction(s) when it comes to putting online a video-concept, so our organization is protected, and our model stays sustainable.
- 4) Implementing an appropriate framework to monitor the impact of our programs on various stakeholders (families, youth, professionals) so we can compatibilized this output in our M&E framework.

Partnership

Partnership building is a key component to our organization as we strongly believe in the multisectoral necessity of cross border partnerships. It is our objective to build partnerships following one of those two sustainable models (All Inclusive Business model or the Creating Shared Value model) in order to provide tangible deliverables leading to measurable social impact.

Our partnership building need and strategy :

- Partnering with a medium or large international organization in the domain of Child Protection to sponsor our access with local professionals to assist with 1) producing subtitles and translation and 2) replicate our model (once we find an appropriate way to deal with rights).
- Partnering with a financial donor either from the private or public sector (we have been operating pro-bono and are currently fundraising).
- Partnering with a well-known regional "Ambassador" to facilitate (faster) access to our global youth target audience.

Replicability

This project is designed to be replicable. Socio-cultural relevance is a crucial aspect which is observed and respected throughout each activity taking place in every episode. For instance, an episode having for main narrative the theme “The Warrior” or “Peaceful Boundaries” will require a different symbolic approach whether the target audience is from Western, Eastern or South-Asian regions.

Our Team has the cultural experience and expertise to adapt the content of our episodes to nearly every geographical area to ensure social and linguistic relevance. Yet it is our

objective to empower local professionals to replicate our model safely and efficiently, within our M&E Guidelines.

Sustainability

The soundness of the many health impacts of our programs will remain legitimate long after COVID-19 finally disappears.

Main beneficiaries will have permanent access to the posted episodes to deal with a wide range of difficult emotional issues triggered by the pandemic and its aftermath.

The fight against the consequences of child abuse was an on-going war way before the beginning of the outbreak. The need for such service became even more significant in light of the COVID-19 crisis. Our goal is not only to continually adapt and fine-tune the content of our episodes to the evolution of the sanitary crisis but to provide steady support and relief to kids and families long after the end of the crisis.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case32-Going digital to facilitate the global library field response to the pandemic

Title of the project, Contact Organization Name, Stakeholder type, Country

Going digital to facilitate the global library field response to the pandemic|International Federation of Library Associations and Institutions|Civil Society|Netherlands

Beneficiaries

The primary beneficiaries of these activities are members of the global library sector. For some, the digital transformation opened more channels and opportunities to participate in dialogues, exchanges of experience and collaborations. The sector itself of course stands to benefit from this wider pool of engaged participants, from their experiences and insights. Other members of the sector benefitted from the shift to digital because they could access more digital offers and services – webinars, tools, knowledge databases, etc.

Naturally, many of these professional communications and initiatives have a strong focus on adapting, maintaining or improving library services and offers to their patrons and communities. As such, libraries' communities and patrons are often the key target beneficiaries.

Website

<https://www.ifla.org/>

Description

IFLA and its professional units have relied on digital tools and platforms to facilitate professional communication during the pandemic – and help build the global library field's capacity to respond.

A series of scheduled annual meetings by different IFLA Units were shifted online, addressing, inter alia, ways to adapt the Units' goals and working plans to the pandemic. Crucially, this allowed the Units to engage members who would not attend otherwise (e.g. due to financial or logistics constraints) – the Asia and Oceania Committee online meeting, for example, reported a record high attendance.

Second is the use of ICT to develop relevant online offerings to build library response capacity. These include webinars on relevant topics – e.g. information literacy and addressing digital health inequalities in times of COVID. The Document Delivery and Resource Sharing Section launched a web-based platform for interlibrary resource sharing during the pandemic.

Finally, IFLA and other actors in the library field relied on ICT to mobilise an exchange of experiences with libraries' response to the pandemic and supporting their communities.

A wide number of library pandemic responses rely on ICT - from expanding access to online materials, organising online community events, to expanding library public internet access offers, and beyond.

ICT Tools

To mobilise professional communication, IFLA relied on online conferencing tools and other web platforms, as well as social media. While not novel in itself, the use of these platforms – particularly video conferencing – was made easier by software and connectivity improvements over the last few years, and the build-up of members' experience with these tools, especially in those regions most in need of capacity building support.

The fairly routine use of many of these platforms pre-pandemic allowed many members to quickly adapt and shift to an all-digital communication, which helped deliver an urgent joint response from regional and international groups. This transformation allowed for increased

participation across members and facilitated cooperation (e.g. with collaborative productivity tools or file transfers, easing the tasks of minutes and records-keeping), adding value to their meetings; as well as encouraged a full focus on development of new digital offers and resources.

Challenges

One of the noted challenges in facilitating and mobilising professional communication on a global and/or regional scale is accommodating a diversity of time zones for live meetings. Some of the possible workarounds include splitting a meeting into several smaller calls or workshops; collaboratively picking the date/time and of course good recordkeeping for those who cannot attend.

Occasionally, the quality of internet connectivity could pose a challenge for some participants. Librarians in countries affected by internet shutdowns have of course not been able to join. Those presenting in sessions have also had to deal with uncertainty around how intellectual property works across borders.

Libraries looking to provide digital services to users have had to face the under-regulation of digital content markets (also leading to concerns about intellectual property), as well as restrictions on providing public Wi-Fi access only to certain groups.

Partnership

Broadly speaking, there is of course scope for collaboration with representatives from other areas – either as subject-matter experts (e.g. for preparing joint webinars or other materials – for example, with health, digital inclusion or information literacy experts), or as implementation partners. For instance, there are examples of collaborations between library and publishing sectors to enable broader remote access to digital materials; or with other organisations and agencies working to help bridge the digital divide during the pandemic and beyond.

Replicability

Initiatives to mobilise all-digital professional communication and coordination to facilitate effective pandemic responses can of course be implemented by other organisations that bring together geographically dispersed representatives from a single field of work.

Within the library field, we of course see similar initiatives from library associations and organisations on regional, national and sub-national levels. Many prepare informational resources for their members (e.g. in Austria, Bulgaria, and others), compile and create overviews of different members' experiences and responses (e.g. by the African Library and Information association, the American Library Association, and others), and set up or expand access to virtual events – including those for professional development (e.g. in Colombia and Portugal, among others).

Sustainability

Since it is not clear how long libraries and many other sectors will operate under the present conditions, the insights and suggestions generated through these activities may remain relevant for the foreseeable future.

Moreover, switching to an all-digital cooperation mode helps develop the capacity to expand the sector's digital offers, which may be useful beyond the pandemic.

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 17: Revitalize the global partnership for sustainable development

Case33-Finding Digital Addresses

Title of the project, Contact Organization Name, Stakeholder type, Country

Finding Digital Addresses Finding Gambia Civil Society Gambia (Republic of the)

Beneficiaries

Ministry of Health of The Gambia
Pharmacies
Delivery Companies

Website

<https://twitter.com/FindingGambia>

Description

In order to tackle the difficulties faced by The Gambian citizens while observing social distancing, Finding Gambia an initiative founded to provide addresses for every Gambian – in collaboration with Gambia Task Force on Plus Code Addressing System – launched a program that would allowed Gambians to find their generate address using google plus codes (which is also their exact addresses) anywhere they are in the country. The initiative provided training for the Centre for disease control and the Ministry of Health COVID 19 emergency team in plus code generation to help locate callers who suspect signs of the virus and need urgent medical attention. We trained volunteers from the ministry of youth using the technology to help them on contact and provision of essential goods for the populations and help ensure social distancing.

We also partnered with the UNDP, Ministry of Youth and EU’s Youth Empowerment Office in Gambia and provided training for pharmacies and delivery companies to ensure that citizens stay home and still get their essential goods.

ICT Tools

Google, Google Plus, Google Maps

Challenges

During the corona virus outbreak, The Gambia, just like other nations across the globe is observing the guidelines recommended by the World Health Organization (WHO) and one of these is the observation of social distancing.

Citizens were highly recommended to stay at home, regularly wash their hands and avoid large gatherings. Yet still, people needed essential items like food and medicines.

Partnership

Yes. In the tech sectors.

Replicability

-

Sustainability

Yes. So far, delivery companies have made an improvement of having to drive to a certain area and then make phone calls to ask for more direction to the precise location of the recipient to just getting the direct google plus codes of the recipient and receiving directions from the Google Maps application.

Pharmacies now also make deliveries for their customers to stay at home and still receive the essential medicines they need. Hence, allowing Gambian citizens to stay home and

observe social distancing, and still getting their essential goods from the comfort of their home.

Action Lines

AL C2. Information and communication infrastructure|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case34-Awareness, Relief work. like Ration distribution Medical help and child nutrition etc

Title of the project, Contact Organization Name, Stakeholder type, Country

Awareness, Relief work. like Ration distribution Medical help and child nutrition etcMahadebnagar Rural Welfare SocietyCivil SocietyIndia

Beneficiaries

Youth and community stakeholders

Website

<https://mrwsngo.org/>

Description

During COVID19 activity we think most urgent basic awareness and followup and involved social media campaign youth and local key stakeholders

ICT Tools

like social media campaign and WhatsApp Facebook

Challenges

Face many different challenges in this campaign but our volunteers and community stakeholders awareness through community level and after all success the mission

Partnership

Yes our working areas West Bengal State Murshidabad district

Replicability

Yes ongoing our project and very much success increased the negative case

Sustainability

In this project covering community very fast and capability knowledge store for their lifetime

Action Lines

AL C2. Information and communication infrastructure

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case35-Closer than ever.

Title of the project, Contact Organization Name, Stakeholder type, Country

Closer than ever. Association for Progressive Communications (APC) Civil Society South Africa

Beneficiaries

APC members, partners (women's rights and sexual rights groups, LGBTQI activists, civil society organisations working in human and digital rights), community network peers and the communities they work with.

Main benefits/services:

- human support (one to one), solidarity circles, community level sharing of responses
- information on what tools to use and how to use them particularly in transitioning to online work
- infrastructure support – access to self-hosted services required in transitioning to online work – Mattermost, Next cloud, web hosting, pad, jit.si etc
- sub-grants – campaigns, research, project, infrastructure, support - direct support for work people want to do locally (single grant), and with one another (collaborative)
- policy advocacy – connecting national levels issues with policy advocacy efforts regionally and globally whilst supporting members and partners to counteract and respond to measures adopted by governments and/or corporations that impact negatively on HRs at national levels.

Website

<https://www.apc.org>

Description

'Closer than ever' is APC's collective response to C19 - about tools, human and community support, research and policy advocacy, collectively building our network's capacity to connect and share during this pandemic, and to prepare for the future. Highlights:

- A guide for social change organisations wanting to work online with recommendations on the human aspects, tools, processes and support, based on APC's 30 years of experience.
- Resources and solutions from our community supporting human rights online in response to the pandemic, from a community, care and decentralized perspective.
- Policy positions and recommendations including:
 - the importance of an internet that is universal, open and accessible for all, that it is safe and vibrant for women and people of diverse, marginalised gender expressions and sexualities and how we can achieve it;
 - the 'African Declaration on Internet Rights and Freedoms' response informed by digital rights trends across all regions in Africa;
 - critical issues requiring attention by governments, the private sector and civil society - while devastating structural inequalities are being laid bare by the virus, a sense of

community and collective resilience are acquiring new meaning. APC sees the internet as a crucial part of this resilience.

ICT Tools

- FOSS tools for online working with safety and security. A suite of tools and guides in the 'Closer than ever: working online' guide.
- Knowledge-sharing platform – based on 'Discourse' responding to our network needs to discuss responses to the pandemic, particularly contact tracing, mis-information, increasing gender-based violence and secure solutions for online meetings and collaboration.
- Sharing infrastructure – 'matching up' those who have capacity to provide critical infrastructure services (such as web hosting, Mattermost, NextCloud, pad and Jit.si) to those who need these services. The system will facilitate 'matching' offers and needs among members and partners.
- Online meeting platforms – working with partners to implement 'BigBlueButton' as our network's video conferencing solution that can be locally hosted and shared with members' and partners.
- Re-imagining face to face meetings – ideas for how virtual meetings can be conceptualised and implemented in ways that increase participation in meaningful caring ways, and don't exacerbate digital exclusion.
- Webinars: What does 5G mean for global connectivity efforts? In the midst of the COVID-19 crisis, the importance of basic connectivity in staying informed and reaching marginalized communities has been a focal point for those working in community networks and on the issue of universal connectivity.

Challenges

- Changed work and life environment. The threat, uncertainty and fear have resurfaced trauma, wariness and anxiety.
 - Flexible responses to people's needs. More flexible work hours, creative approaches to leave, realistic work objectives. Self and collective care practice built into organisational culture.
- Diversity of contexts with members and partners in 80 or more countries. Universality of affordable and quality health care, education, connectivity, clean water, food, etc., vary enormously. Levels or severity of lock-down, increasing gender-based violence, oppression

of people's speech and movement, monitoring and surveillance.

- Support members, partners and communities developing responses rooted in the appropriate use of ICTS, care, decentralisation and community-based responses in lieu of action and solutions.
 - Adjust activities and assess support of their continued involvement in those activities.
 - Speak out about increasing on and offline rights violations, gender-based violence and increase our advocacy efforts.
 - Communicate regularly with partners and donors and collaborate in support strategies.
-
- Navigating decision making and policy processes in new virtual configurations being adopted.
 - Rethinking our engagement with policy processes and activism in order to bring about necessary change.
 - Strengthen coalitions and adopt more collaborative approaches in line with multi-stakeholder approach and principles.

Partnership

Guides: We welcome offers to assist with translation, develop case studies, and provide contextualisation of the guide for regional specificities.

Hosting services: We are interested to hear from organisations who can make some of their ICT infrastructure, including data, available to those who need.

Testing of applications (BBB): We are interested in hearing from organisations who are committed to development and hosting of the Big Blue Button video-conferencing software.

Policy advocacy: We are interested to work with organisations thinking about navigating decision making and policy processes in the new virtual configurations being adopted, and developing new ways of engagement.

Replicability

Many of the tools suites and guides can be easily replicated and improved through creative commons licensing. Sharing infrastructure and data to those who need is also replicable.

Members and partners are drawing on APC's experience in remote working and are adapting resources and expertise to their needs and contexts. APC learns from the experiences of members and partners living in diverse situations, continually incorporating learning into improved and adaptable responses and models, which are then shared back to the community.

Self and collective care is an important practice in our organisational culture and anchored in our politics of care. We continue to build this practice more broadly with our members and partners. This has contributed to our collective well being and created space for release

and authentic connection in times of disconnect. It cannot be easily 'replicated' in the sense of sharing a set of tools or guidelines but if organisations are interested to explore further we are happy to also share our experience.

Shared and collective advocacy for everyone working for an internet that is - universal, open, accessible for all, safe and vibrant and that is a such a crucial part of the resilience we need to respond to the global pandemic - is replicable and entirely possible.

Sustainability

APC does not consider 'Closer then ever' as a project as such, but rather an intentional re-aligning, amplifying and focusing of existing work and practice as a direct response to the pandemic.

It is sustainable from the perspective that the measures adopted have strengthened good practices developed over 30 years and enabled us to embed them, and many other ways of working (community-based, with collective and self-care, emphasising knowledge and experiences exchanges, etc), in a more streamlined manner into our organisational and networking dynamics that are becoming part of the way we do things.

We have grown to think of the crises as an opportunity for overall organisational strengthening that will become part of our ongoing efforts.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 5: Achieve gender equality and empower all women and girls

Case36-Tigo Eschools Platform

Title of the project, Contact Organization Name, Stakeholder type, Country

Tigo Eschools Platform Apps and Girls Civil Society United Republic of Tanzania

Beneficiaries

For secondary schools and primary Schools

This platform will focus on secondary schools and primary schools at the moment but given approval the same platform is very suitable for University institutions too.

For Higher learning institutions.

Almost every student at university has access to a smartphone or a computer, this makes this platform even much better to serve the higher learning institutions such as colleges and Universities and Vocational centers. Once approved, Each Higher learning institution can have a dedicated customised User Interface or system to make learning for easy learning and management.

This innovation can play as an opportunity for students in the ICT department since selected individuals would be recruited to manage and provide IT support for the platform thus acquiring high level experience and an opportunity to improve the platform.

Website

<https://www.appsandgirls.com/>

Description

Tanzania has approximately more than 14 Million pupils in pre and primary school level and more than 7 Million students in secondary school enrolled in school (UNESCO 2016), who are out of school due to the pandemic. Even before the pandemic crisis, we were already experiencing an education crisis, as many learners were not learning fundamental skills needed in life, increased school dropouts rates, lack of enough learning materials in schools and the very high ratio of teacher to learners. This is a difficult situation for parents who are unable to support their children's learning materials/content at home, with the unequal livelihood in Tanzania these negative impacts will be felt disproportionately by poor children.

Apps and Girls and Nlab with their partners Tigo Tanzania, we have created the eschools web-based platform to provide interactive and continuous learning opportunities to children in both rural and urban areas across Tanzania during COVID-19 and after, by connecting learners, parents and teachers while improving the educational opportunities for learners at home. The learners are able to attend virtual classes conducted by teachers, ask questions and attempt quizzes during the lessons. Also they can revisit their teachers' lessons since it can be auto-recorded by the platform.

ICT Tools

Through the Eschools website, teachers are able to conduct video and audio sessions with a single or group of students using their computers/smartphones, these sessions can be recorded and uploaded to the platform for his /her students' revision and learning. Teachers are also able to measure understanding of the class and track progress through live polls and white board privilege (this is when a teacher gives a student the access to the virtual

board where teacher's presentations are displayed and annotated). The platform also provides a Question and Answer service via SMS for students who don't have access to the internet. and has extra curricular classes of coding, web, game development, robotics , business, and STEM & tech-entrepreneurship mentorship via the Codegalaxy system.

Internet penetration in the nation of around 52 million people ticked up to 45 percent in 2017 from 40 percent a year before (Reuters 2018), this means at the moment, most households in Tanzania have access to a mobile phone or a smartphone. These might seem as just communication devices, and maybe for the use of social and access to information to those with smartphones but now it's time for more through Eschools. These devices will be the center of learning by giving access to education , knowledge and skills to students, but also access to employment and a way to earn an income for teachers.

Challenges

We had to mobilise teachers across the country for the testing of the platform, since Apps and girls have connections with a number of schools in almost five regions, the start of execution of this activity wasn't as difficult. We also utilized District educational officers who shared their teachers contacts and helped to connect with teachers in their districts and sometimes arrange the testing with our team too.

Partnership

We wish to roll out eschools services Nationwide to make sure we reach every student in the country and with the right help from the Educational officers, government and private schools and teachers, we can achieve this.

Replicability

Across the African continent, an estimated 297 million students have been affected by school closures as a result of the pandemic (UN Africa Renewal 2020). Since the Eschools platform works online and offline through a web-based and SMS platform respectively, it has the potential to be used in other countries in the African continent to give access to learning to students.

Sustainability

We are committed to make these services readily available to every student and every household during the Covid-19 crisis regardless of their financial status and that is why the services are free at the moment and they will also have zero-rating meaning no megabytes needed to access the platform -- this will be done by our partner Tigo Tanzania. In the future, we are anticipating to use a tutoring approach where students can pay to have private lessons and be tutored by teachers of their choices and at their own preferred times.

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case37-Mwajuma Simama!

Title of the project, Contact Organization Name, Stakeholder type, Country

Mwajuma Simama!Our Voices Against Harassment (OVAH)Civil SocietyUnited Republic of Tanzania

Beneficiaries

We are targeting girls and young women within the age range of 5 – 19.

Website

<http://www.ourcries.org/>

Description

As children and young adults in Tanzania are forced to stay home after the National schools closure to prevent the spread of the novel Coronavirus (Covid-19), there are now more subjected to frequent harassment and abuse from their family members and neighbors. During this time more children and young adults especially girls and women are subjected to violence, trauma and psychological stress. We have already observed in Ruvuma, 100 girls have been impregnated in these three months of school closure. If the issue of sexual abuse and harassment continues we will see the rise of child pregnancies, child marriages and school dropouts rates exponentially. Mwajuma Simama is a series of animation that aims to educate girls and young women about Sexual assault and abuse and how to deal with it. Our content will educate girls and young women about what sexual abuse is in a simplest and relatable manner possible.

ICT Tools

The animation will show a teenage girl main character called Mwajuma who experiences sexual abuse in her homes and her community, the series of events of the animation script will focus to educate about what constitutes and is defined as sexual abuse, discuss important topics such as consent and discourage victim blaming. It will also encourage youths to speak out and engage their parents and guardians who can help. We plan to display the content of our animations through OVAH website (www.ourcries.org), social media platforms, and partner with e-learning platforms, TV programs and Radio Channels programs as we also plan to tailor our content to audios.

However, we realize that only awareness and education isn't effective enough to combat the problem of sexual abuse, OVAH will expand to provide a online and offline reporting service for sexual harassment such that the victims can be able to report these abuse and harassment and get the right help.

Challenges

Animation Development – We anticipate the animation series to contain twelve episodes , animation is very costly and this is one among the main reasons we are applying for funds to help us to execute this project.

Partnership

At the moment, we already have a promised partnership from Apps and Girls Organization to stream our videos in their e-learning platform that they have developed in partnership with Tigo. The platform and content are also available with zero rated internet meaning one doesn't need to have internet bundles to access the platform.

The platform will also be rolled out across the country, targeting primary school students to advance level secondary school students – reaching most girls and young women in our target group.

We are also looking forward to creating partnerships with TV Programs and Radio Channels to enable us to reach more girls and young women across Tanzania.

Replicability

A 2004 WHO review of research estimated the global prevalence of childhood sexual victimization to be about 27% among girls (WHO 2012). If financially equipped, we can make the animation multilingual and roll it in other countries.

Sustainability

It easy to attract business to advertise if there is an audience, Ads can be used as a revenue model for Mwajuma Simama!

Action Lines

AL C3. Access to information and knowledge|AL C9. Media

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 5: Achieve gender equality and empower all women and girls

Case38-Rapid Response to Community COVID-19 queries through an online counselling service.

Title of the project, Contact Organization Name, Stakeholder type, Country

Rapid Response to Community COVID-19 queries through an online counselling service.Halley Movement CoalitionCivil SocietyMauritius

Beneficiaries

Beneficiaries include: children, single parents, women and girls, working parents, disabled population, the elderly and social & religious leaders.

Benefits to the beneficiaries include: expert answers to queries, quick responses, all issues are tackled including Covid-19. Specific issues/ questions deal mainly with sexual exploitation (both physical and online), child abuse, elderly abuse, corporal punishment, gender violence, inappropriate materials on internet, education and health (both physical and mental) and referral services, among others.

Website

<http://www.halleymovement.org>

Description

1. Online counselling service through live chat, email and short code telephone
2. Accessibility to all users through the free platform: www.helplinemauritius.org
3. Professional advice and guidance by trained & expert counsellors working for the service since years now.
4. Awareness campaign of the service through social media: FB-helplinemauritius
5. Community dialogues in marginalised and 'difficult to reach' areas.

ICT Tools

1. Internet access to seek counselling, advice or guidance
2. Live chat through the free platform
3. Email queries
4. Short code telephone access.

Challenges

The main challenges include the following, among others. The NGO needs funds.

1. Recruitment and training of additional counsellors and staff
2. Increase of logistics costs to run the service
3. Expenses to cover community dialogues in specific areas
4. Secretariat costs to monitor advertising, social media and internet connection expenses, etc.

Partnership

Yes,

1. Capacity building, and
2. Funding

Replicability

Yes, it is replicable.

Our network partners in Africa-Indian Ocean Island States are requesting the NGO to help them replicate same in their countries.

Sustainability

This project is sustainable as it is operating since 2012 in Mauritius. Its data and information are being used to submit NGO reports to the United Nations and African Union Commission , eg. UN UPR in 2013 & 2018.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 1: End poverty in all its forms everywhere

Case38-COVID-19 in SDGs: Adaptation Priority - Objectives & Broadcast Contents through Community Radio & Community Visual Radio in Bangladesh

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 in SDGs: Adaptation Priority - Objectives & Broadcast Contents through Community Radio & Community Visual Radio in Bangladesh
Bangladesh NGOs Network for Radio & Communication
Civil Society
Bangladesh

Beneficiaries

Rural people around 6.5 Millions

Website

<http://www.bnnrc.net>

Description

Bangladesh NGOs Network for Radio and Communication (BNNRC) has been struggling for the last 20 years for opening up and strengthening the community media sector including Community Radio and giving focus on its vital role as voices of the voiceless rural people from 2000. www.bnnrc.net |

BNNRC has been mobilizing all community radios for developing and broadcasting awareness building programs on COVID-19: contamination to protect lives and livelihoods since March 1, 2020 to 31 May 2020.

During March 1, 2020 to 31 May 2020 BNNRC has been working on COVID -19 covering the following issues: 1. Animate CSOs, Government, health service providers and communities for reinforcing collective action in pre and during COVID-19 2. Response for achieving keeping community people's daily life normal and livelihood function, 3. Mobilize further cooperation among government, CSOs, local market and communities' response.

1. Enhance the capabilities of affected communities through an equity lens for adapting/coping/surviving with the new normal situation
2. Focus on enhanced capabilities of Broadcasters and Stakeholders for exercising new normal and building resilience
3. Accelerate of ICT applications for benefitting community people in all aspects of life
4. Effective access to reliable information through ICT and media for countering infodemic and keeping lives & livelihood easy

ICT Tools

Challenges

Community Radios have been broadcasting COVID-19 related life-saving information since March 2020 with their own resources but without emergency grant community radio stations are facing difficulties. Last couple of months the total situation has not been easy for community radio stations. Among the cancellation of advertisement, cut down of grant-funded projects and stopped other income sources increased the challenges significantly.

The major issue that the community radio sector is facing in Bangladesh is its precarious financial condition. With the stations mostly fending for themselves over the past few months, some donor agencies are slowly stepping in, although funds from these sources are yet to overcoming national and international bureaucratic hurdles.

Partnership

Community Radio station

Replicability

COVID-19 in SDGs: Adaptation Priority - Objectives & Broadcast Contents through Community Radio & Community Visual Radio in Bangladesh project can be replicated in the same stream where all stakeholders are running the same structural processes and implementations around the world.

Sustainability

COVID-19 in SDGs: Adaptation Priority - Objectives & Broadcast Contents through Community Radio & Community Visual Radio in Bangladesh project ensuring reliable community infrastructure and equitable access to information and communication technology throughout the country. As such, it promotes the effective use of ICT, facilitate lifelong learning and skills development, creating enabling environment for digital innovations as well as boosting the investment in rural communities. which will propel the nation toward the stability, prosperity, and sustainability. With these results achieved, project is a driving force that propel country toward a path of long-term stability, prosperity, and sustainability.

Action Lines

AL C9. Media

SDGs

Goal 16: Promote just, peaceful and inclusive societies

Case39-Research via Literary work

Title of the project, Contact Organization Name, Stakeholder type, Country

Research via Literary work Childcare Consortium Civil Society India

Beneficiaries

Facebook Readers

Website

https://www.facebook.com/AnandAAAKumbakonam/?modal=admin_todo_tour

Description

24 July 2020

Tit-Bits: 76 368 Word analyses to be released in face book soon

Explaining Human Population Genetics:

Very less Human beings are infected by a COVID-19 virus from wildlife and later how the very vast number of people affected by such virus around the world?

Wildlife has few Natural necessary commitments such as survival; reproduction and recycling process where humans are interfering in their natural commitments which was limited and infected COVID-19 virus with limited people.

The connectivity of such limited infected people under socioeconomic commitments is largely affecting the people those who are in lack of due diligence in control genes in a thickly populated area without proper space and express COVID-19 virus and affect a larger number of people.

The lack of due diligence in control genes among the people is originated in obscene of

innate immunity of information , missing essential nutrients in health and poor education, cultural and religious discrimination, unemployment, Graft and corruption with irregular space in livings.

These are the reason and fundamental cause for COVID-19 infected and affected people to express or transmit to spread the virus all over the world, among the surplus human population where the vast number of people gets affected with this virus on day to day and increases.

Further that the infected and affected people of COVID-19 virus are in lack of due diligence in control genes are falsely urged and produce IgG antibodies instead of activating the production of messenger RNA to receive genetic information copied from DNA to reduce sickness and morbidity ratio.

This kind of false inhibition of control genes is not only happening in COVID-19 virus infected and affected people. It happens between Nations too, where the control genes are falsely urged the antibody forces to reach out to war instead sending the messengers who receives information from the direct democratic process for Peace living.

One has to face such consequences in present world as humans are failing in protecting the environment and Wildlife to complete the natural commitment in Ecosystems to lead a hale and healthy life.

Therefore take care in the near future in protecting the nature of each in biosphere to avoid the generation of viral infected population for prosperity in Global socioeconomic structure. Thank you for reading

The truth prevails

By

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NGO is in Special Consultative Status with the Economic and Social Council of the United Nations [Childcare consortium –CCC]

ICT Tools

e mail

Challenges

My writing on COVID 19 needs to be sponsored in Facebook

Partnership

Partner to sponsor my literary work on COVID 19 in facebook

Replicability

all Geographical areas

Sustainability

23 July 2020

Read Tit-Bits: 76 with 368 Word analyses soon in face book

Explaining Human Population Genetics:

Very less Human beings are infected by COVID-19 virus from wildlife and later how the very vast number of people affected by such virus around the world?

Do you know how the lack of due diligence in control genes is occurring, and originated in human body which receive the virus and largely affect the people by expressing COVID-19 virus in a thickly populated area?

Do you know that the infected and affected people of COVID-19 virus are in lack of due diligence in control genes are falsely urged and produce IgG antibodies instead of activating the production of messenger RNA to receive genetic information copied from DNA to reduce sickness and morbidity ratio.

To know how,

Read Tit-Bits: 76 to 368 Word analyses in Explaining Human Population Genetics which reveals COVID-19 viral spread of large and escalation of war and peace between Nations. Don't miss it.

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Action Lines

AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case40-COVID-19 Essay writing contest 2020

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Essay writing contest 2020 Edified Generation Rwanda Civil Society Rwanda

Beneficiaries

COVID-19 Essay writing contest 2020 was designed to respond to the COVID-19 especially supporting the scholars who are in lock down by expressing their knowledge on Corona Virus

Website

<https://edigenrwanda.org/>

Description

COVID-19 Essay writing Contest 2020 seeks to promote and maintain reading and writing culture as well as promotion of Book industry in Rwanda. The contest will not only provide assistance to the winners necessary to go to schools in September 2020 but also will strongly focus on the following : We need to understand how they perceive this unprecedented lock down caused by COVID-19; Engaging children and youths in the art of reading and writing and promotion of reading and writing culture in Rwanda; Exposing and nurturing young children/youths into digitally literate by applying through the platform ; Integrating them into the journey of the government of Rwanda to curb the spread of the Corona Virus.

ICT Tools

Students will visit <https://edigenwanda.org/> and choose COVID-19 Essay writing contest 2020 , children must decide a language to be able to proceed to the instructions and guidelines then to the application forms.

Challenges

The Main challenge was budget limitation which finally restricted the contest by only 5 Districts out of 30

Partnership

The program is looking for partners to build its financial muscles . Once funds are available the contest will be extended to the national scale .

the gape Area of investment are:

- 1.Implementation of the Online platform 10,000\$
2. Children Books Publishing and Exhibition in the end 20,000\$
- 3.Awards for the best work , Project Execution including Monitoring and evaluation budgets 20,000\$

Replicability

The project will be Extended to the national scale and will target other groups of people in the nation

Sustainability

Books are the best way we can save the right information , by recording the memories brought by the unprecedented outbreak . we shall be preserving the history and lessons in a consistent way since all work will be uploaded online

Action Lines

AL C4. Capacity building

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case41-Literay work via research

Title of the project, Contact Organization Name, Stakeholder type, Country

Literary work via researchChildcare ConsortiumCivil SocietyIndia

Beneficiaries

Friends and Facebook readers

Website

https://www.facebook.com/AnandAAAKumbakonam/?modal=admin_todo_tour

Description

19 July 2020 released in Facebook

Tit-Bits: 74 308 Word analyses

COVID 19 role play in Human Population Genetics:

Humans are commonly subject to major changes in their number and distribution due to their activity in a geographical region where they have DNA in the body for mutation, diversity and reproduction. Human immunity is interrelated with the utility of soil, food and Ecosystem in the biosphere.

There is no DNA in COVID 19 virus and it uses a recombination method for reproduction in duping evolutionary processes at host cells during gene flow by posing like a parent element and following the sign language of poor innate ability of immunity without response.

When the innate ability of immune response, improved via service oriented natural elements & techniques held in Plasma treatment is bringing major changes during evolutionary processes and disables the duping recombination technique of COVID 19 reproduction of host cells of the patients who get relieved permanently from such virus and discharges from hospital.

This very simple analysis is insisted by the Aam Aadmi research and development program to use service oriented natural Plasma treatment all over the world since February 2020 on Facebook.

But, the egoism still prevails around the world that is not bothered about such literary works and busy in making business oriented vaccine by hyping Gene which are liable to resurface again with COVID 19 virus after treatment.

The World Health Organization must excommunicate such egoistic bureaucrats, administrators and reestablish communication with the able administrators, researchers, medical team and writers to establish service oriented natural elements & techniques held in Plasma treatment with plasma banks at State, district and town level to chase out COVID 19 virus permanently from our planet Earth.

Wisdom treat and dismantle the mechanism of COVID 19 virus for successful existence and not issue warnings time to time to generate fear psychosis among human population in Globe who are socially and economically very weak in understanding the nature of each at this juncture.

Take care and the truth prevail!
Thank you for reading.

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NGO is in Special Consultative Status with the Economic and Social Council of the United Nations [Childcare consortium –CCC]

ICT Tools

Facebook and e mail

Challenges

Need sponsors to sponsor my literary on COVID 19 in Face book to boost

Partnership

Need partner to sponsors to sponsor my literary on COVID 19 in Face book to boost

Replicability

Yes

Sustainability

Relieve Covid 19 patients via my literary work

Action Lines

AL C4. Capacity building

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case42-Literary work via research

Title of the project, Contact Organization Name, Stakeholder type, Country

Literary work via research Childcare Consortium Civil Society India

Beneficiaries

Friends and Facebook readers

Website

https://www.facebook.com/AnandAAAKumbakonam/?modal=admin_todo_tour

Description

07 July 2020

Tit-Bits: 72 790 Word analyses published in face book

Why Human processes in administrations need to adopt a cosmic process to avoid dangerous consequences in Globe?

Human processes are based on judging the nature of each. Human judging capability is liable to mismanage the energy sources due to the prevailing volume of overpopulation in

failure of family planning, gender inequality, graft and corruption.

Such energy mismanagement promotes ego of self interest among Parent, Adult, and Child and generate misunderstanding. Misunderstanding generates conflict among human active forces in the form of politics which aimed improving someone's status with consistent feelings and behaviors to achieve its aim and objectives.

The consistent feelings and behaviors without understanding the nature of each is erase common interest in political forces and governing bodies in the world of democracy and face dangerous consequences as of now experiencing with COVID 19 viral menace and war.

When the universe plans our destiny, this is an example of our cosmic destiny. The Cosmic destiny and process is inconceivably vast in understanding the nature of each that needs common interest. Human understanding, common interests and judging capabilities require absorbing capabilities in experiencing the familiar black energy held in the Universe.

The familiar black energy in the universe moves largely outward to counter the gravity of the physical forces that move inward to maintain the contraction between energy and forces and avoid collisions, violence among revolving billions of Galaxies in the universe.

Maintaining the contraction between energy, forces are a common phenomenon hidden in cosmic destiny and the process which replaces the depleted usage and consumption values via natural reproduction where human process in the administration is failing in doing so and facing dangerous consequences as specified in Para 1,2 & 3.

When, human process fails to maintain the contraction between energy and forces due to overpopulation in failure of family planning, gender inequality, graft and corruption are liable to deplete natural resources and ecosystem for energy needs.

Human process is continued to deplete energy resources beyond the optimal limit without replacing it due to overpopulation and expanding of forces with intensity. The intensity in expanding forces affects the contraction with energy in conflict and dishonestly releases the infectious disease of graft, corruption and war in collision by spreading all over like COVID 19 virus.

After COVID 19 lockdown period our global statisticians and scientists wondered on measuring the fall of energy utility in optimal limit which improved the healing ratio of our planet Earth and made invisible to visible in the human sense.

The burdening overpopulation, pollution and gender inequality with graft and corruption are the culprits who intensify the forces which extend physical might in conflict to conduct war and extract energy with its bullying behavior of lousy expansionism from the civilization.

Such, civilizations are liable to suffer and face the consequences in begging for their rights

and privileges after the war of destruction which develops nothing except facing the dangerous consequences thereafter.

It is nonsense in human process which needs to be avoided by adopting a cosmic process in administrations to improve human understanding, common interest and judging capabilities for the maintenance of periodic contraction between energy and forces to avoid collision and violence among human populations for Peace.

Improving human understanding, common interest and judging capabilities in civilization is depending upon the family planning on controlling overpopulations, gaining gender equality and stamp out graft and corruption that simultaneously turn the human process into a cosmic process in the administration. Such simultaneous natural change in the administrative process is maintaining the contraction between energy and forces for sustainable development.

The volume of egoistic physical character in lack of information among human process of administration has to avoid polluting the biosphere to synchronize with cosmic processes which send signals of information for all life forms living in the biosphere for diversity.

But, the civilizations polluted biosphere which distorted information and delayed diversity, transformation processes and retained stagnant population under Global warming. The stagnant population is bound to lead the dull and ordinary life to spread COVID 19 virus all over irrelevant to internal immune failure of natural processes.

Currently, humans are in search of information under distorted informative conditions in the biosphere to produce vaccine against COVID 19 virus which may not be true to a cosmic process in nature and hype gene to complete the human process in error.

The true natural elements are held in plasma, which are interrelated with cosmic processes in treating nature of each to avoid dangerous consequences by relieving severe and moderate patients from COVID 19 viral infection and overcome human error in Globe.

The human error still remains with human processes in administration all over the world in allowing COVID 19 patients from 1st stage with 4th stage to reach the danger zone.

Human process needs to rush and adopt a cosmic process in various administrations in the world to stop COVID 19 viral spread and death among a stagnant population with plasma treatment to improve immunity for the reduction in mortality rate and develop socioeconomic structure for hale and healthy life.

Thank you for reading

Good luck

The truth prevails

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ICT Tools

Facebook and e mail

Challenges

Need sponsors to sponsor my literary on COVID 19 in Face book to boost

Partnership

Need partner to sponsors to sponsor my literary on COVID 19 in Face book to boost

Replicability

yes

Sustainability

Relieve Covid 19 patients via my literary work

Action Lines

AL C4. Capacity building

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case43-Literay work via research

Title of the project, Contact Organization Name, Stakeholder type, Country

Literay work via research Childcare Consortium Civil Society India

Beneficiaries

Friends and Facebook readers

Website

https://www.facebook.com/AnandAAAKumbakonam/?modal=admin_todo_tour

Description

26 June 2020

Tit-Bits: 71368 Word analyses published via face book

How to counter the effect of affects COVID 19 virus?

When, human administrative processes of rule, regulation and policies fails in protecting the Ecosystem and spreading of COVID 19 virus in the biosphere is require searching for new process such as a cosmic process to avoid violence spreads like an infectious disease and collision among human populations.

The Author's study reveals that the Dark energy in the cosmic process moves outward to counter the gravity of the physical forces which move inward to maintain the contraction between energy and forces in expanding universe for periodic cosmic changes to avoid collision and violence among trillions of Galaxies. The loss of contraction between energy and forces ends in Supernova explosion and release the dust of violence in the universe.

The released COVID 19 virus out of bats in the biosphere is getting plenty of energy from human body and solar energy to spread all over and pushes human forces backward until one sum up the rest of the forces to counter the effect of affecting COVID 19 virus in reducing and eliminating it via medical treatment.

To counter the effect of affecting COVID 19 virus, one needs a net single vector sum of forces to counter the gravity of the COVID 19 virus infected physical forces which move

inward towards cities, town and villages and further remote places.

The net force is the vector sum of all the forces and what about our forces except human forces of police and medical team to counter the gravity of the COVID 19 virus which infecting physical forces at large?

Administration's rule, regulation and policies alone won't work in fight against COVID 19 viral infection and human process need to follow the cosmic process of handling with vector forces which has magnitude and direction along certain rules of combination to maintain the contraction between energy and forces to avoid collision and spreading the dust of infections all over.

He who ignores this analysis in reverting back from the human process to cosmic process may find spreading of COVID 19 viral infection rapidly without indicating where the rule, regulation and policies get tired without results.

Thank you for reading and Take care!

The truth prevails

By

Anandaraj Karunakaran-Ex.Navy

Author,

From the desk of Aam Aadmi Research & development program, Kumbakonam, 612001

Email: a_karuna@live.com

NGO is in Special Consultative Status with the Economic and Social Council of the United Nations [Childcare consortium –CCC]

ICT Tools

Facebook and e mail

Challenges

Need sponsors to sponsor my literary on COVID 19 in Face book to boost

Partnership

Need partner to sponsors to sponsor my literary on COVID 19 in Face book to boost

Replicability

yes

Sustainability

Relieve Covid 19 patients via my literary work and promote self sustainability

Action Lines

AL C4. Capacity building

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case44-Literay work via research

Title of the project, Contact Organization Name, Stakeholder type, Country

Literay work via researchChildcare ConsortiumCivil SocietyIndia

Beneficiaries

Friends and Facebook readers

Website

https://www.facebook.com/AnandAAAKumbakonam/?modal=admin_todo_tour

Description

09 June 2020

Tit-Bits: 69 188 word analysis

How COVID-19 turn into community transmission and spread like forest fire?

The system failure in the world of democracy is responsible to turn COVID-19 into community transmission and spread like forest fire.

Direct democracy or pure democracy makes policies directly with the people, which never fail at any good or bad situation.

But, representative democracies, the indirect democracy are in fear to consult and coordinate with people to gain clues and make policy along policy makers.

Therefore, that the representative democracies are always bound relay on bureaucratic state officials who do not have direct connectivity to people and become clueless which turn COVID-19 epidemics into community transmission.

Hope, now everyone understands the importance of People's power hidden in direct democracy.

Direct all the elected representatives to visit physically at their respective constituencies to interact with people to gain clues to make fresh policies collectively to prevent from limited to unlimited community transmission of COVID-19 epidemics in the world of the largest democracy of India bearing the population of 1.38 billion.

He who ignores this analysis may face the consequences later and may cry.

Thank you for reading

The truth prevails

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Replicability

yes

Sustainability

Relieve Covid 19 patients via my literary work and promote self sustainability

Action Lines

AL C4. Capacity building

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case45-DIGITAL PROJECT FOR THE PREVENTION OF COVID-19 in Chad.

Title of the project, Contact Organization Name, Stakeholder type, Country

DIGITAL PROJECT FOR THE PREVENTION OF COVID-19 in Chad. Association des Techniciens en Technologies de l'Information et de la Communication Civil Society Chad (Republic of)

Beneficiaries

men, women, youth, children

Website

https://twitter.com/ticprojec_attic

Description

Humanity today finds itself facing a pandemic caused by the COVID-19 virus. Today, there are still many questions about the origin of this pandemic. We know that it is transmitted by direct contact with respiratory droplets produced by an infected person or by contact with contaminated surfaces. As COVID-19 continues to advance across the world, what is the fate of African populations and especially the most deprived?

It is essential that our communities take measures to prevent the transmission of the virus and reduce the impacts of the pandemic, and that they also support measures to combat it. In Chad, despite the government's salutary efforts, in its fight against COVID-19, it is clear that it continues to be a nightmare for the Chadian people. So as Chadians, we must all take initiatives to contribute to the fight against this pandemic. The only solution to defeating this pandemic in our country is collective commitment, because our survival is in our hands.

It is within this framework that the Association of Technicians in Information and Communication Technology (ATTIC) in collaboration with Betsaleel Busy Technology Pro (BBTP) initiates this project for training, awareness and the fight against infox COVID-19 circulating on social networks in Chad.

ICT Tools

the war against the coronavirus will also have to be waged on the Web. Many pandemic poisonings are currently circulating on Facebook, YouTube and others. And we are obliged to act by training and sensitizing young people, women, men, old people, children everyone without exception against the infox of COVID-19 which circulates on social networks.

Challenges

The whole world is currently facing a pandemic of "fake news" / "infox" about the Coronavirus COVID19! "Infodemic" is the expression chosen by the WHO to describe the rumors surrounding the epidemic that are circulating. The fight against "infox" then takes on its full meaning and urgency.

Thanks to new means of communication, every person becomes a vector of information in a context of immediacy. This digital boom is a real challenge to take up as it is revolutionizing the way we communicate in our society by generating innovation and economic attractiveness. However, it should be compared with the new regulations for global platforms with regard to press freedom and State sovereignty. If everyone shared information ethically and fairly, ensuring its veracity and verifying its source, the infox phenomenon would not have the same magnitude, nor the consequences that we know of

it.

A case of Covid-19 is on the rise and is causing concern, disinformation and fake news are also growing. Unproven information is circulating on social networks and several digital platforms, which could mislead users. Thus, and to limit the circulation of fakes news, the ATTIC association in collaboration with Betsaleel Busy Technology Pro took the initiative to launch the campaign which aims to raise awareness and provide the right information on the pandemic in N'Djamena in Chad.

Partnership

Yes, ICT area

Replicability

yes, we will create a website for awareness even after the end of the project

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building

SDGs

Goal 6: Ensure access to water and sanitation for all

Case46-MOUSSA IBRAHIM BARAKA AS COUNTRY DIRECTOR , AFRRICAN COVID-19 YOUTH TASK FORCE PROJECT OF COVID-19 IN CHAD

Title of the project, Contact Organization Name, Stakeholder type, Country

MOUSSA IBRAHIM BARAKA AS COUNTRY DIRECTOR , AFRRICAN COVID-19 YOUTH
TASK FORCE PROJECT OF COVID-19 IN CHAD
CARTHAGE Civil Society Chad (Republic of)

Beneficiaries

The Government of Chad announced a mandatory curfew in several provinces bordering Cameroon between 8pm and 5am starting April 2 until now.

The government of Chad has implemented enhanced screening and quarantine measures to reduce the spread of COVID-19.

The Chadian Ministry of Public Health has a hotline “green” number 1313 for

inquiries about the COVID-19 virus. The call is free and available 24/7.

- As of 27 May 2020, there are 700 confirmed COVID-19 cases, of which hospitalized in every Provincial Hospital and, and 62 death cases, and 303 patients recovered.

Website

<https://www.itu.int/net4/wsis/stocktaking/Surveys/Surveys/Submit/15863>

Description

Peace and economy

ICT Tools

Highlights

- Chad declared its first case of COVID-19 on 19 March 2020. The individual had been travelling in the past weeks through two other African countries already reporting more cases.

N'Djamena Hassan Djamous International Airport remains closed to international passenger traffic until now

The Government of Chad announced a mandatory curfew in several provinces bordering Cameroon between 8pm and 5am starting April 2 until now.

Challenges

- Under the leadership of the newly set up Health Monitoring and Safety Unit (Cellule de veille et de sécurité sanitaire) coordinated by the Minister Secretary of State at the Presidency, the Government finalized the National Contingency Plan for Preparedness and Response to the Epidemic of Coronavirus COVID-19 (Plan National de contingence pour la préparation et la riposte à l'épidémie de la maladie coronavirus COVID-19) and is seeking the UN and development partners' support

Partnership

In addition, to prevent the spread of the disease, the Government has taken a series of measures with the major ones focused on: suspension of all international flights, closure of schools, universities, places of worship, and of non-essential businesses, a ban on public transport, closure of the main markets

and a curfew in the capital of N'Djamena and 4 provinces of Logone Occidental, Logone Oriental, Mayo-kebbi Ouest and Mayo-kebbi Est.

Replicability

Key challenges include: Limitation in consumables, personal protection equipment (PPE) and equipment for critical clinical care to equip Farcha Provincial Hospital and render the unit entirely functional; reinforcement of surveillance, tracing and case management capacity at provincial level; increase in laboratory capacity in N'Djamena and in the provinces; lack of infrastructure and sanitation of quarantine sites; and strengthening assistance provided to Chadian students returning from Cameroon

Sustainability

How we can participate in covid-19 fighting?

- We make a sensibilisation to the public in Chad
- Advise the people to respect the government measure.
- Provide a mask to the people
- Provide a hand washing point to the most crowded places
- Provide a hydro alcoholic gel to sanitizing the hand

Action Lines

AL C2. Information and communication infrastructure|AL C6. Enabling environment

SDGs

Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

Case47-Literay work via research

Title of the project, Contact Organization Name, Stakeholder type, Country

Literay work via research Childcare Consortium Civil Society India

Beneficiaries

Friends and Facebook readers

Website

https://www.facebook.com/AnandAAAKumbakonam/?modal=admin_todo_tour

Description

24 July 2020

Tit-Bits: 76 368 Word analyses

Explaining Human Population Genetics:

Very less Human beings are infected by a COVID-19 virus from wildlife and later how the very vast number of people affected by such virus around the world?

Wildlife has few Natural necessary commitments such as survival; reproduction and recycling process where humans are interfering in their natural commitments which was limited and infected COVID-19 virus with limited people.

The connectivity of such limited infected people under socioeconomic commitments is largely affecting the people those who are in lack of due diligence in control genes in their body in a thickly populated area without proper space in living is express, transmit infected COVID-19 virus and affect a larger number of people.

The lack of due diligence in control genes among the people is originated in obscene of innate immunity caused by Gene repression interrelated with environmental factors such as missing essential nutrients in health and poor education, cultural and religious discrimination, unemployment, Graft and corruption with irregular space in livings.

These are the reason and fundamental cause for COVID-19 infected and affected people to express or transmit to spread the virus all over the world, among the surplus human population where the vast number of people gets affected with this virus on day to day basis.

Further that the infected and affected people of COVID-19 virus are in lack of due diligence in control genes are falsely urged and produce IgG antibodies instead of activating the production of messenger RNA to receive genetic information copied from DNA to reduce sickness and morbidity ratio.

This kind of false inhibition of control genes is not only happening in COVID-19 virus

infected and affected people. It happens between Nations too, where the control genes are falsely urged the antibody forces to reach out to war instead sending the messengers who receives information from the direct democratic process for Peace living.

One has to face such consequences in present world as humans are failing in protecting the environment and Wildlife to complete the natural commitment in Ecosystems to lead a hale and healthy life.

Therefore take care in the near future in protecting the nature of each in biosphere to avoid the generation of viral infected population for prosperity in Global socioeconomic structure.

Thank you for reading

The truth prevails

By

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ICT Tools

Facebook and e mail

Challenges

Need sponsors to sponsor my literary on COVID 19 in Face book to boost

Partnership

Need partner to sponsors to sponsor my literary on COVID 19 in Face book to boost

Replicability

yes

Sustainability

Relieve Covid 19 patients via my literary work and promote self sustainability

Action Lines

AL C4. Capacity building

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case48-Digital Hope

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital HopeB-Gifted Foundation of Sierra Leone / Maryland University Francis King Carey School of LawCivil SocietySierra Leone

Beneficiaries

The project currently serves 1500 people, in a year it will serve 5000 people and in 5 years it will serve 25,000 people. The project is targeting an approximately 20,000 amputee war victims use ICT as well as gain the level of information and awareness to prevent the spread of Covid19 in their marginalized communities, The project is also giving war amputated victims the tools and a way to learn skills with a potential for employment and empowerment.

Website

<http://www.b-gifted.org>

Description

We are using modern technologies to reach vulnerable, marginalized amputees to access information about Covid19 through their cellphones and via public address systems in the communities. The initiative assists those who are doubly marginalized as a result of their physical indifferences knowing that their situation will become even challenging during the Covid19 epidemic. Persons with Disabilities are traditionally left behind and this is true of Amputees and War Wounded who face a lot of discrimination within the communities they

live. The project offers innovative programs that will help them gain useful information during the Covid19 epidemic, attract humanitarian support, develop their residual skills and day to day functional abilities and free PWDs from being dependent on others and access gainful livelihood opportunities through innovative skills. The project will help eliminate these discrimination by providing the tools that Amputees and War Wounded need to over leap the discrimination and neglect they face in the areas of access to innovative tools, employment, grant and access and other support.

ICT Tools

The initiative is using smartphones, computers, radio, internet, TV, scanners, printers, laptops, and other means of broadcasting information and sharing content to raise awareness for those who face challenges during the war and are part of the most vulnerable population in the country.

Challenges

Challenges are access to funding and other technical tools to carry out the project. We intent to expand the project to other amputee camps and continue to use ICT to provide information, raise awareness and help in skills development. Going to amputee camps where amputees have faced unbridled terror, where expectations are high, frustrations rife, and people who are just daily expressing frustrations of being left out was a challenging one for me. In 2010, I began to visit the amputees and hear their difficult stories with the hope to support them. The communities where isolated, with bad roads, rugged with holes, hard for vehicles to ply. I mostly took Honda to travel there and hear first-hand the injustices of the war and how to help tell their stories. It was a bigger problem with desperate people, hungry, suffering from pains and the physical wounds, venting their anger and frustrations at everyone who tries to go there. They felt left out saying 'people promised them without actually delivering the services'. They were bitter about the governments disregard for them and social benefits. The anger is deafening and will make the faint of spirit abandon the goals. I braved it to the camps many times to identify their problems and took actions by creating several programs. The first project was the Support to survivors of amputation and then the Digital Hope and the Show Some Love Project.

Partnership

I am looking for partnerships in ICT for development, ICT for disability, ICT for Peace, ICT for humanitarian support, technical and development partners, and funding partners who can help leverage and scale the program

Replicability

The project is currently being replicated in Liberia and we hope to expand to Guinea and other countries

Sustainability

The project has been self-sustainable for sometime now since winning the UN ITU awards and the Pan African Awards for entrepreneurship in education shortlist. The project volunteers and the amputee camps and communities has been working on local efforts to carry out the programs through the funds initially provided for setting up the pilot phase. The project

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 10: Reduce inequality within and among countries|Goal 16: Promote just, peaceful and inclusive societies

Case49-COVID-19 Radio Response

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Radio Response|Farm Radio International|Civil Society|Canada

Beneficiaries

Our ultimate beneficiaries are rural listeners that gain access to relevant, timely and accurate information about COVID-19 on the radio and through our ICT platforms. This is achieved through the capacity building and enabling of intermediaries: radio broadcasters. These broadcasters serve their communities through regular programming on the health and social effects of COVID-19 and other issues. We are currently seeing major threats to food security among many rural communities in Africa. Markets remain closed or inaccessible, labour shortages have made harvests difficult, and physical distancing measures have made agriculture in general quite difficult. Our programming across our entire agriculture and climate change portfolio has shifted to also address the immediate needs brought on by COVID-19 but also the knock-on effects that may affect food security and nutrition as we move from emergency to recovery.

Our work is founded in the idea that all rural citizens in Africa have a right to information. By empowering broadcasters to deliver this information in the most accessible medium around

(radio), we are aiming to bolster the food security and well-being of marginalized populations in sub-Saharan Africa.

Website

<https://www.farmradio.org>

Description

At a time of physical distancing, radio is often the only source of information for marginalized communities. We are working with our network of more than 1000 radio stations across Africa on supporting communities with COVID-19. We are providing critical information to journalists across 41 countries to allow them to combat misinformation, answer frequently asked questions, and stay safe while reporting. We have also rolled out an emergency IVR hotline and a companion chatbot on Telegram and Facebook Messenger to arm journalists with the correct, up-to-date information on the pandemic. We have facilitated more than 50 social media discussions on WhatsApp and Facebook so far across ten countries where we work. We have moderated 19 five-day discussions with health, gender and nutrition specialists, allowing broadcasters to ask questions freely to inform their COVID-19 programming. Lastly, we launched a COVID-19 Support Fund for radio stations. The fund can cover fuel for generators, protective equipment, internet and phone costs for remote work, or other relevant needs. Broadcasters in twelve countries (Burkina Faso, Cameroon, Democratic Republic of Congo, Ethiopia, Ghana, Kenya, Mali, Malawi, Nigeria, Senegal, Tanzania, and Uganda) have been able to apply for the funding. All of this work with broadcasters is amplified by radio programs that reach out to tens of millions of listeners in both rural and urban geographies across the continent. At a time of physical distancing, radio is often the only source of information for marginalized communities. You can learn more here: <https://farmradio.org/our-work-on-covid-19-so-far/>

ICT Tools

We are leveraging the power of radio with our network of more than 1000 radio stations, many of which are actively broadcasting critical information during the pandemic. FRI helps radio station partners to develop interactive programs that not only leverage radio, but also modern digital technology to facilitate interactivity with listeners.

Farm Radio International's Digital Innovation team has developed both a call-in service (on our Uliza interactive voice response system) and a social media chat bot to provide a comprehensive overview of frequently asked questions, myths and misinformation, and tips for broadcasters to stay safe. The logic is that broadcasters act as force multipliers, broadcasting accurate information learned on these systems to tens of thousands or more listeners.

In ten African countries, broadcasters can call the line and leave questions which are then

responded to by health and subject experts. Across the continent, the chatbot is available for use on Facebook Messenger and Telegram, enabling our partners everywhere to have access to the same information. When broadcasters record a question, it is captured on an online app developed by our team, who then categorizes the question (so that we can track the type of information needed) and then sends it to a local expert.

The experts then sends a text back to our team, who relay the responses in the language spoken by the broadcaster.

Learn more here: <https://farmradio.org/emergency-covid19-hotline/>

Challenges

One of the main challenges we are seeing is the availability of radio stations to access resources to continue their critical work. We are hoping to help solve this problem through our COVID-19 Support Fund for broadcasters to cover basic costs while the pandemic wreaks havoc on advertisement support that stations rely on.

Furthermore, we are seeing challenges around actually delivering our work. Before the pandemic we did capacity building in a face-to-face manner. Now, we have shifted this method to completely distance methods. Monitoring and evaluation has also been shifted to distance methods where possible to make sure we know what works and where.

Partnership

FRI is definitely looking for partners. First, we are looking for funding partners to invest in robust communication services in the countries we work in. Second, we are looking to partner with NGOs and other civil society groups that may need help in delivering their work during the pandemic. Due to the nature of our work being largely at a distance already, we are able to offer connections to communities that have largely been cut off from the development community during COVID-19. We are looking for partners in the agriculture, health, education and gender equality sectors. These partnerships would focus mainly in the countries FRI maintains physical operations: <https://farmradio.org/our-work/#where-we-work>

Replicability

We think so. There is a major need for programs that support communication services even outside of the context of the COVID-19 pandemic. But right now it is even more critical to replicate this kind of approach, as the world moves on to recovery from the pandemic.

The major issue right now is simply funding. Large numbers of radio stations in our network could feasibly launch more targeted COVID-19 recovery content in the coming months if the right funders were willing to work with organizations such as FRI on this kind of work.

Sustainability

Because this is largely an emergency response project, it is time-bound and limited. However, the ideas behind the project point to an ability to sustainably offer these services: enabling local actors to sustainably produce critical information broadcasts, leveraging the scale-up capability of ICT channels, and enabling the participation of both governments and civil society.

Business models, post pandemic, could involve more integration of private sector organizations with an interest in prosperous African rural communities (seed suppliers, input supply, local tech businesses).

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C9. Media

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 13: Take urgent action to combat climate change and its impacts|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 17: Revitalize the global partnership for sustainable development

Case50-Amelioration of Agriculture Advisory services through ICT during Covid 19

Title of the project, Contact Organization Name, Stakeholder type, Country

Amelioration of Agriculture Advisory services through ICT during Covid 19|ENJEAL NYS AGRO|Civil Society|Cameroon

Beneficiaries

Advisory services workers have a platform of short messages for distance counseling of farmers of farmers.

Smallholder farmers receive messages on good Agriculture practices via mobile phones

Website

<https://www.enjealnysagro.wordpress.com>

Description

Develop an online platform where Agriculture extension and Advisory services worker can find short messages on good Agriculture practices to share with Smallholder farmers.

ICT Tools

The online platform is been developed via worldpress, any practician can have access to it. Smallholder farmers receive counseling through their mobile phones in form of short messages system (SMS)

Challenges

C- To touch an important number of farmers.

S- Agriculture Advisory services workers can create a data base of phone numbers of Smallholders that they work with regularly

Partnership

Yeah, in telecommunications, this system can be more effective if a USSD service is developed. A partnership with a telecommunications operator can facilitate the development of the service.

Replicability

This project can be replicated in sub-saharan country where internet connexions and telecommunications networks is a problem. It was first developed for a specific now many village a benefiting it.

Sustainability

Yeah it is sustainable. Agriculture Advisory service in Cameroon need a tool like this to be more effective. USSD is to be put in place so that the service will be automatic for Smallholder farmers.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-agriculture

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Case51-Sauvegarde Environnementale et developpement durable

Title of the project, Contact Organization Name, Stakeholder type, Country

Sauvegarde Environnementale et developpement durable
Reseau des organisations de la société civile pour le développement du Tonkpi (ROSCIDET)
Civil Society Côte d'Ivoire

Beneficiaries

les populations rurales, les jeunes, les femmes, les décideurs politiques, les institutions nationales, régionales et internationales

Website

<http://roscidet.com>

Description

nous avons à travers nos réseaux sociaux et notre presse numérique (AfrikScTv) réalisé campagnes de sensibilisations , créer des visuels numériques pour la populations, relayer la bonne information.

ICT Tools

facebook, twitter, linkedin, Zoom, Team, whatup, les mails, notre site web, skype. ils favorisent la dématérialisation de notre administration, réduisent notre empreinte carbone, envoyer rapidement a travers le monde nos messages qui sont suivi et relayés

Challenges

la disponibilité des outils de créativité numériques pour les visuels, l'accessibilité a internet des différents bénéficiaires cibles, l'incertitude sur la possession des bénéficiaires de bon terminaux de réception comme des androïdes, des ordinateurs et le pouvoir d'achats des souscriptions internet

Partnership

oui, dans le domaine de l'intelligence artificiel et les développement d'application adaptées au situations de crises et urgences sanitaires, risques de catastrophes, déforestation. le développement d'applications permettant d'inventorier, de faire une analyse Socio-Economique, de la veille stratégique et de l'alerte précoce.

Replicability

oui.

Ce projet a été réalise en Côte d'Ivoire.

Il peu être répliquer partout en Afrique et en Amérique latine

Sustainability

Oui c'est un projet durable car il permet de réduire l'usage des papiers donc la déforestation, limite les déplacements non essentiels donc les émissions de gaz a effet de serre, permet d'employer de la ressources humaines de qualité dans le cadre de partenariat à travers le monde.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C9. Media|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case52-Feminist organizing toolkit – planning virtual meetings

Title of the project, Contact Organization Name, Stakeholder type, Country

Feminist organizing toolkit – planning virtual meetings
Women Engage for a Common Future (WECF)
Civil Society
Netherlands

Beneficiaries

The activists in the feminist advocacy networks: Women's Major Group, Women & Gender Constituency, Women's Rights Caucus, and our local Women2030 partners who came together and formed a new unofficial network called "Feminist Response to COVID-19"

Website

<https://www.wecf.org>

Description

Together with WEDO, at the outset of the COVID-19 outbreak, we quickly realised that there was an urgent need for training on how to use online meeting tools such as Zoom by the members in our advocacy networks that we are part of. As a pro-bono initiative we quickly set up 3 training sessions (on accessibility & methodology, nuts & bolts, and safety). We had more than 200 people registering for each event and about 120-150 people attending. These were followed by the development of a toolkit in English which has been translated into Spanish and French, and which we aim to translate into Russian and Arabic as well.

ICT Tools

Feminist organizing toolkit – planning virtual meetings

Source: <https://www.wecf.org/feminist-organizing-toolkit-planning-virtual-meetings/>

Challenges

Time zone for the calls, it was very difficult to find times that suited everyone, that's why we decided to upload the videos to YouTube, and to produce the toolkit, so for those who couldn't follow the trainings could at least read the tips in the toolkit. We have also continued to mentor members of the feminist response to COVID-19 network.

Partnership

This was not a project, but more a pro bono activity for the many members and partners in these advocacy spaces.

Replicability

Yes, it can be translated and adapted. We have made it open for others to use it freely, as long as they credit us. But we encourage people to use it and train folks in their networks on the contents that is applicable to them.

Sustainability

We are constantly listening to our community to see if more training is needed, so we might have a few more teach-in in the future.

Action Lines

AL C5. Building confidence and security in use of ICTs

SDGs

Goal 5: Achieve gender equality and empower all women and girls

Case53-CONNECT & STOP VIOLENCE

Title of the project, Contact Organization Name, Stakeholder type, Country

CONNECT & STOP VIOLENCEWOMENVAICivil SocietyFrance

Beneficiaries

Beneficiaries include:

- girls, boys, who suffer violence at home and at school/high school/ university;
- women suffering from domestic violence including rape;
- anybody suffering from sexism and discrimination in the public arenas.

They will be provided a device that will help intervention and proof collection.

Website

<https://www.womenvai.org>

Description

A device based on IOT that will be disseminated to end violence (sexism, rape, racket, violence at home, on campuses, in public and private transportation etc) and collect legal proof.

ICT Tools

- iot, 4G, block chain and Artificial Intelligence are used in this project;
- it is being piloted in two geographical areas in France (Paris suburbs and geneva border /french side)

Challenges

Key challenge is to design a discreet and small device to hide in our underwear for ex. A Patent is being designed and we are eager to co-produce with ethical industrial players with a circular economical approach.

Partnership

- codesign, coproduction, comarketing
- focus on low income countries
- financial ethical partners

Replicability

Yes. Worldwide as long as you have 4G or any high speed internet connection.

Sustainability

Yes. Sustainable in ma'y Ways. From technology point of view, we use very limited components which can be recyclable. From economical perspective we are looking at a circular economical scheme. Socially it is a device that can be adapted and passed to another person.

Action Lines

AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and

sustainable economic growth, employment and decent work for all|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case54-TLAYOLCHIKAWALIS (ACTIONS TO PROTECT THE HEARTS) CAMPAIGN

Title of the project, Contact Organization Name, Stakeholder type, Country

TLAYOLCHIKAWALIS (ACTIONS TO PROTECT THE HEARTS) CAMPAIGN
Redes por la Diversidad Equidad y Sustentabilidad ACC
Civil Society
Mexico

Beneficiaries

The main beneficiaries are the members of “Union of Cooperatives Tosepan” that brings together 395 Indigenous communities of the Sierra Norte of Puebla

Website

<https://www.redesac.org.mx/>

Description

The TLAYOLCHIKAWALIS (ACTIONS TO PROTECT THE HEARTS) CAMPAIGN is aimed at making effective the right to know of the masehual people of Cuetzalan in order for them to help each other. With very scarce access to infrastructure, services and information in their own language, there has been a worrisome trend of misleading information and fake news, and the need for a campaign which not only provides reliable information but enables the community to organize themselves to help and see for each other, In order to mobilize and organize community members for the provision of supplies and other economic relief in this economic crisis in Cuetzalan, the campaign is absolutely necessary.

The campaign is being led by a long established local “Union of Cooperatives Tosepan” that brings together 395 Indigenous communities of the Sierra Norte of Puebla, but we need help for the campaign costs in Cuetzalan del Progreso and surrounding communities. Currently, TOSEPAN is being accompanied by the Mexican NGO Redes por la Diversidad, Equidad y Sustentabilidad A.C. in a very important indigenous telecommunications network project together with Telecomunicaciones Indígenas Comunitarias A.C. and Rhizomatica.

ICT Tools

broadcasting, internet, dissemination via social networks of the campaign.

Challenges

Very scarce access to telecommunications infrastructure, services and information in their own language, fake news, poor access to healthcare.

Partnership

We're looking for donors that can contribute to our campaign and action plan.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 16: Promote just, peaceful and inclusive societies

Case53-Hygiene Promotion and Education for Informal Workers

Title of the project, Contact Organization Name, Stakeholder type, Country

Hygiene Promotion and Education for Informal Workers|Saujana.org|Civil Society|Indonesia

Beneficiaries

The primary beneficiaries are informal workers and micro-enterprise holder who often forced to disobey work from home regulation due to their working nature. They are at high risk because they are overlooked by government regulations and are not necessary being recipient of any fiscal incentive. Hence, the only way to survive for them is to keep working on high-risk places.

Website

<http://saujana.org>

Description

We initiated hygiene promotion and educational project to reduce levels of risk of informal workers and micro-enterprise from being infected or infecting people with COVID-19 in relation to their livelihood activities.

ICT Tools

We develop various hygiene promotion and COVID-19 prevention protocols in various digital format including digital flyer and video. We use a website (kerjacovid.org) as a main channel of distribution, along with the use of social media.

Challenges

Main challenges are to reach the end-user/beneficiaries of the project as most of them have minimum access to ICT. We solve that by using influencers and volunteer to help our initiative and media received by its end-users.

Partnership

Yes, we are looking for a partner who can provide with a small fund to help us continue the work i.e producing more protocols for different workers, and maintaining our website to at least by end of December 2020.

Replicability

It is replicable especially to another country that has big numbers of informal workers like Indonesia, who often unregulated and hence at risk in terms of health and economy in pandemic

Sustainability

As the nature of the project is to provide informal workers with detailed protection protocols to COVID-19, this will sustain to at least when the pandemic ends, so sustainability is not necessarily the priority, but how it can reach out larger community is more important

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case54-Digital initiatives for solidarity: how to support senior citizens in times of health crisis

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital initiatives for solidarity: how to support senior citizens in times of health crisisE-SeniorsCivil SocietyFrance

Beneficiaries

All the activities proposed by E-Seniors are meant for healthy and independent seniors, from 55 to 85+ years old. Among this target group, there is a very diverse level of ICT competences, with people who are familiar with these tools and already know the basics to how to use it, and on the contrary, complete beginners, who need more support. E-Seniors always makes sure to adapt its activities to people's needs and offers computer courses for all levels (beginner, medium, advanced). The activities set up during the coronavirus crisis were also designed for everyone: receiving the newsletters involved just having an email address and was accessible to beginners, the English conversation workshops were more for seniors with medium to advanced competences to be able to use Zoom, and finally, the ICT trainers were available for everyone with the computer assistance in case of a problem. With its different activities, E-Seniors aims at fighting e-exclusion, to bridge the digital gap between generations, and to foster seniors' social participation.

Website

<http://www.eseniors.eu/>

Description

E-Seniors acts, in normal times, as a local actor by proposing to seniors collective computer workshops in different places of Paris, thanks to partnerships with social centers and the districts' town halls. When lockdown started, E-Seniors had to reinvent its activities in order to offer alternatives to its members, keeping in mind that this target group is a vulnerable population.

Therefore, the first measure was to offer newsletters to the members of the association, bringing together interesting initiatives proposed by local actors to keep busy at home. The

feedback we received has been very positive and has encouraged our team to continue this initiative and even go further considering the demand for computer assistance. Indeed, seniors needed support to manage computer malfunctions, as computers have become essential in this particular period, both to keep in touch with family and friends and to run essential errands. Thus, E-Seniors' ICT trainers provided telephone hotlines and remote assistance with software like TeamViewer, which allows to take control of a computer remotely.

Finally, E-Seniors set up another activity: English conversation workshops via Zoom, during which seniors met with a native English-speaking trainer to discuss a variety of topics depending, on the interests of the participants.

ICT Tools

E-Seniors uses mostly ICT communication tools. Indeed, the newsletters are sent to seniors via email (around 1 200 contact in the mailing list) and the different activities gathered give free resources online to stay occupied such as gym classes, online books and films, online visit of museums, information about health, activities to do with children, etc. E-Seniors uses Zoom, a well-known video conference tool, for the English conversation workshop. This allows seniors to reunite together, to share a friendly moment, and to discuss whatever they want, despite the sanitary situation. Finally, ICT trainers resort to phone and Zoom for the computer assistance, and when necessary, they use TeamViewer to take control of the computer remotely and solve the problem. This solution allows seniors not to be left out and to still have access to a professional, despite the distance.

The ICT tools mentioned above promote digital transformation in the organization, as it had to reinvent its activities online. E-Seniors had to stop all of its face-to-face computer courses and its associative meetings, and go through a brainstorming phase to determine what to do in order to help seniors in this difficult time. The solutions found with ICT tools seem fitting as they bring people together and offer them a window on the world and its initiatives while maintaining the measures advocated by the public authorities.

Challenges

The main challenges to the implementation of these activities are the difficulty that some seniors might have in accessing the content developed. This is why the E-Seniors' team thought of creating several tutorials (Zoom for English conversation and TeamViewer for computer assistance), allowing seniors to learn how to use the tools.

Partnership

E-Seniors imagined this initiative by itself and is not particularly looking for partners as it has already strong partnerships with local actors in Paris. However, E-Seniors is always open to suggestions and wouldn't be closed to the idea of replicating the project at a European level.

Replicability

In case of another pandemic situation, E-Seniors' could replicate the project by maintaining the activities proposed from March to September 2020, but also develop the project more. Given the success of the initiatives mentioned above, E-Seniors would like to go further and offer seniors, without geographical limits, other tools to help them spend this particular period as serenely as possible. These tools would complete the ones already developed and would consist of opening an online forum, and to create tutorials whose aim is to enable people who are unable to move to still be able to remain active and have access to care. E-Seniors plans to create the following tutorials: online yoga classes and other forms of physical activity that can be done at home, healthy cooking recipes, how to benefit from telemedicine, and training on various subjects such as social networks or online data protection. Moreover, a course will be offered during the summer so that seniors can reinforce the skills acquired during the school year and become familiar with new communication tools (WhatsApp, Google Hangouts, PowerPoint, Paint). Of course, E-Seniors' project could be replicated in another location, at the European level for example as the organization is involved in many European projects and have a wide network of partners.

Sustainability

The newsletters produced during the lockdown period are stored on E-Seniors' website for an indefinite period of time and are therefore be accessible to any interested person. The new tutorials would also be made available on the website so the greater good can benefit from it. The spirit of the project is to make these resources available and sustainable by letting them in open source endlessly.

What E-Seniors has been doing for the past five months could be repeated if there is another pandemic situation. The organization has ideas to improve it by making communication more interactive, involving more seniors, pushing them to be proactive and participate, opening online forums discussions, etc. E-Seniors does believe it succeeded to help people overcome their loneliness situation during the lockdown period, and this might be useful in future.

Action Lines

AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case55-Literary work via research

Title of the project, Contact Organization Name, Stakeholder type, Country

Literary work via research Childcare Consortium Civil Society India

Beneficiaries

Friends and Facebook readers

Website

https://www.facebook.com/AnandAAAKumbakonam/?modal=admin_todo_tour

Description

27 July 2020

Tit-Bits: 77 200 Word analyses

How to build solidarity among various people and Governments to fight against COVID 19 for success at Globe?

Humans are exposed to hazardous substances in the air, water, soil, and food that lives with Natural and technological disasters under Climate change and facing an occupational hazardous COVID 19 infected disease in a built environment at biosphere.

But, to build solidarity among such human population and governments, one needs repair all these above mentioned hazards to overcome and gain transparency and accurate information to understand the nature of each to function against COVID 19 viral infection for success at Globe.

The good work and drill of the most open governments with transparency such as Taiwan and New Delhi in the world has provided accurate information to understand the nature of each to function against COVID 19 viral infection and fought and brought the infected cases under remarkable dip for success.

This is the right and high time for the United Nations to rush and get all Nations endorsed and signed on a climate change treaty in Glasgow, Scotland from 1 to 12 November 2021 without fail to rebuild solidarity and protect life forms to relieve from such occupational

hazardous livings of the population on Earth.

Thank you for reading

The truth prevails

By

Anandaraj Karunakaran-Ex.Navy

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NGO is in Special Consultative Status with the Economic and Social Council of the United Nations [Childcare consortium –CCC]

ICT Tools

Facebook and e mail

Challenges

Need sponsors to sponsor my literary on COVID 19 in Face book to boost

Partnership

Need partner to sponsors to sponsor my literary on COVID 19 in Face book to boost

Replicability

yes

Sustainability

Relieve Covid 19 patients via my literary work and promote self sustainability

Action Lines

AL C4. Capacity building

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case56-UniConnect – ICT Tools and Digital Learning during COVID-19

Title of the project, Contact Organization Name, Stakeholder type, Country

UniConnect – ICT Tools and Digital Learning during COVID-19 Unistream Civil Society Israel

Beneficiaries

Primary beneficiaries are disadvantaged Israeli youth – Jewish, Arab, Druze, etc. – ages 14-18 hailing from marginalized communities in the socioeconomic and geographic periphery and youth from the United States. Unistream works primarily with youth from struggling communities that lack opportunities for social mobility and are therefore excluded from the global stage. By forging this virtual exchange and utilizing ICT tools for online learning, the program transforms youth into agents of change with resources to alter their life trajectories and a commitment to give back to society, building each other up and nurturing meaningful relationships based on mutual growth.

The participants will develop an initial idea for a startup via online Zoom sessions and WhatsApp, after assessing the needs of their local communities in regards to the pandemic. From this first stage, participants will work together through the business development process, all under the guidance of key business leaders who volunteer as mentors. The joint Israeli/American group will go through each stage of the business development process, culminating in a transnational presentation to businesses people who will provide feedback and a means for the participants to continue to challenge their personal and professional development.

Website

<https://www.facebook.com/unistream>

Description

UniConnect – ICT Tools and Digital Learning during COVID-19 harnesses business and entrepreneurial education and practical applications as a mechanism for cultivating meaningful relationships between youth in the United States and disadvantaged youth in Israel through utilization of ICT tools and online digital platforms. The program activities foster a commitment among youth towards social activism while endowing them with the skills, knowledge, tools, and networks to advance professionally and personally. Youth participants will be placed in diverse groups (in regard to gender, ethnicity, nationality, etc.) and will attend over five structured and monitored online sessions facilitated

with ICT tools (web-based learning) and engage in informal group communication in English via WhatsApp. Groups will go through the initial stages of establishing business and social ventures, with an emphasis on responding to common, local community challenges attributable to COVID-19 to develop their commitment to social engagement and find points of commonality between participants. Program activities will focus on identifying challenges, brainstorming as part of a business hackathon, small group work, undergoing a feasibility committee to choose an idea to develop, working with expert mentors, product development, and product presentation – all using ICT infrastructure.

ICT Tools

Within the framework of UniConnect, ICT tools including computers, web cams, microphones, and more, are a crucial element enabling disadvantaged youth participants working on their joint COVID-19 related startup regardless of physical distance. Each group will create their own product, working closely with mentors from the business sector and a specially- trained Group Leader, in addition to taking part in larger group sessions – within Zoom sessions, each group will be divided into digital breakout rooms controlled by the Group Leader. Other tools such as Padlet and Coogole will be utilized. Through this innovative project, participants will gain 21st Century hard and soft skills that will enable them to successfully integrate into higher education and the workforce but also become experts in utilizing these tools that are also useful for their formal education and daily life. ICT tools are particularly critical as education in Israel and around the globe is transferred online due to the pandemic.

Challenges

The emergence of COVID-19 necessitated that Unistream transfer all of its programming online with pedagogical adaptation to best fit digital platforms, as in person activities were no longer feasible, creating a major operational and programmatic challenge for the organization. In addition, COVID-19 has forced us to evaluate priorities, with significant emphasis placed on programmatic continuity, adapting current operations for a digital environment, redesigning physical events for online application, and addressing pressing needs of beneficiaries and staff. This was a huge technical, pedagogical, and operational feat that mandated considerable personnel effort and other resources. Unistream assessed how to best apply the new tools, utilize ICT tools and platforms to maintain engagement with participants without compromising on impact. The difficulty we currently face is maintaining the integrity and effectiveness of our model when it is delivered via digital platforms. Now that we are able to operate our models digitally, we can integrate participants globally, a major plus and part of our growing experience, expanding the effect and impact of UniConnect.

Partnership

Unistream harnesses a unique cross-sector, holistic partnership-based ecosystem and engages relevant stakeholders in such a way that each party brings its most efficient benefit to the partnership: The Innovation Authority, Israel Ministry of Economy (the primary partner

that recruited Unistream to launch the pilot iteration of the program), municipalities, and schools that provide access to participants as well as the space and consideration for the after school implementation of the program, in addition to the business sector – leading international and national companies: JP Morgan, fiverr, Credit Suisse, Microsoft, Google, Ebay, Facebook, Cisco, Ernst & Young, Gett, KPMG, HSBC, PayPal, Deloitte, Citi, to name just a few, which will contribute professional mentoring and/or host participants for special events and/or are funders.

In order to connect youth over ICT tools and infrastructure, Unistream relies on partners on a local level – municipal, educational, and business. We have implemented this program in Los Angeles and Atlanta with tentative plans to begin in Huntington, Virginia, and the UK. The organization is always looking for partners to jointly operate our programs.

Replicability

This project utilizes digital platforms and ICT tools in an innovative way, making it accessible to a global audience with access to technological infrastructure, with an emphasis on English speakers. In the past, Unistream has exported its flagship programs to the United States and Europe. We are able to do this because the basic pillars of the program – business, entrepreneurship, social activism, technology, and leadership, are transferable – are universally relevant.

In addition, other countries around the globe face similar critical issues that Israel faces – growing inequality, lack of relevant practical skills and knowledge, dearth of connections, violent conflict, lack of accessibility, and an increase in underserved communities – and many citizens suffer from the same inability to change their circumstances. Unistream directly addresses each of these issues through the business and entrepreneurship programs, including ICT based UniConnect.

Sustainability

Unistream will support the program activities with both in-kind and financial support garnered by our Resource Development team. Currently, we have strategic, long-term partnerships with several Jewish Federations, local/international banks, foreign governments (including the USA), various Israeli Government Ministries, and successful companies and other organizations from a variety of sectors. Unistream’s Founder and Chairman covers all overhead costs, ensuring all program funds provide a direct benefit for the participants. In parallel, Unistream has cultivated a mentors’ forum comprised of 4,700 leading business people and key leaders who volunteer their time to share their knowledge and networks with disadvantaged youth participants.

Additional emphasis is also placed on instilling a social conscious that sets participants on the path to reinvest in their communities, creating cyclical change and transforming the beneficiary to benefactor. Participants become agents of change in their lives and within their communities, capitalizing on their abilities to succeed socioeconomically, lending to program sustainability.

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case57-Saksham Project

Title of the project, Contact Organization Name, Stakeholder type, Country

Saksham Project Saksham Trust (and its subsidiary Saktek Foundation) Civil Society India

Beneficiaries

The projects primarily benefit PVI in India across different age groups, gender, class-division and its different regions including those in tier-two and three cities.

In addition to results highlighted in answer 12, the project enables PVI to smoothly shift to online-education and employment amid lockdown ensuring that they are not disadvantaged due to mobility and other restrictions.

Our subsidized distribution-programme provides support to those who otherwise may not be able to afford A.T. devices because of high-cost despite Saksham bringing down cost significantly compared to international-market. The devices are further offered with content and training ensuring holistic solution-delivery.

Our services are part of larger accessible-ecosystem of India and in that sense we work closely with Government of India, NGOs, boards and universities and publishers. Our projects therefore not only benefit PVI but also their immediate-circle of influence including family, education-stakeholders such as schools, employers et cetera.

It is important to note here that the project-activities are not limited to current situation but will have a bearing on PVI lifecycle. For example, previous impact-assessments have reported that A.T. devices such as smartphones not only allow PVI to participate actively in education but also assist in employment and interpersonal-communication etc.

Website

<http://saksham.org/>

Description

Saksham empowers persons-with-print-disabilities (PVI) through technology-solutions, education and skill-development by using ICT-infrastructure/devices to remove environmental and attitudinal-barriers:

1. Saktek online-store

a. Objective: Active participation of PVI in education, employment-sectors amid shift to online-learning/work amid lockdown.

Result: 350+ students provided digitally literacy A.T. solutions at subsidized-rates with training and content (including laptops, smartphones, tablets, DAISY-players, Dotbooks, RBDs) through support of Embassy-of-Germany and other partners.

b. Objective: Timely-delivery of A.T. products/devices including medical/health-products so that PVI are independent and self-reliant especially during COVID-19.

Result: Delivered 3000+ A.T. solutions from Saktek's portfolio of 160+ products for PVI with all necessary precautions. Procured and disseminated devices relevant for pandemic like talking-oximeter.

2. Accessital:

a. Objective: Meet urgent demand of accessible-book-production while following necessary restrictions amid shift to online-learning and PVI inability to travel and buy bulky braille-books.

b. Result: Through Accessital, web-based-platform for converting print into accessible-format Saksham registered 300+ volunteers worldwide who supported efforts with complete online workflow. We partnered with local disability-NGOs (Enable, Amogh) and employed 25 PwDs thereby offering them steady livelihood-opportunity.

3. Sugamaya Pustakalaya

a. Objective: PVI students have accessible-books irrespective of their location to appear for exams. Adequate support is offered to new-users.

b. Results: Sugamaya-Pustakalaya provided accessible-books for PVI including to Delhi-University students. Recorded 14% increase usage of this tech-platform with 700+ new users and 400 new-titles being created and uploaded during Covid. Library enabled users to download, read books from hometowns. Saksham-Helpline was created whereby students could directly place and receive content-request.

ICT Tools

Saksham uses variety of A.T./ICT tools for promoting digital-transformation of PVI:

- We provide mainstream-technologies like laptops, tablets, smartphones at subsidized cost to enable active PVI participation in education and employment irrespective of their socio-economic background.
- Devices are provided with training and preloaded content along with A.T. solutions such as INDO-NVDA (screen-reader adapted to Indian-context by Saksham) that enable PVI to read/write in normal-script while offering multiple Indian-languages suited to Indian-context.

- Dotbooks and RBDs offered under subsidized-devices allow users to read-books, create/edit word-documents, browse-Internet, manage emails, connect directly to online-libraries through built-in applications, in addition to connecting with PC and phone through NVDA and talkback screen-readers through USB and bluetooth.
- Saktek.in offers diverse portfolio of 160+ affordable devices so that PwDs from remotest parts of India are able to receive their devices amid lockdown.
- We work on accessible-media and formats through Accessital and Sugamaya Pustakalaya. Accessital (web-based platform) allows for management of complete-workflow including OCR in Indian-languages for books in accessible-digital e-text format. Sugamaya-Pustakalaya (tech-platform) provides free access to 50k+ titles for print-disabled in multiple-modes and channels. It automates creation, distribution of accessible-content and protects publishers' intellectual-property while bringing together an ecosystem of stakeholders and offering tools for one-click accessible content-generation.

Challenges

Saksham strongly believes that a device without training does not benefit the individual. Since COVID-19 lockdown has hampered face-to-face training, we initially faced challenged of providing training amid lockdown. We have since mitigated this challenge by providing online support through Saksham helpline and delivering webinars online on our various platforms.

Earlier persons had to travel and come to the office to provide support for the conversion of book through scanning which was a concern amid the pandemic. The Accessital platform with complete online workflow management has enabled volunteers/employees from remote parts of the country and even other countries to support this process and meet the high-demand for accessible books. In addition, our partnership with local-NGOs in engaging PwDs in the creation process has also enabling us to generate steady income for them amid the lockdown from their homes.

We did face a few challenges as PVI found it difficult to make a shift to online education/learning but we were able to mitigate the same by providing technical support through our WhatsApp groups, email and technology helpline where users could communicate with our technology experts.

Partnership

As shared above, under Accessital project we have partnered with local NGOs in Bangalore who are providing employment to PwDs for supporting Saksham's work in accessible-book creation. Our aim is to further expand this programme to meet the goal of book conversion while also offering employment to PwDs who may have lost employment due to the lockdown. We are therefore looking for civil society organisations to partner with for this project.

Another area where we require support is that of device distribution. While Saksham has

successfully generated funds for the distribution of devices such as laptops, smartphones through support of our partners, we require local partners who can help us in distributing devices across India, especially in remote areas.

Replicability

Saksham has always believed in ensuring that devices are provided along with content and training to users as a holistic solution ensuring ease of access and one-stop solution for users. We believe this methodology is replicable and can be adopted by schools, organisations and institutions working for PVI.

We also believe that our Accessital platform and Sugamaya Pustakalaya library are well suited for the current lockdown and can be replicated in middle-income and low-income countries.

Sustainability

The World Blind Union estimates that less than 1% of published books are ever made into accessible-formats in the developing-countries. There is a significant demand for accessible books in India. The Sugamaya Pustakalaya is filling this gap and is powered by TCS Infinity which made the technology available to the DFI consortium of 190+ entities including government bodies, educational-boards and universities, publishers and NGOs involved in providing accessible-books available to PVI with a perpetual license at zero-cost.

In addition to this all books created on our Accessital platform (developed as part of previous DAISY consortium project) are uploaded onto Sugamaya Pustakalaya. Accessital therefore compliments Sugamaya Pustakalaya and ensures there is minimum wastage of resources and no duplication of work. At the same time Sugamaya Pustakalaya also provides a complete ecosystem for various stakeholders and has 80+ production and distribution partners on-board thereby ensuring communication among all stakeholders and effective stocktaking and strategy.

Saktek is a not-for-profit company, which makes affordable A.T. devices available to customers and generates its income through this and by conducting webinars, where relevant. We also utilize our existing database of donor organisations and raise money through CSR grants, individual donors, institutional grants etc. and govt. tenders.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 16: Promote just, peaceful and inclusive societies

Case58-Support provided by the Omar Dengo Foundation (FOD) to the Costa Rican public educational system in response to the COVID-19 crisis

Title of the project, Contact Organization Name, Stakeholder type, Country

Support provided by the Omar Dengo Foundation (FOD) to the Costa Rican public educational system in response to the COVID-19 crisis
Omar Dengo Foundation (Fundación Omar Dengo)
Civil Society
Costa Rica

Beneficiaries

The beneficiaries of activities to Costa Rica's public educational system (between March 15 and July 15, 2020), were the following:

- 8,901 teachers participated in FOD's online courses through the virtual campus "Upe"
- 5,994 teachers participated in Profuturo Foundation's online courses available through the virtual campus "Upe"
- 6,999 teachers and students participated in online courses offered through our partnership with Cisco Networking Academy
- 2,339 teachers participated in FOD's telepresence courses
- 9,915 teachers participated in virtual workshops and 1,690 in virtual tutorials on the use of Microsoft Teams (March 15 to May 15, 2020).
- Content about the use of Microsoft Teams posted through Facebook reached, on average 9,763 viewers.
- 6,603 teachers' WhatsApp and Email messages and 1,184 phone calls on the use of Microsoft Teams responded through FOD's Help Desk.
- Through the partnership with Cisco, FOD supplied teachers with up to 1,000 Webex licenses. Each of these licenses supported up to 200 participants connected simultaneously per session, thus allowing a maximum of 200,000 participants.

Website

<http://www.fod.ac.cr>

Description

Since March 16, 2020, schools closed in Costa Rica, cancelling in-person classes and moving the educational system to at-home schooling. The Omar Dengo Foundation, in coordination with the National Program of Educational Informatics Ministry of Public Education – Omar Dengo Foundation (PRONIE MEP-FOD), offered the following services:

- Teacher training activities through FOD’s virtual training campus “Upe” and other online training services such as Cisco Networking Academy. Including the offering of online courses, workshops and tutorials in subjects such as learning with mobile technologies, computational thinking, programming, electronics, cybersecurity, digital citizenship and entrepreneurship.
- Encourage the use by teachers of Microsoft Teams through social networks.
- Digital resource toolbox “LIE++ from home”, to guide online, at-distance and offline educational informatics learning, by primary and secondary school students.
- Provision of alternative communication tools, such as Cisco Webex licenses.
- Home access to PRONIE MEP-FOD’s laptops so that students could continue with their educational processes through at-distance and virtual schooling.
- Teacher Help Desk to answer inquiries using WhatsApp messages, Email and phone calls.
- Transportation of educational materials to students without Internet access.

ICT Tools

The activities undertaken by FOD included the use of the following tools and online platforms to promote the continuation of the educational services by students and teachers:

- Online Virtual Campus “Upe” (www.upe.ac.cr)
- “LIE++ from home” digital toolbox (lieencasa.fod.ac.cr)
- Microsoft Teams, the communication platform selected by Costa Rica’s Ministry of Public Education to be used within the country’s public educational system.
- Cisco Webex
- WhatsApp messaging
- Email services
- Social networks, used to share learning capsules and to organize live training events on subjects related to new strategies towards online learning at home.

Challenges

FOD addressed two main challenges:

1. The first challenge dealt with was reaching teachers with poor connectivity conditions and/or lack of experience with technology. This was overcome by designing resources and training opportunities that could be attractive and easily accessible, even for teachers under those conditions. For example, live events through social networks such as Facebook,

virtual workshops and live tutorials through Microsoft Teams were used as tools for teachers to participate and get clarification on their questions and doubts.

2. The second challenge dealt with was how to obtain information and data on the extent of which teachers are using digital and online tools to reach their students, and providing them with useful learning experiences and ongoing support.

Partnership

Our partners in the above-mentioned initiatives were:

- Costa Rica's Ministry of Public Education (MEP)
- Cisco Systems
- Institute for Training and Studies in Democracy - IFED (from the Supreme Electoral Court of Costa Rica)
- Profuturo Foundation
- Microsoft

Replicability

The project's activities can be replicated by other public and private educational systems, by following the methodological strategy of training the educators first, and then provide them with continuous advice and support. The use of social media to deliver live broadcasting and educational learning capsules can be useful to reach a majority amount of population. FOD's new training formats, such as mini-workshops and virtual tutorships can be easily replicable through Microsoft Teams or other online video conferencing tools. They are characterized by requiring little production and preparation time and, as being very short, they can be replicated numerous times. At the same time, participants have shown very high levels of satisfaction with these type of activities.

Sustainability

The support activities undertaken to respond to the Covid-19 pandemic rely on the long-standing multi-stakeholder partnership that has allowed the Ministry of Public Education and the Omar Dengo Foundation to establish a solid National Program of Educational Informatics benefiting 92% of K-9 public school students nationwide. New modalities of training and support activities can be embedded into the educational practices at public schools. Virtual environments provide an opportunity for teachers to learn, in a hands-on manner, about the methodologies and contents on how to use technology. This can help them to better understand technological tools, and enable them to use available resources with a wider reach.

The virtual platforms used by FOD during this public health emergency, such as "Upe" Virtual Campus, "LIE++ from home", Microsoft Teams for mini-workshops and tutorials, as well as the Help Desk tools, will be available even after students and teachers return physically to their classrooms. It is important to notice that teachers have gained knowledge and are more skillful with online tools. The expectation is that, as teachers incorporate these tools into their repertoire, they will continue using them further on with their students and for

their own professional development training.

We have reported here activities undertaken until July 15, 2020. FOD and PRONIE MEP-FOD are continuing their efforts to provide online and at-distance services to students and teachers from public schools nationwide.

Action Lines

AL C4. Capacity building

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case59-Support provided by the Omar Dengo Foundation (FOD) to the Costa Rican public educational system in response to the COVID-19 crisis

Title of the project, Contact Organization Name, Stakeholder type, Country

Support provided by the Omar Dengo Foundation (FOD) to the Costa Rican public educational system in response to the COVID-19 crisis
Omar Dengo Foundation (Fundación Omar Dengo)
Civil Society
Costa Rica

Beneficiaries

The beneficiaries of activities to Costa Rica's public educational system (between March 15 and July 15, 2020), were the following:

- 8,901 teachers participated in FOD's online courses through the virtual campus "Upe"
- 5,994 teachers participated in Profuturo Foundation's online courses available through the virtual campus "Upe"
- 6,999 teachers and students participated in online courses offered through our partnership with Cisco Networking Academy
- 2,339 teachers participated in FOD's telepresence courses
- 9,915 teachers participated in virtual workshops and 1,690 in virtual tutorials on the use of Microsoft Teams (March 15 to May 15, 2020).
- Content about the use of Microsoft Teams posted through Facebook reached, on average 9,763 viewers.
- 6,603 teachers' WhatsApp and Email messages and 1,184 phone calls on the use of Microsoft Teams responded through FOD's Help Desk.
- Through the partnership with Cisco, FOD supplied teachers with up to 1,000 Webex

licenses. Each of these licenses supported up to 200 participants connected simultaneously per session, thus allowing a maximum of 200,000 participants.

Website

<http://www.fod.ac.cr>

Description

Since March 16, 2020, schools closed in Costa Rica, cancelling in-person classes and moving the educational system to at-home schooling. The Omar Dengo Foundation, in coordination with the National Program of Educational Informatics Ministry of Public Education – Omar Dengo Foundation (PRONIE MEP-FOD), offered the following services:

- Teacher training activities through FOD's virtual training campus "Upe" and other online training services such as Cisco Networking Academy. Including the offering of online courses, workshops and tutorials in subjects such as learning with mobile technologies, computational thinking, programming, electronics, cybersecurity, digital citizenship and entrepreneurship.
- Encourage the use by teachers of Microsoft Teams through social networks.
- Digital resource toolbox "LIE++ from home", to guide online, at-distance and offline educational informatics learning, by primary and secondary school students.
- Provision of alternative communication tools, such as Cisco Webex licenses.
- Home access to PRONIE MEP-FOD's laptops so that students could continue with their educational processes through at-distance and virtual schooling.
- Teacher Help Desk to answer inquiries using WhatsApp messages, Email and phone calls.
- Transportation of educational materials to students without Internet access.

ICT Tools

The activities undertaken by FOD included the use of the following tools and online platforms to promote the continuation of the educational services by students and teachers:

- Online Virtual Campus "Upe" (www.upe.ac.cr)
- "LIE++ from home" digital toolbox (lieencasa.fod.ac.cr)
- Microsoft Teams, the communication platform selected by Costa Rica's Ministry of Public Education to be used within the country's public educational system.
- Cisco Webex
- WhatsApp messaging
- Email services
- Social networks, used to share learning capsules and to organize live training events on subjects related to new strategies towards online learning at home.

Challenges

FOD addressed two main challenges:

1. The first challenge dealt with was reaching teachers with poor connectivity conditions and/or lack of experience with technology. This was overcome by designing resources and training opportunities that could be attractive and easily accessible, even for teachers under those conditions. For example, live events through social networks such as Facebook, virtual workshops and live tutorials through Microsoft Teams were used as tools for teachers to participate and get clarification on their questions and doubts.

2. The second challenge dealt with was how to obtain information and data on the extent of which teachers are using digital and online tools to reach their students, and providing them with useful learning experiences and ongoing support.

Partnership

Our partners in the above-mentioned initiatives were:

- Costa Rica's Ministry of Public Education (MEP)
- Cisco Systems
- Institute for Training and Studies in Democracy - IFED (from the Supreme Electoral Court of Costa Rica)
- Profuturo Foundation
- Microsoft

Replicability

The project's activities can be replicated by other public and private educational systems, by following the methodological strategy of training the educators first, and then provide them with continuous advice and support. The use of social media to deliver live broadcasting and educational learning capsules can be useful to reach a majority amount of population. FOD's new training formats, such as mini-workshops and virtual tutorships can be easily replicable through Microsoft Teams or other online video conferencing tools. They are characterized by requiring little production and preparation time and, as being very short, they can be replicated numerous times. At the same time, participants have shown very high levels of satisfaction with these type of activities.

Sustainability

The support activities undertaken to respond to the Covid-19 pandemic rely on the long-standing multi-stakeholder partnership that has allowed the Ministry of Public Education and the Omar Dengo Foundation to establish a solid National Program of Educational Informatics benefiting 92% of K-9 public school students nationwide. New modalities of training and support activities can be embedded into the educational practices at public schools. Virtual environments provide an opportunity for teachers to learn, in a hands-on manner, about the methodologies and contents on how to use technology. This can help them to better understand technological tools, and enable them to use available resources with a wider reach.

The virtual platforms used by FOD during this public health emergency, such as “Upe” Virtual Campus, “LIE++ from home”, Microsoft Teams for mini-workshops and tutorials, as well as the Help Desk tools, will be available even after students and teachers return physically to their classrooms. It is important to notice that teachers have gained knowledge and are more skillful with online tools. The expectation is that, as teachers incorporate these tools into their repertoire, they will continue using them further on with their students and for their own professional development training.

We have reported here activities undertaken until July 15, 2020. FOD and PRONIE MEP-FOD are continuing their efforts to provide online and at-distance services to students and teachers from public schools nationwide.

Action Lines

AL C4. Capacity building

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case60-Saksham Project (Saktek, Accessital and Sugamaya Pustakalaya)

Title of the project, Contact Organization Name, Stakeholder type, Country

Saksham Project (Saktek, Accessital and Sugamaya Pustakalaya) Saksham and its subsidiary Saktek Foundation Civil Society India

Beneficiaries

The projects primarily benefit PVI in India across different age groups, gender, class-division and its different regions including those in tier-two and three cities.

In addition to results highlighted in answer 12, the project enables PVI to smoothly shift to online-education and employment amid lockdown ensuring that they are not disadvantaged due to mobility and other restrictions.

Our subsidized distribution-programme provides support to those who otherwise may not be able to afford A.T. devices because of high-cost despite Saksham bringing down cost significantly compared to international-market. The devices are further offered with content and training ensuring holistic solution-delivery.

Our services are part of larger accessible-ecosystem of India and in that sense we work closely with Government of India, NGOs, Boards and Universities and publishers. Our projects therefore not only benefit PVI but also their immediate-circle of influence including family, education-stakeholders such as schools, employers et cetera.

It is important to note here that the project-activities are not limited to current situation but will have a bearing on PVI lifecycle. For example, previous impact-assessments have reported that A.T. devices such as smartphones not only allow PVI to participate actively in education but also assist in employment and interpersonal-communication etc.

Website

<http://saksham.org/>

Description

Saksham empowers persons-with-visual-impairment (PVI) through technology-solutions, education and skill-development by using ICT-infrastructure/devices to remove environmental and attitudinal-barriers:

1. Saktek online-store (<http://saktek.in/>)

a. Objective: Active participation of PVI in education employment-sectors amid shift to online-learning and work because of lockdown.

Result: 350+ students provided digitally-literacy A.T. solutions under subsidy-scheme with training and content (including laptops, smartphones, tablets, DAISY-players, Dotbooks, RBDs) through support of Embassy-of-Germany and other partners.

b. Objective: Timely-delivery of A.T. products/devices including medical/health-products so that PVI are independent/self-reliant during COVID-19.

Result: Delivered 3000+ A.T. solutions from Saktek's portfolio of 160+ products for PVI with all necessary precautions. Especially procured/disseminated devices relevant for pandemic like talking-oximeter and talking-thermometer.

2. Accessital: Web-based-platform for accessible-book-creation

a. Objective: Meet urgent demand of accessible-book-production while following necessary restrictions amid shift to online-learning and PVI inability to travel and buy bulky braille-books.

b. Result: Through Accessital Saksham registered 300+ volunteers worldwide who supported our efforts with complete online-workflow. The project also partnered with local disability-NGOs (Enable, Amogh) and employed 25 PwDs for this project therefore providing them steady work-from-home opportunity.

3. Sugamaya Pustakalaya: Online-library of accessible-books for PVI

a. Objective: Students-with-visual-impairment have accessible-books irrespective of their location to appear for exams. Adequate support is offered to new-users.

b. Results: Sugamaya-Pustakalaya provided accessible-books for PVI including Delhi-University students. Recorded 200% increase in usage of this tech-platform with 400 new-titles being created and uploaded during Covid. Library enabled users to download and read books from their hometowns. Saksham-Helpline was created to assist users whereby they could directly place and receive content-request.

ICT Tools

Saksham uses variety of A.T./ICT tools for promoting digital-transformation of PVI:

- We provide mainstream-technologies like laptops, tablets, smartphones at subsidized cost to enable active PVI participation in education, employment irrespective of their socio-economic background.
- Devices are provided with training and preloaded-content along with A.T. solutions like INDO-NVDA (screen-reader adapted to Indian-context by Saksham) that enables PVI to read/write in normal-script while offering multiple Indian-languages suited to Indian-context.
- Dotbooks and RBDs offered under subsidy-scheme allow users to read-books, create/edit word-documents, browse-Internet, manage emails, connect directly to online-libraries through built-in applications, in addition to connecting with PC and phone through NVDA and talkback screen-readers through USB and bluetooth.
- Saktek.in offers diverse portfolio of 160+ affordable assistive devices so that PwDs from remotest parts of India are able to receive their devices at their doorsteps amid lockdown.
- We work on accessible-media and formats through Accessital and Sugamaya Pustakalaya. Accessital (web-based-platform) allows for management of complete-workflow including OCR in Indian-languages for books in accessible-digital e-text format. Sugamaya-Pustakalaya (tech-platform) provides free access to 700k+ titles for print-disabled in multiple-modes and channels. It automates creation, distribution of accessible-content and protects publishers' intellectual-property while bringing together an ecosystem of stakeholders and offering tools for one-click accessible content-generation.

Challenges

Saksham strongly believes that a device without training does not benefit the individual. Since COVID-19 lockdown has hampered face-to-face training, we initially faced challenge of providing training amid lockdown. We have mitigated this challenge by providing online support through Saksham helpline and delivering webinars online on our various platforms.

Earlier persons had to travel and come to the office to provide support for the conversion of book through scanning which was a concern amid the pandemic. The Accessital platform with complete online workflow management has enabled volunteers/employees from remote parts of the country and even other countries to support this process and meet the high-demand for accessible books. In addition, our partnership with local-NGOs in engaging PwDs in the creation process has also enabled us to generate steady income for them amid the lockdown from their homes.

We did face a few challenges as PVI found it difficult to make a shift to online education/learning but we were able to mitigate the same by providing technical support through our WhatsApp groups, emails and technology helpline where users could communicate with our technology experts.

Partnership

As shared above, under Accessital project we have partnered with local NGOs in Bangalore who are providing employment to PwDs for supporting Saksham's work in accessible-book creation. Our aim is to further expand this programme to meet the goal of book conversion while also offering employment to PwDs who may have lost employment due to the lockdown. We are therefore looking for civil society organisations to partner with for this project.

Another area where we require support is that of device distribution. While Saksham has successfully generated funds for the distribution of devices such as laptops, smartphones through support of our partners, we require local partners who can help us in distributing devices across India, especially in remote/rural areas.

Replicability

Saksham has always believed in ensuring that devices are provided along with content and training to users as a holistic solution ensuring ease of access and one-stop solution for users. We believe this methodology is replicable and can be adopted by schools, organisations and institutions working for PVI.

We also believe that our Accessital platform and Sugamaya Pustakalaya library are well suited for the current lockdown and can be replicated in middle-income and low-income countries.

Sustainability

The World Blind Union estimates that less than 1% of published books are ever made into accessible-formats in the developing countries. There is a significant demand for accessible books in India. The Sugamaya Pustakalaya is filling this gap and is powered by TCS Infinity which made the technology available to the DFI consortium of 190+ entities including government bodies, educational-boards and universities, publishers and NGOs involved in providing accessible-books available to PVI with a perpetual license at zero-cost.

In addition to this all books created on our Accessital platform (developed as part of previous DAISY consortium project) are uploaded onto Sugamaya Pustakalaya. Accessital therefore compliments Sugamaya Pustakalaya and ensures there is minimum wastage of resources and no duplication of work. At the same time Sugamaya Pustakalaya also provides a complete ecosystem for various stakeholders and has 80+ production and distribution partners on-board thereby ensuring communication among all stakeholders and effective stocktaking and strategy.

Saktek is a not-for-profit company, which makes affordable A.T. devices available to customers on not for profit basis and sustains itself through this. We also utilize our existing database of donor organisations and raise money through CSR grants, individual donors, institutional grants and govt. tenders.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 16: Promote just, peaceful and inclusive societies

Case62-Supporting radio journalism during COVID-19

Title of the project, Contact Organization Name, Stakeholder type, Country

Supporting radio journalism during COVID-19|Farm Radio International|Civil Society|Canada

Beneficiaries

Radio stations and broadcasters, who serve millions of rural dwellers with much-needed fact-checked information on COVID19

Website

<https://farmradio.org>

Description

- Interactive COVID-19 hotline for journalists
- Connecting broadcasters to share experiences (WhatsApp groups)
- Broadcaster how to guides and written resources
- Emergency fund for community radio stations
- Pivoting approaches to be fully remote-led
- Adapting existing radio programs to include COVID-19 messaging in response to community feedback

ICT Tools

Blending of radio with IVR, SMS, WhatsApp, hotlines for scale, reach and interactivity - West Africa and East Africa

Challenges

Ensuring accuracy of information, responding quickly to myths and fake news

Partnership

Radio station partners and health partners always welcome

Replicability

Yes, as this project is remote led, and run through existing radio stations, it can be replicated worldwide wherever there are radio stations and commitment (and budget)

Sustainability

Radio stations will continue to broadcast, and will have many tools, partnerships and skills in place to sustain, but as the problem will also sustain, budget for response and solutions will need to be sustained also

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C7. ICT applications: benefits in all aspects of life — E-agriculture|AL C9. Media|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls

Case63-Rise multiplayer – Open science multiplayer game to foster mutual care (respiratory and mental health)

Title of the project, Contact Organization Name, Stakeholder type, Country

Rise multiplayer – Open science multiplayer game to foster mutual care (respiratory and mental health)Breathing Games AssociationCivil SocietySwitzerland

Beneficiaries

Contributors (acquiring knowledge about IT, health, clinical research, etc.), players (having a safe space to get peer support, collaborate towards a common challenge, experiment care differently), other interested people.

Website

<https://www.breathinggames.net>

Description

The coronavirus affects us all in our mindset. Everyone may feel depressed, lonely, or just not see how to take care. Play is a natural way to experiment, socialize, learn. We develop a multiplayer game to reduce stress, increase the feeling of belonging, and foster mutual care, in a fun and constructive mindset. People from all ages and health conditions can play. The story: 2-4 characters collaborate to overcome obstacles on a pilgrimage to a mountain top.

ICT Tools

Digital, research-backed multiplayer game, game controller to transform the breath into a digital signal (currently research projects, clinical studies planned).

Challenges

Mobilizing a broader community to collectively create game levels combining people's experience of respiratory and mental health and knowledge from the literature. Raising funds to have a professional, full-time coordination team to ensure that the game and controller increase in quality and compliance thanks to open, rewarded contributions.

Partnership

Yes, individual contributors (game level designers, Photon / C# developers, visual and sound artists, makers, people with respiratory and mental experience, clinicians, digital lawyers, etc.); public organizations (research labs, university hospitals, funding agencies, etc.); commons networks; foundations.

Replicability

Yes. The source code we developed is available under an open-source licenses (not the code of the game engine and third-party libraries). We use an inclusive co-creation process. Links to documentation and videos: <https://breathinggames.net/jeux/rise>

Sustainability

Yes. We mutualize resources accross countries, and ensure people can use, reproduce and adapt our work. We rely on existing infrastructure (IT, spaces, etc).

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C7. ICT applications: benefits in all aspects of life — E-science|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 3: Ensure healthy lives and promote well-being for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case64-Global Barter Communities

Title of the project, Contact Organization Name, Stakeholder type, Country

Global Barter Communities|Global Barter Communities|Civil Society|Philippines

Beneficiaries

In less than 3 months, local from almost 200 other cities and provinces, and Filipinos overseas created barter communities on Facebook and continuously helped communities.

The revival of barter system helped thousands of Filipinos around the world and in the Philippines secure their basic needs such as rice, eggs, medicines and other essential items.

Website

<https://jocellebatapasigue.com>

Description

Last May 8, 2020, the Bacolod Barter Community was started as a Facebook Group by local innovation leader Jocelle Batapa Sigue. The objective of the group is to alleviate the growing poverty, unemployment and food scarcity among resistance of Bacolod and Negros Occidental by providing an online platform for people to use items, goods and services instead of cash for exchanging and getting what they need.

In less than 3 months, local from almost 200 other cities and provinces, and Filipinos overseas created barter communities on Facebook and continuously helped communities.

The revival of barter system helped thousands of Filipinos around the world and in the Philippines secure their basic needs such as rice, eggs, medicines and other essential items.

Two weeks after creating the Bacolod Barter Community, Batapa-Sigue established the Global Barter Communities, a group page of founders, administrators and moderators of various barter communities around the country and overseas as a venue to exchange notes and share best practices.

She created the Global Barter Communities Handbook as a guideposts for all founders.

ICT Tools

The online or digital barter communities use a combination of Facebook Groups technology, Canva, Photoshop, Excel, and mobile technologies to address the whole value chain of bartering.

Challenges

Since the revival of bartering is recent and the platform is online, citizens are coping with learning how to navigate social media and digital tools, and act and behave accordingly on social media

Partnership

Global partners to help us as founders maintain and sustain what we have started as well as recognition of agencies and communities about the importance of bartering as a means to survive the impact of COVID-19

Replicability

Two weeks after creating the Bacolod Barter Community, Batapa-Sigue established the Global Barter Communities, a group page of founders, administrators and moderators of various barter communities around the country and overseas as a venue to exchange notes and share best practices.

Sustainability

Continuous improvement of the barter communities and the observance of the Global Barter Communities Handbook as a guideposts for all founders

Action Lines

AL C6. Enabling environment

SDGs

Goal 1: End poverty in all its forms everywhere

Case65-InABLE's- COVID-19 Response Project

Title of the project, Contact Organization Name, Stakeholder type, Country

InABLE's- COVID-19 Response Project InABLE Civil Society Kenya

Beneficiaries

The primary beneficiaries are:

Primary school learners with disabilities in Kenya

Secondary school learners with disabilities are lower

Youth living with disabilities (defined as those between 15 - 24 years old)

The main benefits/services are:

A distance learning programme to ensure that students including those with disabilities or from low-income backgrounds have access to distance learning programme.

Teachers and parents providing support to students on use of educational digital tools to access to learning resources from the inABLE distance learning programme

A community of schools, parents, teachers, and students using online discussion platforms for psychosocial support.

Books produced in various formats ensure that persons with print disabilities in Kenya have access to local and international books in various formats, online or offline and empower publishers to factor in accessibility from the onset of book production.

The findings of the Case Study will be presented in a technical report that details the lived experiences of learners with disabilities as Kenya transitions to at-home learning.

Website

<https://inable.org/>

Description

InABLE Home Schooling Project: A lack of access to computer technology or reliable Internet connectivity is an obstacle to continued learning for many students, including special needs students. To create the right remote learning, inABLE is working to deliver educational resources to blind and visually impaired students using Internet access, computer assistive technology and an educational support team.

Promoting Inclusive Education Through Accessible Digital Content Project: to improve the learning opportunities for learners and young people with disabilities and ensure their rights under the UN Convention on the Rights of Persons with Disabilities this project will: develop interactive digital accessible learning materials in a variety of media formats (EPub4 and DAISY) for learners with disabilities in Kenya and increase access to relevant interactive digital learning resources for persons with disabilities.

Case Study on Experiences in Home-Learning for Primary and Secondary-School Students with Disabilities in Kenya: This is a research project involving a collaborative effort to begin to document the experiences of Kenyan students with disabilities in these challenging times of learn-from-home due to the COVID-19 pandemic. The main output of is a technical report that will inform decision-making at local and national levels.

ICT Tools

Laptops: Each selected learner and instructor will require one Chromebook laptop with the following specifications: OS - Windows 10, Processor – Core i5, RAM – 4 or 8 GB, Hard Disc - 500GB.

Headphone: Each learner and instructor requires a headphone to enable them work with screen reader effectively.

Screen reader software: Each learner and instructor's laptop must have NVDA installed as the main screen reader software to help blind student access the computer.

Learning software: Each learner and instructor's laptop must have all software used for

learning activities which include: Thorium for Windows and Easy Reader for Android, Microsoft Office, Math flash, etc. and remote meeting software to be used during training and evaluation.

Internet Connectivity: Each laptop provided will require a modem and monthly subscription to gain Internet connection.

Learning Content/ Education Resources: The content will include all computer skills notes, Course books, and Story books.

Online Learning Platforms: inABLE team will also identify online learning platforms that are fully accessible to blind learners and train the learners on how to access available content.

Challenges

The Chromebook laptops come with a chrome operating system and keyboard shortcuts commands different from the Windows Operating System that the users are accustomed to. The instructors need to be facilitated to develop easy tutorials, to be on standby both online and via voice call to support users and conduct routine home visits to check on the Chromebook usage.

With proper financing, we would be able to purchase gadgets for all learners, their teachers and trainers and not just a select few for effective delivery of this project.

Poor internet connectivity where the users are domiciled. We need to supply modems, data and voice call bundles users to access online materials and communicate with their trainers.

Most online reading materials are in an inaccessible format for the visually impaired people. There is a shortage of the software, hardware and trained staff needed to convert these materials into accessible EPUB4 files. We therefore need to acquire these requirements.

There is a shortage of staff in the schools. Furthermore, we have a selected few trainers because of lack of gadgets. We propose equipping of most teachers with these skills and empower them to implement projects of this nature in future.

Partnership

Computer hardware providers: to provide the hardware and software either financially or in-kind required to be distributed to the blind and visually impaired students

Internet service providers: to provide stable and affordable internet connection to the learners

Accessible content developers and providers

Replicability

Although this project is meant to respond to the challenges arising from COVID-19, it has opened up an avenue for developing distance-learning for disabled learners. The distance-learning/Home Schooling Project is catering only for selected students and teachers in the six schools that inABLE works in. The project can be replicated to include all the students in

the special schools and eventually in all 16 schools for the blind in Kenya. The Accessible Digital Content Project will only seek to digitize selected textbooks and story books for selected grades. This can be expanded to include more course books and story books.

Sustainability

Key to the success of the program is strong and reliable internet bandwidth connectivity, laptop computer devices, electricity for charging the devices, accessible educational content and a dedicated team of assistive technology instructor, teachers and parents. To sustain our program, resources are placed for both present and future programming, while equally ensuring that plans are in place for additional funding as well partnerships with Internet providers and Computer hardware suppliers. Funding for each phase leading up to project replication is also a key component to our strategy. This includes needs assessments and/or program development, meetings with key stakeholders, hiring and training of qualified staff, acquiring program space and necessary materials and technology, and fidelity and outcomes monitoring and coaching.

The program design involves capacity building of instructors and caregivers to ensure smooth running. We strive to secure program partners and funding streams that support not only the delivery of the core components of our program, but for all the supporting activities that make scale-up successful (e.g., funding for training, coaching, fidelity monitoring, and outcome measurement). This includes thoughtful planning for start-up activities, direct service costs and supports, and infrastructure costs necessary to achieve outcomes.

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 10: Reduce inequality within and among countries

Case66-Project ‘FreedomCOVID-19’ – Creating awareness on COVID-19 among communities, train on Prevention, minimize Transmission and demonstrate strategy and to re-adapt existing programs for digital response to COVID.

Title of the project, Contact Organization Name, Stakeholder type, Country

Project ‘FreedomCOVID-19’ – Creating awareness on COVID-19 among communities, train on Prevention, minimize Transmission and demonstrate strategy and to re-adapt existing programs for digital response to COVID.ZMQCivil SocietyIndia

Beneficiaries

We have two kind of beneficiaries – firstly the Community Health Workers (CHWs) who work in the rural communities. The second kind of beneficiaries are the rural communities such as general public in the rural areas, marginalized communities, women, children, adolescent girls and boys, TB patients, pregnant lactating mothers etc.

Website

<http://www.FreedomCOVID19.com>

Description

FreedomCOVID19 is an initiative of ZMQ. The crisis has impacted the work on the ground. We have been using technology in our ground interventions for years. This has accelerated our approach to use technology in more ways as there is definitely restrictions in movement. Our Frontline Health Workers are now more equipped in using technology. ZMQ's Response to COVID-19 has been in 2 ways:

1. ZMQ's and its programs to adjust to COVID Response (Like MIRA, FreedomTB and YourStoryTeller Projects)
2. Developing dedicated COVID-19 program to address needs of rural and migrant communities. The programs are like
 - a. ZMQ has developed an 'Integrated COVID mHealth System' for last-mile communities engaging community health workers (ASHAs and VHTs), sub-centers (HC-II), PHCs (HC-III) and CHCs (HC-IV). The solution is focused on diagnostics, case finding, tracking, referral, treatment and prevention in India, Uganda and Rwanda.
 - b. ZMQ created a 'COVID Vector Pathways' project seeing exodus of migrant workers walking back to their villages on fixed pathways. There are 48 vector pathways in India. ZMQ is working on this vector pathway to screen these vulnerable people on parameters like Thermal screening, Cough, Symptoms, providing them RFID card with all details of the worker.

ICT Tools

ZMQ is a pioneer in 'Technology for Development' not-for-profit organization with 20-years' experience. ZMQ has developed and implemented numerous programs which are replicated and scaled in India/ other LMICs–Afghanistan, Uganda, Rwanda and Ethiopia. ZMQ has readapted some of its pioneering programs in India and LMICs countries to digital COVID response.

ZMQ's MIRA Channel is a mobile phone based digital channel on maternal & child health for rural women/CHWs in India, Afghanistan, Uganda, Rwanda and Ethiopia. MIRA is readapted to provide additional information on COVID-19 to rural communities, especially pregnant women/their families through mobile-phones.

ZMQ's FreedomTB is a mobile phone based platform for adherence to treatment of Tuberculosis patients. It's ACTS (Active Compliance and Treatment System) uses VOT (Video Observed Treatment) approach for patient to report swallowing TB pills using a video selfie. FreedomTB is readapted to provide additional information on COVID-19 to rural communities; especially TB patients/their families using mobile-phones.

ZMQ's YourStoryTeller (YST) is a mobile channel to design, develop and disseminate digital stories on critical social issues like HIV/AIDS, Tuberculosis, Polio, Malaria, WASH, SRHR, MCH & Childhood-Pneumonia in the communities. YST has developed customized digital stories for last-mile communities on COVID-19 to understand prevention, transmission and treatment of disease.

Challenges

The pandemic has shaken the world but in LMICs it has especially affected poor-slum-dwellers, daily wage workers, refugees and under-privileged especially living in low and middle income countries. They have earlier been socially excluded by systems-healthcare, livelihood opportunities, social justice etc. The immediate challenge faced was to provide right communication to marginalized communities. COVID-19 messaging is focused mostly for affluent. Did we ever think that would the poor be able to wash their hands if they don't have running water or soap? Would the people living in congested slums be able to maintain social distancing? Would the daily wage workers be able to survive the lockdown? Would the refugees be able to stop crossing borders to flee atrocities of war? Social distancing, Lockdowns, Sanitizers and Hand washing is a privilege. Most ways to ward off COVID-19 are accessible only to affluent. Exodus of the poorest of the poor from urban settings to their far flung villages poses even a bigger threat; not just due increased chances of community spread of virus but more due to starvation, hunger and discrimination. The toll for families is hunger and poverty that are either newfound or even more grinding than before.

Partnership

Yes we are looking for partners in two ways. As we have demonstrated this project successfully and scaled in India, Uganda and Rwanda; we want to take to further to other East African countries (Ethiopia and Tanzania), Afghanistan and also Francophone countries (Senegal, Burkina Faso and Ivory Coast). We want more support partner to help us to scale the program in the mentioned countries. This support is in two forms – to increase the reach of beneficiaries, we need more resources to take it to these countries and also want implementation partners to help us scale in their respective countries. Our cost per country scale is around USD 100,000 to 150,000 per country.

Replicability

Yes FreedomCOVID-19 is a replicable project. It started in India and is now being replicated in Uganda and Rwanda. We have to re-adapt it to local context with focus on content, language, imageries, graphics, voice-over to fit the needs of the local communities. We are

looking for partners to support us to replicate this project in Ethiopia and Afghanistan; and also in 2-3 Francophone countries namely Senegal, Burkina and Cote d'ivoire. As the model is ready – piloted and tested in India, it has now been being replicated and scaled to Uganda and Rwanda.

Sustainability

Yes FreedomCOVID-19 is a sustainable project. With its adaptation for a new country, it needs little resources to develop and customized for that country. Once it is done, it will be piloted in a district and then it is offered to the national government to adoption. The ultimate objective is to measure the impact in form of how many lives have been saved and also it is calculated based Health Economic Impact that is how the lives saved have impacted the economy in terms of the metrics DALYs (Disability-Averted Life Years).

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C10. Ethical dimensions of the Information Society

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case67-STEM AND ROBOTICS WORKSHOP FOR DOWN SYNDROME YOUNG ADULTS AND THEIR SPECIAL NEEDS EDUCATORS

Title of the project, Contact Organization Name, Stakeholder type, Country

STEM AND ROBOTICS WORKSHOP FOR DOWN SYNDROME YOUNG ADULTS AND THEIR SPECIAL NEEDS EDUCATORS|Special Needs Initiative for Growth|Civil Society|Nigeria

Beneficiaries

Children and young adults with Down syndrome, Autism spectrum disorders, cerebral palsy and Visual-impairment.

Website

<http://biolinky.co/specialneedsinitiativeforgrowth>

Description

We use a variety of training techniques so that persons with various disabilities such as Autism spectrum disorders, cerebral palsy, blindness and Down syndrome can learn according to differing and preferred learning styles. We also employ a flexible approach not only to content but to goals, methods, materials and assessment techniques. At the novel outbreak of the Corona Virus, we conducted the STEM and Robotics Empowerment workshop in collaboration with the Barack Obama American Corner to develop the cognitive and technical capacity of young adults with Down syndrome and their educators so that they can be well equipped to lead technology roles, gain access to STEM and Robotics related jobs and earn a living for themselves especially during the Covid 19 crisis.

ICT Tools

With Content around STEM and Robotics, early and young adults with intellectual and physical challenges are encouraged to integrate with computational skills as the rest of 21st century society. For this reason, our curriculum adopts and demonstrates pedagogical practices and resources that allow young adults with disabilities to address and develop their skills based on their individual goals and capacities. This training content has been proffered to over 50 young adults with Down syndrome for over 2 years in Lagos State Nigeria under our administration.

Challenges

Most of our challenges are centered around data. some of our team members experience difficulties in contacting the families of the students with special needs because some of the parents did not provide the right data. Teachers get worried that because of the communication gap during this period, the students miss out on important learning experiences that should stimulate their therapeutic and academic skills. To address this, we have partnered with other organisations whose vision and mission aligns with ours to compare data and retrieve data of families of persons with disabilities whom we proffer solutions to.

Partnership

Yes. Partners in Assistive Technology Support services, organizations who provide employment opportunities for young adults with Physical challenges.

Replicability

This project was conducted for the special needs educators of the Down Syndrome Foundation Nigeria and the young adults with Down syndrome. Currently, the educators are replicating the positive outcome of the STEM and Robotics workshop to the children adaptive eLearning opportunities that meets each down syndrome young adult learning

style/pattern and capacity building in terms of his or her cognitive flexibility. Currently, the young adults with Down syndrome are undergoing mentorship and Monitoring and Evaluation to discover how well they are utilizing the technical expertise and training delivered to them to change their capacity building for access to decent work. Also, we are partnering with technology based organization to link some of the Down Syndrome young adults to technology based organizations where they can Intern and leverage upon the STEM and Robotics opportunities proffered to them,

Sustainability

We have put in place another curriculum for 2021 to proffer STEM and Robotics training to more special needs educators and down syndrome young adults across other parts of Nigeria via virtual and onsite sessions.

This will be sustained through our continuous partnership with the Barack Obama American Corner and donation from the Sifax Group. Also, we have carried out a survey and discovered that the training conducted early this year has improved the cognitive flexibility, critical thinking and technical ability of 70% of the Down Syndrome children and young adults as well as 80% of the special needs educators. If we keep up with this training on a yearly basis, we will demonstrate and replicate a positive outcome to more down syndrome young adults and educators who will be well equipped to take on technology roles, bridge the divide encountered in unequal access to career development and promote inclusiveness for them.

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge

SDGs

Goal 10: Reduce inequality within and among countries

Case68-Geneva Internet Platform Digital Watch Observatory COVID-19 webpage

Title of the project, Contact Organization Name, Stakeholder type, Country

Geneva Internet Platform Digital Watch Observatory COVID-19 webpage
Geneva Internet Platform
Civil Society
Switzerland

Beneficiaries

All users.

Website

<https://www.giplatform.org/>

Description

The Geneva Internet Platform (GIP) Digital Watch Observatory has developed the COVID-19 webpage on its website as a one-stop shop for the latest developments and overviews on the interplay between COVID-19 and digital policy. The webpage contains a mapping of the COVID-19 outbreak per the GIP Digital Watch Observatory taxonomy of digital issues. It describes in detail the intersection between COVID-19 and artificial intelligence, cybercrime, human rights online, data governance, e-commerce, capacity development, content policy, online education and digital divide. The webpage also contains updates (global, regional and local developments which have an impact on how digital policy is developed around the world) related to the interplay of COVID-19 and digital policy.

ICT Tools

The Internet, dig.watch website, Google Documents, Google Spreadsheets, data analysis and visualisation, artificial intelligence.

Challenges

The main challenge is the high volume of news regarding COVID-19. It is overcome by the numerous and highly trained team behind the observatory. The observatory boasts an international team of over 30 digital policy experts covering over 50 digital policy issues, most of which intersect with COVID-19. Each team member is on the lookout for the news that intersect between their respective area of expertise and COVID-19, and careful not to report unverified claims.

Partnership

The GIP is looking for partners to help promote and contribute to the content published on the observatory.

Sustainability

The webpage is sustainable due to the team of experts who curate the content accessible on the entire observatory, as well as the COVID-19 webpage in particular.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case69-Assisting in the surveillance of Covid-19 symptomatic and asymptomatic patients using International traveler data

Title of the project, Contact Organization Name, Stakeholder type, Country

Assisting in the surveillance of Covid-19 symptomatic and asymptomatic patients using International traveler data
Datamation Foundation Charitable Trust
Civil Society
India

Beneficiaries

The Primary beneficiaries are at one level the nation and society at large who have benefited due to timely testing and surveillance support and testing support. Providing ICT support and concurrent analysis made available to the local municipal authorities, health authorities are beneficiaries at second level.

Website

<https://www.datamationfoundation.org>

Description

The project entailed setting up a standalone database of arriving international travelers from a special arrival form. The arrival form contained name, address, email, contact# last countries visited; and also accompanying family members. Incoming passengers from February onward from the international airports were scanned. Due to time sensitivity involved for tracking the passengers; the digitization process was necessary to be completed within shortest time. Image enabled data entry was deployed for digitization. Entire digitization process was completed in 2 weeks time; and digital data was shared concurrently with the Health authorities for an effective surveillance. Tele profilers were deployed for tracking Covid-19 suspects and testing. Without ICT solution it would not have been possible to conduct an effective Covid-19 testing and surveillance.

ICT Tools

We deployed minimalist onsite scanning and digitization process at the first stage. Image based look up data entry tools were deployed for capturing the information from the scanned images. Data cleaning, and BI/BA tools were deployed for data analysis and for submission of the reports to the Health Authorities so that effective tracking and surveillance at the ground level is made possible. A tracker and RDBMS enabled dashboard were also established.

Challenges

Main challenges were in systematic digitization of data of over 500,000 international travelers. Hand written forms also proved to be a major challenge since it is very critical to maintain accuracy of data so that effective surveillance does not get compromised. Since time was the essence of ICT application it was also mandatory to conclude the digitization process as soon as possible on a war footing. Working with the Govt. agencies and the health authorities in a participatory and democratic process were other challenges.

Partnership

We are looking for technology and funding partners for up scaling the initiative, so that we can implement effective surveillance and tracking enabled by ICT in various countries.

Replicability

The project is easily replicable in all geographies irrespective of language, cultural and administrative barriers. The software tools and the ICT solutions are also replicable without any barriers and hindrances.

Sustainability

The project is sustainable since it is low cost and also financial support from the Govt. agencies and authorities is available for effective surveillance and tracking of both symptomatic and asymptomatic Covid-19 and other virus infections.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case70-Supporting Covid-19 Entrepreneurs survey : Tools and Methods

Title of the project, Contact Organization Name, Stakeholder type, Country

Supporting Covid-19 Entrepreneurs survey : Tools and Methods
Datamation Foundation
Charitable Trust
Civil Society
India

Beneficiaries

Research and academic organizations are the primary beneficiaries and also the policy planners. The small and medium entrepreneurs are also second level stakeholders benefiting from this initiative.

Website

<https://www.datamationfoundation.org>

Description

The project entailed reaching out small and medium entrepreneurs for understanding Covid-19 pandemic's impact on their businesses and lives. ICT enabled interactive calling solutions were deployed for calling and for the recording of the responses.

ICT Tools

IVRS and ICT enabled calling were deployed for capturing the responses of the SME entrepreneurs.

Challenges

In a post lock down scenario, the access to the Entrepreneurs and also conduct of the surveys has been very challenging. The recording of the responses in multiple languages in the ICT solutions has been a major challenge too. Identification of a random stratified SME entrepreneurs for coherent feedback collection and compilation was also a major challenge which we overcame by adopting effective sampling and analysis.

Partnership

Industrial Associations and the Entrepreneurs Associations as well as Academic institutions and policy planners are effective partners.

Replicability

Yes the project is replicable in any country and in any settings.

Sustainability

The project is sustainable in every scenario due to limited investment as well as funding available for the replication of the same.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-business

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case71-Digital Skills for Women, Girls and Teachers

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital Skills for Women, Girls and Teachers
Women in Technology in Nigeria(WITIN)
Civil Society
Nigeria

Beneficiaries

Women, Girls and teachers

>>Teachers trained are able to teach more effectively online. Even though this pandemic came so suddenly, our teachers are better prepared for any future re-occurrence

>>Women now have multiple streams of income and are able to do businesses online with more ease

>>Girls are getting equipped for the future

Website

<http://wit.ng/>

Description

>>Teachers are equipped with digital skills to enable them teach effectively online due to pandemic via our teachers.ng network.

1. Record and edit audio, video for e-Learning
2. Creating simple website, blogs and WIKIS
3. Google Cloud computing for Education
4. Creating Engaging Visuals, Multimedia and Presentations
5. Creating Digital Quizzes and Assessment online
6. Integrating Social media into learning
7. Cybersecurity for Teachers (cyberbullying)
8. Efficient and Effective Web Search
9. Game-based Teaching
10. Computational Thinking
11. Managing e-Learning Platform
12. Advanced Spreadsheet
13. Digital Story Telling
14. Entrepreneurship and problem Solving
15. Project based experiential learning: Critical thinking, teamwork, Collaboration, Communication
16. Working with files (including reducing sizes of online files)

>>Women are being provided with digital skills and entrepreneurship opportunities via our wit.ng network.

Girls, through our icamp.ng project are being equipped with up to date 4IR. Modules include Modules Coding Robotics Video Editing Cybersecurity Web development Digital Story Telling Artificial Intelligence Mobile Apps Development Leadership & Entrepreneurship Graphics, Drawing and Animation Design, Computational & Critical Thinking

ICT Tools

To cut cost we rely heavily on open source.

For icamp.ng for example, during this pandemic, we are using

Python

HTML/CSS

Scratch

Wordpress

App Inventor

Blender

We also use other free resources provided by other organizations online.

Challenges

Funding is the main challenge.

We realize that we have not spent enough time putting our work and impact online to attract

fundere. We are currently rebranding and re-structuring. We have a new advisory board for example wit.ng/advisory and we have redesigned our website. In a couple of months, we would have been able to upload most of our past works online .

Partnership

yes we are.

we need partners in more digital programs for women and girls

Sustainability

Yes it is sustainable as after the pandemic we will charge a token to cover our overheads

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-learning

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case72-Mesh Mash Webinar Pi

Title of the project, Contact Organization Name, Stakeholder type, Country

Mesh Mash Webinar PiJanastuCivil SocietyIndia

Beneficiaries

Our primary beneficiaries are low-literate rural and tribal communities who do not have good data connection to the internet - especially, the students who are affected by the changes post covid-lockdown. They would benefit by peer group interactions, special learning and online workshops in addition to curriculum work as promoted by their schools or the education dept.

Website

<http://blog.janastu.org>

Description

We have introduced a logical mesh for students and other group activity so that learning activities can sustain in small groups interactions over the mesh network or data plans.

ICT Tools

We configure a "webinar pi" along with an annotation service and synchronization tools so others in the logical mesh share/see each others or teacher student activities as if it is a local media service. Yggdrasil, Papad audio annotation tools, synching and Raspberry Pi with a screen, camera. mic and speakers that can be connected to a wifi hotspot or to another mesh node.

Challenges

The main challenge is to provide an alternative to the smart phone as a necessary device for youngsters - especially young women. Also configurable for the unique learning needs supported by peer group activity. To help bring about an context of inclusive online interaction and publication wherein a group of girls can work together instead of a device being designated as an individually owned device.

Partnership

Community Mesh and Learning for all projects. Especially for young women. Also we hope to work with women and technology entities that can nurture tech girls coops.

Replicability

The project is open source and built so as to be replicable. We have replicated in 2 different places in India - 1 in Karnataka and 1 in Mirzapur, UP

Sustainability

Our design is for this to be sustainable by enabling local groups to own and maintain it which in turn can be supported by a number of beneficiaries including local donors and educational outfits.

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-employment|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case73-Ayni Learning Platform - My first job online!

Title of the project, Contact Organization Name, Stakeholder type, Country

Ayni Learning Platform - My first job online!Ayni BoliviaCivil SocietyBolivia

Beneficiaries

Direct beneficiaries

10 secondary public schools of the urban and rural area of Tarija and Oruro will get access to digital material through the online learning platform.

At least 300 teachers (30 teachers per school) and 300 students (30 students per school) are trained in the use of this online learning platform.

Female participation 60% and male participation 40%

Indirect beneficiaries

10 school communities, where the students will be able to exchange this knowledge with other students from other schools.

The schools serve a total of 3,000 students, 300 teachers are working there and 4,000 parents and/or family members (like brothers or sisters in other schools) will get used to a online learning platform with official content.

Website

<https://redayni.org/>

Description

With Ayni we are committed to face-to-face education, but due to COVID we are challenged to reinforce our technologic tools that have proven to be great. We prioritize preparing our schools to ensure the possibility of homeschooling with the highest quality and equity. Children and adolescents are the best advisers to build this new normality in education. The objective of this project, to create a virtual teaching-learning model that facilitates the integration process between: (1) the creation of own content, (2) the investigation of internet content, (3) evaluations and (4) digital tools so that they do not saturate the teacher or the student.

The activities respond to the following specific objectives:

- Create an online learning platform according to the needs of students and teachers in online and offline formats, to improve access to formal education for students and teachers.
- Train teachers in the management of online learning platforms, virtual learning techniques and dynamics, evaluations and other functionalities. Train groups of students as well in managing the learning platform.
- Generate digital learning content according to the official school curriculum, using digital tools such as: scratch, canvas and video editing.
- The best students will learn how to manage an online learning platform. Students will provide technical support with supervision of Ayni staff (My first job online!) after they are trained and will earn a small salary.
- Systematization of online learning experiences: the best teaching practices will become an “online learning model” and will be disseminated on social networks for the benefit of other Bolivian teachers.

ICT Tools

The inequalities are accentuated by the pandemic, it increases the situation of vulnerability and educational gaps. This is why, it is necessary to act quickly and with determination to guarantee the accessibility to education for all.

This project aims on guaranteeing quality education in the post-Covid-19 context and giving learners the possibility to experiment their first job online.

We learn them technological tools such as Zoom and Moodle mainly, other tools such as Google classroom, scratch, canvas and video editing are complementary. Soft skills like creative thinking, communicational skills (Q&A) telephone and chat software as well.

The online learning platform is developed in Moodle because it is free, it uses open source, it works online and offline (local server). These characteristics are useful to obtain better results and better access for students and teachers from different contexts. Our activities have a regional impact.

Challenges

Inequality has increased to the point that the majority of Bolivian students face a triple gap: economic, social and educational.

Social: with parents who can not guide them because of lack of resources (time, health)

Economic: with the school and/or parents who are incapable of assuming the costs of connectivity.

Educational with parents who can not guide the students because of lack of knowledge.

This gap will continue to increase if decisions are not made focused on fulfilling the rights of children and adolescents to quality education. The challenges we faced are:

Lack of local useful online content adapted to the Bolivian context. It is not enough to give courses in the management of technological tools to teachers; the challenge is to create a new learning methodology online, which requires basic skills. The lack of knowledge was the biggest challenge. The teachers became learners.

Lack of connectivity in rural areas. We can 'distribute' connectivity to teachers and students to use internet for learning purposes. .

Lack of school regularity: Due to the uncertainty experienced during Covid-19, it was necessary to take measures to ensure that no child was left without 'going to' school.

Children who had connectivity during COVID and no schooling got addicted to Play Station and gaming.

Partnership

yes. We will need the collaboration of the government and the CSR. Telecom companies have to offer their services low cost and reach also the rural areas.

Replicability

This initiative is replicable in any public or private school in Bolivia, since the online learning platform is already designed. What is required in order to implement it, is the development of capacities for teachers and students.

Sustainability

The project is sustainable. This project facilitates the development of skills and abilities acquired by teachers and students. The only costs are the subscription to the hosting and the domain. For both, an annual amount of approx. 215 USD, which schools would have to pay to maintain their online learning platform.

Action Lines

AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-employment

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case74-Ayni Learning Platform - My first job online!

Title of the project, Contact Organization Name, Stakeholder type, Country

Ayni Learning Platform - My first job online! Ayni Bolivia Civil Society Bolivia

Beneficiaries

Direct beneficiaries

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At least 300 teachers (30 teachers per school) and 300 students (30 students per school) are trained in the use of this online learning platform.

Female participation 60% and male participation 40%

Indirect beneficiaries

10 school communities, where the students will be able to exchange this knowledge with other students from other schools.

The schools serve a total of 3,000 students, 300 teachers are working there and 4,000 parents and/or family members (like brothers or sisters in other schools) will get used to an online learning platform with official content.

Website

<https://redayni.org/>

Description

With Ayni we are committed to face-to-face education, but due to COVID we are challenged to reinforce our technologic tools that have proven to be great. We prioritize preparing our schools to ensure the possibility of homeschooling with the highest quality and equity.

Children and adolescents are the best advisers to build this new normality in education.

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- Train teachers in the management of online learning platforms, virtual learning techniques and dynamics, evaluations and other functionalities. Train groups of students as well in managing the learning platform.
- Generate digital learning content according to the official school curriculum, using digital tools such as: scratch, canvas and video editing.

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Educational with parents who can not guide the students because of lack of knowledge.

This gap will continue to increase if decisions are not made focused on fulfilling the rights of children and adolescents to quality education. The challenges we faced are:

Lack of local useful online content adapted to the Bolivian context. It is not enough to give courses in the management of technological tools to teachers; the challenge is to create a new learning methodology online, which requires basic skills. The lack of knowledge was the biggest challenge. The teachers became learners.

Lack of connectivity in rural areas. We can ‘distribute’ connectivity to teachers and students to use internet for learning purposes. .

Lack of school regularity: Due to the uncertainty experienced during Covid-19, it was necessary to take measures to ensure that no child was left without 'going to' school.

Children who had connectivity during COVID and no schooling got addicted to Play Station and gaming.

Partnership

yes. We will need the collaboration of the government and the CSR. Telecom companies have to offer their services low cost and reach also the rural areas.

Replicability

This initiative is replicable in any public or private school in Bolivia, since the online learning platform is already designed. What is required in order to implement it, is the development of capacities for teachers and students.

Sustainability

The project is sustainable. This project facilitates the development of skills and abilities acquired by teachers and students. The only costs are the subscription to the hosting and the domain. For both, an annual amount of approx. 215 USD, which schools would have to pay to maintain their online learning platform.

Action Lines

AL C4. Capacity building

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case75-Literay work via research

Title of the project, Contact Organization Name, Stakeholder type, Country

Literay work via research Childcare Consortium Civil Society India

Beneficiaries

Friends and Facebook readers

Website

https://www.facebook.com/AnandAAAKumbakonam/?modal=admin_todo_tour

Description

04 August 2020

Tit-Bits: 78 518 Word analyses

Aam Aadmi Plasma therapy versus commercial tipped vaccine:

99.9 percent of the Universe is made up of plasma," says Dr. Dennis Gallagher, at NASA's plasma physicist.

In humans, there are three possible antibodies is present in the blood plasma: A, B and Rh antibodies.

Convalescent plasma or serum of COVID-19 from cured individuals has virus-neutralizing antibodies and act as a passive antibody therapy.

Sound due diligence from control genes and its regulation is released Rh antibodies in Coved 19 pregnant women to protect the fetus. But, the lack of due diligence in control genes in some of the men and women of Coved 19 patients is suddenly regulate cytokines in panic and falsely trigger Rh antibodies instead of activating the production of messenger RNA to receive genetic information copied from DNA to reduce sickness and morbidity ratio.

The convalescent sera of COVID-19 from cured patients is collected in measure of 129 ml to 120 ml and injected into patients each day for 5 days by storing plasma in 60 Degree temp.

The A antigens from anti-A antibodies and anti-B antibodies held in convalescent sera of COVID-19 cured patients' plasma will recognize alien protein held in affected/infected patient's red blood cells and clean them. Sometimes A & B combine as and when required to target and destroy invading foreign elements in circulating human blood.

Such therapy of plasma cleaning, targeting and destroying the abnormal substances held in Coved 19 patient's circulating blood is stops the syndromes of cytokine storm to protect multiple organ function and reduce inflammation in lungs for easy breathing of patients to relieve from oxygen cylinder support for normal breathing.

No major side effects from such plasma treatment and easily transportable in any part of the world under cold chain transport support system like for vaccine.

The Convalescent Plasma therapy successfully handled by the Delhi Aam Aadmi Government in India and mutually benefiting population as that is not only relieving patients but develop social inclusion too via plasma donors.

The commercial tipped vaccine is yet to prove its metal like plasma therapy did. The

Vaccine is liable to create conflict between Vaccine Alliance countries and Vaccine non Alliance countries on profit issues.

The world needs nearly 4.7 billion doses, if the threshold or control system of the population is 60 percent. Out of that 2 billion doses will be required to cover the health care workers and other high risk groups in the world. The Serum Institute, India promised 400 million doses of the vaccine ready by year end.

How are the Aam Aadmi and Aam Aurat [ordinary men & women] going to sustain in such world without proper resources?

These questions that the World Health Organization needs to ask to overcome such menace by encouraging mutually benefiting Plasma therapy.

The mutually benefits plasma therapy need to be established like Delhi Government all over the world in opening plasma banks in each state, city and towns to serve both villages and to protect; Haves and Have Nots; in maintaining United Nations sustainable development goals (SDGs) 3 for Peace and prosperity.

Thank you for reading

The truth prevails

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NGO is in Special Consultative Status with the Economic and Social Council of the United Nations [Childcare consortium –CCC]

ICT Tools

Facebook and e mail

Challenges

Need sponsors to sponsor my literary on COVID 19 in Face book to boost

Partnership

Need partner to sponsors to sponsor my literary on COVID 19 in Face book to boost

Replicability
yes
Sustainability
Relieve Covid 19 patients via my literary work and promote self sustainability
Action Lines
AL C3. Access to information and knowledge AL C4. Capacity building
SDGs
Goal 3: Ensure healthy lives and promote well-being for all

Case76-Literary work via research
Title of the project, Contact Organization Name, Stakeholder type, Country
Literary work via research Childcare Consortium Civil Society India
Beneficiaries
Friends and Facebook readers
Website
https://www.facebook.com/AnandAAAKumbakonam/?modal=admin_todo_tour
Description

07 August 2020

Tit-Bits: 79 273 Word analyses

How to make climate change meet success in Glasgow, Scotland in November 2021?

The Global geopolitical systems are not a whole in the structure of the United Nations because of boundaries which create voids due to missing components in human attitude which fail in fulfilling human purposes on our planet and express lies at functioning meets to end in conflict, violence with groups and disagree with agreements on consensus.

The components of cognitive, emotional, and behavior in human attitude during climate change treaty in Glasgow, Scotland from 1 to 12 November 2021 is very important to gain rights and positive attitude for success to protect the human population from potential damage, harm or adverse health effects such as COVID 19.

Any missing components out of three as specified above in human attitude while making boundaries are liable to create conflict and war later, if one disagrees with agree on missing components.

The remedy and balancing act on human positive and negative attitude is depending upon the cognitive brain process of people assembled in climate change meet with accurate psychic, the extrasensory perception (ESP) in lingua Franca which makes the frame or structure as whole.

Here, choosing the pidgin and Creole used for communication is very important to keep the rest of components intact in climate change meet such as emotions and behavior for unanimous amalgamation to agree with disagreeing for success.

Such successful climate change framework and meet at Glasgow, Scotland in November 2021 is protects human population and fulfils United Nations sustainable development goals (SDGs) without fail for socioeconomic development.

Thank you for reading and think it over,

The truth prevails

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AL C4. Capacity building
SDGs
Goal 3: Ensure healthy lives and promote well-being for all

Case77-Literary work via research
Title of the project, Contact Organization Name, Stakeholder type, Country
Literary work via researchChildcare ConsortiumCivil SocietyIndia

Beneficiaries

Friends and Facebook readers

Website

https://www.facebook.com/AnandAAAKumbakonam/?modal=admin_todo_tour

Description

14 August 2020

[Released on the occasion of August 15, 2020 India's independence day, which complete 73 years]

Tit-Bits: 80 378 Word analyses

Why to follow and support Delhi Aam Aadmi Government to bring societal changes in a living system locally and globally?

Transparency is in human traits which need to be consolidated by delivering true socioeconomic statement in public. The Delhi Aam Aadmi party did at public gatherings and delivered a true socioeconomic statement at Mohalla Sabha and consolidated the transparent people to form a Government with thumbing victory by keeping the five major components in their hidden agenda.

The hidden agenda of five major components are family planning, improving public health, gender balance and education and keeping a clean environment. Executing these five components is refining the transparent characters and bringing changes among non transparent character engrossed in human traits for transformation and Peace.

These five components need to be upgraded time to time to pass on to the next generation, otherwise the generation will stand still, junk without diversity for decade and even centuries in practicing graft and corruption.

The healthy societal change acquires during the period of physical maturity among growing human population on exercising five of this component and avoids the formation of emotional groupies and immoral gangsters. Such groupies and gangsters are falsely developed during the immature period held on poor family planning, health and education and gender inequalities along environmental degradation.

If, one finds the graft and corrupt government repeated again in any states or union territories in India or elsewhere means that the above mentioned five components is not upgraded for decades and even centuries.

Such state of affairs makes human population to remain junk without diversity with immature groupies and gangsters held in various communities in official and unofficial position to destroy the geopolitical system and the Nation.

Therefore, it is very essential to follow and support Delhi Aam Aadmi government locally and

globally that implementing the above said five components. The five components are encouraged in improving supply chain, electricity, water, health and education by reducing corruption and pollution ratio at Delhi, the capital city of India.

The successful process helped the Delhi Aam Aadmi Government to fight COVID 19 by bringing under remarkable dip with plasma treatment and made societal changes in their state of harmony.

Human rights need to take care to retain human rights, sustainability and dignity by supporting the five components practiced by the Delhi AAP Government all these years. Otherwise humans are liable to lead life under poverty, ill health, agony, misery and mental degradation in struggle as usual.

Thank you for reading and take care

The truth prevails

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ICT Tools

Facebook and e mail

Challenges

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Partnership

Need partner to sponsors to sponsor my literary on COVID 19 in Face book to boost

Replicability

yes

Sustainability

Relieve Covid 19 patients via my literary work and promote self sustainability

Action Lines

AL C4. Capacity building

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case78-Literary work via research

Title of the project, Contact Organization Name, Stakeholder type, Country

Literary work via research Childcare Consortium Civil Society India

Beneficiaries

Friends and Facebook readers

Website

https://www.facebook.com/AnandAAAKumbakonam/?modal=admin_todo_tour

Description

20 August 2020

Tit-Bits: 81 543 Word analyses

Transparency, tolerance, faith and our Human rights:

Human rights are moral principles or norms that describe certain standards of human behaviour and are regularly protected as Natural and legal rights in municipal and

international law.

The moral principles or norms of human rights are Transparency and tolerance. The honesty, non violence and faith are in human behaviour which is being protected under natural and legal rights by municipal and international law.

The honesty that is Transparency and tolerance in human rights has admired by international law where the Mahatma Gandhi awarded freedom at midnight in 14–15 August 1947 from the British Raj against the behaviour of non violence, Satyagraha.

The religious intolerance in faith or belief is still in combating mode under the preview of United Nation Charter resolution 16/18 to avoid human rights violation.

Human rights and violence are depending upon the balanced state of emotional and moral urge of the individual and population living under mayor or municipal council headed by a Government to maintain peace among various communities living around the world.

Human individual and populations are emotionally submerged most of the time reading novels, watching T.V., Cinema, drama and games and so on entertainments where the moral urges are considerably suspended to balance with emotions to improve the power of tolerance in human rights and governments as a whole..

The emotional and moral urges among human population can be balanced by the mayor or municipal council under any governments and promote tolerance, human rights, purity in faith or belief by executing a family plan, improving public health, gender balance and education along keeping a clean environment.

Naturally, that the transparency and tolerance do not require graduation to promote human rights and it requires pure character in traits to be honest and gain power. Like Shri. K. Kamaraj was three consecutive terms as Tamilnadu Chief Minister in the nineteen-sixties of who never attended school and brought first midday meal scheme in schools for children in India to promote human rights and tolerance.

One who fails to execute any one of the five services mentioned above shall imbalance socioeconomic structure at times and experience human right violation. The human right violation in domestic, community based faiths and in a state and Nation as whole in rites' to end in civil war or war with neighbouring countries in loss of tolerance power in individual and collective at governance.

Further Intolerance in human rights is bound to violate animal rights on wildlife such as bats and got infected with Covid-19 virus and suffers individually and collectively at large in Globe.

At the movement in 21st-century that the human populations are living in an intolerant world

under the punishment of most legitimate universal law due to the enormous human and animal rights violation which parted humans away from socioeconomic structure to suffer.

It is very essential to take care of the next generation by executing all five services mentioned above to balance human emotions and moral urges to reestablish Transparency, tolerance, faith of practicing purity in mind and promote Human rights. The promotion of human rights among Haves and Have-nots is resolving issues and values in the socioeconomic structure for Peace and tranquility in the art of livings.

Take care,

Thank you for reading

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ICT Tools

Facebook and e mail

Challenges

Need sponsors to sponsor my literary on COVID 19 in Face book to boost

Partnership

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Replicability

Yes

Sustainability

Relieve Covid 19 patients via my literary work and promote self sustainability

Action Lines

AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-science|AL C10. Ethical dimensions of the Information Society

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case79-Literary work via research

Title of the project, Contact Organization Name, Stakeholder type, Country

Literary work via research|Childcare Consortium|Civil Society|India

Beneficiaries

Friends and Facebook readers

Website

https://www.facebook.com/AnandAAAKumbakonam/?modal=admin_todo_tour

Description

09 September 2020

Tit-Bits: 82 1100 Word analyses

How to resolve the Social Problem faced by Aam Aadmi Party of India to change the system for socioeconomic transformation?

The social Problem faced by the Delhi Aam Aadmi Party in India is in converting the non transparent characters into transparent characters in various states and union territories to reach in power for socioeconomic Transformation.

The polarity between human emotions and moral urges in the body and mind is balanced by transparent characters to promote human rights, clean environment for socioeconomic transformation.

At the same time that the manic in non transparent characters in their body and mind causes bipolar disorder and dupe human rights in fear to fulfill socioeconomic needs in accumulating black money and end of recessions.

The transparent characters in India have passion to repair such failure of human natural status in collecting data from each Mohalla as specified in this analysis and exercise to promote human rights, a clean environment and resolve socioeconomic problems for transformation.

Such data collection and exercise are enabling Aam Aadmi Party volunteers to improve public interest, transparency and control the conditions of social life to reach power in the states and union territories. The power of pure moral authority to balance with emotions at the Centre for integrity.

The reason for an imbalanced state of moral and emotional value of the population is specified in TitBits: 81, Para 6 published in FB 20 Aug 2020 for reference. It causes human natural status of the body and mind problem via Bipolar disorder with manic and depression among different dominant ethnicities that are living emotionally hopelessness or morally helpless situation at Mohalla, districts and state and Nation as whole.

There may be Haves and have-nots in any human settlement in Nations, including the United Nations and the problem of Bipolar disorder is same everywhere and shall not allow to unanimously amalgamate at the floor to promote human rights and climate change program by using intensely controversial Power to maintain the status quo.

More the Bipolar disorder is more the human trafficking, murder and raping with more cruelty in human rights which ultimately violate animal right to result in COVID 19 like menace and more in future, if not repaired.

Positive action on such data collection by AAP Volunteers is liable to repair such disorder and brings radical changes, favours political, economic or social reforms by lowering the risks of failure in their art of Governance for progress.

The collected statistical data such as on Women's empowerment, health and education, Environmental condition and on basic amenities along socioeconomic problems from each Mohalla needs to be consolidated with AAP State conveners during each semester for presentation to the mayor or municipal council headed by a Government.

The Unresolved such poor conditions by local authorities as specified in consolidated data can be referred to higher authorities or later in a court of law by addressing in public with

remedy by AAP volunteers in protest to resolve bipolar disorder of manic and depression for social harmony at each Mohalla, districts and Nation as whole.

Further, that the unresolved bipolar disorder under the poor Governance with corruption is developing human movements without reason at Mohalla, district, state and Nation. Such Human movements without reason become involuntary.

The involuntary human movement without reason at Mohalla, district or Nation is hesitating and avoiding consensus during a recession or severe despondency and dejection and deliver anti people policies with bad conduct and generate social disobedience.

Human movement with reason becomes voluntary when there is a less Bipolar disorder in a Mohalla and improves neighborhood relation, promote Human rights and clean environment for diversity.

When the volume of Bipolar disorder increases more and more in a Mohalla shall deteriorate neighborhood relation, violate human rights and live under an unclean environment with vote bank for money.

The ratio of impenetrability in transparency is determining the attitude of profitability and mutual benefits in a volunteer-ism.

The reasonable and transparent AAP volunteers collect data as specified to overcome such bipolar disorder and promote human rights, clean environment in their Mohalla, district, state and Nation and gain leadership quality on mutual benefits to reach win-win situation.

The attitude of more profitability leads to greed and Corruption to retain bipolar disorder and COVID 19 menace in advertising to boost self interest via bogus Media with collected public money to retain corruption.

But, the limited and restricted AAP young volunteers may conduct unique way of COVID 19 Mohalla meet by wearing mask and keeping social distance at door to door in each Mohalla and collect data as specified above to resolve bipolar disorder among different dominant ethnicities and promote transparent characters in the art of living.

The Intellectuals and watchdogs knew that the Incremental innovation of the Delhi Aam Aadmi Government has been changed the very old services practiced since Independent in India by lowering the costs with existing limited power in improving human functions to improve economy and improved successfully under geopolitical pressure in competition.

But, the Intellectuals and watchdogs are yet to know how the Delhi AAP government is doubling the tax revenue collation of Rs 60,000 crore in 2019-20 budget on comparing 2014-15 budget of Rs, 32641 crore?

The magic movement of the Delhi AAP Government is achieved in reducing the Bipolar disorder of manic and depression among the Delhi population via improving Women's empowerment, health, education and Environment with program on infrastructure without corruption.

Such magic movement of the Delhi AAP Government on population is doubled the human functions to gain double tax revenue of Rs 60,000 crore in 2019-20 budget by giving a lollipop to rest of the Governments in India.

An investment does not make success. But, the good purpose and methodologies behind investments make success; even AAP volunteers invest Rs.1/- towards a good cause and purpose shall be successful in achieving pragmatic idealism of AAP to run clean governance.

However, it is a moral boost for rest of AAP volunteers in India to move in the right direction with strength to strength on analysing varying social problem collected from different Mohalla having a different dominant ethnicity for socioeconomic transformation in India without fail in the coming years.

The radical innovation via Tit-Bits: 82 reveals certain facts with specific reason with the rule of collecting specific data for success.

Now who will bell the cat?

A minimum 13 member group of AAP volunteers or more he who collects the data and consolidate a true statement as specified from their respective Mohalla and present it to concern authorities with remedy shall bell the cat, if not in court of law.

Thank you for reading and best wishes

The Truth prevails

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ICT Tools

Facebook and e mail

Challenges
Friends and Facebook readers
Partnership
Need sponsors to sponsor my literary on COVID 19 in Face book to boost
Replicability
Yes
Sustainability
Relieve Covid 19 patients via my literary work and promote self sustainability
Action Lines
AL C4. Capacity building
SDGs
Goal 3: Ensure healthy lives and promote well-being for all

Case80-STEM AND ROBOTICS EDUCATIONAL INTERVENTION FOR YOUNG ADULTS WITH DOWN SYNDROME
Title of the project, Contact Organization Name, Stakeholder type, Country
STEM AND ROBOTICS EDUCATIONAL INTERVENTION FOR YOUNG ADULTS WITH DOWN SYNDROME Special Needs Initiative for Growth Civil Society Nigeria
Beneficiaries

This practice is designed to support our primary beneficiaries such as children, teenagers, young adults and youths living with Autism Spectrum Disorder, Down Syndrome, Cerebral Palsy and Visual Impairment(Blindness) between the ages of 9 years old to 40 years. Also, we provide support to their carers, special needs educators and families so that they can transfer the set of skills and practices to the persons with disability. Our geographical regions for vocational support covers rural areas, remote areas and urban areas. The main benefits/services focuses on demand-driven IT entrepreneurship and career development to enable either employment or self-employment, after which they are mentored, supported to secure an internship or job, or given a small grant to start a business within the ICT Sector.

Website

<https://biolinky.co/specialneedsinitiativeforgrowth>

Description

During the early days of the Covid-19 breakout and frenzy in March 2020, much focus turned to virtual learning platforms for children and young without special needs in globally but this method has been ineffective for children and young adults with disabilities as they have been often left behind due to their developmental stages and other limitations to accessibility in technology and other assistive technologies. Given the circumstances surrounding the global pandemic, Students with disabilities in developing countries were deprived, excluded and segregated from therapeutic and educational resources as opposed to their non disabled peers who access remote learning and adapt to several learning opportunities during this period. It became obvious that we needed to do more in terms of providing students with disabilities with the right learning alternatives using technology. One of the project activities we promoted in response to the Covid-19 outbreak with the use of ICT to create a social impact among our Disability community was applying STEM and Robotics educational intervention to children and young adults with Down syndrome. In March 2020, we conducted the STEM and Robotics Empowerment workshop in collaboration with the Barack Obama American Corner to develop the cognitive and technical capacity of young adults with Down syndrome and their educators so that they can be well equipped to lead technology roles, gain access to STEM and Robotics related jobs and earn a living for themselves especially during the Covid 19 crisis. The Down Syndrome young adults and their special educators get to build electronics, and learn about basic physics, electricity, and how electronic devices work. With Content around STEM and Robotics, early and young adults with intellectual and physical challenges are encouraged to integrate with computational skills as the rest of 21st century society. For this reason, our curriculum adopts and demonstrates pedagogical practices and resources that allow young adults with disabilities to address and develop their skills based on their individual goals and capacities. This training content has been proffered to over 50 young adults with Down syndrome Lagos State Nigeria under our administration. The impact of this project improved their communication and cognitive flexibility skills as they now pursue a career in ICT.

ICT Tools

We use a variety of training techniques so that young adults with Down syndrome can learn according to differing and preferred learning styles while leveraging STEM and Robotics. We also employ a flexible approach not only to content but to goals, methods, materials and assessment techniques that suits the young adults with Down syndrome and their special educators.

We proffer STEM and Robotics leveraging on various schematic pieces to enable them construct robots, buggies and devices, while ensuring they can physically “move” or “operate” together to successfully and repeatedly perform a given task. Trainees and their special educators had the opportunity to build electronics, and learn about basic physics, electricity, and how electronic devices work. With Content around STEM and Robotics, early and young adults with intellectual and physical challenges are now encouraged to integrate with computational skills as the rest of 21st century society during the pandemic and even during the post COVID-19.

Our STEM AND ROBOTICS educational intervention is improving digital transformation and inclusive education for children and young adults with intellectual disabilities in Lagos State Nigeria by developing and improving the right skill set, methods and techniques relevant for Nigerian children and young adults with disabilities to compete in or create a job market locally and globally during the Crisis and beyond.

Also through our educational ICT tools , we deploy researched based objectives to equip the educators or trainers with the right capacity so that they can transfer the right skills to the Children and young adults with disabilities and their peers thus enabling us to proffer each problem-solving skills within STEM contexts (e.g. problem stories about the velocity of a car, body temperatures, probability genetics, chemicals), generalize problem-solving skills when engaging in hands-on activities in an engineering classroom eg, by measuring and calculating which will increase students with disability motivation to access internship platforms, job opportunities and entrepreneurship grants to scale their career after the training. This is a way that we measure the level of educational impact that we provide for them.

Challenges

Challenges we encounter are mainly Employment Opportunities for adults who have been trained technically with us into employment or entrepreneurship roles related to ICT. After empowering persons with disabilities on technical skills in September 2019, We had few organizations to mentor or integrate them for internship because they believe that persons with disabilities have limited functionalities. In overcoming this obstacle, we had to conduct awareness and advocacy outreach online and onsite to enable association of employers to see the positive outcomes that could be derived from their obligations to employment equity for persons with disabilities. We buttressed that if Persons with Disabilities were granted opportunities to integrate into technical roles in the workplace, they will have insights into how to serve customers with disabilities.

There will be greater diversity at the work sites so that a wide variety of perspectives are utilized when resolving problems. Since then, 47% of employers of technical fields saw

reason to this and have affirmed their support to include persons with disabilities in mentorship, internship and other employment roles.

Partnership

There is a large chasm between the potential of data-driven information and its actual use in helping solve the social problem.

We would like to have partners who are using big data to tackle complex social problems related to persons with disability. We would like to partner with them to deploy big data to tackle issues in identifying the number of people who experience disability (persons with intellectual, sensory and physical disability) across low-middle income countries, as well as the unmet needs, barriers and inequalities they face; so that we can replicate our social change across these countries.

Also, we would like to have partners dealing with assistive and rehabilitative technologies for children and young adults with special needs. These are areas around Robotics and other STEM Related services. Having partners in this field will help us digitally fabricate and sustain rehabilitative technology curriculum and prototypes for children and young adults with disabilities.

Replicability

Given the circumstances of the unprecedented time we found ourselves due to the global pandemic, we began engaging most of our vocational and technical support virtually as well as in person. Our virtual empowerment programs in STEM education and other technical skills increased by 57% since March 26th 2020, we provide capacity building programs and technical training to disabled persons, special educators and families of persons with disabilities in partnership and support from the Civil Society Organizations, Government, Public and Private stakeholders. This has been replicated across other low income countries through our Disability and Covid-19 Global Town Hall Meetings which took place in July and December 2020.

Sustainability

Yes it is Sustainable. It is sustainable because our training content not only addresses STEM education and therapeutic needs but it has also addressed how persons with disabilities can access employment and business development services while leveraging on technology. This has helped to motivate employers in Nigeria to hire and leverage accessibility to business settings for training purposes for persons with disabilities. Over 80 persons with disabilities have benefitted from this training content and practise in the past 2 years and one month.

Our STEM education training content includes the structure for overseeing the inclusion efforts, stakeholder cooperation, gender issues and monitoring and evaluation for Down Syndrome young adults, Visually-impaired young adults, cerebral palsy children and early adults and young adults with autism spectrum disorders.

Since 2017 to 2020, We have facilitated 18 community projects that have provided technical and vocational training support for 2,470 young adults with blindness, down syndrome,

cerebral palsy and autism spectrum disorders through information technology and IT Entrepreneurship. 69% of them have been provided internship platforms and entrepreneurship grants to scale their career after the training.

Action Lines

AL C4. Capacity building

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case81-Happy hours on ZOOM

Title of the project, Contact Organization Name, Stakeholder type, Country

Happy hours on ZOOM Association E-SENIORS Civil Society France

Beneficiaries

Our primary beneficiaries are all the seniors who, in normal times, come to our workshops in public places all over Paris - in social centers , cultural centers, in townhalls, also in retirement homes or residences.

Then we have the professional nurses or caregivers who need to find a new way to communicate with their patients or sick family members.

For all these people, we organize online teaching and, for people who do not have computers, we try to help them by giving recycled computers

We try to give as much possible information about the situation ,about practical solutions to different problems or needs

We try to keep social links /contacts by talking online or even organizing games

Website

<http://www.e-seniors.asso.fr>

Description

For promoting 'Ageing well" among independent seniors , we organized several online activities , in replacement of our regular workshops in public places:

1. Regular workshops about the use of computers , tablets, smartphones and , more generally Internet - for people isolated at home , i.e. our usual target population which nowadays has to stay at home and, very often , alone.-
2. Online happy hours with the idea of bringing people to discuss online together
3. Some other online meetings with specific activities such as memory training, English conversation (between French and also pan-european with seniors for all EU countries
4. We also published , very often at the beginning of the Covid crisis – nearly 2-3 times a week – a newsletter containing links to possible activities (like films theatre, online exhibitions, concerts, conferences, videos, workshops, also practical hints...in order to keep people busy at home

Then to support fragile old people with their family caregivers (at home) the action consists of equipping caregiver / home help pair families with connected tablets, in order to maintain the link with resource partners, to avoid isolation, and moreover:

- identify basic needs, assess dependency, degree of autonomy at any time
- to offer animation workshops
- to transmit useful and practical information in the daily life of the caregivers: newsletter, orientation towards digital links (cultural and others)

Support can be aimed at people who cannot carry out activities outside the home.

Thus, the goal is to allow seniors to participate in all programs that use digital.

This platform would allow associations and partners working with seniors:

- to have information on their quality of life
- to facilitate responses to their possible needs

ICT Tools

Our workshops are mostly aimed for computers but we can also teach features about tablets and smartphones.

The first type of tools used are cloud-based video conferencing services that you can use to virtually meet with others - either by video or audio-only or both

It can Be ZOOM JITSI MEET GotoMeeting Teams....

We need also to use fast and secure solutions for gaining access to computers and networks remotely with tools like Teamviewer ,

This enables us to help seniors at home, when they have a problem with their computer, tablet, etc

Among the proposed themes of the workshops , we offer:

1. Join and / or organize a group video call with Zoom
2. Google Meet or Skype
3. Hidden functions of WhatsApp
4. Share your mobile phone's Internet connection
5. Presentation of Google and Firefox
6. E-administration = help with administrative procedures (retirement, employment center,

social security, etc.)

7. TeamViewer

For the more advanced participants:

Purchasing security

How to make a professional layout, with WinWord or PowerPoint.

Photo, sound and video properties and formats

Explorer and Windows environment

Google drive on the computer or on the Internet (local or online)

Challenges

One of the the obstacles to learning the use of digital technologies is the fact that seniors are afraid of not being up to the task of learning computers and may refuse any help

Another problem is how to teach beginners who never used a computer;

For this, at least at the very beginning, one needs to help in face to face and install ZOMOM software on the computer. Then things can be managed on distance

The Covid pandemic has highlighted the risks of isolation of all the elderly , especially because of the state recommendations telling them to stay at home and not have visitors.

Among them there is also the category of those with loss of autonomy. The restriction of access to day centers and especially the limitation of face-to-face contact have had negative consequences on their physical and mental well-being.

The good side is that this period also revealed a growing interest in the use of new communication technologies, as well to maintain social (online) as well as to help the vwork of caregivers and maintain continuity of care.

Based on the lessons learned from this pandemic, our idea is to offer online training for all seniors (even adults!) and for the caregivers

And equipment (tablets adapted to seniors) and a platform to maintain a permanent link between seniors (as well autonomous than patients) , informal caregivers and caregivers.

Partnership

we are always interested in working with associations doing similar actions with seniors in orther countries

Replicability

As Eseniors association, we are members and even involved in the management of EURAG which is the oldest federation of ageing people' asspciations in Europe and other affiliated countries. We are constantly working and meeting with partners from all these countries and share our best practices, under others in the frame of European Erasmus or Horizon projets

Sustainability

The fact of teaching people to get autonomous, in terms of access to information and knowledge through Internet, is, by itself a major success in terms of sustainability. With our actions we help achieve different of the SDG (Sustainable development) goals such as Quality Education (SDG 4), good Health and well being (SDG3), Reduces Inequalities (SDG10) or sustainable cities and communities (SDG11). Indirectly even in Area 10: of the GREEN DEAL = Empowering citizens for the transition towards a climate neutral, sustainable Europe Or Area 9: Strengthening our knowledge in support of the European Green Deal

Action Lines

AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 16: Promote just, peaceful and inclusive societies

Case82-mr

Title of the project, Contact Organization Name, Stakeholder type, Country

mrGatef organization Civil Society Egypt

Beneficiaries

The main beneficiaries are: . Education and training; Citizens;
 • Man power; • Professionals in Information and Communication Technology
 Today digital skills have become a basic precondition for anyone in any country to participate meaningfully in the development of the economy
 Digital and digital society. This toolkit sought to equip policy makers and stakeholders
 Others provide practical guidance for developing a digital skills strategy tailored to meet the needs of each country
 same. And since there is no single strategy that fits all countries - each country has different strengths and goals
 On the other hand - there are a number of promising approaches that have proven their worth in many contexts, and are offered for every country
 A range of models to be explored and adapted. It is hoped that the toolkit will be useful in stimulating discussions

That leads to concrete steps through new policies and programs.
It goes without saying that countries can use the entire toolkit in developing a comprehensive skills strategy
Digital or they can simply focus on a specific area and use elements of the toolkit as much as they cater to any
Specific needs - for example, how to target underprivileged groups.
The International Telecommunication Union is pleased to make this set of tools available to Members, and is eager to support
Members strive to provide their citizens with the digital skills they need to thrive in the twenty-first century

Website

<https://www.atf11.com>

Description

The most important projects presented to prevent the spread of Covid-19 by using information and communication technology
With the technology at our disposal, we did the following
1- Imposing strict health control
This is in order to ensure that the region is free of any suspected cases of infection with the virus, through the intensive campaigns carried out by the Ministry of Health during the past days to protect everyone in the region.
2 - We have succeeded in using technology that has played a big role recently to reduce the negative effects of the spread of the Coronavirus, whether at the level of individuals or businesses, as it facilitated communication and remote work.
Since the outbreak of the Coronavirus began, we have conducted awareness campaigns for all of our employees about the necessity of hand hygiene and the areas around them, whether at home or work, and adhering to all measures taken by the state to protect citizens, whether in reducing gatherings or being in crowded places.
3 - We carried out counseling campaigns for the importance of transferring money via phone to help non-bank countries reduce cash circulation
As a result of our success in using technology, it can be said clearly that our success as a result of using technology to limit the spread of disease has been monitored. Smart technology has provided us with wide-ranging awareness methods for all sectors in society, as well as reduced direct contact between people through artificial intelligence systems, and as a result of our use of modern technology, we succeeded in discovering people with the disease on the one hand, and sterilizing streets and regions on the other hand.

ICT Tools

- 1- Building a world-class digital infrastructure
- 2- Enabling everyone to access the digital skills they need;
- 3- Helping all business enterprises to become digital business enterprises;

4- Data - exploding the power of data in an economy as a whole and improving public confidence in its use.

5- Skills building, highlighting new initiatives and existing programs, including a variety of formal and informal learning approaches for digital skills

Basic and advanced. One of the most ambitious new developments is the creation of a new digital skills partnership that aims to provide free training opportunities over the next few years through partnerships across sectors - and includes matching skills to prepare individuals to fill vacancies locally.

Challenges

The challenge is clear. There is a huge skills gap - tens of millions of jobs open around the world

For those with advanced digital skills - with the attendant shortage of qualified people ,and Today digital skills have become a prerequisite for anyone in any country to participate meaningfully in the development of the economy

Digital and digital society. This toolkit sought to equip policy makers and stakeholders

Others provide practical guidance for developing a digital skills strategy tailored to meet the needs of each country

same. And since there is no single strategy that fits all countries - each country has different strengths and goals

On the other hand - there are a number of promising approaches that have proven their worth in many contexts, and are offered for every country

A range of models to be explored and adapted. It is hoped that the toolkit will be useful in stimulating discussions

That leads to concrete steps through new policies and programs.

It goes without saying that countries can use the entire toolkit in developing a comprehensive skills strategy

Digital or they can simply focus on a specific area and use elements of the toolkit as much as they cater to any

Specific needs - such as how to target semi-groups

Partnership

of course , I will need partners , in important areas

Replicability

This project is definitely replicable, I'd suggest any country in Asia and Africa

Sustainability

This is a sustainable project. Imagine a country where basic digital skills are valued and promoted and have priority.

For all the people of the country - as one of the basic skills of the nation combined with literacy and numeracy skills

Traditional. Imagine a country where all segments of the population can access news and information, and communicate with friends and individuals

Family, daily use of services related to e-health, e-government, digital finance, Agricultural technology, smart transportation - and making full use of immersion in a vibrant global knowledge society.

Imagine a community of people with the digital skills required to be employable, productive, creative, and successful - a community that can

In it for all our youth to develop basic skills and then progress to acquire the skills of intermediate and advanced levels of know-how

Digital - young people who are able to participate in emerging industrial sectors and to launch their own business ventures

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns

Case83-Education Application

Title of the project, Contact Organization Name, Stakeholder type, Country

Education Application Alamsurya Kubara Endriharto Civil Society Indonesia

Beneficiaries

Without thinking of purchase of Data Packages, Quota and Signals. In our application too there is a learning to help students easier to understand the meaning of a learning materials.

Website

<https://lestariilmu.id>

Description

During COVID-19 condition, this innovation is motivated by the condition of the parents of students in the hilly area, if learning must be used Internet quota purchased will certainly be burdensome.

ICT Tools

Along with the conditions of learning at home, from our side we are developing IT-based education with a concept without data packages and can be accessed nationally through Google Playstore.

Challenges

The delivery of digital literacy to the public because society is still running with conventional methods. Meanwhile, at this time of COVID-19, a breakthrough in digital learning is very much needed.

Partnership

Partners needed are the Ministry of Education, Teachers, Edu. Institutions, Telecommunications Companies in National that was built with Lestari digital Text starting from being engaged in education.

Replicability

Can be developed with developer permission. Cooperate with Lestari Digital Text was cooperate according to and based on Formal Education Unit in 2010 as a publishing company located in Magetan Regency

Sustainability

This project sustainable and committed to make changes in how we learning in class that combines between the existing print in the paper text with android which can appear in Smartphone.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case84-Intelligent Medical Robot IMC

Title of the project, Contact Organization Name, Stakeholder type, Country

Intelligent Medical Robot IMCTechnoSpectCivil SocietySyrian Arab Republic

Beneficiaries

- Patients who are having heart attacks
- Patients requiring cardiac care, especially Corona patients
- Cardiologists to monitor their patients
- Athletes who undergo exerted muscle strain
- Hospitals and health centers

Website

<https://technospect-sy.com>

Description

Due to the high number of daily cases of Covid-19 all over the world and the consequences of having a heart attack whether during or after being affected with Covid-19 hence we came by the idea of having an intelligent medical robot that can check and assess the patient and figure out of expected heart attack based on collecting parameters and arguments. This robot can be utilized for all heart diseases patients where could be used not only for Corona patients which all in all get along with SDG goal (3) which about Good Health And Well-Being

ICT Tools

Hardware part and software tools used to analyse the parameters and figures and provide an output.

Challenges

Difficulties of taking real data from a Corona patient due to quarantine and self-isolation
Difficulties of taking real data from medical centers because of quarantine also

Partnership

Medical centers and hospitals
Ministry of health
AI Medical companies

Replicability

N/A

Sustainability

This project is sustainable and could be even more developed to suit special cases of Covid19 and much more, with the tools of AI then a lot can be done.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case85-Kelas Bersama (Class for Everyone)

Title of the project, Contact Organization Name, Stakeholder type, Country

Kelas Bersama (Class for Everyone)Kelas Bersama (Class for Everyone)Civil SocietyIndonesia

Beneficiaries

- A. Kelas Bersama for Teens: Provides free online classes with themes about teenagers.
- B. Kelas Bersama for College Students: Provides free online classes with themes relevant to college students.
- C. Kelas Bersama for Parents: Provides free online classes with themes around parenting.
- D. Kelas Bersama for Teachers: providing free online with themes around teaching and learning activities from early childhood level to the middle school level.

Website

<https://kelasbersamakita.id/>

Description

KELAS BERSAMA is one of the communities under the auspices of the Library of the Ministry of Education and Culture of the Republic of Indonesia. KELAS BERSAMA or Class for Everyone is a community engaged in the field of education by becoming a connector between anyone who is moved to share knowledge and seekers of lifelong knowledge.

KELAS BERSAMA exists so that educators and knowledge seekers can meet in face-to-face or virtual classrooms to study together. KELAS BERSAMA makes the library the main room for gatherings of educators and knowledge seekers with the hope that the library can continue to grow into a place to seek knowledge, not only by reading existing collections but also by providing space for learning together.

KELAS BERSAMA exists as a concern for knowledge seekers who are sometimes constrained by the costs of attending workshops, training, seminars, and so on. Therefore, Kelas Bersama comes by providing free classes. Besides that, Kelas Bersama pays attention to the phenomenon that many facilities owned by the library are not being fully utilized, so it would be nice if they are used to provide free classes where educators and knowledge seekers meet.

ICT Tools

Kelas Bersama uses several Technology/ICT Tools:

1. Open source design tools (Canva)
2. Open source live streaming tools (Streamyard)
3. Open source meeting platform (Zoom, GoogleMeet)
3. Social Media (Youtube, Instagram, Facebook)
4. Open source survey administration application (Googleform)

Challenges

Challenges:

1. Recruitment
2. Passing the torch to new volunteers
3. Retaining volunteers long-term

Solutions:

1. Identifying key volunteers
2. Developing a simple Learning Management System (LMS)

Partnership

1. International volunteers
2. International resource person
3. Learning Management System

Replicability

Yes, this project is easily replicable:

1. Set up a team
2. List potential resource persons to share knowledge and contact them
3. Design and promote the events on social media
4. Live stream

Sustainability

Yes, this project is easily replicable, because:

1. Technologies/ICT tools used are open source and very user friendly
2. The team and the resource person sharing their knowledge are volunteers

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C9. Media|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 10: Reduce inequality within and among countries|Goal 17: Revitalize the global partnership for sustainable development

Case86-Kelas Bersama (Class for Everyone)

Title of the project, Contact Organization Name, Stakeholder type, Country

Kelas Bersama (Class for Everyone) Kelas Bersama (Class for Everyone) Civil Society Indonesia

Beneficiaries

- A. Kelas Bersama for Teens: Provides free online classes with themes about teenagers.
- B. Kelas Bersama for College Students: Provides free online classes with themes relevant to college students.
- C. Kelas Bersama for Parents: Provides free online classes with themes around parenting.
- D. Kelas Bersama for Teachers: providing free online with themes around teaching and learning activities from early childhood level to the middle school level.

Website

<https://kelasbersamakita.id/>

Description

KELAS BERSAMA is one of the communities under the auspices of the Library of the Ministry of Education and Culture of the Republic of Indonesia. KELAS BERSAMA or Class for Everyone is a community engaged in the field of education by becoming a connector between anyone who is moved to share knowledge and seekers of lifelong knowledge.

KELAS BERSAMA exists so that educators and knowledge seekers can meet in face-to-face or virtual classrooms to study together. KELAS BERSAMA makes the library the main room for gatherings of educators and knowledge seekers with the hope that the library can continue to grow into a place to seek knowledge, not only by reading existing collections but also by providing space for learning together.

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ICT Tools

Kelas Bersama uses several Technology/ICT Tools:

1. Open source design tools (Canva)
2. Open source live streaming tools (Streamyard)
3. Open source meeting platform (Zoom, GoogleMeet)
3. Social Media (Youtube, Instagram, Facebook)
4. Open source survey administration application (Googleform)

Challenges

Challenges:

1. Recruitment
2. Passing the torch to new volunteers
3. Retaining volunteers long-term

Solutions:

1. Identifying key volunteers
2. Developing a simple Learning Management System (LMS)

Partnership

1. International volunteers
2. International resource person
3. Learning Management System

Replicability

Yes, this project is easily replicable:

1. Set up a team
2. List potential resource persons to share knowledge and contact them
3. Design and promote the events on social media
4. Live stream

Sustainability

Yes, this project is easily replicable, because:

1. Technologies/ICT tools used are open source and very user friendly
2. The team and the resource person sharing their knowledge are volunteers

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 1: End poverty in all its forms everywhere

Case87-MyAmbar

Title of the project, Contact Organization Name, Stakeholder type, Country

MyAmbarNASSCOM FoundationCivil SocietyIndia

Beneficiaries

Women undergoing gender based violence, allies helping women. It is a holistic solution to help women understand the effects on their mental, physical and emotional health due to violence even if they are not able to report the cases due to various reasons.

BENEFITS/SERVICES:

1. Easy one step verification for users.
2. Anonymous user feature
3. Risk Assessment tool to help users know how and where to start from.
4. Emergency helpline numbers in India along with emergency SOS button.
5. Directory of service providers for counselling, mental health services, legal support services geo-tagged to location.
6. Personalized messages to 5 selected emergency contacts.
7. Self guiding Audio based content for users.

Website

<https://nasscomfoundation.org/>

Description

Use of technology to help our beneficiaries better their life opportunities, promoting equality, providing support & services and enable ecosystem.

MyAmbar mobile application is designed for promoting gender equality and provide women safety with the objective to help women understand the effects of violence on their physical and mental wellbeing, changes manifested in their behavior during traumatic experiences of domestic violence and avail support services.

COVID-19 saw an increase in number of cases of Domestic violence with no means to report or support, the mobile app provide users with information and access to avail support services and understand and manage the effects of the traumatic experience on themselves.

Designed by-NASSCOM Foundation

Supported by- Vodafone Idea CSR, UN Women, Sayfty Trust

Website- <https://www.myambar.org/>

ICT Tools

MyAmbar mobile application to help the beneficiaries download it and avail the support services of counselling or legal and mental health support around them geo-tagged to their phone. An easy to use app always available near them which helps them cope with this experience by supporting and developing their understanding of the issue, its causes and effects on their health along with mental health exercises, access to important support services available around them.

Features:

1. Easy Risk Assessment Tool
2. SoS button
3. Accessibility with Audio based content
4. Local care support services
5. Content in multiple languages

Challenges

1. Access to smartphones specially for women in the country. The application can be used by allies also to help women understand and get help during the traumatic experience.
2. Reporting of cases even after providing all the knowledge and support information. Actual reporting by women requires attitudinal change and courage for them to come out despite their circumstances and societal pressure.
3. Reading and understanding the content and knowledge provided in the application. The application provides audio based feature to help illiterate users also listen to the content and information written.
4. Gender based violence is of various forms and the application will be continually upgraded to include more and more issues and forms of violence against women.

Partnership

1. Looking for partners to take the product into the communities among the beneficiaries and helping them understand the features, know how to navigate the application and understand the content. Hence, organizations working with women groups across India are to be partnered with to have more users download and use the application.
2. Content partners and service providers to cover more content on different other forms of violence against women along with providing support services across India.

Replicability

A mobile application can be made accessible to users across India. It is a simple to navigate application and we are looking to cover more women safety and empowerment issues and information. We are currently partnering with various civil society organizations to take the product across the country.

The application can be replicated internationally in other countries by providing important information about laws, helpline numbers and details of support services in respective countries.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 16: Promote just, peaceful and inclusive societies

Case88-Pharmacy plus

Title of the project, Contact Organization Name, Stakeholder type, Country

Pharmacy plusMR.GENIUSCivil SocietyMorocco

Beneficiaries

all types of peoples special Village residents

Website

<https://www.facebook.com/Djbouziyani/>

Description

this application can help poeple to consulting with doctors and helping poeple to find an esay way to reach to specialist doctor and this application having a bot chat .

ICT Tools

smart phones / social media / pub

Challenges

Financing
and we dont solving this challenge yet

Partnership

yes were looking from any area just they have a patient to help other .

Replicability

yes its replicable . we can use this app in any area .

Sustainability

yes its sustainable we will be care in this about updates and adding a new features

Action Lines

AL C2. Information and communication infrastructure

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case89-KURURIO

Title of the project, Contact Organization Name, Stakeholder type, Country

KURURIORelawan TIK MalangCivil SocietyIndonesia

Beneficiaries

Our primary beneficiaries are everyone who need delivery goods and foods. including buyer end seller

Website

<http://kururio.co.id>

Description

We help "social distancing" program run more effective, because we are helping store and restaurant become online and delivery by our driver. Customers only request the product or service from mobile apps

ICT Tools

We are using Mobile Apps. And we are effectively using social media promoting to cover regional and national level

Challenges

The main challenges is the infrastructure and customer education. For customer education we use social media for promotion and education, and for infrastructure don't have any idea right now

Partnership

Yes we are looking for partners, in every city in Indonesia. We are focusing on Development application and our partner focus on promoting

Replicability

Yes, this project is replicable, and this project is already implemented on more than 100 city in Indonesia

Sustainability

Yes this product sustainable, because our target is 150 million user of mobile phone in Indonesia

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-business

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 16: Promote just, peaceful and inclusive societies

Case90-Agromedium

Title of the project, Contact Organization Name, Stakeholder type, Country

Agromedium Agromedium Kft. Civil Society Hungary

Beneficiaries

The Agromedium is a mobile application, a digital information database for the farmers and agricultural advisors. The users can use it offline and online too, and they can get up to date information about the agricultural input market.

Our solutions target are the big farms and the smallholder farmers too. Each type of farms need to make good decisions about input products.

Everybody who need to make decisions about plant protection, nutrient replenishment and sowing.

Website

<https://agromedium.com/hu/>

Description

We had started the Agromedium project in 2017, and we released the first public available version in 2018 in august. Now in 2021 we have 10 000 hungarian users and many of them use it every day in season.

We have many good rating in the App Store and in the Google Play (5 / 4,829 star with 70 ratings). In the Huawei App Galery is available the Agromedium about one week.

We was promoted for the "Agricultural Man of the Year" award in 2018 in the "agricultural innovation category": <https://www.azevagrarembere.hu/jelolt/470>

Dr. Harcsa Marietta - plant protection advisor's blog:

<http://gazdahely.hu/agromedium/?fbclid=IwAR2rQxeQ1w6rhFcfCxfwYfMZI2wZt6rGoabVBE LRSJDWf5UQk1yXZtmg8I>

ICT Tools

Smartphones (features, apps); Web platforms (forums, communities, e-governance); Cloud (data storage and computing, Big data); Software solutions (programs and packages)

Challenges

It is a free decision support system, an up to date information database for the farmers and agricultural advisors. The Agromedium helps the users compare the plant protection products, fertilizers and seeds in several aspects so they can make a good decision. Those companies who are make farm management software no need to make these databases, no need human resource for it, they can focus the more important things. We can make market research for the input product manufacturers, governments, authorities and we can show trends for they, even for the whole of Europe. We can help the flow of information to adopt good practices in other countries.

Partnership

no

Replicability

Proven/ Scale-up stage

We want to expand the Agromedium to all in Europe. We start the Agromedium system in Romania in the mid of 2021, and in 2022 want to be in every European country.

We want to develop in the Agromedium an agricultural dropshipping system for the farmers and the distributors and we want to develop a social media platform where can the farmers and advisors discuss the actual agri- horticultural problems (it is in progress and available at the end of 2021).

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture

SDGs

Goal 12: Ensure sustainable consumption and production patterns|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

Case91-Digitas ICT Accessibility Platform

Title of the project, Contact Organization Name, Stakeholder type, Country

Digitas ICT Accessibility Platform Digitas Institute Civil Society Slovenia

Beneficiaries

The key beneficiaries are the deaf and hard of hearing and their organisations. However, persons with other impairments, such as blind and visually impaired, can also benefit from safe and secure ICT solutions that can be used by any device or platform, without a need to download any application. The solutions are affordable and accessible and contribute to efforts to build inclusive and equitable societies.

These solutions help meeting the requirements for social and physical distancing during the COVID-19 pandemic, where it is difficult for sign language interpreters to accompany deaf or hard-of-hearing persons when they have to communicate with non-sign language users.

Awareness raising, capacity building and training programmes, as well as stakeholder engagement, are important for local and regional actors, such as local or regional development agencies. Cooperation with local actors promoting cultural heritage and sustainable tourism has also been established.

It is envisaged to establish regional digital accessibility centres in order to promote capacity building and training programmes as well as cooperation among stakeholders in the area of ICT accessibility.

Cross-border cooperation has already been established with beneficiaries from Croatia. It can be further expanded regionally, with potential partners from Austria, Hungary, Italy and South-Eastern Europe.

Website

<https://www.digitas.si>

Description

In 2020, our organisation has launched several activities as a response to the COVID-19 pandemic.

It launched the Information and Communication Technology (ICT) Accessibility Testbed to develop and test accessible ICT solutions, especially targeted at the deaf and hard of hearing communities. A particular focus was on safe and secure solutions, including those based on WebRTC (Web Real-Time Communication) technology. Several deaf and hard of hearing persons, sign language interpreters and experts participated in testing solutions, such as video remote interpreting (VRI) services, online meeting applications, and language

technologies.

The testbed activities were aimed, among others, at improving the understanding of functional and accessibility requirements of accessible ICT solutions, and defining regulatory requirements for their deployment, and for the betterment of the deaf and hard of hearing communities.

The testbed activities have been complemented by a broad Accessibility Partnership with organisations of persons with disabilities from Slovenia and Croatia, and by a partnership with experts and academia in order to develop and provide accessibility training.

Our organisation has also launched awareness raising, capacity building and training programmes on accessible ICT solutions to meet COVID-19 challenges. It collaborates with organisations of persons with disabilities and other local, regional and national stakeholders.

ICT Tools

We are using standards-based ICT solutions for capacity building, online training, meetings, conferences, and video remote interpretation services. We also support the work of persons with disabilities and their organisations amidst COVID-19, and help them to use standards-based ICT solutions in various situations, such as education, healthcare, meetings, as well as government, social and financial services.

Safe and secure technologies are used based on WebRTC that do not require any application download neither on desktop nor on mobile platforms. The solutions used are compatible with different browsers and with all major desktop and mobile platforms. They are safe, secure, affordable and accessible. We took ITU-T FSTP.ACC-WebVRI “Guideline on web-based remote sign language interpretation or video remote interpretation (VRI)” as a reference for VRI. Standards-based ICT solutions such as WebRTC promote interoperability and therefore our organisation can address the accessibility needs at the international level.

It is now almost an imperative to use remote sign language interpretation or VRI services. Requirements for social and physical distancing during the COVID-19 pandemic has made it difficult for sign language interpreters to accompany deaf or hard-of-hearing persons when they have to communicate with people who do not understand sign language.

Challenges

In the testbed activities, various challenges have been identified.

In most countries in Central Europe and South-Eastern Europe, national sign languages have been recognised by law. However, not all countries have established national qualification systems for sign language interpreters.

In several countries in the region, it is hard to find enough qualified and competent sign

language interpreters. There is also a general lack of qualified captioners.

Language technologies such as text-to-speech, speech-to-text and captioning are not yet available for languages with small numbers of speakers or their quality is not yet comparable to more common languages such as English.

Due to COVID-19, all testbed experiments and evaluations as well as all the meetings have taken place online. This has been a particular challenge, as we have mainly worked with the deaf and hard of hearing.

Availability, affordability and quality of broadband internet access has also been encountered as one of the challenges, especially in the rural and remote areas. We have provided advice to organisations of persons with disabilities to address these issues with network operators, service providers and national regulatory authorities.

Partnership

Partnership and stakeholder engagement activities have been in the centre of our project. These activities and a process of working with partners and identified stakeholders have been carefully planned as the project is growing organically.

Replicability

The ICT solutions used in our project are based on international standards and can be replicated in any part of the world. The same applies to the organisational aspects (the testbed, accessibility partnerships, and digital accessibility centres).

We are discussing expanding our project to other countries in the region as well as to other parts of Europe and to Asia.

Sustainability

We promote accessible ICTs, provide capacity building and training, and cooperate with national governments, regulatory authorities, organisations of persons with disabilities, and other stakeholders. It is our aim to incorporate international standards-based ICT solutions such as VRI into the existing national accessibility frameworks. In this way, the project can sustain itself in the same way as the existing accessibility services can be sustained by, e.g., governments or other relevant stakeholders.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C7. ICT

applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C10. Ethical dimensions of the Information Society

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case92-IOT and Machine Learning Application Development Training and Learning

Title of the project, Contact Organization Name, Stakeholder type, Country

IOT and Machine Learning Application Development Training and Learning
PythonesiaORG
Civil Society
Indonesia

Beneficiaries

The beneficiaries are the general public to help activities during the Covid-19 pandemic by using IoT equipment built through the training process and learning to build IoT device ,Machine Learning .

Website

<https://www.pythonesia.org>

Description

Providing Training and Learning to Build IoT Applications and Machine Learning online to help overcome the Covid-19 pandemic through several IoT applications and devices

ICT Tools

The device used is a Microcontroller device that is connected to the Internet network and provides IOT and Big Data support for Machine Learning as an analysis of the covid-19 pandemic conditions.

Challenges

Learning to build IoT is considered something new and difficult to do, especially for participants who do not have basic knowledge of electronics, so the training is carried out by practicing online

Partnership

We are looking for partners, especially local governments and non-governmental organizations who are consistent in developing IoT for the response to the Covid-19 Pandemic

Replicability

This activity can be replicated and implemented by local governments to produce IoT devices needed in the conditions of the Covid-19 Pandemic and after the pandemic

Sustainability

This program is carried out in a sustainable manner, this sustainable activity can be carried out with the application development process that was built and developed by the Pythonesiaorg team

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case93-Isolation Ward and Touch free Investigation of Patients : Smart City-P(P=Pandemic Preparedness)

Title of the project, Contact Organization Name, Stakeholder type, Country

Isolation Ward and Touch free Investigation of Patients : Smart City-P(P=Pandemic Preparedness)Ada Lovelace FoundationCivil SocietyIndia

Beneficiaries

Hospitals, Health care Units, Rural health settings and for patients with determination in India and cross borders

Website

<https://adalovelace.in/>

Description

Problem we are addressing:

Airborne Smart Isolation ward play a predominant role in protection of patients and minimize risk and spread of infectious disease such as Tuberculosis, SARS, Covid-19 and future pandemic and also help frontline medical hospital staff from risk of infection. It embraces Multimode air purifier that cleans exhaled air and kills airborne viruses is used extensively. The ultimate idea is Smart CityP = Pandemic Preparedness Model.

We adopt negative pressure gradient principle which helps covid-19 quarantined patients, prevent from airborne droplets sneezing, coughing, exhalation and transmission to other persons.

Smart Sensors are used to continuous monitoring of ambient atmosphere inside the Isolation ward/cubicle.

ICT Tools

Smart Sensors, Smart Devices, Cyber Security Equipment, Aromatic Pressure Equalizers

Challenges

Misinformation, disinformation, fake news, cyber threats and cyber criminals targeting hospitals and healthcare systems. We are leveraging technology to overcome bad actors and impact on patients and Medical Professionals.

Partnership

APAC

Replicability

Our Airborne Smart Isolation ward/Cubicle solutions is amazing low cost product, which is modular, portable, scalable, Installed and dismantled within few minutes which helps, prevent spread of Infectious diseases in the hospital ecosystem.

Sustainability

The main idea is Smart CityP model, which enhances health care facilities abundantly. We want to establish Internet of things (IOT) facilities for still better communication facilities for patient, frontline professional staff, Caregivers and entire hospital ecosystem for smarter approach and also Sustainability.

Action Lines

AL C4. Capacity building

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case94-Community Networks to Facilitate Home Schooling, Self-Learning, and Access to Information for All

Title of the project, Contact Organization Name, Stakeholder type, Country

Community Networks to Facilitate Home Schooling, Self-Learning, and Access to Information for All
Asociación Mundo Posible
Civil Society
Guatemala

Beneficiaries

Our primary beneficiaries are the students and teachers within the community where we are setting up this network. The main benefits are having free access to some of the best international and local educational resources for free through their devices, not only at school but at their homes. The digital library also has an offline MOOC for teachers that they will be able to complete from home at their own pace. This will certainly help improve the students' performances in the different subjects, and it will motivate them to stay in school and to learn about subjects based on individual interests. Teachers will also have the chance to improve their teaching practices by integrating technology and the different methods proposed to develop XXI Century skills with their students. Given that this digital library allows the upload of local content, teachers will be able to share different files with their students and community authorities can share information with the community in general.

Website

<https://worldpossible.org/>

Description

This project's general goal is to support distance learning in communities with limited to no access to the internet, by providing free access to digital educational resources and training programs to teachers, community leaders, facilitators, and local authorities. This is possible through the offline digital library RACHEL (Remote Area Community Hotspot for Education and Learning) developed by World Possible, and a wireless community network to support a large number of simultaneous users in an extended area. This network will allow any person within the community with a smartphone or any device with WiFi capability to have instant free access to some of the best educational websites and modules with curated local resources, making it available over a local wireless connection. Websites include Wikipedia, Khan Academy, Hesperian Health Guides, among many others. Local modules include materials from the Ministry of Education in the different Mayan languages, Latin American Libraries, an offline MOOC (Massive Open Online Course) to train teachers about developing "soft skills" or "XXI century skills" with their students, a comprehensive COVID-19 module, and many more.

ICT Tools

We are using an offline and mesh network technology that allows students and community members to have free access to a great deal of the educational content that is normally available through the internet. The RACHEL servers that we have deployed in more than 300 schools have the capacity to serve up to 50 simultaneous users in a 50 meters range. We are now setting up and piloting a network capable of serving 500-1000 users in a 5-10 Km area range. In order to achieve this, we are using a combination of robust servers, a load balancer, and a mesh wireless network composed of several station-based antennas, switches and strategically located access points.

This technology will certainly help close the digital divide in rural areas, at a national level, where most of the students are not able to do research at home or continue their education during lockdown, while also allowing most community members to learn about almost anything they have an interest for.

Challenges

One of the main challenges is that not every student, especially the younger ones, has access to a smartphone, tablet or laptop to work at home. However, almost 100% of the households in rural areas have access to at least one smartphone, which could be used by younger members of the family, at certain times of the day. We also expect that as this model of community network will prove to be effective, and widely known by the central government's educational authorities and organizations that support education programs in these contexts, more coordination and efforts will be made to provide every student with a laptop or tablet.

Setting up a mesh network in rural areas of Guatemala can be very challenging due to its

topography and the security needed for the external equipment. Nevertheless, our team has the support of Ubiquity experts who advise on best settings and configurations for the network, and from local governments who are committed to making sure that the deployed equipment is secure and maintained.

Partnership

We are currently strengthening the partnership we started years ago with the Guatemala Ministry of Education to coordinate efforts in selecting the most appropriate schools and communities to implement the RACHEL digital library and to engage teachers in our training program. We also need to partner with the local governments and community leaders where a community network is set up, so that there is a strong ownership of this project and the resources deployed are looked after and maintained.

Besides the above, we are always looking for partner organizations that focus on gender equality, environmental preservation, entrepreneurial activities, etc., and that could benefit from this platform, as they too can upload their content to make it easily available in a community to facilitate their activities; and organizations that support educational efforts by providing computers, laptops or tablets to students.

Replicability

Yes. Since 2014 we have been replicating the RACHEL digital library and teacher training program in Guatemala, having reached to date over 300 public schools. Last year in partnership with a Canadian organization we successfully started this replication process in an indigenous region of Nicaragua and soon we expect to continue this process there and in Honduras. It is important to mention that RACHEL has been deployed in more than 40 countries through different organizations and World Possible chapters.

The RACHEL Community Network will be the first of its kind and we are aiming to replicate it at a national level, with support from educational authorities and other organizations that have helped us implement RACHEL in many public schools. We believe it is one of the best solutions to close the digital divide and allow students in rural settings to continue and improve their education during lockdowns and beyond.

Sustainability

Yes. The digital library RACHEL works offline, so all users will not need to pay for internet fees or any kind of fee ever, and all the content within the library is open source. There is only one initial investment to purchase all necessary equipment and since it is a local network topology, it dynamically self-organizes and self-configures, which can reduce installation overhead. The ability to self-configure enables dynamic distribution of workloads, particularly in the event a few nodes should fail. This in turn contributes to fault-tolerance and reduced maintenance costs.

Additionally, as mentioned before, since this is a much needed resource for students and teachers, there will always be a strong partnership with local governments so that they oversee and maintain the well-functioning of the network.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case95-Kuña pokatu – Poder de las Mujeres

Title of the project, Contact Organization Name, Stakeholder type, Country

Kuña pokatu – Poder de las Mujeres Organización de Mujeres Campesina e Indígenas (CONAMURI) Civil Society Paraguay

Beneficiaries

Organización de mujeres campesinas e indígenas, es un movimiento de mujeres que busca organizarse articulando dos fuerzas culturales, sociales y productivas como las del mundo campesino y las del mundo indígenas. Surge en 1999.

Una de las metas de Conamuri es lograr la participación política plena de las mujeres campesinas e indígenas en todas las instancias de decisión sobre su vida, la de sus familias y de su territorio. Por eso apuesta fuertemente a la politización de las mujeres mediante escuelas de formación. Asume el feminismo como herramienta de análisis, y también de transformación. Propone el protagonismo de las mujeres en el ámbito público y también en la producción.

Website

<http://www.conamuri.org.py/>

Description

En estos tiempos de pandemias el liderazgo de las mujeres ha sido fundamental en el cuidado de la salud comunitaria y de la alimentación, tal como históricamente lo hemos hecho. Esto implicó un esfuerzo mayor ya que, por una parte, mantenernos en los lazos organizativos demandó nuevos aprendizajes y manejo de otros tiempos con la virtualidad, y por otra, el estar en casa también nos volvió a instalar con más tiempo en las huertas en los jardines, en las chacras.

Vemos necesaria la capacitación permanente, la formación constante y el manejo de las nuevas tecnologías, como herramientas fundamentales para potenciar estos liderazgos que contribuyen en el conjunto del quehacer de la organización y de las articulaciones de la que formamos parte. Conamuri están en espacios internacionales en la lucha por la Soberanía Alimentaria y la participación política de las mujeres en estos espacios, las cuales nos planteamos sostener desde esta propuesta. Tenemos una compañera postulada por la Alianza por la Soberanía Alimentaria al Mecanismo de la Sociedad Civil para incidir en temas vinculados a la alimentación desde la mirada campesina e indígena de la región. compañeras lideresas indígenas en plena resistencia en sus territorios disputados por los capitales del agronegocio. Tenemos compañeras en la tarea de la comunicación, que en trabajo colectivo nos ayudan a la difusión de las ideas apostamos político/productiva de potenciar la producción agroecológica mediante la promoción de la agroecología en las comunidades, el desarrollo de experiencias en parcelas demostrativas/fincas modelos, fincas/escuelas, industrias de la alimentación y comercialización conjunta, Todo esto en el marco de nuestra apuesta a la importancia que damos a la labor de las liderezas con tareas nacionales e internacionales, proponemos apoyar el desarrollo de sus comunidades, que son el principio y fin de las luchas que emprende la CONAMURI. Por ello planteamos el fortalecimiento de las Semilla rógga(casa de las semillas), lugar de producción comunitaria desde el liderazgo de las mujeres.

ICT Tools

- Talleres de elaboración de planes comunitarios de comunicación e incidencia. Debates en radio comunitarias. Algunos referentes de la comunidad han podido participar de varias actividades a nivel nacional y departamental , tenemos facebook, radio comunitario , whatSApp,instagram, capacitación en elaboración de pequeño proyecto comunitario.

Challenges

dinamizar el grupo comunitario que esta un poco desanimado, no inactivo, pero sin muchas motivaciones. Es decir el encuentro más permanente, las visitas de personas de fuera de la comunidad, como comunicadores, pasantes, profesionales de diversas áreas han mantenido una fluida relación interna. Así también, algunas referetes de la comunidad en su relación con la organización a nivel nacional ha posibilitado otras miradas colocando la problemática de esta comunidad en el plano nacional de la organización y ante las autoridades.

podemos superar a través de la juventud a la que se dirige la escuela de agroecología que motiva la idea de trabajar en este periodo de cuarentena en las fincas familiares y también

en dinamizar los grupos de whatsapp aportando audios y videos con sus trabajos y valorando los conocimientos que reciben de las personas mayores.

Partnership

área de comunicación , manejo de TIC . a nivel comunitario,

Replicability

Las mujeres nucleadas en la organización CONAMURI lleva años trabajando en conservación e intercambio de semillas nativas, garantizando la disponibilidad para las productoras/es, y evitando que desaparezcan; sin embargo, es siempre a muy pequeña escala. Se identifica demanda por parte de particulares y organizaciones, e incluso instituciones públicas, ya que no existe oferta de semillas no transgénicas, ni siquiera en las instancias públicas responsables.

Sustainability

La Semilla Róga (“la casa de las semillas”) es una iniciativa de la CONAMURI – que toma sus raíces en la voluntad de las mujeres y hombres campesinos / as e indígenas de llevar adelante un proyecto productivo y político que les permita implementar estrategias de construcción de soberanía alimentaria, de manera colectiva, que pueda trascender el nivel del discurso, y tener impacto en la vida cotidiana de las familias campesinas e indígenas como en el desarrollo nacional de nuestro país.

La Semilla Róga es un proyecto que se desenvuelve en los comités de base de la CONAMURI, y a nivel nacional, en el marco de la Campaña en defensa de las semillas y la soberanía alimentaria - Ñamombarete ñane ñemitÿ oĩ haġua tekokatu! – la cual empezó en el año 2007 y permitió trabajar con más de 80 comités de productores y productoras, para la formación e información sobre el rescate y conservación de las semillas y la soberanía alimentaria, así como el impulso de dos proyectos de ley /Ley del Maíz y Ley de las semillas). A través de numerosas actividades públicas e intervenciones en los medios de comunicación (programas de radios, televisión, prensa, debates públicos), permitió instalar en la agenda ciudadana y política la necesidad de verdaderas políticas públicas que contemplen el rescate y la conservación de especies nativas y criollas, sin ningún tipo de apropiación privada.

Action Lines

AL C2. Information and communication infrastructure

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Case96-Digital Advocacy / Literacy Training

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital Advocacy / Literacy Training Digital Woman Uganda Civil Society Uganda

Beneficiaries

The rural women and we equip and skill them on how to be able to own their space online and be inclusive as well as improve their businesses there.

Website

<https://www.digitalwomanuganda.org>

Description

We have held digital literacy training through our online radio to reach more people esp the rural people in Uganda. We have also helped the vulnerable groups ie refugees in Kyaka refugee camp to be able to use the internet and also a mobile phone to access services since now most services are being offered online

ICT Tools

We use an Internet radio (<https://www.t-radio.live>) that we developed to help disseminate content to our clients. We also created a shortcode (8228) too. Its toll free.

Challenges

Main challenge is to find meaningful partnerships to help scale the idea or project to a wider region. The cost of Internet in Uganda is still high, this we are advocating with other CSOs to help it addressed.

Partnership

In the areas of scalability and also funding to help procure atleast feature phones for these women

Replicability

It is, we used the same model amongst the refugee camp. All it needs is a partnership within the locality.

Sustainability

Once the goals are achieved, the skills received are for life, and it incorporates our daily work schedules too

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 5: Achieve gender equality and empower all women and girls

Case97-COVID-19 Vaccine Opinion Analysis: Monitoring the Vaccines through Twitter Analysis

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Vaccine Opinion Analysis: Monitoring the Vaccines through Twitter Analysis
Artificial Intelligence Laboratory - University of Udine
Civil Society
Italy

Beneficiaries

The first beneficiary is the civil society, because they can find useful information on COVID-19 Vaccines. Moreover, our initiative can be interesting to pharmaceutical companies, which have to monitoring their drugs in their social channels. Accademia will be also interesting, because we are collecting a huge amount of data: we started collecting data in Nov 2020 and we update them everyday.

Website

<http://ailab.uniud.it/>

Description

With the recent approval of COVID-19 vaccines, a large debate about safety has emerged on social media. Positions in favor and against the vaccines have fueled such a discussion with arguments that are often based on unreliable sources, when not on fake news.

This project aims at monitoring and visualizing the dynamics of the Twitter debate, to get a sense of the public sentiment, while highlighting tweets that mention potential adverse events. A website has been created and has been constantly updated to visualize what the crowd is talking about and what pieces of information are being shared.

Team:

Lead Board

Giuseppe Serra (University of Udine)

Enrico Santus (AI Advisor @ Women's Brain Project)

Emmanuele Chersoni (Hong Kong Polytechnic University)

Developers

Beatrice Portelli (University of Udine)

Roberto Tonino (University of Udine)

Edoardo Lenzi (University of Udine)

Simone Scaboro (University of Udine)

ICT Tools

The full System behind this website consists of a module dedicated to data collection and five separate Artificial Intelligence modules dedicated to data processing: Localization, Hashtag Analysis, URL Analysis, Sentiment Analysis, Symptom Extraction. In particular, the ICT tools developed for this project are Natural Language Processing algorithms to extract and understand the text collected by social media.

Challenges

First challenge is to deal with this such of huge amount of data, second challenge is to design and develop Natural Language Processing Algorithm to extract efficiently meaningful information from these data

Partnership

We are looking for ICT and pharmaceutical companies who want to support this initiative to become a commercial product for monitoring vaccines or drugs in social media.

Replicability

To our knowledge our initiative is unique around the world, and all citizens of the world can use it

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C7. ICT applications: benefits in all aspects of life — E-science

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case98-AGRICITY FOODS: INTEGRATING TECHNOLOGY IN REGENERATIVE URBAN FOOD PRODUCTION SYSTEMS

Title of the project, Contact Organization Name, Stakeholder type, Country

AGRICITY FOODS: INTEGRATING TECHNOLOGY IN REGENERATIVE URBAN FOOD PRODUCTION SYSTEMS
CITY OF KISUMU URBAN AREAS ASSOCIATION
Civil Society
Kenya

Beneficiaries

Urban poor households in Cities and Urban areas in Kenya. We offer the training on urban farming techniques and permaculture practices. We offer them certified farm inputs such as seeds and organic fertilizers. We offer them access to online market in addition to continuous mentorship and extension services

Website

<http://www.ckuaa.or.ke>

Description

Agricity Foods is a modern vertical farming technology and permaculture practices that uses locally available materials to produce food within urban spaces in an integrated circular economic process that incorporates reducing human hunger, absolute food poverty, urban waste generation, climate change mitigation, jobs and wealth derived from food systems. We have integrated technology in delivering training and extension services through mobile applications and internet platforms. We also use technology in accessing markets for ready farm fresh harvests thereby reducing human contacts and

ICT Tools

Mobile Text messaging

USSD

Mobile Apps

Websites

Social Media

Challenges

The cost of accessing the internet services still remains prohibitive to majority of our target customers/beneficiaries. In some areas the signal strength of the ISP is weak and therefore reducing live streaming. This is a huge challenge in delivering video supported training content.

Also our customers find it expensive to afford our equipment and services.

Partnership

Yes.

We additional support in Financing of farm equipment and inputs to allow our customers benefit from instalment payments instead of one off payment.

We need support in refining, redesigning and improving the Mobile Apps and Web based platforms

Replicability

With so many concerns about chemicals in food products, food accessibility and affordability, many people are now adopting the idea of growing their own foods. Today 50% of global population live in cities and urban centers, this is expected to increase to 70% by 2050 thus posing a huge challenge to access to food and security of persons in Cities & Urban Areas.

Urban farming is becoming more popular among homeowners, apartment dwellers and health-conscious individuals who want to take full charge of their nutrition by growing food for self-consumption and/or as income generation. So essentially this technology is versatile and universally acceptable

Sustainability

The global urban population shall increase to 70% by 2050. This shall create a sustained annual increment in demand for fresh chemical free foods for improved quality of urban life. The Milan Urban Food Policy Pact of 2015 binds all cities and urban areas globally to establish robust urban food systems. This is also supported by the Food-For-Cities, The Right-To Food Initiatives and the New Urban Agenda (Quito 2016)

In this regard, and to ensure a self sustaining permanent impact, we shall continuously mobilize and lobby for support from local and international development partners, local

government agencies and other stakeholders from civil societies, faith based organizations and the business community

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-agriculture

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts

Case99-项目

Title of the project, Contact Organization Name, Stakeholder type, Country

项目项目 Civil SocietyChina

Beneficiaries

项目

Website

<https://www.itu.int/net4/wsis/stocktaking/Surveys/Surveys/Submit/15863048637525604#sform>

Description

项目

ICT Tools

项目
Challenges
项目
Partnership
项目
Replicability
项目
Action Lines
AL C4. Capacity building
SDGs
Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all Goal 14: Conserve and sustainably use the oceans, seas and marine resources

Case100 كيف يمكن تجنب الإصابة الأمراض المعدية بصورة سريعة
Title of the project, Contact Organization Name, Stakeholder type, Country
Civil Society Saudi Arabia كيف يمكن تجنب الإصابة الأمراض المعدية بصورة سريعة التعليم
Beneficiaries
أفراد المجتمع من كبار وشباب واطفال هم المستفيدين من خدماتها المختلفة التي زاد الإعتماد في التعليم عن بعد والتسوق الالكتروني في الإنترنت والبحث عن الوظائف والخدمات الحكومية

Website

<https://www.itu.int/net4/wsis/stocktaking/Surveys/Surveys/Submit/15863048637525604#sform>

Description

التوعية الاجتماعية لجميع أفراد المجتمع من كبار وشباب واطفال وهذا يؤدي مع مرور الوقت الى معرفة طرق الوقاية منها وتجنبها والتقليل من انتشارها ومعرفة كيف نحارب الفيروسات التي تنتشر بسرعة بين أفراد المجتمع

ICT Tools

الانترنت والاتصالات ومواقع التواصل الاجتماعي من أهم أسباب تعزيز العلاقات بين أفراد المجتمع من كبار وشباب واطفال ومواقع التواصل الاجتماعي هي سبب الإتصال بمن حولك

Challenges

. وصول خدمات الانترنت الى جميع أرجاء الكرة الأرضية .
زيادة تكاليف الإنترنت المالية
. عدم فهم ومعرفة استخدام الإنترنت بالشكل الصحيح المفيد
. عدم احترام الخصوصية

Partnership

نعم بالتأكيد والشركاء الآخرين في هذا المجال من أهم سبل التعاون والنجاح والتغلب على المشاكل الحالية والمستقبلية التي تواجهنا في الحياة الحالية والمستقبلية

Replicability

نعم بالتأكيد يمكن التكرار والاستفادة من الخبرات والتجارب الناجحة للمؤسسات والأفراد والدول العربية وجميع دول العالم وهذا . الفيروس المدمر الذي كان سبب في وفاة العديد من الجنس البشري

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 1: End poverty in all its forms everywhere

Case101-22534

Title of the project, Contact Organization Name, Stakeholder type, Country

22534TayotaCivil SocietySaudi Arabia

Beneficiaries

اهلي وعائلي

Website

<https://www.itu.int/net4/wsis/stocktaking/Surveys/Surveys/Submit/15863048637525604#sform>

Description

تباعد ووقاية

ICT Tools

شراء المنتجات من العملا عبر النت والتوصيل لبريد المنزل

Challenges

نبدا المشروع من 0 ثم تبدا التحديثات

Partnership

نعم

Replicability

في الاعوام القادمة

Sustainability

المشروع يبدأ للمواطنين اولاً ثم المقيمين

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Case102-Class Chat - Smart Learning "Application Android for learning without internet quota / data package"

Title of the project, Contact Organization Name, Stakeholder type, Country

Class Chat - Smart Learning "Application Android for learning without internet quota / data package" ICT Volunteers Magetan Civil Society Indonesia

Beneficiaries

Our main users are teachers and school students in Magetan district, Class Chat - Smart Learning has been downloaded 40000 times, and there are 100 teacher users

Website

<https://www.facebook.com/rtik.magetan/>

Description

The Covid 19 pandemic has accelerated the development of the world of information technology and has changed the order of life, including in terms of education which is required to be able to adjust as a result of the Covid 19 pandemic that has infected the whole world.

In the current learning situation, a medium is needed that can make students interested in learning. Among the facilities that can be used are digital media to support teaching and learning programs during a pandemic. Currently, there are many smart phones that can be used for this reason, ICT Volunteers Magetan with CV. Lestari Ilmu offers a learning application that allows parents, teachers and students to be able to learn science (school subjects) through an application android that is easy to use and without the need for an internet data package.

We can download the Class Chat application for free on the official website <https://relawantik.lestariilmu.id/> or on the Google Play Store and APKpure with the keyword "Class Chating"

The advantage of this application is that it does not require an internet (data) package, especially during the current COVID 19 pandemic which requires students to study at home on a ring basis so that the presence of this Class Chat Application is very helpful for students, teachers and parents to save on data package bills because of this application Offline in nature and all lessons have been adapted to the 13 curriculum

ICT Tools

This application was created as an answer to the difficulty of the internet network in our area (Magetan Regency) because this application is Offline so that it is very easy for students and teachers to provide lessons during the current Covid 19 pandemic.

This Class Chat - Smart Learning application has been adapted to curriculum 13 equipped with visual media and in the form of images and sounds that allow users to imitate.

Challenges

we are currently continuing to make improvements in terms of content and the system we use, and we require financing for that every activation of our program includes donations for premium package services.

Partnership

yes we are looking for partners for the development of this Class Chat - Smart Learning application. especially in areas where internet coverage is still minimal (East Java) or other areas

Replicability

Class Chat - Smart Learning is very easy to use because it is based on android and to make it now is very easy and there are many experts who can do it, because the android system is taught by many ICT vocational schools or many online courses that teach it

Sustainability

Class Chat - Smart Learning is one of the most sustainable programs, because this program is very much needed in educational institutions and is always evolving following the development of IT technology.

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-science

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case103-Teacher SMS

Title of the project, Contact Organization Name, Stakeholder type, Country

Teacher SMS Youth In Action Civil Society United Republic of Tanzania

Beneficiaries

Rural remote schools and pupils to benefit from teaching in our local Swahili language and ask questions/clarification via SMS without payment.
Its inclusive and accessible .

Website

<http://www.vintagetechologies.or.tz>

Description

To provide bulk free mobile phone SMS for selected primary school pupils subjects and students reply/ask for clarification via their registered parents mobile phones.

ICT Tools

Bulk SMS/USSD services whereby we prepare a weekly timetable and teach students at home. We selected 7 remote wards in our district to help the rural pupils to access studies via mobile phones.

Challenges

We are using parents mobile phones hence program starts during late day after parents are home from work.

To have home spare phones for pupils and all kids of different grades to learn.

Partnership

Yes looking for partners on ICT mobile application and development and management.

Replicability

All districts of Tanzania

Sustainability

Its sustainable as schools and schools products makers can put theirs advertisements hence generate income, also still pupils especially from rural areas find the program useful,inclusive .

Action Lines

AL C2. Information and communication infrastructure

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case104-Algerian Water News Section

Title of the project, Contact Organization Name, Stakeholder type, Country

Algerian Water News Section Algerian Waters / algérienne des eaux Civil Society Algeria

Beneficiaries

The first beneficiary of the audio-visual project represented in the establishment of a news channel for Algerian Water via YouTube and Facebook. They are the customers of the Foundation, which will allow them to view the various activities of the Foundation and its daily tasks, and to identify the difficulties faced by its agents in order to provide drinking water regularly, as those charged with the media consider at the unit level

Website

<https://www.ade.dz>

Description

The major challenges faced by the water resources sector in Algeria and embodied by the Algerian Water Company, being the official sponsor of the water supply process throughout the country in production, storage and distribution, in light of repeated United Nations warnings of the dangers of fresh water scarcity and the deterioration of water resources due to climate change in most countries of the world . Without exception, for the Arab countries, it has been ranked as the poorest region in terms of water resources.

In the face of those challenges, it has become necessary to reconsider the current relationship between the institution and the citizen, or rather to collectively work to enlighten them and make them aware of the dangers of the next stage that the whole world will witness, which will inevitably be terrible.

It aims to develop the media and communication aspect of the institution in light of the recent environmental developments that have increased the decline in water supplies in Algeria and caused crises related to the provision of potable water. Therefore, it was necessary to have a news section in order to bring the picture closer to the citizen and clarify it in everything related to the supply, production and consumption of water, including serious work to raise awareness and educate them through classes and television programs related to the water resources sector.

The project was also tested in two units in the Foundation, namely the units of Laghouat and Annaba, where the experience proved successful and achieved 60%, and contributed to attracting a significant number of concerned groups and influencing them directly, especially the youth and women who are the most follower of the news channel on social media.

ICT Tools

The first beneficiary of the audio-visual project represented in the establishment of a news channel for Algerian Water via YouTube and Facebook. They are the customers of the Foundation, which will allow them to view the various activities of the Foundation and its daily tasks, and to identify the difficulties faced by its agents in order to provide drinking water regularly, as those charged with the media consider at the unit level

Challenges

he project had several challenges, including not accepting it at first because the activity of the institution is purely technical in addition to the lack of possibilities and support, but after its experience it became necessary to generalize the latter to all 44 units across the country

Partnership

THANKS

Replicability

THANKS

Sustainability

Spreading the use of information and communication technology through public institutions, which is new to informatics in my country, as it positively affected society by directly educating individuals and bringing them closer to the process of water distribution and conservation in the country.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C10. Ethical dimensions of the Information Society

SDGs

Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 12: Ensure sustainable consumption and production patterns

Case105-web platform intended for the exchange between professionals community and civil society community around the world.

Title of the project, Contact Organization Name, Stakeholder type, Country

web platform intended for the exchange between professionals community and civil society community around the world.MadeservCivil SocietyAlgeria

Beneficiaries

Our primary beneficiaries are : Professional community and society civil community.

Our services:

1- For individuals:

Any civil society user can benefit from banking services, among which we mention the following :

- A search engine for professionals located in each area in the world, based on a pre-setting of the geographical area and the target professional specialization.
- Booking and follow up of appointments
- quote request for various services

2-For professionals:

There are many kind of professionals who can benefit from Madeserv's services, among them we mention the freelances, large, small and medium enterprises, public administrations, craftsmen and liberals, therefore, the services available are as follows:

- Strengthening the institutional presence by promoting the services provided.
- Manage of appointments
- Manage of commercial tasks

3- More services related to the exchange of information between service providers and customers.

Website

<https://www.madeserv.com/>

Description

Madeserv services have not been promoted yet.

ICT Tools

The Madeserv services will be promoted on the web by the main website and mobile applications otherwise, providing flexibility in accessing to the online services at any time and area around the world.

Challenges

The main challenge is to gather the largest possible number of professionals around the world, and this is to provide quality services commensurate with the requirements of people around the world.

At soon, we will work to promote our services through advertisements on social media, as well as provide multiple and attractive benefits to professionals.

Partnership

Financial support for the Madeserv will be a primary incentive for the development of the project on a large scale. Therefore, adding a partner will stimulate reaching the goals set at an accelerated pace.

It is agreed in advance with the partner to provide the main factors as well as the appropriate conditions for the success of the project.

Replicability

Madeserv in its initial version represents the beginning of services intended mainly for professionals and all actors of civil society, so that it is characterized by an optimal control of the various communication's mechanisms between the service provider and the client. Madeserv is an open model for promising future horizons which subjects its services to continuous updating to ensure flexibility of its services and answer to the expectations of its users.

Sustainability

All the services offered within Madeserv represent an innovative portal for freelancers and companies, because it adopts a clear strategy other than the social media websites currently active in this domain , the non-professional subscriber will benefit for many advantages which represented by a free online services.

Madeserv makes it possible to facilitate certain daily tasks for the professional users of the site and therefore to optimize their current management mode, which will certainly help to widen their activity's field as much as possible.

Action Lines

AL C2. Information and communication infrastructure|AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-employment

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case106-communication in dept coverage

Title of the project, Contact Organization Name, Stakeholder type, Country

communication in dept coverageAlgeria waters unit oum el bouaghiCivil SocietyAlgeria

Beneficiaries

The beneficiaries of this service are customers who lack online payment service and who live in rural and remote places, as well as the elderly, people with disabilities and those who are quarantined and the main services was the clearance dept at home

The goal was to collect the debts of the institution by applying communication and awareness techniques and the project was a financial success where the percentage of collections increased and connected and improved customers

Website

<http://www.facebook.com/adeoumelbouaghi>

Description

We used the Information Bank of the Department of Commerce to identify and survey people with large debts and bills accumulated since the beginning of quarantine and we contacted them personally and moved to their homes to facilitate the payment process at their residence because they cannot move due to illness, disability or old age during the quarantine period where through field interaction we found that these people were in dire need.

ICT Tools

tools used are computer and mobile phones, which changed the way of Traditional payment fund Especially since the region is not spreading the culture of online payment, in addition to the fact that the organization has not yet opened this service in online payment

Challenges

The challenges were initially to form task forces that accepted to operate in quarantine and pandemic conditions and then faced the problem of lack of capacity, teams and transportation for the target audience and the area covered by this project. There are also difficult and consistent convictions that water is free of charge and that bills should not be paid. This has been a difficult process to convince some far-flung residents to pay their bills, especially since they have not done so since the pandemic covid 19

Partnership

Yes, look for participants in the project, especially in the field of automated media, to develop a mini-printing machine with self-charging or solar energy in order to facilitate the clearance process of homes as well as link the process to the customer information bank with the Online Trade Authority

Replicability

this project can be replicated in all areas that do not deal with online payments for water distribution institutions where mobile teams are established whose work is to facilitate the process of billing homes for customers

Sustainability

yes it is especially Because of our presence in an area that still lacks the technology of remote payment for water bills where there is currently only payment through the postal and transportation interests in addition to the fact that the culture of online billing is completely unknown to the majority of the population of the region due to the lack of knowledge in this area and the lack of such treatment in the interests of the unit at present we do not even have a unified database in our trade department this project contributed to the promotion of the objectives of the organization by facilitating transactions and moving away from bureaucracy in addition to the government's proximity to the citizen and stay away from abuse through cutting and turning to justice as direct communication and awareness and media operations facilitated the tasks of both parties and benefited both parties and reduced the rate of harm to both parties

Action Lines

AL C2. Information and communication infrastructure|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-business

SDGs

Goal 6: Ensure access to water and sanitation for all|Goal 10: Reduce inequality within and among countries

Case108-Algerian Water News Section

Title of the project, Contact Organization Name, Stakeholder type, Country

Algerian Water News Section Algerian Waters / algérienne des eaux Civil Society Algeria

Beneficiaries

The first beneficiary of the audio-visual project represented in the establishment of a news channel for Algerian water via YouTube is the citizen of all kinds, the elderly - people with disabilities - remote and rural communities - women - youth who are considered clients of the institution, as they will be allowed to view the various activities of the institution and its characteristics. daily tasks, learning about the difficulties their agents face in order to provide drinking water regularly. The media at the unit level is the link and the basis for the establishment of the Algerian Water News Section

Website

<https://www.facebook.com/adeannaba23/>

Description

The major challenges faced by the water resources sector in Algeria and embodied by the Algerian Water Company, being the official sponsor of the water supply process throughout the country in production, storage and distribution, in light of repeated United Nations warnings of the dangers of fresh water scarcity and the deterioration of water resources due to climate change in most countries of the world . Without exception, for the Arab countries, it has been ranked as the poorest region in terms of water resources.

In the face of those challenges, it has become necessary to reconsider the current relationship between the institution and the citizen, or rather to collectively work to enlighten them and make them aware of the dangers of the next stage that the whole world will witness, which will inevitably be terrible.

t aims to develop the media and communication aspect of the institution in light of the recent environmental developments that have increased the decline in water supplies in Algeria and caused crises related to the provision of potable water. Therefore, it was necessary to have a news section in order to bring the picture closer to the citizen and clarify it in everything related to the supply, production and consumption of water, including serious work to raise awareness and educate them through classes and television programs related to the water resources sector.

The project was also tested in two units in the Foundation, namely the units of Laghouat and Annaba, where the experience proved successful and achieved 60%, and contributed to attracting a significant number of concerned groups and influencing them directly, especially the youth and women who are the most follower of the news channel on social media.

ICT Tools

The tools used in the realization of the project are, audio-visual tools, which lie in computers, lights, studios, sound technologies, correspondents specialized in communication.

As clean as it is mandatory to provide

In this project, we will use the most important means and technical supplies necessary in filming and directing in order to make the news channel a success. In the first stage, we will be forced to use virtual studios to present media activities and news

Challenges

One of the most important challenges that we may face in our project is the frameworks in charge of media and communication at the level of units that need continuous training in order to refine their talents and prepare them well for media work in a modern way, because the majority of those charged with communication are accustomed to the routine media work represented in publishing on pages and interventions through regional radios. From time to time, which is considered insufficient, given that media work in audiovisual requires a degree of continuity so that the person in charge of communication can improve his level and advance it for the better

he project had several challenges, including not accepting it at first because the activity of the institution is purely technical in addition to the lack of possibilities and support, but after its experience it became necessary to generalize the latter to all 44 units across the country

Partnership

thanks

Replicability

The project can be replicated in all public companies of a commercial nature

Sustainability

his project contributed to giving a new image in the media, audio-visual, which enabled all viewers, clients, media families, as well as executive bodies, to access the depth of the institution and learn about its tasks and the main task entrusted to it, which is the management and distribution of potable water and the preservation of its quality.

The matter was not limited to this extent, but the vision was so far that the citizen received field lessons to preserve water wealth and effectively participate in the preservation of this vital substance, and the quality of water conservation and non-waste and rational consumption according to communicative principles were implanted among the members of society. by the enterprise

In this way, the communication channel between the customer and the institution has been established in a very excellent way, and the citizen has become aware that he has an effective role in raising awareness and sensitizing about the seriousness of the situation if he does not preserve the water wealth.

Please provide a short description of the project in 150 to 200 words describing the project's objectives, results achieved, and impact generated.

Action Lines

AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-environment

SDGs

Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 12: Ensure sustainable consumption and production patterns|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 17: Revitalize the global partnership for sustainable development

Case109-Inclusion of Disadvantage Communities in COVID – 19 Vaccination through Community Broadcasting

Title of the project, Contact Organization Name, Stakeholder type, Country

Inclusion of Disadvantage Communities in COVID – 19 Vaccination through Community Broadcasting
Bangladesh NGOs Network for Radio and Communication
Civil Society
Bangladesh

Beneficiaries

Target beneficiary group(s)
Women Indigenous and nomadic peoples The poor Remote and rural communities Youth and Youth Women at rural Bangladesh

Website

<https://www.bnnrc.net>

Description

COVID-19 has disrupted the lives and livelihoods of the communities of Bangladesh, the most densely populated country. It became a big concern for Bangladesh. It was a troublesome situation to prevent COVID – 19 with limited resources and health service support.

Since March 2020, Bangladesh NGOs Network for Radio and Communication (BNNRC) has been implementing awareness building campaign on COVID – 19 by mobilizing the community radios in Bangladesh. Initially, the campaign focused on animating CSOs, Government, health service providers and communities for reinforcing collective action, keeping community people's daily life normal and livelihood function and mobilize further

cooperation among government, CSOs, local market and communities' response.

Later after, BNNRC focused on enhancing the capabilities of affected communities through an equity lens for adapting with the new normal situation, capabilities of broadcasters and stakeholders for building resilience, and accelerating of ICT applications for benefitting community people in all aspects of life, and effective public access to reliable and timely information through ICT and media for countering infodemic and keeping lives & livelihood easy.

Finally, BNNRC has been initiated a campaign on COVID – 19 vaccination to connect the Dalits, illiterate people, and hard-to-reach people who doesn't have digital device and ICT literacy.

ICT Tools

Community Radio Broadcasting
Social Media

Challenges

Challenges

1. The Dalits and hard-to-reach communities do not have appropriate digital device and don't know digital illiteracy. So, it was a cumbersome business for registering them for getting vaccine.
2. Mobilizing the community to visit the mobile vaccine registration points/centers.
3. Poor internet service was a problem to access in the vaccine registration website.
4. Doctors were very busy with their routine work and difficult to participate in live phone in program. Sometimes, they couldn't able to facilitate the live program due to poor internet service too.

Partnership

Yes! Capacity Building

Replicability

This is absolutely a community based on-demand project with a common issue. The project has been addressing the problem successfully by animating all stakeholders of the society and government officials. So, the project is replicable all over the world and where radio weave, and or Social Media (SM) and community organizations are existing.

The project activities can be run by the train-up community broadcasters, volunteer and radio listener club members. Therefore, the radio broadcasters, volunteer and Social Media users need capacity building training to upgrade their skills first so that they can run the program locally without any technical support.

Sustainability

COVID -19 pandemic is a global concern. The project addresses COVID -19 treats especially promoting vaccination program locally and by engaging the community and other stakeholders including government service providers. Most of the people are now using mobile phone sets with options of FM radio and internet. So, applying the same strategy, the project will be replicated and sustained in any part of the world where there is a community and the threat exists.

“Prevention is better than cure” so the community radios can start awareness building campaign in an advance of any kind of threats and disaster situation by their own management. The trained broadcasters are aware enough to contact with the reliable sources of information, related government service points and other private initiators. The radios can also run any on-demand campaign by blending the issues and information with other contents.

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C9. Media

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 10: Reduce inequality within and among countries|Goal 16: Promote just, peaceful and inclusive societies

Case110-algeria

Title of the project, Contact Organization Name, Stakeholder type, Country

algeriaétat centre de formation ProfessionalCivil SocietyAlgeria

Beneficiaries

Le grand public, les particuliers et les personnes allergiques

Website

<https://www.mfep.gov.dz/>

Description

Un appareil sensible automatique qui génère de la vapeur d'eau chaude et froide en fonction de l'état de la maladie

ICT Tools

Technologie de l'industrie dans l'électronique, la chimie et les appareils numériques

Challenges

Réduire et prévenir l'exposition aux épidémies

Partnership

Bien sûr, cette personne m'aide beaucoup à mettre en œuvre le plan correct, efficace et réussi

Replicability

yes

Sustainability

Surveillez et soyez sensible s'il y a des allergies saisonnières ou des parasites mortels qui peuvent tuer des gens

Action Lines

AL C6. Enabling environment

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case111-China

Title of the project, Contact Organization Name, Stakeholder type, Country

ChinaChinaCivil SocietyChina

Beneficiaries

China

Website

https://mail.163.com/js6/main.jsp?sid=ADIfXUtRGWhFVtqIQIRRZGprijMsnlaX&df=mail163_letter#module=read.ReadModule%7C%7B%22area%22%3A%22normal%22%2C%22isThread%22%3Afalse%2C%22viewType%22%3A%22%22%2C%22id%22%3A%22529%3AxS2CERTNv11BX%2BunvwAAmG%22%2C%22fid%22%3A1%7D

Description

China

ICT Tools

China

Challenges

China

Partnership
China
Replicability
https://mail.163.com/js6/main.jsp?sid=ADIfXUtRGWhFVtqIQIRRZGprijMsnlaX&df=mail163_letter#module=read.ReadModule%7C%7B%22area%22%3A%22normal%22%2C%22isThread%22%3Afalse%2C%22viewType%22%3A%22%22%2C%22id%22%3A%22529%3AxS2CERTNv11BX%2BunvwAAmG%22%2C%22fid%22%3A1%7D
Action Lines
AL C7. ICT applications: benefits in all aspects of life – E-employment
SDGs
Goal 10: Reduce inequality within and among countries

Case112-Grassroots Social Impact
Title of the project, Contact Organization Name, Stakeholder type, Country
Grassroots Social ImpactDe Doronos-Jay women and Youth Development FoundationCivil SocietyNigeria
Beneficiaries
Grassroots Women and Youth/Economic development, Empowerment and Growth
Website
https://dedoronosltd.com/
Description

Skill Acquisitions, capacity Building,

ICT Tools

Desktops computers, laptops and others

Challenges

Financing and women unbelieve

Partnership

Yes. Training and Development

Replicability

Yes. Generation Equality

Sustainability

Yes, because it tends to eradicate poverty among women and youth and enhance gender equality

Action Lines

AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life — E-agriculture|AL C9. Media

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 5: Achieve gender equality and empower all women and girls

Part 4: Private Sector

Case1
Title of the project, Contact Organization Name, Stakeholder type, Country
Organization Name Private Sector Switzerland
Description
What projects and activities has your organization introduced during the Coronavirus disease (COVID-19) Pandemic to continue working efficiently and to create a social impact helping other stakeholders?
ICT Tools
Which technologies/ICT tools are you using and how is it enhancing digital transformation in your organization?
Action Lines
AL C1. The role of governments and all stakeholders in the promotion of ICTs for development AL C2. Information and communication infrastructure AL C3. Access to information and knowledge AL C4. Capacity building AL C5. Building confidence and security in use of ICTs AL C6. Enabling environment AL C7. ICT applications: benefits in all aspects of life – E-government AL C7. ICT applications: benefits in all aspects of life – E-business AL C7. ICT applications: benefits in all aspects of life – E-learning AL C7. ICT applications: benefits in all aspects of life – E-health AL C7. ICT applications: benefits in all aspects of life – E-employment AL C7. ICT applications: benefits in all aspects of life – E-environment AL C7. ICT applications: benefits in all aspects of life – E-agriculture AL C7. ICT applications: benefits in all aspects of life – E-science AL C8. Cultural diversity and identity, linguistic diversity and local content AL C9. Media AL C10. Ethical dimensions of the Information Society AL C11. International and regional cooperation
SDGs
Goal 1: End poverty in all its forms everywhere Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture Goal 3: Ensure healthy lives and promote well-being for all Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all Goal 5: Achieve gender equality and empower

all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case2-The First Internataaional CyberSchool of the future for the new IT-generation KIBERone

Title of the project, Contact Organization Name, Stakeholder type, Country

The First Internataaional CyberSchool of the future for the new IT-generation KIBERoneLLC
«System»Private SectorRussian Federation

Beneficiaries

Who are your primary beneficiaries and what are the main benefits/services?

Website

<https://kiber-one.com/>

Description

Due to the spread of COVID-19:

1. We have converted the training into an online format;
2. We have developed a support program for parents of our students so that they can be closer to each other and spend more time together

ICT Tools

Multimedia (educational online platforms, specialized software, presentations), audio-visual equipment (laptops, projectors), the Internet, information in electronic format (video, audio)

Challenges

Not all parents have good digital skills, so they can't always help their children with online learning. We help children to master technology through remote support

Partnership

No, we are not looking for partners and provide training services on our own

Replicability

To date, the project is developing around the world.

The replicability of the project is ensured by several factors:

1. The project is being developed through franchising and through its own branches
This allows us to expand the territory of presence and spread our own educational model in a short time and without attracting additional resources (financial, personnel, etc.).
A franchise package has been developed, which includes a detailed description of the project organization technology, teaching aids for training programs, instructions, and all kinds of partner support (administrative, legal, marketing, etc.);
2. The training program has been translated into several languages (English, German, French, Serbian, Portuguese, etc.);
3. The training program, a model for organizing business processes, and technology for promoting services can be adapted in any market (any country, any city/town, population size does not matter);
4. The company profile is one of the most relevant in the field of additional education for children, and the demand for high-quality education of children in the field of digital technologies is growing worldwide;
5. Interaction with partners (organization of joint events, free workshops, consulting on business organization, employee training, partner support) is possible in a round-the-clock online mode, which increases the efficiency of management and control and accelerates decision-making and adjustment

Sustainability

The sustainability of the project is due to several factors:

1. Shortage of qualified IT specialists in many countries of the world, which indicates the demand for high-quality specialized education now and in the future;
2. Stable demand for high-quality services for the additional development of children in the field of digital technologies

According to the company's own marketing research, the number of children in the world who regularly attend training centers in the field of digital technologies is growing by about 6-10% annually;

3. Additional full-fledged education in the format of an IT school

The project program implies long-term comprehensive training, which is designed for a period of up to 9 years and can take place in parallel with the basic education and in addition to it;

4. Team of qualified specialists involved in the implementation of the project
The project team consists of specialists in programming and IT, management, marketing, and pedagogy. The total number of employees and developers is about 100 people;
5. Constant adjustment and updating of the training program through the introduction of modern educational modules, relevant training platforms, as well as interesting and non-standard tasks and projects for self-implementation;
6. Sources of stable financial flows
The volume of financial revenues of the company is formed through three permanent channels: training in its own divisions, the implementation of franchises (lump-sum contributions), and regular payments by existing franchisees (royalties);
7. The possibility of replication of the project in any locality (population size does not matter);
8. The project's target audience is children and adolescents aged 6-14 (children at this age are especially susceptible to new knowledge, are interested in modern technologies, and actively use gadgets, but use them mainly for entertainment) and their parents (they care about quality education of their children, and precisely at the age of 6-14 invest the core capital in their development)

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case3-RegoPantes

Title of the project, Contact Organization Name, Stakeholder type, Country

RegoPantes8villagesPrivate SectorIndonesia

Beneficiaries

With the spread of COVID-19, the entire world has become online. Digital education has become the most relevant. Moreover, it has become necessary to receive education in an online format. Our audience is children and teenagers from 6 to 14 years old, and we have made our program available by transferring training online

Website

<http://8villages.com>

Description

With the low demand from culinary businesses, making farmers' incomes decrease significantly, the alternative taken is to sell to end consumers, a digital market is needed to connect farmers directly to end consumers so that in this difficult time farmers still get the proper income.

RegoPantes.com (means FairPrice) by 8villages continues to try to be a marketplace between farmers and consumers and keep involve farmers in the value chain to reduce dependence on many parties.

Shopping for vegetables and fruit online is no longer a lifestyle, but has become a necessity.

ICT Tools

Smartphone, by giving the right incentive which is marketplace for farmers and buyer, farmers want to learn more, upgrade themselves to go beyond planting and involve more in the value chain.

Challenges

Logistics, before COVID-19, farmers depend on bus to send their product from outside West Java, now since the bus stop operating, the connection cut out, together with Coordinating Ministry for Economic Affairs, 8villages leverage the state-owned train company to deliver fruits, and not just solving the logistic problem, it also reducing logistic cost up to 60%.

Partnership

Yes, NGOs and companies who want to empower farmers beyond just planting, by introducing 8villages as their digital ecosystem so they can increase their income

Replicability

We manage to start the project by connecting farmers in Central Java to customers in Jakarta, now we have supply coming from farmers in Java and Bali and connect them to consumers in Jakarta, Bogor, Depok, Tangerang, and Bekasi. We also successfully connect farmers to businesses too

Sustainability

It's very sustainable, because it's already running for 3 year now, farmers receive better income, buyer receive fresh product directly from farmers, 8villages take margins on the product sell

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C9. Media

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 12: Ensure sustainable consumption and production patterns

Case4-COVID Symptoms Tracker with Data Sharing

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID Symptoms Tracker with Data Sharing|Open Health Network|Private Sector|United States of America

Beneficiaries

Farmers, fair price, we manage to increase farmers income up to 22x, by involving them more in the value chain

Website

<http://www.openhealth.cc>

Description

We released Free covid.openhealth.cc in English, Spanish, Chinese, French & Russian to enable people to track their symptoms, share with physicians before and after telehealth and in person appointments, find covid testing center nearby, manage medications, donate plasma and more.

ICT Tools

We deployed web, iOS & Android apps. Future updates include integrations to wearables devices, EHR and more.

Challenges

We need to create a wider awareness of this solution .

Partnership

We'd like to partner with more government officials, healthcare providers.

Sustainability

This offering can easily be adapted to many other disease areas. We have been working with many prominent healthcare organizations for many years in cardiology, cancer, wellness, addictions , GI and other disease areas and know how to create solutions that deliver value.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case5-AliHealth Online COVID-19 Consultation Platform

Title of the project, Contact Organization Name, Stakeholder type, Country

AliHealth Online COVID-19 Consultation Platform AliHealth Private Sector China

Beneficiaries

There are tens of thousands people worldwide using covid.openhealth.cc daily , share data with doctors to get immediate feedback on treatment, escalations if needed.

Governments use heat map to predict next hot spot.

Physicians use this tool as it enables them to track symptoms in between appointments.

Website
https://www.alihealth.cn/
Description
We have launched an online COVID-19 consultation platform. People can directly contact doctors online with COVID-19 treatment experience for advice. Doctors are available 8:30-24:00 (GMT+8).
ICT Tools
The platform is built in a mobile app, AliPay. Users can enter consultation page by searching “scientifically fight disease”.
Challenges
The platform is currently free of charge. AliHealth has subsidized \$570,000 for the consultation fee. We hope WSIS can promote the platform and encourage more doctors to participate.
Partnership
We are looking forward to partner with more doctors.
Action Lines
AL C7. ICT applications: benefits in all aspects of life — E-health
SDGs
Goal 3: Ensure healthy lives and promote well-being for all

Case6-Social Watcher
Title of the project, Contact Organization Name, Stakeholder type, Country
Social Watcher Information Age Consulting Private Sector Kuwait

Beneficiaries

The platform started to serve China from January 24th and expanded to overseas from March 8th. More than 200 Chinese embassies overseas have recommend AliHealth Online COVID-19 Consultation Platform.

Website

<http://information-age-consulting.com>

Description

Social Watcher is a large-scale community service which utilizes media and ICT tools and expertise. The service utilizes Artificial Intelligence, Text Mining, Big Data analytics and visualization, and Natural Language Processing to analyze the public opinion regarding political and social issues in Kuwait and study the impact of those political and social issues on the Kuwaiti society. Through this analysis, our platform monitors content and activities on social media in Kuwait, identify and analyze public opinion trends, analyze public sentiment, and finally delivers analytics reports, infographics, and interactive dashboards showing the results of our analysis in an open, transparent, objective , and scientifically motivated manner. The analytics reports are published on our mobile friendly web platform, social media, local media and circulated among interested professionals.

During Corona Virus outbreak, we developed an online indicator which provides an analysis of the public interaction with the spread of the Corona virus in the State of Kuwait during the days when the virus spread in the country. The indicator implemented as an online dashboard which shows daily updates statistics about corona virus cases in Kuwait using Data Visualization techniques. The dashboard also shows the trending tweets and hashtags in Kuwait on Twitter during the period of the spread of Corona virus in Kuwait. The trending tweets and hashtags in Kuwait are identified throughout advanced analysis systems that depend on Geographic Information System (GIS) supplemented for tweets and retweets and the rate of circulation and interaction is determined according to smart software through the number of retweets, and throughout other indicators. The benchmarking is updated automatically on 11:45 of every day evening. The indicator's dashboard is available on this page:

<https://dashboard.watcher.social/published/409dc608124fec99b154cb8e2727a4c5/kuwait-corona-statistics-index-english-version#>

ICT Tools

Artificial Intelligence, Text Mining, Big Data analytics and visualization, Natural Language Processing, and Web Services Integration.

Challenges

1- The running cost of data analytics software and the cost of web hosting. In this respect, Social Watcher offers its service for free and this means that the cost of running this service is handled by the project owners.

2- The time and efforts needed to keep up with the event.

3- The time and efforts needed for the collection of data, preparation and cleansing of data, analysis of data, visualization of data, and presentation of results (designing infographics for example).

4- Decision makers, politicians, and many media professional lack the understanding the role of social media analytics to identify the public opinion.

5- Misunderstanding of our efforts by some political figures.

6- Illiteracy in understanding interactive infographics and interactive dashboards among some of our audience.

7- Resistance to change by some of our targeted audience segments.

8- Since our reports are freely available for the public through an open access web platform, our efforts are at the risk of being stolen by others.

Partnership

No

Replicability

Through using the same analysis methods and applying and adapting the same social media analytics and visualization tools to the social media content published in other societies and countries.

Sustainability

The project is sustainable through continuous Research and Development (R&D) to enhance the social media analytics, text mining, and natural language processing tools and methods we use and through responding to user's feedback.

Action Lines

AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C9. Media

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case7-Digital Approaches to Resilience and Adaptation in Jamaica (DARAJA Project)

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital Approaches to Resilience and Adaptation in Jamaica (DARAJA Project) Caribbean Climate Innovation Center Private Sector Jamaica

Beneficiaries

1- Governmental Organizations that have interest in understanding public opinion trends in relation to Corona Virus outbreak

2- Journalists, media professionals, decision makers, politicians, professionals Interested in the Jamaican public affairs, and the general Public

Website

<http://www.caribbeancic.org/>

Description

The proposed solution will be a new climate resilience and adaptation methodologies and technologies to improve climate risk management and COVID19 responses in Jamaica through this program.

ICT Tools

The platform will be complemented by a smartphone-based weather application for communicating information directly to individuals which will provide a tailored weather and COVID information.

Challenges

Lack of information on climate and weather data makes them extremely susceptible and vulnerable coupled with the information on the COVID 19 situation daily bulletin.

Partnership

Yes, counter funding partners

Replicability

Yes, this project is a piloted project currently in Jamaica that will be replicated for the rest of the Caribbean.

Sustainability

Yes, through the creating an opening Data Compass for Climate Resilience. A second aspect of the project will focus on the creation of a Climate Resilience Sandbox, to support the development of innovative solutions for early-warning systems & risk reduction systems utilizing open data from searchable online database of all key international (NASA, ESA, Caribbean Scientific Institutions), as well as the national datasets on climate hazards and exposure data related to climate risk in Jamaica. This project will directly stimulate business development in Jamaica by establishing a climate resilience data innovation incubation program for up to 10 SMEs/startups utilizing big data and artificial intelligence to access the DARAJA Information Sharing Platform. These innovators will utilize the data to develop added value products and services that help to build climate resilience. The alumni of this program will become the founding cadre of private sector actors to engage with MSJ and the public sector agencies releasing their data sets onto the DARAJA Platform. Their business initiatives will combine data and information from DARAJA with other relevant information to create revenue-generating products and services that improve Jamaica's overall resilience to weather and climate shocks. This will be published and licensed as open data. It will offer rapid prototyping and marketing testing guides for Jamaica start-ups/SMEs interested in creating new open data driven climate risk information products and revenue streams.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C9. Media|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat

climate change and its impacts|Goal 17: Revitalize the global partnership for sustainable development

Case8-Wi-fiHome by Beinday

Title of the project, Contact Organization Name, Stakeholder type, Country

Wi-fiHome by BeindayBEINDAY by INTERFACE SASPrivate SectorSenegal

Beneficiaries

Vulnerable communities and small groups which include reclus farming communities.

Website

<http://interface.sn>

Description

While one in two inhabitants of this planet is currently confined, business life is getting organized. Beinday by Interface sas maximizes the potential of the WI-FI connection in Senegal to promote telework and e-commerce during this period of fight against COVID 19. We have implemented Wifi-Home dedicated to real estate agencies and owners of rental properties. The focus was on "STAY AT HOME" because of the COVID-19 pandemic. The objective is to be able to better adapt its product in the current context.

ICT Tools

Beinday is a platform for monetization and injection of advertising content through free Wi-Fi through its various offers ranging from Wi-Fi Home (in homes) Wifi -Biz (in reception areas) to Wi-Fi Zone (Public spaces) via Wi-Fi on board (in public and private transport) and Wi-Fi Edu for schools and universities.

Challenges

Our strategy is precisely to go in partnership with these real estate companies to always stay in the B to B to C taking into account the particularities of their sector. Because it is precisely the solvency of 70% of some very mobile tenants in question. This can create disadvantages in monitoring operations and assessing customer satisfaction throughout Senegal.

The objective is to make the real estate product much more attractive through simple and

efficient Wi-Fi for the benefit of the client who is the tenant by integrating this service into the rent package by the lessor.

Partnership

We will take care of recruiting these companies which evolve in the hiring in order to be able to integrate our solution in their offers. We are going to work with all operators who also wish to support us in this new segment with our Wi-Fi Home solution on the Beinday platform for the management of tenant users.

Replicability

In a country where not everyone has access to the Internet yet (only 58% penetration versus 25% in Africa), the project quickly found takers. Sonatel, Expresso, Free and the Arc Télécoms Access Provider contract or negotiate with the start-up Interface SAS which celebrated its first purchase order of 4,000 euros in April 2019. The WIFI access points installed by the teams The computer technologist engineer are today 21 in 7 different sites including banks and cultural establishments like the African Renaissance Monument which inaugurated the series. The objective, at the key, is to go to the conquest of Africa. We wants to conquer around twenty countries including Benin, Cameroon, Gabon, Mauritania, Niger and Togo with a presence by 2022 in Mali and Côte d'Ivoire.

Sustainability

An African ambition well achievable after a stake in the amount of 35,000 euros made by the Delegation for Fast Entrepreneurship of Women and Youth DER / FJ, new funding mechanism for young entrepreneurs set up by the State of Senegal with a fund which amounts to more than 43 million euros. Recently, the start-up also raised another 35,000 euros. After a first failure with a company whose name was disputed to them by a big American company, the team is convinced that success is not far away. Consisting of several different profiles including IT engineers, telecom specialists, managers, finance, marketing, communication and sales experts, Interface SAS is managed by a top management made up of two Senegalese and two Germans who have come together in association with a team of 6 full-time premises in production. The band has just had a patent from the African Intellectual Property Organization (OAPI) to establish itself in the 17 countries targeted, on the continent with different offers relating to both events and dedicated WIFI banks, cars, establishments open to the public and reception areas, such as cultural places, etc.

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 11: Make cities inclusive, safe, resilient and sustainable

Case9-Project BIRD (Broadband Infrastructure for Rural Area Digitalization)
Title of the project, Contact Organization Name, Stakeholder type, Country
Project BIRD (Broadband Infrastructure for Rural Area Digitalization)Global Plan Inc.Private SectorJapan
Beneficiaries
Before the COVID-19 crisis, the Wifi Events, Wifi-Biz and Wifi-zone offers met with success with our users who connected from breakfast. Today, the COVID-19 crisis forces us to be confined. So, we had to quickly highlight the Wifi-Home which is very useful for teleworking.The added value is precisely to allow these families to connect to E-commerce platforms so that they can track their delivery in real time during this context to respond to the call from the Senegalese authorities. Thanks to e-commerce, it is now possible to continue shopping on these many platforms. The strengthening of digital connection systems allows a large number of users to be connected to networks without creating disturbances.
Website
http://www.globalplan.jp
Description
The project BIRD (Broadband Infrastructure for Remote-Area Digitalization) is for affordably closing the digital divide that help cope with COVID-19 by enabling remote work, tele medicine etc. at every corner of the globe.
During 2016-2018, ITU-T SG5 and SG15 published ITU-T L.1700, L.110 and L.163. The president of Global Plan Inc. initiated the standardization discussions and worked as the key editor.
By meeting those standards, an affordable optical cable solution was proposed. Note that World Economic Forum at Davos 2017 identified a key challenge as “Finding solutions that connect the large rural offline populations at minimal costs”
In 2019, the practicability of the solution BIRD was confirmed in a mountain village of west Nepal (10 km) and rural areas of Mongolia (21.8 km) as the APT projects.

In Early 2020, the COVID-19 Pandemic occurred. March 30, 2020, Washington Post posted an article “Coronavirus has made the digital divide more dangerous than ever”. April 6, 2020, US Telecom CEO stated, “Coronavirus reveals need to bridge the digital divide”.

The ITU-compliance of the solution BIRD could make the solution less costly by economy of scale thus the more the full-scale deployment is expected in a global scale.

ICT Tools

Technologies/ICT tools used in BIRD is affordable and reliable optical fiber cable connectivity that meets new ITU-T standards.

It is applicable to urban-rural broadband backhaul connectivity for tele medicine, distant learning and remote work. The cost of optical cable installation are typically 70 to 80 per cent of the entire CAPEX of the network today, with cable installation currently relying on heavy machinery and highly skilled labor. This challenge is made even greater by the low densities of rural communities.

To reduce the cable installation cost, a lightweight, robust and thin optical cable is used that meets ITU-T L.110. The cable well realizes a terabit capability, low latency and cost-effective upgradability/scalability needed for ever-growing demand toward 5 G era and beyond.

The cable is with ease of handling and excellent environmental durability implementable from the ground surface to underground to air to water by following L.163 standard.

With this cable, the civil work can be simple and easy without demanding heavy machinery and skilled engineers. The CAPEX can be reduced by ~80% than with conventional cables.

Challenges

The challenge was to make ITU-T agree that cost-effective implementation be the standard's top priority for rural communications in developing countries, where reliability is the second most important attribute. This reversed the common approach to fibre-optic connectivity design – reliability is usually the first prize, but with L.1700, affordable implementation comes first.

The next challenge was to identify the cable design realizing the lowest installation cost. Such a cable should allow installation on the ground surface, a little beneath the surface, in the air and under water in a do-it-yourself (DIY) manner using local people's everyday tools. The cable for the BIRD solution selected is lightweight thin robust that is based on the submarine cable technologies.

Another challenge was confirmation of the practicability of the BIRD solution in the field with

difficult terrain. March 2019, L.110-compatible cable of ~10 km was installed by following L.163. The network connected the Dullu Municipality Head Office, 13 Municipality Ward Offices, 3 High Schools, Dullu Land Mapping Office, and Dullu Hospital. Along with the vehicle roads, the cable was mostly buried, ~10-20 cm in depth. A part of the cable was manually installed on the ground's surface in the unexplored jungle.

Partnership

To seek for the partners to globally deploy the BIRD solution, it must be recognized that closing the digital divide and coping with COVID-19 should be recognized as the need from prevention of societal loss rather than from pursuit of financial profits.

Another point is solution's compliance with ITU standards that is unprecedentedly aiming at closing the digital divide thereby coping with the pandemics today and tomorrow.

ITU is therefore encouraged to promote this ITU-compatible non-profit solution to the ITU members including users, manufacturers, operators, civil society, finance experts, media, development banks, investors, cable/system suppliers, local communities, etc. for its quick and global deployment.

In addition to installing the cable for the BIRD solution at a low cost, the cable needs to be affordably and sustainably maintained for many years after installation. It is therefore important for each community people acknowledge the value and importance of the cable.

The solution BIRD is therefore designed for non-skilled local-people easily join the planning, installing and maintaining the cable as sustainable partners. Such a partnership with the local community is the key to affordable, reliable and quality maintenance of the connectivity for many years.

Replicability

The solution BIRD is simply composed of optical cable and transmission equipment that are basically commercially available.

By simply adjusting the cable layout and selecting appropriate cable installation styles (surface, underground, air, water) by considering terrain, weather and local community's s knowledges, the cable can be installed. As such, the BIRD is flexibly replicable.

Sustainability

The solution BIRD is developed aiming at the best sustainability from the holistic point of view by considering not only the sustainability of the solution itself but more importantly, socio-public sustainability that is realized through broadband optical cable connectivity at every corner of the globe. The socio-public sustainability enhanced by the solution BIRD is already addressed within the answers of the present questionnaire.

Although the physical sustainability(reliability) of the solution BIRD is the 2nd most important attribute after affordability, the stainless-steel tube with sufficient wall thickness accommodating <48 fibre cores gives sufficient robustness to the cable against outer disturbances including extreme temperature, water/moisture ingress, crush, rodent and tensile strength. ITU-T L.1700 indicates acceptable mean time between failure is 7-9 months and acceptable mean time to repair is 2-4 weeks (Summer-Winter).

Action Lines

AL C2. Information and communication infrastructure|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries

Case10-LibraRisk and the coronavirus COVID-19 emergency

Title of the project, Contact Organization Name, Stakeholder type, Country

LibraRisk and the coronavirus COVID-19 emergency|LibraRisk srl|Private Sector|Italy

Beneficiaries

Primary beneficiaries are unconnected people, particularly those who live beyond difficult terrain with low income. The main benefits/services are the unprecedentedly practicable and affordable availability of terabit-capable connectivity.

Concrete beneficiaries so far include Dullu municipality, west Nepal mountain village, where a 10km L.110 cable installed following ITU-T L.163 in 2019 is supporting e-health and e-education. Tanzania, Rwanda, India, DR Congo indicated interests and the motivations behind the interests are documented in ITU L.163, Appendices.

Global society altogether is another beneficiary. The BIRD solution can be quickly installed at a low cost by non-skilled local communities without using heavy machinery nor special tools. Multiple cable-lines can be simultaneously and independently constructed in parallel within one district using local people with everyday tools such as pick axes so that urban to rural digital divide is hoped to be closed and COVID-19 control become easier as soon as

possible.

The spread of coronavirus infection made us aware of the importance of closing the digital divide for the prevention of social loss rather than for pursuit of financial profit.

Website

<https://www.librarisk.com/>

Description

LibraRisk platform provided a service aimed at communicating COVID-19 emergency to foreign communities, in Italy. Foreigners represent little less than 10% of the overall population, but the national media did not provide information specifically conveyed for those communities

ICT Tools

In the early phases of COVID-19 emergency, LibraRisk regularly sent, via push notification (translated in Italian, English, Spanish and French), press releases and news published by both the National Department of Civil Protection and the “Nuovo Coronavirus” portal of the Italian Ministry of Health

Challenges

To foster a more inclusive communication of risk, comprising information to be provided to foreign communities living on the Italian territory

Partnership

Cultural mediators agencies

Action Lines

AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 11: Make cities inclusive, safe, resilient and sustainable

Case11-AaaS - Assistive Technology as a Service

Title of the project, Contact Organization Name, Stakeholder type, Country

AaaS - Assistive Technology as a Service
Key2enable Assistive Technology Mena Ltd
Private Sector
United Arab Emirates

Beneficiaries

Italian citizens and foreign communities living in Italy

Website

<https://www.key2enable.com>

Description

As we are a hardware/software company, as soon as we schedule a virtual workshop of our complete solution for people with disabilities and the School wants to pilot with some of their Students, it is time to send the Hardware equipment to their house or to their school. We configure the online platform for that specific child or person with disabilities and we follow up with the installation. It is actually very easy but sometimes it needs more effort to do it from their homes.

We will also start very soon, the recording of our e-learning platform for the professionals that work directly with the children/people. We will do this in English and in Arabic. We have already finished it in Portuguese, in Brazil.

ICT Tools

We were already developing a Subscription model that we call AAAS - Accessibility as a Service in Brazil since October 2019.

In this Platform we are working directly with the END-USER - B2C

What we do:

We receive the questions and doubts from the parents through our on-line platform, and together we understand the best solution that will work with that particular children/person.

Then, we coordinate with the parents an online training session, they sign a subscription contract with us, and we send the solution to their homes.

We will accompany their results through any means of communication that they prefer.

Challenges

In Brazil our challenge is short of money inside families and most of them do not understand how to use technology. This challenge does not exist in that same proportion in the UAE or in the other countries we are running our company (Chile and USA)

Partnership

Education for people with disabilities.

Replicability

yes, completely replicable. We can teach any person that has a minimum of computer knowledge on how to use our Assistive technology with the person with disabilities they will attend.

Sustainability

Yes, it is sustainable. We sell a subscription plan for the family where they will be able to use our proprietary Assistive technology with their child and they can benefit from our knowledge. it is like they have a virtual tech caregiver to allow their child to communicate, play, and learn with technology.

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 10: Reduce inequality within and among countries

Case12-Hosting Call center – virtual automatic telephone station (VPBX)

Title of the project, Contact Organization Name, Stakeholder type, Country

Hosting Call center – virtual automatic telephone station (VPBX)PJSC RostelecomPrivate SectorRussian Federation

Beneficiaries

The primary beneficiaries are the parents. Most of them do not know what is the best solution for their children. And together with our specialists, we indicate what we understand that will work better in each case.

Website

<https://www.company.rt.ru/en/about/info/>

Description

Due to the current pandemics, a lot of medical organization decided to promptly set-up hotlines to provide support to the public in connection with issuing illness certificates. Rostelecom has been deploying call-centers on short notice on the basis of the Virtual Telephone Exchange service (VPBX) with allocation of a nationwide phone number, enabling millions of people to make free phone calls at the allocated number and ask questions of interest to them.

Also, under the quarantine, demand for home delivery of goods and food products has been experiencing dramatic growth rates. For instance, in Kaliningrad region Rostelecom has helped two large companies to arrange promptly an over-the-phone ordering, order handling and distribution process using call-center facilities. Having in place a high-tech cloud-based solution, the companies are now able to handle much higher order volumes. In order to offer support to small and medium businesses against the backdrop of fighting the COVID-19 infections, Rostelecom has launched a Home Office service based on the Virtual PBX solution. The new offering will enable entrepreneurs to maintain efficient channels of communications with employees, customers and partners, while staying at home.

Virtual PBX service makes it unnecessary for its customer to buy and maintain any networking equipment, because such equipment is deployed in the provider server, while subscribers are connected via the cloud. Additionally, Rostelecom offers its customers an opportunity to implement any scale of telephone service ranging from small start-ups to large nationwide companies, featuring a broad selection of extra options, like call monitoring, call recording, etc. Customers, owning Virtual PBXs are able to independently manage their telephone networks using the private cabinet capabilities and make settings of their networks to meet their business needs.

ICT Tools

National and regional levels.

Virtual PBX is the organization of telephony via the Internet with the functions of call forwarding, distribution and recording. Connecting Virtual PBX is easy; receive calls to SIP-phone, mobile or computer. The phone number is not tied to the connection address and will remain with you even when changing the office. The right employee will always answer and calls will be distributed evenly. You can set up call forwarding, add new users or activate services in your personal account in real time.

Virtual PBX suits you if: your employees work remotely, you need a landline number for incoming calls, you have a sales team, you have a branch network, you have a support service.

All tariffs for the Virtual PBX include 1 landline number and Russian toll free number 8800 and a package of outgoing minutes to any phones in Russia. Virtual PBX connection - 0 rubles.

Virtual PBX works via the Internet, additional equipment in Customer premises is not required.

Challenges

We can't see any problem at the moment, but have aggressive development plans to upgrade up to the level of UnifyCommSuite.

Partnership

No

Replicability

The project can be easily replicated, as it is based on a standard solution designed by the Company, with settings and customization as required to meet specific needs of business customers, and can be used both for in-office communications and for receiving incoming calls made by service users, with required call forwarding to specific employees of the company who are not located in the office, while preserving high quality and reliability of the service. It is also possible to provision remote workplaces for contact center operators. The allocated phone number is never busy, owing to availability of multiple channels and flexible routing; also, usable settings are available through a private cabinet, while employees performance can always be monitored using call statistics and call recordings.

Sustainability

Yes, the project is sustainable, as it is in line with the following UN Sustainable Development Goals:

- Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture;
- Goal 3. Ensure healthy lives and promote well-being for all at all ages;
- Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all;
- Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation;
- Goal 10. Reduce inequality within and among countries;
- Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable.

Action Lines

AL C2. Information and communication infrastructure|AL C6. Enabling environment

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case13-Healthrostrum

Title of the project, Contact Organization Name, Stakeholder type, Country

HealthrostrumHealthrostrumPrivate SectorTunisia

Beneficiaries

Beneficiaries are B2B companies (big, small and medium-sized businesses) in Russia, private and state-owned companies. In this case, an actively developing network of European confectionery houses and restaurants. As well as an online shopping service for fresh and natural fruits and vegetables with fast delivery.

Virtual Telephone Exchange solution (VPBX) offered by Rostelecom is provisioned on the operator's own network and available in over 400 cities throughout entire Russia with allocation of a city telephone number assigned to the specific city. The service is highly reliable and provided with required redundancy of resources on Rostelecom network. Virtual PBX service can be used by businesses of any size whatever, ranging from start-ups to big corporations and governmental entities.

A key benefit of any Virtual PBX service is its extreme cost efficiency alongside fast scalability as the company grows.

Virtual PBXs offer new opportunities for businesses to improve user quality of service and business efficiency. The service customers are provided with various call distribution scenarios depending on the region of the caller location and time of the call origination.

Upon delivery of the Virtual PBX service, any customer is provided with various additional service features, like viewing online statistics of all calls, voice prompt menu (IVR), deployment of the customer own virtual contact-center, etc.

Automatic calling is one of the recently implemented features enabling the system to make calls according to a pre-loaded list of phone numbers and reproduce a recorded announcement.

Website

<https://www.healthrostrum.com/>

Description
Healthrostrum.com is a social network for health that enables people to share their health experience and connect with a caring community.
ICT Tools
for now it's basically web technology.
Challenges
marketing and raising money, overcome it by making partnerships and raising money from VCs or have access to grants
Partnership
yes, in health care field: health related companies, health related associations and medical universities
Replicability

Case14-COVID-19 Awareness and Prevention content on KaiOS
Title of the project, Contact Organization Name, Stakeholder type, Country
COVID-19 Awareness and Prevention content on KaiOS KaiOS Technologies Private Sector China
Beneficiaries
Patients, Health care professionals and health enthusiasts
Website
https://www.kaiostech.com/
Description

KaiOS is a mobile operating system that powers more than 100 million smart feature phones, mostly in developing countries. We know how difficult it can be to find trustworthy information on the COVID-19, so to equip KaiOS users with trusted information, we have added various content aimed at low-income users that live in developing countries, to cope with the challenges of the pandemic.

ICT Tools

We have launched two apps on KaiOS:

1. Be Safe app - provides users with essential information about the coronavirus disease and how to stay safe. All the content comes from the World Health Organization (WHO) website and is available in English, French, Spanish, Simplified Chinese, Urdu, Arabic, Swahili, and Russian.
2. COVID-19 Stats app - tracks the number of reported cases, deaths, and active cases around the world and per country. It also features a “top 20” list of countries and their confirmed cases, deaths, and recovered cases. It’s available in English and in French.

We have further added a CoV tab in the Life app. It will share dos and don'ts, myths of the virus, and have links to trusted sources like UNICEF and the World Health Organization.

Challenges

The main challenge is to support our developers in continuing creating solutions and working with carriers to promote them to the largest number of users. It's all well to create amazing content to help end users, but it would be fruitless if the content does not reach the target audience.

Partnership

We would like to enrich our content offering, and as such are looking for content partners that can provide good information and learning materials for not just the current environment, but to help those from less privileged backgrounds in general.

Replicability

Yes. We would consider migrating the content we have gathered to other platforms, to enable more people from using it.

Action Lines

AL C3. Access to information and knowledge|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case15-No-touch high-precision IA-based thermal camera system

Title of the project, Contact Organization Name, Stakeholder type, Country

No-touch high-precision IA-based thermal camera system PJSC Rostelecom Private Sector Russian Federation

Beneficiaries

a CoV tab in the Life app on KaiOS - The app that equips first-time internet users with tools and resources in digital skills, health, education, and other essential topics. It will share dos and don'ts, myths of the virus, and have links to trusted sources like UNICEF and the World Health Organization.

Website

<https://www.company.rt.ru/en/about/info/>

Description

Rostelecom is Russia's core systemic enterprise with a headcount of over 200 thousand employees, offering telecommunications and digital services across entire Russia. We were unable to put all our employees under quarantine imposed due to COVID-19 pandemics. In order to ensure maximum safety and protection of those employees who keep going to office for work, we decided to equip their offices with thermal camera systems to measure visitors' body temperature and reduce any risk of an infected visitor's coming inside the office, because high temperature is the main sign of COVID-19 infection existence. After some offices were equipped with thermal cameras, it was found that measurements were often inaccurate under slightly varying installation conditions, thus requiring a visit of an engineer to repeat the camera setup. To address this issue we have integrated cameras into Rostelecom video-surveillance platform and developed an algorithm based on the Artificial Intelligence for an automatic calibration of a camera without any human involvement. Then we develop a capability to support connections of all the installed thermal camera units to a common single monitoring center to ensure control over the epidemiologic situation across entire company, by collecting and assessing events issued by all connected units, in order to undertake data-based preventive measures.

While developing the product for ourselves, we have managed to create a really breakthrough product, which proved to be of interest to our customers, and we have promptly offered it to them, thus helping them to cope with prevention of COVID-19 spreading.

ICT Tools

A stand-alone thermal camera unit enables instant on-site measurements of visitors' temperature and required servicing.

We integrated thermal cameras with our video-surveillance and data intelligence platform, added access management systems, and connected cameras with a common single monitoring center, thus creating a comprehensive solution that enables transition from local temperature measurements to centralized monitoring of the epidemiologic control on the regional and federal levels, and Big Data-based decision-making.

Challenges

High cost for social entities. Currently, we continue working to enable connection to our platform of low-cost thermal cameras originally not designed to produce precise body temperature measurements. Owing to further development of our platform we believe we will be able to support people detection and taking their body temperature accurate measurements using such low-cost thermal camera units, thus creating a revolutionary solution based on our software at an affordable price. This solution could be in future used in social projects among others.

Partnership

Yes. Telecommunications operators wishing to offer thermal surveillance solutions developed by us to their customers. Also, manufacturers of thermal surveillance equipment.

Replicability

Yes. This project continues to develop and is planned for development in the next 5 years.

Sustainability

Yes, the project is sustainable, as it is in line with the following UN Sustainable Development Goals:

- Goal 3. Ensure healthy lives and promote well-being for all;
- Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all;
- Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation;
- Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case16-Wikaia mobile application and dashboard

Title of the project, Contact Organization Name, Stakeholder type, Country

Wikaia mobile application and dashboard VegaNet Private Sector Tunisia

Beneficiaries

Currently, the solution major customers are large and medium businesses, as well as governmental enterprises: construction industry, fuel and energy complex, food and processing industry, agriculture, healthcare, transportation, information and control system, communications, housing and utilities, population service industry, administrations, social facilities.

Key benefits and strengths of Rostelecom-offered solution are:

relatively moderate cost, unique software, a capability of data collection and analysis on the thermal camera control platform, integration with access control systems, etc.

Website

<https://cutt.ly/uymmfqG>

Description

In the context of national ICT initiatives advocated by both Tunisian Ministry of Communication Technologies and Digital Transformation and the Tunisian Ministry of Health, VegaNet has developed a mobile application named Wikaia (in Arabic Prevention) as part of a voluntary initiative.

Wikaia allows any professional (individuals, private companies, public companies) who is running his business during this pandemic period to check randomly if any visitor or client

should have been confined or is declared infected by Covid-19, as recorded in the government database to which Wikaia is linked. Any positive check will lead to an alert that will be sent to the Ministry of Health which will be able through Wikaia's dashboard to have access to the information regarding the person's journey and all the people he may have met during a specific period of time and who may have been contaminated as well. Wikaia is proven to be an important tool to control the spread of the virus and keep people aware of their obligations during this pandemic phase.

Wikaia has been developed in compliance with the General Data Protection Regulations. The check is made by scanning the ID document barcode and the tracking is made by using GPS information communicated through the application.

ICT Tools

Wikaia uses :

- OTP to secure the account.
- Barcode scanner to make it easy for users to check people's ID documents without having access to any personal data?
- GPS data: each ID check will lead to recording the GPS data of the person to be able to make later the necessary data matching.
- Big Data processing
- Mobile application and a web dashboard
- Webservices with the Government Database

Challenges

The main challenge was how to access the government health database which contains important information. We overcame this crucial challenge through a joint initiative lead by the Ministry of Communication Technologies and Digital Transformation and also through providing appropriate guarantees and technologies to keep all the collected information secure and confidential.

As Wikaia has been initially developed for shopkeepers and other local merchants who may not have a specific ICT knowledge, the second challenge was how to make them use Wikaia easily. We overcame this challenge by developing a very user-friendly mobile application that can be used by anyone without any prior training.

The third challenge was how to address the application to people who do not have smartphones. We overcame this challenge by creating webservices linked to the health database and a USSD code, to allow users of feature phones to make the needed checks.

Partnership

Wikaia has the support of the Tunisian Ministry of Communication Technologies and Digital Transformation and the Tunisian Ministry of Health.

Wikaia has also the support of one of the three Telecommunications operators in Tunisia to provide Wikaia freely to users (no data connection to be charged). We are currently processing the same with the two other operators.

Replicability

This project is replicable to all countries as it addresses global issues related to the pandemic situation and relies on technologies that can be used at large-scale. It is also replicable at a national level, as Wikaia can also address national security issues (internal security).

Sustainability

Wikaia can be used in any situation that may require public authorities to keep people safe. The followings are planned evolution of the use of Wikaia:

- the use of Wikaia in Airports to record the list of people who are coming from abroad and which should be under traffic restriction for 14 days in accordance with the regulations in force.
- include the contact tracing technology to provide the Health Authority with optimized and targeted information.
- Control the number and the safety status of people allowed to enter an event or a specific place to keep them safe from contamination or for any other security purpose.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case17-MyCyberHygiene - Building Awareness, Confidence and Security in the Use of ICTs

Title of the project, Contact Organization Name, Stakeholder type, Country

MyCyberHygiene - Building Awareness, Confidence and Security in the Use of ICTs
CybExer Technologies OÜ
Private Sector
Estonia

Beneficiaries

Both the Public authorities and citizens are considered to be beneficiaries of the solution. Wikaia allows:

- keep track of contaminated people or potentially contaminated people
- Help to ensure economic stability.
- Feed Health Authority's database with important data regarding the contamination and the

risk of contamination.

- Take the appropriate steps and measures to limit the spread of the virus.

Website

<https://cybexer.com>

Description

MyCyberHygiene builds awareness, confidence and security in the use of ICT. This project helps to counter COVID-19 amid increase in fraud, cybercrime and cyber attacks by raising cyber awareness and cyber hygiene training with a unique free online platform. This is a way of boosting the human element in cyber security at times of crisis.

As coronavirus has forced offices and schools to close, the web remains our lifeline. As we are told to work from home and stay away from others, we all growingly rely on cyberspace in getting news, receiving education, in holding conferences, ordering food, or sending emails. Unfortunately, cybercriminals are aggressively making use of the crisis, as we 've seen phishing e-mails & ransomware, DDOS attacks, malware and data stealing apps applied. To help battle this, people need support with cyber security awareness training.

CybExer offers cyber hygiene risk mapping course with an unique online platform for governments and enterprises. This platform combines e-learning courses with comprehensive risk assessment for the organization. For the individual user, the course goes through everyday situations in digital world, where ignorance or simple carelessness can bring about many problems. What people gets out of the course is a risk matrix showing specific areas in different categories, such as personal attitude, knowledge about security and technology, expose to social media, and the effect of corporate culture. At the end of the online session, each person gets recommendations on how to protect themselves from specific cyber threats.

Almost all major cyber incidents started with an unsuspecting individual opening yet another e-mail, using the same password over and over again or similar actions that many of us still do on a daily basis. We help tp enhance the cyber hygiene skills of your employees and those of suppliers.

ICTs can contribute to achieving universal education worldwide, through delivery of education and training of trainers, and offering improved conditions for lifelong learning, encompassing people that are outside of the formal education process and improving professional skills.

Our proposed project is designed to build confidence and security in the use of ICTs for public services through capacity-building activities in the form of on-the-job cyber hygiene training courses. The project contributes to significant opportunities for lifelong learning and

for the promotion of just, peaceful and inclusive societies via reinforcing the citizen trust towards (digital) governmental services that can be provided either by the central government, local governments or external service providers.

ICT Tools

CybExer offers cyber hygiene risk mapping course with an unique online platform for governments and enterprises. This platform combines e-learning courses for your employees with comprehensive risk assessment for the organization. For the individual user, the course goes through everyday situations in digital world, where ignorance or simple carelessness can bring about many problems. What the organization gets out of the course is a risk matrix showing specific areas in different categories, such as personal attitude, knowledge about security and technology, expose to social media, and the effect of corporate culture. At the end of the online session, each person gets recommendations on how to protect themselves from specific cyber threats.

Challenges

Our world is more connected than ever. In seizing the opportunities that the internet generates, the most crucial element is capacity building and skills development. Only by improving basic digital literacy and updating skill and training systems will the digital benefits be realized and broadly shared.

The challenge for policy makers is to ensure that all current and future workers can seize the growing economic opportunities that accompany the spread of digital technologies. The risk is that rapid technological change will end up increasing inequality and leaving many behind—blunting the digital dividends. Digital illiteracy and lack of skills can become significant barriers.

Partnership

We are looking for partners among regional NGO-s and educational institutions that can help introduce the cyber hygiene course in their curriculum.

ICTs can contribute to achieving universal education worldwide, through delivery of education and training of trainers, and offering improved conditions for lifelong learning, encompassing people that are outside of the formal education process and improving professional skills.

Replicability

The project is replicable and easily scalable as the it is based on CybExer's proprietary Cyber Hygiene e-Learning Course at CybExer's online digital e-learning and risk mapping platform. Transferring of know-how about the methodology and technical implementation is easy and fast.

Sustainability

The Cyber Hygiene e-Learning Course is based on a project first implemented by the Estonian and Latvian ministries of defence and the European Defence Agency as a direct response to sophisticated, targeted cyber-attacks against government entities in 2015-2016. Following its success in the defence sector, the course has been adjusted for wider use in cooperation with the State Information Authority of Estonia since 2017.

Action Lines

AL C4. Capacity building

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case18-MyCyberHygiene - Building Awareness, Confidence and Security in the Use of ICTs

Title of the project, Contact Organization Name, Stakeholder type, Country

MyCyberHygiene - Building Awareness, Confidence and Security in the Use of ICTs
CybExer Technologies OÜ
Private Sector
Estonia

Beneficiaries

A modern economy requires workers with modern skills. Everyone should have the necessary skills to benefit fully from the Information Society. Therefore, capacity building and ICT literacy are essential. Current and future workers need to develop lifelong cognitive, technical, and socioemotional skills required of a well-educated worker in the 21st century. Workers also need to be capable of processing the ever-increasing information available on the internet. Building these skills requires actions affecting all relevant environments for learning: families, schools, universities, training systems, and firms. Given the speed of technological changes, these capacities and skills will also require constant updating throughout the life cycle as workers prepare for careers that last more than one job. Digital technologies themselves can help.

Website

<https://cybexer.com>

Description

MyCyberHygiene builds awareness, confidence and security in the use of ICT. This project helps to counter COVID-19 amid increase in fraud, cybercrime and cyber attacks by raising cyber awareness and cyber hygiene training with a unique free online platform. This is a way of boosting the human element in cyber security at times of crisis.

As coronavirus has forced offices and schools to close, the web remains our lifeline. As we are told to work from home and stay away from others, we all growingly rely on cyberspace in getting news, receiving education, in holding conferences, ordering food, or sending emails. Unfortunately, cybercriminals are aggressively making use of the crisis, as we 've seen phishing e-mails & ransomware, DDOS attacks, malware and data stealing apps applied. To help battle this, people need support with cyber security awareness training.

CybExer offers cyber hygiene risk mapping course with an unique online platform for governments and enterprises. This platform combines e-learning courses with comprehensive risk assessment for the organization. For the individual user, the course goes through everyday situations in digital world, where ignorance or simple carelessness can bring about many problems. What people gets out of the course is a risk matrix showing specific areas in different categories, such as personal attitude, knowledge about security and technology, expose to social media, and the effect of corporate culture. At the end of the online session, each person gets recommendations on how to protect themselves from specific cyber threats.

Almost all major cyber incidents started with an unsuspecting individual opening yet another e-mail, using the same password over and over again or similar actions that many of us still do on a daily basis. We help tp enhance the cyber hygiene skills of your employees and those of suppliers.

ICTs can contribute to achieving universal education worldwide, through delivery of education and training of trainers, and offering improved conditions for lifelong learning, encompassing people that are outside of the formal education process and improving professional skills.

Our proposed project is designed to build confidence and security in the use of ICTs for public services through capacity-building activities in the form of on-the-job cyber hygiene training courses. The project contributes to significant opportunities for lifelong learning and for the promotion of just, peaceful and inclusive societies via reinforcing the citizen trust towards (digital) governmental services that can be provided either by the central government, local governments or external service providers.

ICT Tools

CybExer offers cyber hygiene risk mapping course with an unique online platform for governments and enterprises. This platform combines e-learning courses for your employees with comprehensive risk assessment for the organization. For the individual user, the course goes through everyday situations in digital world, where ignorance or simple

carelessness can bring about many problems. What the organization gets out of the course is a risk matrix showing specific areas in different categories, such as personal attitude, knowledge about security and technology, exposure to social media, and the effect of corporate culture. At the end of the online session, each person gets recommendations on how to protect themselves from specific cyber threats.

Challenges

Our world is more connected than ever. In seizing the opportunities that the internet generates, the most crucial element is capacity building and skills development. Only by improving basic digital literacy and updating skill and training systems will the digital benefits be realized and broadly shared.

The challenge for policy makers is to ensure that all current and future workers can seize the growing economic opportunities that accompany the spread of digital technologies. The risk is that rapid technological change will end up increasing inequality and leaving many behind—blunting the digital dividends. Digital illiteracy and lack of skills can become significant barriers.

Partnership

We are looking for partners among regional NGO-s and educational institutions that can help introduce the cyber hygiene course in their curriculum.

ICTs can contribute to achieving universal education worldwide, through delivery of education and training of trainers, and offering improved conditions for lifelong learning, encompassing people that are outside of the formal education process and improving professional skills.

Replicability

The project is replicable and easily scalable as it is based on CybExer's proprietary Cyber Hygiene e-Learning Course at CybExer's online digital e-learning and risk mapping platform. Transferring of know-how about the methodology and technical implementation is easy and fast.

Sustainability

The Cyber Hygiene e-Learning Course is based on a project first implemented by the Estonian and Latvian ministries of defence and the European Defence Agency as a direct response to sophisticated, targeted cyber-attacks against government entities in 2015-2016. Following its success in the defence sector, the course has been adjusted for wider use in cooperation with the State Information Authority of Estonia since 2017.

Action Lines

AL C4. Capacity building

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case19-Muse app

Title of the project, Contact Organization Name, Stakeholder type, Country

Muse app SABAQ Private Sector Pakistan

Beneficiaries

A modern economy requires workers with modern skills. Everyone should have the necessary skills to benefit fully from the Information Society. Therefore, capacity building and ICT literacy are essential. Current and future workers need to develop lifelong cognitive, technical, and socioemotional skills required of a well-educated worker in the 21st century. Workers also need to be capable of processing the ever-increasing information available on the internet. Building these skills requires actions affecting all relevant environments for learning: families, schools, universities, training systems, and firms. Given the speed of technological changes, these capacities and skills will also require constant updating throughout the life cycle as workers prepare for careers that last more than one job. Digital technologies themselves can help.

Website

<http://sabaq.edu.pk/>

Description

According to the UNESCO, school closures in Pakistan have led to disruptions in education for approximately 46 m students, including 17 m primary grade learners. In this grave situation, SABAQ has been actively working with the government to ensure the continuity of learning.

In light of this, we have made our K-5 app, Muse free for all students to use on the Google Play Store.

We have also partnered with the federal government to provide our e-learning content for free to be aired on TeleTaleem, the national TV channel started by the Federal Government to broadcast K-12 educational content

To ensure its use in remote areas of Pakistan with very limited internet access, we are delivering our app in the remote areas of Gilgit Baltistan through USB and SD cards.

We have also signed an MOU with Sindh Govt Education Department to modify the Muse app and launch it for the entire Sindh Government school network consisting of 4 million students who cannot attend schools during COVID. Beyond COVID, there will be a sustainable way for SABAQ to support these beneficiaries, UNICEF is also a key stakeholder in this MOU.

We are also in the process of developing a chatbot/ tutor bot which will allow students to take assessments and request specific content, adding the missing piece for the model of education delivery during COVID.

ICT Tools

Muse, SABAQ's flagship product, is an Android-based learning app for the primary grades with over 1,500 digital resources for Math, Science, English, and Urdu. Designed to make learning fun and engaging, Muse has animated story-based video lessons, e-books, interactive quizzes, and learning games. Our content is tailored to the local context and available in three languages: English Urdu, and Sindhi.

At present, Muse is being used by 125,000 students in over 1,000 schools across Pakistan. Recently, we also launched a direct to user application on the Android Play Store so children can access the learning content at home directly. We have over 7,000 B2C users. During the COVID scenario, the use of EdTech is limited only to students in high tier private schools that are conducting online classes. However, students in lower and mid-tier private schools and public schools do not have the necessary resources to deliver eLearning. This is where Muse comes in. Our app is without cost for the COVID crisis and will be offered at a low cost- subscription-based model afterwards, ensuring all children can benefit from e-learning.

Challenges

In face of the COVID crisis, the uptake of e-learning in Pakistan has increased. However, many students do not have their own devices on which to access learning content. As a result, they use the devices owned by their parents. One of the challenges that Muse has been facing is how to raise awareness about the use of the app amongst parents and children. To reach users on a wide scale, there needs to be communication to disseminate the message that the Muse app is helpful for children and the use of it to parents since the devices the children will access Muse on are their parents' devices. Moreover, some remote areas in Pakistan do not have the necessary internet connectivity to use the app. For this, SABAQ is already distributing Muse through SB or SD cards so the content can be used offline once its downloaded. It is also partnering with Telenor to provide low-cost data bundles through which users can use the app.

Partnership

SABAQ already has a partnership for implementation idea with the Sindh government. It also has the necessary technical expertise in-house to develop the solutions. However, since SABAQ is a social enterprise that reaches children in the low to mid-income households across Pakistan, it does not have the financial resources to support all the new

COVID related solutions ideas it has. Hence, it needs partners that can provide funding support to support the innovative deployments and solutions that SABAQ is working on as well as funding for communication to raise awareness regarding these solutions.

Replicability

We have reached over 120,000 students and are aiming to scale it to millions across Pakistan. Our highly engaging, story-based lessons for primary grade subjects can be replicated outside Pakistan to developing countries that are suffering from education disruptions due to school closures. Especially in low-income communities during the COVID crisis, Muse can easily be replicated with some adaptation and contextualization.

Sustainability

Muse is offered to both B2B and B2C customers. For B2B customers, Muse is offered to schools at an affordable subscription-based model. We have two types of licenses:

1. Student license at \$7 per student per year
2. Class license at \$40 per class of 35 per year

We have also recently introduced our B2C app on the Android Play Store. For this strand, we have entered into a partnership with Telenor, one of Pakistan's largest telecom companies to leverage growing 3G/4G penetration in Pakistan and develop a low-cost subscription model where students pay \$ 1 per month to subscribe to the app. This pricing combined with Muse's flexible deployment (Muse can be run on any low-cost Android device like a smartphone, tablet or LED TV) and ability to work without the internet allows for easy adoption in a variety of contexts. The revenue generated from these subscriptions has already started supporting a portion of our OpEx. However, we project to be cashflow positive by the end of 2021. After that, there will be healthy margins to fuel further growth and scale of our impact.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case20-Online Gaming and COVID 19: Alarming increase in Cyber threats against Children

Title of the project, Contact Organization Name, Stakeholder type, Country

Online Gaming and COVID 19: Alarming increase in Cyber threats against Children
Ada Lovelace Software Pvt Ltd
Private Sector
India

Beneficiaries

Muse's main beneficiaries are primary grade children in Pakistan, who are out of school at present due to the school closures in the face of COVID-19. These children primarily belong to low to mid-income schools that cannot offer online classes to students. As a result, students are missing out on essential studies and falling behind, exacerbating the existing learning gap. With schools closed until July and expected to continue even further, students need a resource that will allow them to study curriculum-aligned learning content at home. This is where Muse comes in. Muse will help students study English, Maths, Science, and Urdu at home through its national-curriculum aligned digital learning resources such as videos, flipbooks, and learning games and take formative quizzes. So not only can students continue learning, they can also assess their progress and cover previous learning gaps. Muse is available on the Google Play Store and can be downloaded easily.

Website

<https://adalovelacesoftware.com/>

Description

Children are often unsupervised when playing online games increasing predator ability to start a relationship with the child and gain the trust. An online game gives the predator and child a shared interest making a child more comfortable about talking to the stranger. A predator can use this relation to bring the child for a sexual encounter, ask the child to communicate by private chat, instant messaging, Social media apps and exchange of sexual content, even live stream sexual acts as well.

ICT Tools

Social Networks (eg. Facebook, Twitter, Myspace, etc) • Instant Messaging (eg. IM, MSN, etc) • Chatrooms (eg. Skype, Yahoo, MIRC, etc)

Challenges

In Indian subcontinent there is a 300% rise in Cyber Crimes in last two years. Most of the Cyber Crimes against Children have Digital Origins. One of the prominent reason is children's are exposed to technology & the world much before they are mature to understand and handle issues.

Partnership

In my opinion it is the duty and responsibility of all the stake holders mentioned to act in all capacity to keep children safe online. The virus knows no borders and online perpetrators respect no borders. Therefore, we need to work together collectively and collaboratively across borders for safety and security of the children.

Replicability

Child online protection. Child e-safety, Child trafficking

Sustainability

Yes

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C10. Ethical dimensions of the Information Society

SDGs

Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 16: Promote just, peaceful and inclusive societies

Case21-Financial inclusion ecosystems with Digital neighborhood Banking Agents

Title of the project, Contact Organization Name, Stakeholder type, Country

Financial inclusion ecosystems with Digital neighborhood Banking Agents
Proexponente Private Sector Ecuador

Beneficiaries

Online gaming Companies can help protect children parental controls, blocking and reporting annoying user, moderators to monitor online chat and help young gamers safe online. Policy makers, Public and private sector partners, Schools, Parents must take steps to address this issue.

Website

<http://idpayer.com/>

Description

We help banks and financial cooperatives to process all their operations from each neighborhood business thanks to our biometric devices that allow people to make any payment or transaction with facial biometric validation without contact and with the highest standards of security for citizens.

ICT Tools

Biometrics as a contactless transaction system beating a card or a cell phone without the need for people to use the internet. Low-cost biometric devices that increase the reach of banks and financial cooperatives, reducing investment in ATMs or physical agencies. We work with Api integration with the Banking Systems.

Challenges

People who accumulate in bank agencies and fail to use the new technologies because they do not have technological education, access to the internet or they do not have enough education. That is why we chose this project as a collaborative economy alternative so the banking services can be in your own neighborhood and with biometrics as an inclusive and protective method against the pandemic.

Partnership

Banks and financial cooperatives.

Replicability

The project could be replicated in all Latinamerican countries in the first stage.

Sustainability

This project has a B2B business model for banks and cooperatives that can expand their coverage at low cost, reducing the investment of traditional channels such as ATMs and physical agencies. In addition, the project seeks beneficiaries for 75% of Latin American citizens who have not yet managed to access quality banking services and during the pandemic have been more excluded.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C5. Building

confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life
– E-business

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case22-MonitorFCS App and COVID-19MX App

Title of the project, Contact Organization Name, Stakeholder type, Country

MonitorFCS App and COVID-19MX App América Móvil Private Sector Mexico

Beneficiaries

People in main cities or towns who cannot access to banking services.

Website

<http://www.americamovil.com>

Description

1) MonitorFCS App. Since the start of the pandemic, in América Móvil we have been concerned about the health of our coworkers, therefore, as part of the company's actions to deal with COVID-19, in collaboration with the Carlos Slim Foundation, we developed the MonitorFCS App, in order that our coworkers and their families can carry out daily monitoring of their health status and, in case of presenting symptoms related to COVID, receive the necessary attention and information.

2) COVID-19MX App. Through our subsidiary Telcel in Mexico and in collaboration with two banking institutions, we collaborated in the development of the COVID-19MX App, to help the population to generate a personal and family self-diagnosis. There is no browsing cost for Telcel users, as well as the text messages (SMS) involved in the use of the App. The platform was made available to the authorities for their complete management.

ICT Tools

Now more than ever, we rely on connectivity and the use of our mobile devices to communicate with others, and to make daily transactions. The COVID-19 pandemic and the fact that thousands of people are working, studying or just staying at home as a way of taking care of their health, has increased the use of these devices.

With the Apps developed by América Móvil -in collaboration with other institutions- we help people to get a health diagnosis facilitating medical attention if required. By having a previous diagnosis, the Apps also allow doctors to take care of the patient in a faster and more accurate way. These Apps also provide population with truthful information and combat the spread of fake news.

Furthermore, by eliminating navigation costs in the Apps, we make sure that these tools are accessible to the most vulnerable communities.

Challenges

The biggest challenge is that people use the tool, as well as to generate an awareness of the importance of monitoring their health on a daily basis, since this is the only way in which a medical authority can have a complete picture of the person's state of health.

The main way to address this, is through communications and outreach efforts, to build confidence in the adoption of these easy-to-use tools that become great allies in stopping the spread of COVID.

Partnership

No, for the MonitorFCS App, we collaborate with the Carlos Slim Foundation, whose experts are responsible for the support, monitoring and full operation of the application.

In the case of the COVID-19MX APP, the developers are the technical teams of the BBVA Mexico and Santander Mexico banking institutions, the administration of the application corresponds to the health authorities, while for Telcel users, there is no cost of navigation or in the messages (SMS) used by the App.

Replicability

Yes, once the health emergency is over, the MonitorFCS App can still be used to observe that there is no upturn in COVID cases and it could possibly be used to control other diseases or to improve in people's health and well-being.

On the other hand, free browsing of applications of this type can be applied to other apps that promote education, health, etc., with the intention of reaching the most vulnerable populations and contributing to reducing the digital divide.

Sustainability

Yes, while both of them are projects that seek people's health, they contribute to the increase people's confidence in digital tools and solutions and reducing the digital divide.

The projects are compatible with the Sustainable Development Goals promoted by the United Nations.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 10: Reduce inequality within and among countries|Goal 17: Revitalize the global partnership for sustainable development

Case23-Farmer Query System

Title of the project, Contact Organization Name, Stakeholder type, Country

Farmer Query SystemmPower Social Enterprises Ltd.Private SectorBangladesh

Beneficiaries

The main beneficiaries in the first case are our coworkers and their families, while in the second one is the general population. By providing tools that allow them to monitor their health on a daily basis, we contribute to avoid saturation of the health systems, and we offer peace of mind to people who does not have the disease or, where appropriate, we provide the necessary information so that they can get medical assistance.

Website

<https://www.mpower-social.com/>

Description

Rural farmers face a lot of challenges in their crop production and they usually seek advice from extension agents (Govt. and private companies), input retailers. Restricted movement due to COVID 19 means these farmers cannot access their natural knowledge source. But getting timely and customized information for their crop problems is crucial. Otherwise, farmers are likely to make choices that will accumulate at higher costs and even produce less than the expected amount of yield.

Considering farmers' local realities and technological efficiency, mPower has been offering it's remote agricultural expert consultation service 'Farmer Query System'. Farmer Query System (FQS) is a mobile app-based remote consultation service where users (farmer or

infomediary) can place queries. An agronomist provides appropriate and unbiased recommendations via phone call and SMS to the farmer's phone. To broaden the scope and impact we have partnered with local stakeholders such as NGOs, Donor funded projects, MFIs whose field staffs work as an infomediary to place the query from farmers. FQS has been installed in 16,600 mobiles across Bangladesh and 89,077 cases were administered.

The iCHASS of the University of Illinois has evaluated the impact of the service where 90% of farmers reported that the answer to their questions was adequate. As a result, 98% of farmer users trust the service as an information source.

ICT Tools

Farmers, family members of farmers, or infomediaries (lead farmer/ field staff) can place a query by responding to a series of branched questions with relevant images of the problem. The agriculture expert reviews all the information on a web dashboard and then sends the recommendations and solutions to the infomediary through a variety of digital channels including SMS (Short Messaging Services), Voice Message, or via phone calls which is then passed on to the farmers within 3-6 hours. Because of the solution, professional experts providing the service are no longer limited by geography and can attend many more cases on a given day than in traditional circumstances.

If Farmers have no smartphone or internet connectivity, they can give missed calls to a dedicated number. The expert will call back to the farmer, record the problem while on the call, and provide advice.

Despite the great penetration of mobile technology in rural Bangladesh, the usage of smartphones at a smallholder level is still very low. However, FQS infomediaries are acting as digital bridges to link farmers' of Bangladesh with the latest agricultural knowledge and enabling digital transformation.

Challenges

Low Smartphone Usage and Internet Connectivity Among Farmers: Despite great penetration of mobile technology in rural Bangladesh, usage of smartphones at a smallholder level is still very low. In this circumstance, we have to rely on infomediaries to deliver the service.

Infomediaries: One critical piece of FQS is "infomediaries" (e.g.intermediaries who assist smallholder farmers avail FQS. We have to seek and train a large number of such persons to deliver the FQS service remotely.

Farmers Unwillingness to pay for the Service: Operating the services sustainably without donor dependence requires a creative business/service model in view of the fact that farmers in Bangladesh have close to zero willingness to pay for agricultural information service.

Agribusinesses Unwillingness to Subscribe to the Service: Agribusinesses face major information gaps for making optimal decisions related to targeted marketing, production, and supply chain. However, despite our attempt, no agro-input companies have shown keenness to pilot the service and become a trailblazer.

Partnership

The service was developed through the funding support of USAID Agricultural Extension Support Activity and initially piloted partnering with Care Bangladesh, Dhaka Ahsania Mission. These NGO partners have extensive field staff capacity to sensitize FQS in AESA operational locations including 26 Upazilas across 12 districts. A total of 230 Field Facilitators among the AESA project staff and over 500 public extension agents from the Department of Agriculture Extension (DAE) were trained to use this mobile app in the field and so far the DAE's public extension agents had served 2,100 farmers. In addition, 30 Agriculture Information Communication Centre (AICC) agents under AIS, 115 Input Retailers, 3,800 Lead Farmers, and 227 ICT Champions used the service to reach farmers.

Later on, mPower promoted the service among its IFC funded Agro360 service in Southern Bangladesh. We also have partnered with Nobojatra Project of USAID, Rural Development Academy (RDA), FIVDB (an NGO who works in the wetlands region of Bangladesh), and Sajida Foundation (an MFI). These organizations are promoting the service among their beneficiaries amid COVID. More NGOs are likely to partner up in upcoming months as we are aggressively pushing the service among stakeholders.

Replicability

The FQS service is accessible from anywhere in Bangladesh. We are planning to replicate the service for Nepal. mPower is already working with the International Potato Center to make the service accessible from the farmers under their DDBIO project and can receive solutions through an App.

Sustainability

Agricultural information service has traditionally been provided to farmers for free- as a result, farmers do not have an intrinsic propensity to pay for agricultural advice. Therefore, in an effort to commercialize FQS and to make the service sustainable, we are looking forward to creating a business model where we can cross-subsidize services to farmers from revenue earned from elsewhere. Our business model comprises market insight and client engagement services for the private sector, based on information we obtain from the farmers receiving FQS service. FQS generates a continuous flow of data that can be the backbone of extremely valuable services that could be targeted to agro-input companies, food processing industries, crop insurance companies, and even relevant government entities and NGOs catering to the farmers.

We expect to reach a critical mass of 200,000 farmers within the next 2 years which will give

us a significant amount of data. Agribusinesses will subscribe for a service fee depending on the level of farmer outreach they will have from the system. We estimate our operational expenses will proportionately reduce as we reach more and more numbers of farmers. In turn, this increased number would attract more subscribing companies thus increasing the profit.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-agriculture

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 13: Take urgent action to combat climate change and its impacts

Case24-Situational Awareness Builder

Title of the project, Contact Organization Name, Stakeholder type, Country

Situational Awareness Builder G2K Group GmbH Private Sector Germany

Beneficiaries

Smallholder farmers are the least able to make informed decisions against the problems they face. Traditional field extension agents to farmers take years to reach smallholder farmer level. As a result, smallholders are always caught into the loop of suboptimal practices which results in higher production cost and lesser yield. The situation has been further worsened by climate change - now many traditional farming practices are no longer valid. In response, new agricultural technologies and practices are emerging. However, taking them to farmers is a different challenge altogether.

Farmers are well aware that as a source of agricultural information service, input retailers have a strong conflict of interest. But more often than not farmers do not have a choice to get a neutral expert consultation before they make a critical farming decision. This is where FQS plays an important role. Our FQS was designed and disseminated to provide farmers with a source of neutral expert agricultural consultation whereby they can verify whatever information service they get from their other usual sources including input retailers. It is geared to be a demand-driven solution with farmers raising a query whenever there is an actual need.

Website

<https://www.get2know.com>

Description

Our core product, the Situational Awareness Builder (SAB), is based on the principle Fast Detection, Fast Action. During a 3-week sprint in March we have managed to optimise our technology for the fight against COVID-19.

ICT Tools

Our software is an Intelligent IoT platform enabling a sustainable and holistic business digitization. We bundle several use cases of complex infrastructures (video systems, access control, bms, etc.)

Challenges

We overcome challenges by improving our technology and integrating algorithms to provide a tailor-made solution. The SAB is a scalable solution as additional use cases can be simply extended anytime

Partnership

We are able to support the client directly but in certain regions we need a local partner to support the installation

Replicability

The project is replicable. We are providing a software platform only. Local partners or clients are able to provide their own hardware.

Sustainability

It is an extendable modular software platform. Any use case can be implemented to improve workflows, security, processes and provide business intelligence

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-science

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case25-Tunisian government analyzes emergency call data to understand COVID-19 spread and provide more effective emergency response

Title of the project, Contact Organization Name, Stakeholder type, Country

Tunisian government analyzes emergency call data to understand COVID-19 spread and provide more effective emergency response
Targa / Ooredoo
Private Sector
Tunisia

Beneficiaries

We can integrate existing infrastructure and bundle it with our own and third party algorithms to make a building or several locations (smart cities) more intelligent

Website

<http://www.targa-consult.com>

Description

Established in 2004, the Ministry of Communication Technologies and Digital Economy (MTCEN) is an agency of the Tunisian government focused on improving Tunisia's communications sector and acquiring new technology to serve the country's 11 million people.

With the onset of the COVID-19 pandemic, the Tunisian emergency services saw a sudden, dramatic spike in incoming phone calls. They received more than 450,000 calls in the first month of the pandemic—the equivalent of two years' worth in pre-pandemic times. Unable to reach an operator, citizens were calling up to 10 times each. While some calls were placed to a dedicated COVID-19 hotline, many were placed to 1-9-0, the country's general emergency number.

The volume of calls put a strain on emergency services, restricting their ability to provide fast, effective care to those who needed it most. The number of virus-related calls to 1-9-0, rather than to the hotline, limited MTCEN's efforts to track the spread of the virus. Greater understanding of their call data was key to organizing a consistent, effective response to the virus.

MTCEN worked alongside Targa Consult and Ooredoo, Tunisia's largest telecommunications provider, to create dashboards that provide critical insights into call

volumes, times, and geographical variation. Operational in just 24 hours, the dashboards allowed Emergency Doctors to explore and interact with the call data, and make necessary operational changes.

The data justified MTCEN developing a public communications campaign that promoted the COVID-19 hotline, while a redirect solution was built to divert non-emergency calls. These improvements provided greater clarity into the call data, and by understanding call density and geographical variation, Local Emergency services can now monitor trends and identify contamination clusters across the country. Additionally, analyzing peak call times allows the government to manage emergency team response and other resources more effectively, helping them stay ahead of the virus.

MTCEN also discovered that 57% of calls to the emergency number were under 30 seconds, indicating callers were hanging up before reaching an operator. By visualizing average call length and average number of calls per person, operators can now call people back who were unable to reach the emergency number, ensuring citizens receive the critical response they need.

ICT Tools

Data Analysis and Data Visualisation dashboards that provide critical insights into call volumes, times, and geographical variation. Operational in just 24 hours, the dashboards allowed Emergency Doctors to explore and interact with the call data, and make necessary operational changes.

Challenges

Data Cleansing has been the main challenge, Family and friends have been put to contribution to be able to provide the Dashboards in 24h

Partnership

Telecom Companies to provide Data

Replicability

The concept can be replicated in any country provided we have access to the data either thru Telecom or call center companies

Sustainability

The Tunisian Medical Emergency Organisation (SAMU) has expressed interest to have access to the tool after the COVID19 to analyse calls and discover patterns

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 10: Reduce inequality within and among countries

Case26-Global Teens MeetUps

Title of the project, Contact Organization Name, Stakeholder type, Country

Global Teens MeetUpsEduHarborPrivate SectorGermany

Beneficiaries

Ministry of Health
Medical Emergency Organisation.

Website

<https://www.eduharbor.com/>

Description

Global Teens Program was created as a branch program of the Global Competence Online Project to give more support to all the students who have been studying from home during COVID-19, as well as support their families by running these weekly free Global Teens Meet-ups, where a professional educator will facilitate a 50-minutes meeting with students from all over the world.

Students from 9 to 15 years old get to meet each other online, play fun games that help them to discover/share how they are feeling in order to unwind and know that they are not alone. Each MeetUp has a Genius Hour where one of the students gives a sharing about something they have experienced or something they like, such as moving to another country, learning to code or teaching each other magic tricks.

ICT Tools

We have used Zoom, Skype and got an offer to use ClassIn as support from the company in China.

Challenges

The main challenge we have is finding a suitable platform, as well as students' poor internet connection or unstable connection due to weather conditions or individual situations.

Partnership

We have just started the project so we might be looking for partners later on.

Replicability

Yes, any educator with experience in online education can gather groups of students and follow a simple flow to create a trustworthy atmosphere for providing valuable support to students.

Sustainability

Yes, all students need is internet connection and a device. We also cover SDGs and sustainability as a topic.

Action Lines

AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 17: Revitalize the global partnership for sustainable development

Case27-RainRangers champion show

Title of the project, Contact Organization Name, Stakeholder type, Country

RainRangers champion show|Ywai Aqua Life Integrated systems|Private Sector|Nigeria

Beneficiaries

9-15-year-old students who can express themselves in English on an intermediate level. Students from Zimbabwe, UK, Spain, France, China, Zambia, South Korea, India, Colombia, Uganda have joined our Meetups so far. They receive support through fun activities and interactions with their peers online, seeing that everyone is in the same shoes right now. We have run 3 MeetUps and each time had up to 25 students registered.

Website

<https://www.aquaculture1.com/aquaculture-suppliers/ywai-aqua-life-integ>

Description

A mass media publicity and awareness campaign programme that vividly explains what people hear and read using online media showing how to access, made, use and dispose face masks properly.

ICT Tools

Internet technology

Challenges

Unprotective face mask covering make me vulnerable to CONVID -19 infection and improper use and disposal leads to contaminate and infection. A media programme promoting personal hygiene on mask

Partnership

Yes am looking for partners to reachout to many people, in the area to media awareness programme

Replicability

Yes is replicable on media platforms

Sustainability

This project is sustainable because minimum investment is required with great benefits to our audiences. Through our partnership with expect in various fields of endeavours we create awareness

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C9. Media

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 6: Ensure access to water and sanitation for all|Goal 17: Revitalize the global partnership for sustainable development

Case28-Retail Queue Management Solution

Title of the project, Contact Organization Name, Stakeholder type, Country

Retail Queue Management SolutionEarlyonePrivate SectorArmenia

Beneficiaries

Youth community awareness and mean of credible information across media platforms programme such as using materials at home to make mask that are safe to use.

Website

<http://earlyone.com/>

Description

Earlyone has released a new solution to battle the outcomes of the coronavirus outbreak. Besides, Earlyone has improved the existing solution by offering a new feature to its users - QR check-in that allows contactless activation of virtual tickets created with Earlyone app.

ICT Tools

Programming languages: C#, ASP, JavaScript
Technologies and systems: Android OS, Apple iOS, Linux/Unix, Microsoft Windows, Microsoft .NET Platform

Challenges

Due to the COVID-19 outbreak, many Governments around the world are putting restrictions and limits on the number of people that can gather in one place, such as supermarkets,

shops, pharmacies or public facilities.

Retail Queue Management Solution is designed to help retailers control entry to store letting in only allowed number of shoppers, and prevent crowding outside the premises.

Partnership

We are open to new partnerships all around the world as our solution can be implemented anywhere.

Replicability

This project can replicated to meet the needs of an institution that has unusual type of customer flows. This needs to be discussed.

Sustainability

The pandemic will leave its mark on the society. One of the main competitive advantages of organizations will become the extent to which they ensure the safety of their customers.

Action Lines

AL C2. Information and communication infrastructure

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case29-Retail Queue Management Solution

Title of the project, Contact Organization Name, Stakeholder type, Country

Retail Queue Management SolutionEarlyonePrivate SectorArmenia

Beneficiaries

Earlyone's primary beneficiaries are those institutions that have a limit on the capacity of customers that their premises can sustain at a certain time period.

The solution will help those institutions to

- Control entry to premises to limit the number of customers allowed in
- Limit opportunities for COVID-19 to spread by eliminating crowding outside
- Minimise waiting time of shoppers by scheduling their entry time beforehand

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Sustainability

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Action Lines

AL C2. Information and communication infrastructure

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case30-Genecoin e-health

Title of the project, Contact Organization Name, Stakeholder type, Country

Genecoin e-health Genecoin Private Sector Brazil

Beneficiaries

Earlyone's primary beneficiaries are those institutions that have a limit on the capacity of customers that their premises can sustain at a certain time period.

The solution will help those institutions to

- Control entry to premises to limit the number of customers allowed in
- Limit opportunities for COVID-19 to spread by eliminating crowding outside
- Minimise waiting time of shoppers by scheduling their entry time beforehand

Website

<https://genecoin.co>

Description

Genecoin is a tech startup developing blockchain based solutions to maximize social and environmental sustainability of biodiversity supply chains.

As response to the pandemic, we adapted our biodiversity projects so we could further develop them virtually and we created an e-health project to help fight the disease.

For the e-health project, we have partnered with the biotech startup Bio Bureau, who is developing technology for massive COVID-19 testing, and the Brazilian research center in telecommunication, CPqD. The goal of the partnership is to develop a blockchain application to safely store COVID-19 test results, guaranteeing both confidence in the information for all stakeholders and ownership and privacy for the patients.

We foresee that the platform could later be used as an immunity passport, allowing people

return from isolation without endangering others and enabling the resume of some social and economic activities that would benefit all.

ICT Tools

The main tool being used is blockchain technology. We are leveraging it to safely store COVID-19 test results and empower the user (civil society) with control over their data. They are able to share their own data with government authorities in a transparent but private way (anonymized) or even monetize it by giving access to the private sector, if that's their wish.

Challenges

The main challenges are availability of massive testing solutions, stakeholders engagement and funding. To be able to safely store data in the blockchain we first need test results and there is still no massive test solution available in Brazil. Get all stakeholders to agree on the most relevant features for the product has been a challenge as well. Securing funding to allow for the complete development of the solution is also a challenge.

Partnership

Yes, we are looking both for more laboratories engaged in massive COVID-19 testing that are interested in empowering the tested individuals and for stakeholders interested in integrating such platform with user facing applications for different economic industries that could benefit from massive test data, such as tourism sector for example.

Replicability

The blockchain platform could be used on the background to support different user facing applications, with different regional reach and characteristics.

Sustainability

On financial sustainability: we understand that the users data is valuable to different stakeholders that are willing to pay for it. The platform provides a channel for users to monetize their data and retains a fee in case they decide to do it.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case31-Inmarsat support for seafarers

Title of the project, Contact Organization Name, Stakeholder type, Country

Inmarsat support for seafarers|Inmarsat|Private Sector|United Kingdom

Beneficiaries

We see the main beneficiary as the individuals tested who gain control over their data. Other relevant beneficiaries are services and industries that need to resume activities, while guaranteeing the safety of their employees and society. The project has been sponsored by the Brazilian government with financial contribution of industries.

Website

<http://www.inmarsat.com>

Description

To promote seafarer well-being Inmarsat has formalised a 50% discount for crew voice calling services for three months until the end of June. It is also ensuring that calls made to the SeafarerHelp service provided by welfare organisation ISWAN (International Seafarers' Welfare Assistance Network) are available free of charge over the same period. The discount is available day and night to customers using FleetBroadband voice services. Steps are also being taken to accelerate the launch of ChatCard services for Fleet Xpress, with an introductory discount.

Inmarsat's Fleet Xpress retail users will also be able to benefit immediately from the launch of a free of charge COVID-19 video call service with a trained health professional, especially developed in conjunction with crew health management solutions provider Vikand and software platform provider FrontM to help shipping cope with the impact of the crisis. This is a pro bono service over dedicated bandwidth that allows the Master or Chief Officer to connect by video call to a trained health professional from Vikand. This is not a clinical care or emergency service, but it is a vital information resource to help crew at a difficult time for everyone.

ICT Tools

Mobile satellite services are being used to provide voice connectivity to seafarers far away from any terrestrial connectivity.

Satellite broadband solutions are enabling seafarers to use video conferencing technology to get important health information.

Challenges

Seafaring crew spend long periods away from shore-based loved ones and medical services. This can affect their mental and physical health, as well as that of their families. Making connectivity more accessible to them during these critical times can be of great assistance in relieving these stresses.

Partnership

Inmarsat is working closely with international aid organisations and its business partners to deliver this programme

Action Lines

AL C2. Information and communication infrastructure|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 17: Revitalize the global partnership for sustainable development

Case32-Inmarsat supports aid and NGO sector during Covid-19 crisis

Title of the project, Contact Organization Name, Stakeholder type, Country

Inmarsat supports aid and NGO sector during Covid-19 crisis|Inmarsat|Private Sector|United Kingdom

Beneficiaries

Crew of seafaring vessels and their families, who are able to stay in touch with each other and access important medical information

Website

<http://www.inmarsat.com>

Description

Inmarsat is providing further enhanced support to the vital aid and NGO sector during the Covid-19 pandemic, ensuring emergency responders can continue delivering critical aid and relief. Inmarsat's Broadband Global Area Network (BGAN) and IsatPhone 2 services are crucial connectivity tools for land-based organisations, especially for aid agencies and NGOs.

The new initiatives include enabling Inmarsat's BGAN Link plan for usage globally. This means that the normally static, geo-specific service can offer organisations the capability to operate cost-effectively and without complexity within a wider geographic range as they carry out their vital operations. Inmarsat will also offer its BGAN Pro Plan, with a new discount of 50% on the cost of any data usage over the monthly allowance. To support IsatPhone 2 pre-paid users, Inmarsat introduced an emergency voucher including 50% more airtime allowance and a longer validity period for users. Additionally for the IsatPhone 2 GSPS Standard plan, a 50% discount on calls over the monthly limit will be applied.

These new initiatives will ensure aid and NGO organisations have access to the connectivity they need to do their job, wherever they are.

ICT Tools

Mobile satellite service handsets and broadband terminals enable reliable connectivity to ensure that relief actions are informed and make the maximum impact.

Challenges

Covid-19 is affecting the operation of aid and NGO organisations, and the need for reliable connectivity, in a variety of ways. Many are at the forefront of the medical response, supporting health services through telemedicine in remote or developing areas. Elsewhere, the impact of the disease has caused many other issues to the wider economy and people's day-to-day lives, which are also being addressed through the work of NGOs, such as distributing food and other resources. Covid-19 is also adding increasing complexity to the daily operations for aid and NGO organisations as they respond to unrelated-crises, such as natural disasters or humanitarian events, causing remote connectivity to be more critical than ever. Effective emergency response depends upon reliable connectivity. Ensuring accessibility of reliable and robust communications technology can help these organisations perform their critical missions and coordinate amongst themselves and with local governments to create the greatest positive impact for affected populations

Partnership

Inmarsat works closely with aid and NGO partners, including through collaboration with the ITU, as a signatory of the United Nations Crisis Connectivity Charter, and its longstanding support of front-line response organisations like Télécoms Sans Frontières.

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C7. ICT applications: benefits in all aspects of life — E-environment|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 13: Take urgent action to combat climate change and its impacts|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case33-Testing how much you are at risk by Live Corona Online Based Testing System

Title of the project, Contact Organization Name, Stakeholder type, Country

Testing how much you are at risk by Live Corona Online Based Testing System|USOFT Technology|Private Sector|Bangladesh

Beneficiaries

Aid and NGO organisations involved in relief efforts related to pandemic, natural disaster, or other humanitarian operations. Making Inmarsat's satellite communications services more accessible will allow the humanitarian community to continue safely coordinating emergency relief operations, saving lives and helping to rebuild communities.

Website

<http://iushortbd.com>

Description

With this software you can assess for yourself whether you are at risk of being infected with Covid-19 or Novel Corona virus. It will be used to provide users with self-motivated information, future corona virus data analysis, big data and artificial intelligence technology.

ICT Tools

Big Data Analysis and Medical Research

Challenges

It will be used in data analysis, big data and artificial intelligence technologies.

Partnership

ICT Division, Bangladesh.

Replicability

Yes, Its can be implemented all over the world.

Sustainability

The results obtained from this software cannot be considered as health advice by an experienced doctor.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 17: Revitalize the global partnership for sustainable development

Case34-Expanding Access to High-Impact Social, Economic Education Resources across Africa during COVID-19

Title of the project, Contact Organization Name, Stakeholder type, Country

Expanding Access to High-Impact Social, Economic Education Resources across Africa during COVID-19
Intelsat Private Sector United Kingdom

Beneficiaries

Who are assess for yourself whether you are at risk of being infected with the Novel Corona virus.

Website

<http://www.intelsat.com/>

Description

Intelsat and Mindset Network NPC, an award-winning developer and distributor of educational materials in Africa, announced they have formally extended their partnership to ensure students, out-of-school youth, teachers, healthcare professionals and patients across Africa have access to high-quality and free educational television and online content.

Intelsat has partnered with Mindset since the nonprofit was founded in 2002, providing free access to satellite capacity and technology that allows Mindset to rapidly and efficiently broadcast and IP multicast its educational content to over 1,600 schools and 1,025 healthcare facilities across just South Africa.

This partnership extension comes at a time when nearly 300 million students throughout Africa have been impacted by school closures and other learning disruptions due to the novel coronavirus (COVID-19), according to UNESCO. Given the scope and scale of the impending crisis sweeping across Africa, Mindset and Intelsat are offering a free, unencrypted channel that allows governments, departments of education, broadcasters and nongovernmental organizations across Sub-Saharan Africa within Intelsat's satellite coverage area to downlink and redistribute Mindset's Learn channel.

Mindset educational resources focus on topics such as COVID-19, HIV/AIDS, tuberculosis, Ebola, child survival, science, mathematics, information technology and English. In addition to the broadcast, and IP streaming and multicasting distribution that Intelsat assists with, Mindset also delivers its educational content through multimedia, DVDs and print materials and their newly launched App.

ICT Tools

As the foundational architects of satellite technology, Intelsat operates the world's largest and most advanced satellite fleet and connectivity infrastructure. We apply our unparalleled expertise and the global scale of our network to connect people, businesses, and communities – no matter how difficult the challenge. With an integrated space-terrestrial network reaching 99% of the world's populated areas, Intelsat is uniquely positioned to help communities and business digitally transform. In Africa alone, Intelsat technology has played an integral role in bringing critical information and education content, and in connecting people throughout the continent for decades. For this project, Mindset broadcasts their health and education channels to clinics and schools across Africa using capacity on Intelsat 17 at 66°E.

Challenges

Distributing content and information across the African continent can be challenging because there are many communities in remote and rural areas that lack infrastructure and connectivity. The Intelsat-Mindset model makes it easier to overcome these content-distribution challenges and get important information in the hands of more people who need it.

Partnership

For this project, Intelsat has partnered with Mindset Network NPC, an award-winning developer and distributor of educational materials in Africa. Mindset is an independent, nonprofit organization aimed at the personal, social and economic development of Africans by creating, sourcing and delivering educational materials through appropriate media to the primary and secondary education community, the health community and other underdeveloped and under-resourced communities where development can be achieved through education.

Replicability

Yes, Intelsat's network covers 99% of the world's populated areas – even those in remote and hard-to-reach places.

Sustainability

This project has endured for 18 years, and we anticipate sustaining it for years to come.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C9. Media

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 10: Reduce inequality within and among countries

Case35-BODA Community Smart City Pandemic and Epidemic Suite

Title of the project, Contact Organization Name, Stakeholder type, Country

BODA Community Smart City Pandemic and Epidemic Suite
Casantey Business Solutions
Group
Private Sector
Ghana

Beneficiaries

Thanks to the extension of this partnership students, out-of-school youth and teachers across Africa have access to high-quality and free educational television and online content. Since 2002 this partnership has benefited 1,600 schools and 1,025 healthcare facilities across just South Africa. Today, governments, departments of education, broadcasters and nongovernmental organizations across Sub-Saharan Africa within Intelsat's satellite coverage area can downlink and redistribute Mindset's Learn channel.

Website

<http://www.casantey.com>

Description

Citizen alert, contact tracing, contact monitoring and data management solution

ICT Tools

Mobile devices, Artificial intelligence,

Challenges

scaling
publicity and funding to enable countries onboard

Partnership

no

Replicability

product is global and being used in some countries

Sustainability

solution is not covid 19 specific and can be used for any pandemic or epidemic

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case36-Expanding Access to High-Impact Social, Health, Education Resources across Africa during COVID-19

Title of the project, Contact Organization Name, Stakeholder type, Country

Expanding Access to High-Impact Social, Health, Education Resources across Africa during COVID-19Hellas SatPrivate SectorCyprus

Beneficiaries

citizens, governments , researchers, emergency services

Website

<https://www.hellas-sat.net/>

Description

Hellas Sat has partnered with Africom Holdings to assist the efforts of the Government of the Republic of Zimbabwe in the fight against the spread of COVID-19. Hellas Sat is providing free unlimited broadband connectivity to 127 public clinics and hospitals across the country. The deployment was undertaken by Africom Holdings which resuscitated connectivity to infrastructure that was initially set up in 2016 at various clinics and hospitals but due to challenges in accessing adequate foreign currency to pay monthly rentals the sites have been idle

ICT Tools

The connectivity service is provided through satellite (Hellas Sat 3 satellite @39°E). The satellite broadband gateway that used is installed and operated in HELLAS SAT Teleport facility in Cyprus. At the remote sites (hospitals and clinics) a satellite modem and small VSAT antenna is installed for the reception and transmission of the internet broadband traffic. The network is operating in star network topology.

At the remote sites (hospitals, clinics), telephony and Information Gathering tools are interconnected to the satellite modem for the use of the broadband service provided. Information gathering provides faster times in collecting data and moving it to policy makers. Telephony aids faster coordination and lowers communication cost.

Challenges

Key challenges were the set up of the modem/remote terminals and interconnection of the ICT tools at the hospital and clinics, during the lock-down. Local technical personnel undertook this task successfully.

Another challenge is the funding of such project. The requirement and need for such service is a fact, and it is a service that it is greatly required. The health communities in these remote areas of Africa rely on institutional funding like UNPD and World bank and other funding to financially support these must-have services.

Partnership

For this project Hellas Sat has partnered with Africom Holdings, a leading converged communication service provider. A licensed telecommunications operator; Africom is the first company in Zimbabwe to challenge all convention by offering converged communication solutions. With all other telecommunications operators offering traditional products, Africom is the first company to integrate data, voice and video over broadband as well mobility into a single solution.

Replicability

The project that includes the provision of broadband connectivity over satellite as well as the integration of ICT for the provision of services to Hospitals and clinics can be replicated and implemented also to other countries with low penetration of terrestrial connectivity.

Sustainability

The gains and benefits offered by this project and its impact on the operations of the hospitals and clinics is a great mean for its sustainability. Equipment needed for the provision of the service are already in place and available. The benefits for using them in combination with satellite broadband will eventually create the required resources (financially) for the continuation of the project.

Action Lines

AL C2. Information and communication infrastructure|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 10: Reduce inequality within and among countries

Case37-Leveraging Information and Communication Technology for Irrigated Agricultural Information

Title of the project, Contact Organization Name, Stakeholder type, Country

Leveraging Information and Communication Technology for Irrigated Agricultural Information
8villages Indonesia Private Sector Indonesia

Beneficiaries

Thanks to this partnership, 127 public clinics and hospitals around the country are benefiting from broadband connectivity. This collaboration has also allowed Africom Holdings to resuscitate connectivity to infrastructure that was initially set up in 2016 at various clinics and hospitals but due to challenges in accessing adequate foreign currency to pay monthly rentals the sites have been idle

Website

<https://8villages.com/>

Description

"Our project promotes the use of technology to reduce the face-to-face activity on the ground of the irrigated farmers in Garut (West Java) and Lombok (West Nusa Tenggara). The conventional activities among farmers and extension worker is usually conducted by face-to-face to exchange information and extract solution from the extension workers. But since the Covid-19 Pandemic, people will reduce the conventional way of exchanging information as much as they could. In result, farmers have to find alternatives to communicate better to get needed information regarding farming.

Through our platform, it will be possible for farmers to get information not only from their designated extension workers, but also broaded from many extension workers and farmers with the similar problem with them from all over the country. It even made possible for extension workers to act as the surveyor and extract crops data from farmers without jeopardizing the health of both parties; the farmers nor the extension worker.

It also has been proven that the exchange of information in the platform is more effective

and more efficient than the conventional way, since we also provide information in the form of articles, videos, crop calendar, price information and so on."

ICT Tools

"Smartphone, farmers will get the free access of reliable information on how to cultivate their crops better.

They will also be able to interact with experts from universities and each other to discuss their problems in the field. "

Challenges

Since Maret-April 2020, our data acquisition increase up to 100%, but on April-May 2020 becomes the main challenges that encountered. Our acquisition data has declined up to 60% since enactment the Large-scale social restrictions on this Pandemic.

Partnership

yes, we are looking the potential partners collaboration in Indonesia.

Replicability

Our project can be replicated because the problem that we are trying to solve is a common problem that occurs in rural communities in general, especially farmers. The problem in question is access to information and technology. That is the root of the other secondary issues, including funding, access to agri-input, and access to the market. If access to information is opened freely among farmers, they will be freer to get other secondary access. In the implementation of the solution that we're running, we only implemented one area, Central Java. Seeing the success of information disclosure in Central Java is quite high, so we do replicate in the other provinces in Indonesia.

Sustainability

"Our project seems to have significant benefit for both farmers and stakeholders. In the farmers' side, they have been able to get reliable information regarding their problems on the field freely, where they can also get the information about crop calendar, market price, fertilizer information and many more through just one app on their phone. They can also give stakeholders more accurate data through the surveyor (extension worker) that shows what kind of crops do the farmers cultivate, cultivation methode, farm size, all the way to the productivity prediction. This way, stakeholders can predict how much money the farmers' need for the initial capital, what kind of fertilizer do they need to cultivate, what kind of pesticide, until how much crop the farmers can produce in order to be marketed in certain markets.

This benefits shown that this project is sustainable because we deliver sustainable community chain between farmers and stakeholders. Not only that, we also broaden

farmers' knowledge to be able to interact with each other and act as digital community in our platform."

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-agriculture

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Case38-TEACH FOR FUTURE – Educational Transformation of Adults through Innovation, Technology and Entrepreneurship

Title of the project, Contact Organization Name, Stakeholder type, Country

TEACH FOR FUTURE – Educational Transformation of Adults through Innovation, Technology and Entrepreneurship
The National Association of Public Librarians and Libraries in Romania
Private Sector
Romania

Beneficiaries

Indonesian farmers. We're starting from collecting data from farmers to registration in our platform, so farmers can get access to 8villages services easier and farmers can get information access, access to experts, up to online market access to sell their crops with the end consumer. We also provide an innovative service of question and answer among villagers and experts in the world of agriculture, livestock, and fisheries with the use of information-based application technology that is integrated with the use of SMS, websites and android.

Website

<http://www.anbpr.org.ro>

Description

- STRATEGIC ANALYSIS - understanding of the methods, approaches and tools used to promote the acquisition of ICT, innovation management and entrepreneurship competences. The preliminary analysis, documentation & initial research will be carried out both in the specific field of adult education and in the non-education sector. - formal, using recommendations / best practices, a structured learning plan and innovative teaching tools.

- CURRICULUM DESIGN - design of methods of adult education that include both the expertise of the consortium members and the expertise of other entities recognized in the field.

- TRAINING MATERIALS - learning support materials for trainers and trainees based on good practices and case studies in the field, to optimize the training process and results.

-PILOTING & TESTING - in 3 countries (Romania, Greece, Bulgaria) with the participation of 210 adults in 3 countries

ICT Tools

We initiated a Center of Excellence in Romania for testing and certifying the competences in the IT field and the transfer of good practices in order to host a mentoring campus in the field of 3D modeling and printing, a Center of Excellence in Bulgaria in order to host a mentoring campus on entrepreneurial and leadership skills, and a Center of Excellence in Greece in order to host a mentoring campus on innovation management & network collaboration.

Several online channels are used for communication and cooperation between partners, including: Facebook, Skype, Google Docs, Google Drive, Webex, GotoMeeting

Challenges

Taking into account the COVID-19 effects on the “TEACH FOR FUTURE” activities and the impossibility of organizing face-to-face activities, some project activities were or follow to be postponed.

The main problem was the lockdown situation. Due to the COVID-19 pandemic all our activities moved Online. There is a problem attracting people to participate in face to face, physical training activities. Also, day by day we see restrictions in traveling to other Balkan countries. One solution would be to move the coming transnational project meetings to organized virtually and prepare part of the training activities to be organized online.

Replicability

- By distributing the batteries of personalized information post-implementation to a complex database that will contain all the persons interested in the field of action of the project.

- During the project sustainability period, ANBPR and its partners will ensure the availability of resources and will ensure that they will be used by other interested organizations that it works in the field of adult education (NGOs, educational institutions, libraries, companies, etc.).

Sustainability

- Based on the strategic partnerships of the Applicant and its partners with entities active in the field of adult education, good practices will be shared regarding adult learning mobility and intellectual products;

- Partners will ensure that libraries or organizations involved in educational activities will use

the innovative results obtained as a result of carrying out this project in their own adult training activities;
- Partners will encourage the libraries or organizations participating in the dissemination events to capitalize on this important opportunity for adult education, for their involvement in learning activities and for recognizing learning outcomes;

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 10: Reduce inequality within and among countries|Goal 16: Promote just, peaceful and inclusive societies

Case39-COVID-19 Research in Arabic

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Research in Arabic|Arabic Digital Reform Institute (ADRI)|Private Sector|New Zealand

Beneficiaries

Target group: adults, employees / volunteers of partners and / or volunteer members of libraries in Romania, Bulgaria and Greece.

Direct beneficiaries: 210 adults (users of library services that can be employed in various organizations or aiming to start a business, with low skills, librarians) and 10 employees / volunteers of the partners and / or volunteer members of the libraries in Romania, Bulgaria and Greece.

The project improves access and participation in training and mentoring activities of at least 33 disadvantaged adults - discriminated on the basis of ethnicity, from rural areas, persons with special needs, who have not had a job in the last 12 months, with a poor financial situation.

Indirect beneficiaries: 5000 librarians, 10,000 adults, 2 authorities, 5 economic agents, 5 NGOs, 3 universities, from the 3 countries and the EU, who will be informed and access the innovative results.

Website

<https://Adri.co.nz>

Description

Our project aims at providing credible and reliable literature and content in relation to COVID-19 in Arabic. There's currently very little research currently existing in Arabic and therefore, all Arab communities revert to social media platforms for seeking information on COVID-19.

ADRI has partnered with Cambridge University Press, to translate to Arabic a large number of COVID-19 related research from open access publications, to Arabic and then make available online for the public across the MENA region. Our translation is particularly cost-effective as we utilize AI and machine learning to reduce the human efforts to 5-10% of the traditional translation practices.

ICT Tools

ADRI's systems, comprise a distributed architecture of functional applications, which combined create a fully automated translation and editorial practice with minimal human interaction. The involved technologies in these systems, include, primarily, AI, Machine Learning, Neural Networks, Cloud, We and Mobile Technologies.

Challenges

The primary challenges are funding and awareness. Despite utilizing technology has reduced the cost of translation to the fraction of the traditional practices, nonetheless, the project will bear an initial requirement for financial resources. This issue could be resolved via partnering with international corporates who'd like to effectively invest their CSR funds towards real impacts in needful communities. And to overcome the awareness challenge ADRI requires an extended outreach into all the Arabic communities and access to the policy-makers and decision-makers of those states.

Partnership

Yes, we look forward to partner with organisations that have an interest in the peace and well-being of the Middle Easter and North African communities and would like to make a tangible contribution to raise the capabilities of these communities. We welcome interest from, Government agencies, international organisations, banks and academia.

Replicability

This project is particularly targeting the Arabic research and is replicable across all the 22 Arab countries. Nonetheless, We are also able to replicate this project across other non-English communities across the globe where needed. The only challenge is that the cost could get higher as ADRI would need to higher new academic team in that particular language to conduct the quality assurance process of the translated literature.

Sustainability

Yes, ADRI will be delivering the translated research material via subscription. The subscription fees are intentionally low to ensure our content could be available to the larger community.

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

[Case40-covid19.aina.dz](https://www.about.aina.dz)

Title of the project, Contact Organization Name, Stakeholder type, Country

covid19.aina.dzGEOSYSPrivate SectorAlgeria

Beneficiaries

We are aiming to make the content primarily available for the Health Ministries and all the health sectors of the MENA states. Our secondary targets would be the universities and health NGOs who're currently involve in the COVID 19 response across the region.

Website

<https://www.about.aina.dz>

Description

Our project is based on a platform that was awarded at the WSIS 2014. It is a collaborative space platform that each African country can use while keeping its data confidential. Data from each country will be analyzed after the pandemic

ICT Tools

We use webmapping technologies. The geolocation of victims in a territory using environmental data (Hospital, air quality, availability of the medical profession, etc.) will allow analysts to do geodecisional.

Challenges
Collecting information from reliable sources
Partnership
Yes . World Health Organization
Sustainability
Yes, in all poor and developing countries
Action Lines
AL C1. The role of governments and all stakeholders in the promotion of ICTs for development AL C3. Access to information and knowledge AL C5. Building confidence and security in use of ICTs AL C7. ICT applications: benefits in all aspects of life – E-health AL C7. ICT applications: benefits in all aspects of life – E-environment AL C7. ICT applications: benefits in all aspects of life – E-agriculture
SDGs
Goal 3: Ensure healthy lives and promote well-being for all

Case41-Online Agribusiness Directory
Title of the project, Contact Organization Name, Stakeholder type, Country
Online Agribusiness DirectoryAgasha Group LtdPrivate SectorUganda
Beneficiaries
The Ministry of Health, health science research centers, research laboratories
Website

<https://www.scribd.com/user/304891492/Agribusiness>

Description

To publish digital version of AgaSha's Agribusiness Directory which can be accessed via website and through USSD. This will connect farmers to their markets and partners everywhere at any time.

ICT Tools

Use website for smartphone users and USSD for simple featured phones to disseminate information.

Use mobile money gateways to receive payments.

Use WhatsApp & Telegram groups to market the website.

Challenges

COVID-19 lockdown led to restrictions on movements and physical networking events. It is difficult to access contacts of former and new clients and suppliers. Using digital database is a solution

Partnership

Yes. IT expertise in developing the website whose information can be accessed by paying a monthly subscriptions and it is connected to USSD system. The web can have downloaded PDF and Excel documents.

Replicability

Yes. It can expand to other East African countries. We already have Agribusiness database for Kenya, Tanzania, Rwanda, Burundi and Ethiopia which have also been affected by lockdowns.

Sustainability

Yes. Members will access information on website by paying a subsidized monthly access fee. The USSD text will be charged & there will be revenue sharing with the Telecom companies. Advertisements too

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 17: Revitalize the global partnership for sustainable development

Case42-Smart Sustainable Farms

Title of the project, Contact Organization Name, Stakeholder type, Country

Smart Sustainable FarmsCenter of Information technology PakistanPrivate SectorPakistan

Beneficiaries

Farmers and agribusinesses in rural areas along the agricultural value chain can access reliable information in real time and network with urban based buyers and suppliers.

Website

<http://E-Pakistan.org>

Description

Smart Sustainable Farms (SSF) aims to engage Agriculture Land Owners at Grassroots, Local Community Unemployed (All Already Unemployed or Became Jobless due to Covid-19 serving in Local organizations in Pakistan Or Repatriated from Abroad) in ICTs Based Services (Already Developed by CIT) for Offering ICTs based Services & Solutions like Facilitation Services for Govt / Banking Loans, availing Internet-based Govt Servies, Advisory Services, Jobs, Storing SDGs Progress (Goal / Target-Wise on Projects being Carried Out by NGOs, SMEs, Schools, Hospitals at Grassroots ... CIT Partner Organization SDGs Academy of Pakistan (www.SDGsAcademy.pk) has prepared an On-line System for this Function and Exclusively offered to CIT in Pakistan)

ICT Tools

DataBases for Information Storage / Process (From Village / UC level), Training Programs (On-Line Earning, Certificate Courses to Learn IoTs applications (www.lot-Center.pk an Exclusive Partner Organization of CIT), Training Programs on SDGs, Basic and Advanced Learning in ICTs Solutions / Services, Organic Farming, Fish and Livestock Farming etc

Challenges

The main Challenge is Internet Penetration, Outreach till the last mile and Creating Required Awareness to Jointly Work in Smart Sustainable Farm under the Model of Circular Economy. By taking available help from the Government (Internet in Unserved Areas, Partnerships

with Internet Service Providers (ZONG etc) Internet outreach is being managed, Local Community Champs, and Local body Functionaries are being engaged to meet these Challenges

Partnership

Global Partners offering Agriculture Extension based services (On Profit Sharing Models), Universities/ Training Courses Providers to Impart Latest Courses to Young Jobless Graduates for Local and International Markets and Global NGOs interested to Work in Tourism Initiatives in Pakistan

Replicability

Project Can be replicated in any Developing Country having Huge Piece of Unused land and Jobless youth

Sustainability

Yes, totally sustainable as all stakeholders have ' Skin in the Game ' and Utilizing Govt Loan Offers (starting from August 2020 at a Mega level) Youth would be empowered at a Large Scale to Get Engaged in their own areas and stop Population Migration from Villages to Cities

Action Lines

AL C2. Information and communication infrastructure|AL C4. Capacity building|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C7. ICT applications: benefits in all aspects of life — E-employment|AL C7. ICT applications: benefits in all aspects of life — E-environment|AL C7. ICT applications: benefits in all aspects of life — E-agriculture|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 10: Reduce inequality within and among countries|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources

Case43-Re -use Waste Restoring Health

Title of the project, Contact Organization Name, Stakeholder type, Country

Re -use Waste Restoring Health Last Mile Medicine Private Sector Kenya

Beneficiaries

Primary Beneficiaries are Youth at Grassroots looking for new Jobs and Entrepreneurship based Engagements on the Model of LEARN - Earn - Lead

Website

<http://lastmilemed.org/>

Description

Disrupting pharmaceutical supply chain by redistributing unused, unexpired medicine that would otherwise be destroyed through an online platform matchmaking from health facilities, manufacturers & wholesalers with the needs of patients in safety-net

ICT Tools

Cloud computing , Big data , Machine Learning and Artificial intelligence. This would in turn help with making predictive, qualitative and quantitative prediction for the solution to be developed hence making the solution as robust as possible as all assumptions are tested while the data is processed and regular reviews are done to ensure most optimal quality/output.

Challenges

Regulation barriers in health for entrepreneurs this can be overcome by close collaboration between government and entrepreneurs who are coming up with solutions to solve health issues.

Partnership

Pharmaceutical companies producing medicine in non-communicable disease, Funders , Agencies, corporation and collaborators in health sector and human rights organisations

Replicability

We are building a platform software which we aim at outsourcing thus being able to be replicable and adaptable in other country or context but serving the core purpose.

Sustainability

We are sustainable in the sense that we don't prescribe we work with doctor's to do this, reducing our human resource. On the other hand our platform offers a matchmaking thus reducing on expenses

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 10: Reduce inequality within and among countries|Goal 12: Ensure sustainable consumption and production patterns

Case44-Saahas

Title of the project, Contact Organization Name, Stakeholder type, Country

SaahasSaahasPrivate SectorIndia

Beneficiaries

Under insured or Uninsured who have exhausted their option in financing their prescription medication in need for life saving medicine and suppliers.

Website

<https://www.saahas.space>

Description

Saahas comprises a directory of support across 196 countries, a database of guidance notes on understanding gender-based violence and ways to respond to them. The directory of support comprises over 40000 organizations across 196 countries offering medical, legal, education / employment, resources (food, shelter, clothing, emergency support), consular

and refugee-specific support, police and ambulance services for survivors of gender-based violence and child support service. The app has been curating resources for survivors of domestic and other forms of gender-based violence during lockdowns.

ICT Tools

Mobile App
Web App
Facebook Chatbot
Telegram Channel and Bot

Challenges

The lack of available resources for survivors at all times during the lockdown.

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 5: Achieve gender equality and empower all women and girls|Goal 16: Promote just, peaceful and inclusive societies

Case45-Zimba Mart - SME E-commerce and Digitization Resilience Programme

Title of the project, Contact Organization Name, Stakeholder type, Country

Zimba Mart - SME E-commerce and Digitization Resilience Programme
Zimba Women
Private Sector
Uganda

Beneficiaries

Survivors of gender-based violence across 196 countries

Website

<https://www.zimbawomen.org/>

Description

Women-owned Small and Medium Enterprises (SMEs), which make up an estimated one fifth of the Ugandan economy in terms of employment, are likely to suffer disproportionately as a consequence of this outbreak. As Zimba Women, we have introduced the SME E-Commerce and Digitization Resilience Programme through the Zimba Mart e-commerce platform to respond to this challenge by (1) Identifying women-owned or women-led SMEs which have fundamentally sound value propositions but have been severely impacted by COVID-19; (2) Providing dedicated COVID-19 impact analysis and contingency planning to these SMEs through offering business training and digital literacy training via our online platforms; (3) On-boarding SMEs onto the women-owned, women-tailored e-commerce platform to both adjust to the market dynamics created by COVID-19 lock down actions and begin to take advantage of the latent market opportunities offered by e-commerce in Sub-Saharan Africa; and (4) Provide bespoke follow-on support to the women-owners/leaders to enable them to protect their enterprises and take full advantage of e-commerce opportunities. All support is also provided remotely when necessary.

ICT Tools

We have adopted the use of e-commerce digital tools which have presented numerous opportunities. Africa is a massive market, with a growing population of 1.28 billion people, a network of over 15 million SMEs and merchants and a rising internet connection of 453 million users. Research firm Statista estimates that the e-commerce sector in Africa generated \$16.5 billion in revenue in 2017 and forecasts that to grow to \$29 billion by 2022. In general, and during lock down, SMEs on-boarded on the Zimba Mart platform have benefited from adopting an e-commerce approach in a number of ways, including lower transaction costs; reduction in advertising and promotion costs; rapid communication between buyers and sellers; ability to reach new customers; shorter supply chains; and eliminating physical limitations. Due to this; we have moved most of our women trainings online to enable the on boarded SMEs learn how e-commerce is enabling their business growth and to encourage them to update their social and business pages to take advantage of the increased traffic to their sites due to the Zimba mart. The Zimba mart has also given us more visibility as we have customers from not only Kampala our main office location, Eastern and Western Uganda but also as far as the US from customers making food orders for their families in Uganda.

Challenges

Technology both hardware and software: As we grow our vendor database, obtaining technology to achieve growth so that we are able to accommodate more vendors onto the platform is still a challenge such as address system software and using the appropriate shopping cart solution that shall boost growth on the platform.

Some of the women do not have equipment like mobile phones or computers to access the mart to monitor their sales and orders – currently our support center has five networked computers. In a bid to solve this, after COVID-19 lock down we want to increase on these

so that we are able to support more women.

In Uganda, there is still lack of awareness and capacity constraints among Small Medium Enterprises and consumers which are hindering the uptake of e-commerce. – We plan on increasing our visibility and those of our vendors through advertising on various platforms like websites and social media, advocacy during the training and newsletters. Generating the targeted traffic towards the platform is one of our major key needs.

Partnership

Yes, currently we are looking for partners who are intent on raising bars to enable the empowerment and development of women entrepreneurs in Africa by adopting digital transformation such as Online Payment System providers such as PayPal, WePay, Logistic support partners like DHL, Safe boda, Internet providers like MTN, Airtel, International organizations such as International Trade Center, International Council for Small Businesses, USAID, Cross border trade organizations for our exporters and Fulfilment centers/warehouses.

Replicability

Yes, this project can be replicated. Zimba Women is currently working with over 10000 women-owned businesses and women in STEM in Uganda, Kenya, Nigeria, South Africa and other African countries. These women have received business training and digital literacy training through our technology platforms. Through the Zimba Mart e-commerce platform powered by Zimba Women, 70% of women have been able to earn additional income for their families because they can market to buyers outside their community. They also get fair pricing because Zimba Mart enables them to deal directly with the customer instead of unscrupulous middlemen. The Zimba Mart targets up to 1,000,000 of the 6,000,000 million Ugandans with access to the internet. We have seen first-hand the impact these improved businesses have had in the lives of these women. With stronger finances, they have been able to improve lives for their families like better education, better nutrition and better healthcare. This same model can be replicated within other female-oriented business communities in other countries because access to larger markets is a huge motivating factor for self-employment and entrepreneurship for women in Africa.

Sustainability

Yes, this project is sustainable in the sense that the different Small Medium Enterprises (SMEs) on boarded onto the platform shall continue to receive businesses development trainings from the Zimba Women consultants and professionals. From these trainings, the female vendors will understand how to ensure product quality and in turn there will be an increase in demand for their goods in areas beyond their current network reach. As the community of female led SMEs grows in Uganda, so does the number of women vendors increase on the platform. Our women have a higher propensity to use their earnings and increased bargaining power to buy goods and services that improve family welfare which creates a virtuous cycle: female spending supports the development of human capital, which fuels economic growth in the years ahead. In terms of economic sustainability, there

will be increased flexibility towards achieving the consumer's requirements as a results of these trainings. The female vendors shall also have access to a global reach of consumers whom they would not have had access to via offline channels. The Zimba Mart platform also aims at achieving social sustainability through bringing more women that were previously marginalized from the labor market into the formal workplace and equipping them with digital literacy skills. There will also be a link between the Ugandan market as a developing country and other developed countries. In turn, this will expose the vendors to a global pool of consumers.

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-employment

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case46-AAAMeet.in

Title of the project, Contact Organization Name, Stakeholder type, Country

AAAMeet.in|QR|Crypto SAP|Private Sector|Switzerland

Beneficiaries

Zimba Mart focuses specifically on women. There is no marketplace, physical or online that is specifically targeted to women merchants, yet women form the largest percentage of small scale suppliers of home, agricultural produce and clothing apparel.

The main benefits include;

Online marketing: The platform is intended to expose products from women entrepreneurs to local and international markets. We are currently promoting these products on our various social media platforms such as Facebook, Instagram and twitter, Product branding and packaging: As we onboard these businesses, they have to meet a certain standard and hence these businesses are required to improve their products and branding in this regard,

Inventory Management: During the continuous process of updating the stock on the mart, businesses can keep track of inventory from our records.
Financials and bookkeeping: The businesses keep track of sales on Zimba Mart and are

advised on how to grow revenue based on the demographics that are interested in their products. Data provided by google analytics.

We create employment opportunities for women by easing their access to market for goods and services they produce using e-solutions and digital marketing.

Business to Business Linkages for example a baker on our platform will be linked to a wheat flour supplier reducing cost of acquiring goods and may be able to negotiate lower prices because of the Zimba Women relationship.

Website

<https://qrcrypto.ch>

Description

Providing a safe and secure way for videoconferencing in India and the world. AAAMeet.in is free to use on PC/MAC and only 1\$/CHF under the form of its companion app Devaaa available on Android & iOS.

ICT Tools

Videoconferencing, to enable remote working

Cryptography, to enable doing it securely

Challenges

Branding and marketing; could be overcome with the ITU's support (as ITU-T members, we are expecting that as a possibility provided to members who actively develop ICT solutions for COVID19 response).

Partnership

Beyond the ITU, we are looking for organizations interested in developing similar solutions for their own needs, likewise possible partnership with the ITU on developing big blue button for big events

Replicability

Yes; aaameet.us and the Devaaa app is also available in the USA, and we are gradually making it available to the rest of the world. As a cloud-based service, it can be further extended and replicated.

Sustainability

We strive to use reputable cloud providers in order to ensure sustainability, as part of an ever-evolving process towards increased performance and efficiency.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case47-Enhancing Internally Generated Funds (IGF) Through Technology

Title of the project, Contact Organization Name, Stakeholder type, Country

Enhancing Internally Generated Funds (IGF) Through TechnologySubah Infosolutions Ltd.Private SectorGhana

Beneficiaries

All persons looking to work, or otherwise connect remotely, in a safe and secure environment, where they know for sure their data will not be resold !

Website

<https://www.subahghana.com>

Description

Deployment of systems (hardware and software) to assist local assemblies and municipalities collect property rates and building operating permits as well as other legislated levies

ICT Tools

data collection and payment platform

Challenges

Computer Literacy (how to administer the system). This challenge can be overcome through general ICT training and training on the deployment, usage and administration of the system

Partnership

Yes.....in sensitization on the efficiency and advantages of leveraging on technology in the collection of local government legislated taxes and levies as well training on the usage

Replicability

Yes.....through deployment of already developed standardized software

Sustainability

Yes....technology is the way to go now so since it is technology based it is sustainable with relevant updates.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case48Afya Rekod Covid-19 Initiative

Title of the project, Contact Organization Name, Stakeholder type, Country

Afya Rekod Covid-19 InitiativeAfyaRekodPrivate SectorKenya

Beneficiaries

Local governments subsidiaries

Website

<https://afyarekod.com/>

Description

The Afya Rekod platform will enable users to capture real-time data that will heat-map areas where COVID-19 infections are growing, and monitor the growth in real-time, by collecting user-generated information from users, across multiple geographic locations, to allow for sufficient data analysis. Its decentralized nature, that enables people to update their own records, anytime, anywhere, and in multiple formats, will support the relevant health authorities with the efficient general management of the spread of the disease, resource mobilization, and patient support, where required.

Afya Rekod Covid-19 dashboard allows the county to monitor in real-time what is happening and run various granular reports for government authorities and local management teams. This is one of our key tools for managing Covid-19. The county can visualize their full operation and run various layers of result or mapping.

ICT Tools

The Afya Rekod platform was developed, in light of the coronavirus pandemic, to support global efforts to curb the disease. It is a centralized, multilingual, intelligent health data platform, built with Artificial Intelligence (AI) modules and blockchain technology, to ensure that it is adaptive, dynamic, and secured for public usage.

This platform converts structured and unstructured data to global health data record-keeping, using Fast Healthcare Interoperability Resources (FHIR) and other international standards. The Afya Rekod platform will essentially provide a virtual repository for individuals to store their health data in real-time. This platform, which also allows for backward and forward integration with multiple Electronic Health Record Systems (EHRs) and Medical Electronic Record Systems (MERs), will enable streamlined information-sharing to empower health workers.

Challenges

Africa has limited doctors and limited access to health care services.

The lack of data disproportionately affects low and middle-income countries globally with 60 percent of these countries not reporting any data, covering 2 billion people.

The lack of health data has enormous adverse effects. Without health records, doctors cant serve patients properly, and patients cant get access to health care on time. some of the effects include:

- In-efficiency that leads to untimely deaths

- Low-quality health care and access to health care services, i.e. HIV, Cancer etc
- Delayed response to outbreaks, and epidemics that kill millions in Africa, i.e. Ebola and more recently Covid-19
- In-ability to manage and deal with changing and resistant virus, i.e. new strand of Malaria

With the whole world struggling with the Corona Virus pandemic, it's currently evident to the world that centralized health management systems that rely solely on people walking into a health facility to acquire the patient data are not sufficient.

Afya Rekod is a decentralized medical data storage platform that allows patients to store their health records, the medication they take as well as keep journals of their health statuses and that of their kids and families.

The platform is AI-driven uses various AI modules to help detect abnormalities, detect early outbreaks and monitor mobility and evolution of diseases via timely data analytics.

Partnership

We already have commitments from a number of partners in the ecosystem, including Governments, NGOs, and private clinics in Kenya, Zambia, Cameroon, and Nigeria. Our partners are critical in allowing us to successfully deploy in local markets.

Some of the partners we are looking for include;

- Governments: that are looking to manage COVID-19 effectively from contact tracing to outbreak mapping and issuing of Certificates.
- Hospital partners; Facilities that don't have an inhouse health management system, but are keen to improve health treatment.
- NGO's; Organizations that are keen to improve the health services in Africa.
- Service providers; who rely on actual data to improve their services.
- Doctors; who are willing to consult virtually during their free time.
- Social Health workers; from organizations that require consistent communication, and data-driven knowledge to continue to provide better health services for their sick patients.

Replicability

While we are initially piloting in Kenya, the plan is to expand to 3 other African countries, including Zambia, Cameroon and Nigeria by the end of 2020.

Afyarekod's solution can be replicated in any region, as long as we have trustworthy local partners to help with data housing and deployment.

Sustainability

We are working with local partners who want to support their communities, while our current partners have allowed us to provide the platform for free during this Covid-19 pandemic we do however have a dynamic business model. A hybrid between a freemium and a SAAS model, where organizations pay for their patients; who are able to use the platform at no cost.

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 3: Ensure healthy lives and promote well-being for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries

Case49-Capacity Building for Women SMEs

Title of the project, Contact Organization Name, Stakeholder type, Country

Capacity Building for Women SMEs|InspireMill|Private Sector|Pakistan

Beneficiaries

AfyaRekod platform is not a replacement for the current health systems used by various organizations; instead, we have democratized the health data collection process. The patient will be responsible for storing and managing their medical records.

A majority of the health organizations within and outside the urban African towns lack a good system to manage their patients.

While creating this platform, we had in mind general health facilities, organizations and patients.

The shift from organizations to individual users will expand our target market, virtually every person in the continent is a targeted patient for AfyaRekod, including the doctors. We have segmented our user into three broad categories

1. Patients
2. Governments
3. Private Clinics & Hospitals
4. Health providers ie Insurance companies

Website

<http://www.inspiremill.com>

Description
Delivered online training for women SMEs to help them digitize their portfolio and make sales online through social mediums/ market places.
ICT Tools
Facebook, Instagram, Twitter, Streamyard, Zoom
Challenges
Access to internet, payment and logistics constraints, lack of appropriate customer services.
Partnership
Technology Development, Staffing, Funding
Replicability
Yes,
Action Lines
AL C4. Capacity building
SDGs
Goal 1: End poverty in all its forms everywhere Goal 5: Achieve gender equality and empower all women and girls

Case50-KaiOS /
Title of the project, Contact Organization Name, Stakeholder type, Country
KaiOS /KaiOS TechnologiesPrivate SectorChina

Beneficiaries

Small Scale Women Entrepreneurs.

Website

<http://www.kaiostech.com>

Description

KaiOS Technologies has partnered with the Lagos State Government in Nigeria and Robert and John Limited (a Nigerian company in the space of providing digital solutions in education and healthcare), to distribute smart feature phones to help school children continue their education during the COVID-19 lock-down period – and supplement their learning once schools re-open.

ICT Tools

These smart feature phones running on KaiOS will have the Roducate app – and a handful of other useful apps available in the KaiStore. Designed and developed by Robert and John, Roducate is the first mobile learning app in Nigeria with all the approved curriculum materials for Primary, Secondary and select University courses.

Challenges

To get the project started, financial resources had to be secured to enable the devices with activated data SIM cards could be delivered. The project was endorsed by The First Bank of Nigeria Ltd, which sponsored the first batch of 20,000 KaiOS-enabled devices. These devices then had to be distributed to school children from low-income families, typically earning below US\$100 a month. Because the students came from remote areas, the State Government enabled communal solar panels to be installed, at central places within the villages, so that the devices can easily be charged.

We have learnt that having the right product to resolve a problem is not all; It is necessary to create the conditions in which the target audience face as few hurdles as possible, when adopting new technology.

Partnership

For this Roducate project, firstly we're looking for sponsors as we target to provide up to 300K devices to school children. Secondly we're working with manufacturers to support devices for this project. Thirdly together with Robert & John, we hope to expand this project to other African countries so more students across the continent can be benefited from online learning.

For partnership in general, we are continuously looking for:

1. Provide the right content and materials to deprived communities
2. Enable the training and adoption of new technology in those communities
3. Hardware and software partners that can customize their products for a specific use like Education
4. Provide the legal and policy support to carry out such project
5. Provide the financial resources for the initial outlays.

Replicability

KaiOS is looking to replicate the model to other deprived communities in emerging markets, in areas not just limited to education, but healthcare, financial education and digital literacy. Because the barrier to adopting smart feature phones is significantly lower than other digital devices, we believe the project is highly replicable.

Sustainability

The project is sustainable because mobile devices and internet are the most energy efficient forms of attaining information and education; Furthermore the solar panels at community centres have positive spillover effect that benefit the welfare of all villagers. Through using the device, students not only benefit from continued education, but also take their first steps on the technology ladder, which enable them to become sophisticated digital citizens in future life.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C11. International and regional cooperation

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 16: Promote just, peaceful and inclusive societies

Case51-CommunityHeroes

Title of the project, Contact Organization Name, Stakeholder type, Country

CommunityHeroesScript.MediaPrivate SectorFrance

Beneficiaries

Roducate gives students access to full curriculum-based lecture notes, assignments, tutorial videos, podcasts, and mock exams with answers for state and nation-wide exams at all levels. The content can be downloaded onto the KaiOS phone and used online or offline.

Website

<https://scrypt.media>

Description

We have built CommunityHeroes, an application enabling digital connections for a better offline world. The solution facilitates the exchange of hour-based services and support within communities and links community members to non-profit organizations and causes in their area. At the same time, it enables organizations to build campaigns around causes and to recognize community engagement, creating a new form of cross-sectoral engagement. This project was started at the onset of the crisis with the vision to (1) organize and encourage community-driven support systems, (2) create a positive impact on both mental health and future outlook for people affected by the crisis and (3) enable long-term partnerships between communities and organizations that can make a lasting impact way beyond the current crisis.

We are one of the winning projects of the EUvsVirus hackathon (co-organized by the European Commission) and have received continued support by the European Innovation Council.

ICT Tools

For this project, we are building a web-based application, supported by accessibility features to include vulnerable groups and community members (voice-to-text, SMS integration). Beyond that, our aim is to further enhance our solution by integrating Machine Learning for more immediate and private matchmaking between skills and user requests, and Blockchain for certification & transparent exchange of hours spent (which can serve as a certification of work to increase employability).

Challenges

The main challenge for us lays in providing a truly inclusive solution that is accessible to all community members. Very often, comparable solutions do not provide accessibility for those groups that might be heavily benefitting from a solution like this: young people/teenagers, elderly and disabled community members and those without direct technology access. For this reason, we have spent a lot of our time on the topic of accessibility. We aim to overcome this challenge by including voice-to-text recognition, SMS integration, and by building a buddy feature that enables community members to engage on behalf of others and to have an eye on their activity without limiting their access. The buddy feature is a part of our concept that we will still refine together with the target audience.

Another challenge lays in creating sufficient engagement and interaction to make this a meaningful solution. On this end, we are working on improving the usability of the solution

to make it as easy and comprehensive as possible. When it comes to motivation and engagement, we are building on elements of gamification, and on building reward mechanisms that do not affect the intrinsic motivation of our users.

Partnership

At the moment, we are mainly looking for cities, municipalities, governments or local/regional innovation centres that would like to work with us to make the solution available at a local level.

We are also highly interested to partner with organizations that would be interested to become early users and refine our organizational offerings together with us.

At the same time, we are interested in development partners that can help us accelerate our roadmap, and in adjacent solutions and projects for a joint go-to-market.

Replicability

We are building a solution that can be used by communities and organizations globally.

Sustainability

We are setting this project up as an impact-first initiative, which is guiding the decisions on how we will grow the user and customer base and has important implications on e.g. user privacy considerations.

Sustainability is also engrained in our platform – for example, our initial badge system links community engagement and activities to sustainable development goals, and our aim is to further build these links through tailored impact reports for both communities and organizations.

In terms of growth and continuity, we are aiming to build a solution that can be used and customized by communities and organizations globally. Our roadmap also includes the facilitation of global exchange between communities and regions.

Our long-term goal is to build a sustainable model of engagement that involves communities and public/ private organizations alike, working towards common goals.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C11. International and regional cooperation

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for

all|Goal 10: Reduce inequality within and among countries|Goal 17: Revitalize the global partnership for sustainable development

Case52-Jasmeen Talks

Title of the project, Contact Organization Name, Stakeholder type, Country

Jasmeen TalksJasmeen incubatorPrivate SectorUnited Kingdom

Beneficiaries

For community members, we facilitate requesting, matching and exchange of hour-based services. Community members can also dedicate their time to volunteering causes. The benefits: Our research shows that while many community members are willing to help others, most are hesitant to request help, and do not know where to direct their engagement. The solutions offers the opportunity to (1) get help when needed and (2) build connections and feel valued providing support. Especially for people whose mental health or employment has been affected by the crisis, these efforts can reduce pressure by getting support, improving mental health by building connections and self-esteem, and allowing to learn new skills or supporting others, which are both favourable for employability.

For non-profit organizations (and their end beneficiaries), we provide an easy solution to find skilled additional volunteers to temporarily support causes when needed. At the same time, we provide analytics of time spent and impact made. This helps to get more done with limited funds and resources, and to efficiently communicate results.

For organizations, we provide opportunities for volunteer placement of employees, and the option to create campaigns around causes. We also provide valuable insights into the causes and engagement of local communities.

Website

<https://www.jasmeen.co>

Description

We encourage women diversity and inclusion in all sectors.

We want to support women globally and encourage the m to collaborate and communicate together through Jasmeen talks, sharing the ir knowledge and experiences.

These talks are vital to ensure women empowerment and engagement from around the world.

It's the power of touch and communication that we want to empower and help women to adapt thd necessary digital skills needed for better future.

ICT Tools

We are using digital conferences
Digital marketing
Help women to move to online business and platform.
Email marketing
Social networking services and sites.
Help women to build an on line presence

Challenges

Investment
It's really hard in the middle east to secure investment.
Women are underrepresented and have less opportunity to have the write funds.

Partnership

Yes technically :
Technology
Investors
Collaboration with the organisations

Replicability

It can be replicated globally.

Sustainability

Yes
It meets sdg5

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C5. Building confidence and security in use of ICTs|AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote

inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case53-POMOCTu

Title of the project, Contact Organization Name, Stakeholder type, Country

POMOCTu SayEnergy Private Sector Poland

Beneficiaries

Women and young female from all background and sectors.

Website

<https://pomoctu.pl>

Description

The POMOCTu application connects people who need help with those who want to help within the local community. The POMOCTu application was created as a part of social responsibility project of SayEnergy company. Help or get help.

So close. So simple. See more on <https://pomoctu.pl> and get free app for Android:

<https://play.google.com/store/apps/details?id=pl.pomoctu> or iOS:

<https://apps.apple.com/pl/app/pomoctu/id1506186552#?platform=iphone>

ICT Tools

Responsive web app, android an iOS apps. Using address and location services to enable simple and effective way of asking for help and/or finding people who need help.

Challenges

app visibility. app will only work with users, best in local communities - as physical distance does matter. we seek for help in promoting app via local gov / municipalities, organisations providing help to people in need.

Partnership

marketing, publicity, local gov / municipalities, organisations providing help - so people learn about POMOCtu.

for now app is available in polish and english, we are open for partners who might help with adding more languages

Replicability

yes, effective use of the app in countries with other languages than polish / english would require translation / localisation

Sustainability

yes, if app is used ...

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 16: Promote just, peaceful and inclusive societies

Case54-Pandemic Tracker

Title of the project, Contact Organization Name, Stakeholder type, Country

Pandemic Tracker|ICT4DEV|Private Sector|Côte d'Ivoire

Beneficiaries

everybody who may need help and who is open to help others

Website

<http://www.ict4dev.ci>

Description

We launched Pandemic Tracker in collaboration with 2 other startups.

Pandemic Tracker is a mobile application that informs populations about barrier gestures and measures taken by the government. The application recalls the measure of social distancing between close individuals within 2 meters through a beep and the vibration of the mobile. It therefore records contacts and, in the event of illness, makes it possible to trace the people with whom we have been in contact over the past few days. Pandemic Tracker also has a QR code scanner option that provides information on an individual's state of health in relation to COVID-19. And from the Dashboard, we can follow people in quarantine and areas with a high concentration of the disease.

ICT Tools

The Pandemic Tracker mobile application uses Bluetooth technology to manage social distancing activation and compliance, it is an Android application and works for its updates with the Internet. The Dashboard is designed from the php Laravel framework.

Mobile use in Côte d'Ivoire is growing rapidly with around 12 million users out of a population of 25 million, the adoption and use of Pandemic Tracker will help inform a large number of the population while following efficiently the pandemic

Challenges

The biggest challenge was obtaining the authorities for the deployment of the project, to face it, we have taken steps with the investment promotion center in Côte d'Ivoire which has a support unit for startups that we do. part. This center allowed us to meet the Minister of Investment Promotion who allowed us to get in touch with the National Security Council which is in charge of the pandemic response. Things are slowly changing.

Partnership

We are looking for partners, mainly financial, to allow us to finalize the development of the application and continue to pay the hosting and maintenance costs of the platform. We are also looking for strategic partners for deployment in other countries.

Replicability

Pandemic Tracker is fully replicable at a low cost and in a very short time. We designed the solution ourselves so we have perfect control over it and it is also already deployed in Benin under the name of Xover.

Sustainability

This project is sustainable because today, everything suggests that we would be forced to live with COVID-19; moreover, the platform can be easily adapted to pursue and manage other viral diseases which are the basis of epidemics such as ebola virus, cholera and yellow fever.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case55-collaborative repository website for projects and people

Title of the project, Contact Organization Name, Stakeholder type, Country

collaborative repository website for projects and peopleAddictlabPrivate SectorSwitzerland

Beneficiaries

The first beneficiaries are the populations who will be able to respect and self-regulate in terms of social distancing through reminders via the application and the number of people contacted per day which is displayed in the application.

The public authorities will also be able to monitor the pandemic and quickly trace the contacts of patients for rapid treatment.

Website

<http://www.addictlab.com>

Description

Online website for responsible creatives working on sdg related projects - people, projects, works, hubs and SDGs.

ICT Tools

DIY created website and online platform (check site)

Challenges

budget and complexity of the project

Partnership

yes, support and hubs

Replicability

yes - concept allows for hubs and growth of ecosystem around SDGs

Sustainability

online platform with SDG navigation concept

Action Lines

AL C2. Information and communication infrastructure|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production

patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case56-Covid19-Rapid diagnostic & database

Title of the project, Contact Organization Name, Stakeholder type, Country

Covid19-Rapid diagnostic & databaseSIWAKPrivate SectorPoland

Beneficiaries

students, organisations, people

Website

<https://www.siwak.pl>

Description

The idea of the system is to quickly validate the risk of being infected analyzing the symptoms and epidemiology of the patient and after that quickly redirecting the patient to the proper medical treatment. It's not only the tool to give the patient information as hundreds of websites provides nowadays. It quickly leads to a help that patient needs, and shares real-time data to many other systems.

ICT Tools

pure html, vanilla js and some pure math; Simple (no framework, min.css, vanilla) and fast. Full scalable.

The impact on a current situation the society lives in will probably be essential. It aims to provide higher sense of security for patients and better efficiency of the whole care system.

Challenges

Minimizing the spread of the epidemic by identifying new cases, leading them in the possible shortest way to appropriate medical care thus lowering the risk of transmitting the virus to other people.

b). Implementation of procedures allowing to overcome congestion in an overheated medical care system (through quick diagnostic paths).

c). Monitoring exact locations of infected people which, would allow to notice growing concentration of cases in specific areas, and predicting the spread on surrounding neighborhood.

d). Transmitting the data collected by the system directly to specific services (e.g. ambulance crew, epidemic supervising agencies, hospital reception staff).

e). Monitoring the health of the patient qualified for home observation.

Having a central database is the first need in this situation - a source for help, analysis and decision making!

The main stage of the solution is ready to use: quickly redirecting the patient to the proper medical treatment and the database for medical services. You only need to install it on the pacjent.gov.pl server and then gradually implement new medical and analytical modules on it

Partnership

Polish government digital platform of the Ministry of Health and integration with it; or any other country's DP;

Replicability

The project can be replicated in any country and any country can benefit from it; You only need a minimum of good will

Sustainability

The project, also after the pandemic, can be used for quick diagnosis and collection of information about other epidids and infectious diseases and more;

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C7. ICT applications: benefits in all aspects of life — E-science

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 3: Ensure healthy lives and promote well-being for all|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case57-Business Continuity Plan - Health Emergency

Title of the project, Contact Organization Name, Stakeholder type, Country

Business Continuity Plan - Health Emergency
COOPERATIVA DE AHORRO Y CRÉDITO
COOPAD
Private Sector
Ecuador

Beneficiaries

The solution:

1. Relieve the medical staff.
2. Improve the safety of patients and their caregivers.
3. Shortening the time of diagnosis and referring the patient to proper therapeutic procedures.
4. Allowing to track the course of assistance provided by services and patients.
5. Controlling the spread of the epidemic by collecting the real-time data of the suspected and confirmed COVID-19 patients with their exact location.

Website

<https://www.coopad.fin.ec/>

Description

Social distancing, Hygiene, Use of Mask, Surface Disinfection, PREVENTION MEASURES ATTENTION OF PARTNERS AND CUSTOMERS, Commuting to the workplace and return home, Workplace safeguards

ICT Tools

Telework application, centralized and shared remote data base, security, internet access. Complemented with institutional policies, and guidelines taken and approved by the cooperative government

Challenges

The main challenge is confinement and culture. They are eliminated with good customer treatment, education and good corporate governance, supported by the bases of cooperativism.

Partnership

We are looking for partners in the areas of external financing, training in popular finance and social inclusion as well as in the application of good cooperative governance that benefits our clients.

Replicability

This project can be replicated in any financial services and products company of the popular and solidarity economy, in Ecuador or in any country in the world.

Sustainability

The project is sustainable, generating trust in the client, avoiding volatility of its income and guaranteeing it. Well managed money builds trust and our clients have decided to keep their savings.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-business

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case58-Connectivity for hospitals

Title of the project, Contact Organization Name, Stakeholder type, Country

Connectivity for hospitals DGT Sp. z o.o. Private Sector Poland

Beneficiaries

Internal and external clients, the primary benefit is not exposing them to viral contagion and / or personal contact. Also benefiting suppliers and the general public.

Website

<http://www.dgt.pl>

Description

We have prepared an ICT solution for hospitals, ambulances and paramedics, which allows for fast and precise communication and diagnostics thanks to video connections. Our solution allows to determine the position of the paramedic who is closest to the patient who

needs help and guide him in order to isolate or hospitalize as soon as possible. Our solution is fully integrated with the European 112 number and allows for cooperation with operators.

ICT Tools

It is a comprehensive solution that allows interoperability between the various digital and analog systems used. Our solution uses the IP infrastructure via LTE or WIFI and is integrated, for example, with the TETRA or DMR radio system.

Challenges

Our solution is ready and tested. The biggest challenge seems to us to convince the relevant authorities that it is worth applying.

Partnership

We are looking for a partner who has the ability to convince decision-makers in various EU countries that it is worth implementing our solution.

Replicability

Our solution can be effectively implemented in any country where 112 operates.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case59-Vpro Masks

Title of the project, Contact Organization Name, Stakeholder type, Country

Vpro MasksBioniks.OrgPrivate SectorPakistan

Beneficiaries

Hospitals, Crisis Management, Rescuers, Ambulances, other services.
Accelerating the effective use of paramedics and faster isolation and possible hospitalization of patients.
Group communication between rescuers and services, regardless of the communication system used.
The use of group video transmission allows for remote diagnosis in crisis situations. It is also possible to use video transmission from the drone to monitor isolated areas.

Website

<https://viscous.co>

Description

we designed face masks/respirators which can be reused till 6 months all you have to do is to replace filters and your good to go the masks is at very affordable price accessible for everyone.

ICT Tools

3D Printing, 3D scanning, CAD designing

Challenges

starting mass manufacturing and marketing is one of the major challenges that we faced in this process. so we searched small scale industries which can help us in mass production and for marketing we used social media and created distribution channel in major cities of Pakistan

Partnership

marketing and sales.

Replicability

it can be replicated but it required a minimum of 4 months to do so by reverse engineering

Sustainability

yes, people pay for these masks/respirators in this pandemic after this pandemic people will like to wear it for filtration of urban pollution and industrial usage.

Action Lines

AL C6. Enabling environment

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 13: Take urgent action to combat climate change and its impacts

Case60-Mapping the Spread of Covid-19

Title of the project, Contact Organization Name, Stakeholder type, Country

Mapping the Spread of Covid-19|Dalberg Data Insights|Private Sector|Belgium

Beneficiaries

everyone who goes out for work in public places, corporate sector , academia, industries.

Website

<https://dalberg.com/what-we-do/dalberg-data-insights/>

Description

Ministries of Health need data-driven insights when facing a pandemic. High geographic resolution maps and data analysis reports on the spread of the virus can help make more informed decisions, particularly regarding prioritizing resources and influencing the economic development of a nation or region during these crises. Our data products analyze and visualize both public and private data from different sources in order to provide actionable insights for a more evidence-based response to COVID-19 and beyond. In Belgium, we implemented the data product, called ESTER, to support both the Prime Minister and the National Security Council in their national response to the outbreak. We leveraged aggregated and anonymized telecom to monitor mobility patterns within the population and assess the impact of governmental restrictions on population movements at national and sub-national levels. This information served to forecast the spread of the disease and prioritize interventions, while empowering the public with the right information.

ICT Tools

We first developed ESTER to monitor the impact of the Ebola and Zika outbreaks in Guinea and Brazil, respectively. It integrates data on incidence and mobility to combine with public health records from different sources. An agile collaboration between government, telecoms companies, and data regulation agencies gives us access to aggregated and anonymized data that can be leveraged for effective epidemic responses to limit the propagation of the virus. Our data product creates visual representations of the data to synthesize the necessary information in a format that can easily be interpreted by all the beneficiaries. These data insights answer questions such as: How exposed is this district to importing the disease and from where? How likely is it for this district to export the disease and where to? Which is the most strategic district(s) to act upon, based on the impact that cases in that area will have on the rest of the country? By supporting our end-users with greater capacity-building and a solid technical handover, our aim is to change the mindset about making better data-driven decisions. In addition to providing this know-how on regulatory access to data, this ensures the sustainability of our work.

Challenges

We've encountered several challenges associated with the use and adoption of data and digital products within the public sector. These challenges are typically three-fold: ensuring the interoperability of our data and digital products within existing systems and solutions, ensuring proper maintenance and sustainability, and determining the actionability of the data products. To overcome these set of challenges, our priority becomes our level of engagement with the end-user, not only to confirm that we are meeting their hosting requirements, but also to co-design and collaborate on the products we are providing. Additionally, we focus on building their capacity and developing open source technologies to facilitate a longer-term impact of the product for the end-user.

Partnership

We are always looking for similar partners to deploy the same solutions to countries in need. Specifically, we seek partnerships with more telecom operators and Ministries of Health to provide these data insights on a greater scale.

Replicability

There are three modules necessary for the scaling and replicability of the data products in different countries: regulatory, technical, and support modules. The technical module of our data products has become a functional and standard tool that is smartly replicable to other diseases and/or geographical areas than the one(s) initially defined, with minimum technical effort. On the other hand, the regulatory module requires further engagement and ecosystem development with all the stakeholders involved. With the support module involving the maintenance and sustainability of the product, this also requires more collaboration with the stakeholders to ensure a successful implementation. After applying

these modules successfully in Guinea and Brazil, we were able to smoothly replicate the data product for the Belgian government with limited financial resources initially.

Sustainability

The long-term implementation of the data products relies on the capacity building and handover from Dalberg Data Insights to the Ministry of Health. This includes ensuring the integration within their existing systems, training the stakeholders involved on utilizing the model, and handing over all analysis to the end-user. After developing the analysis on the mobility use-case, we handed over the data product to the Belgian government in order to ensure the sustainability of the product for the entire Covid-19 response.

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 17: Revitalize the global partnership for sustainable development

Case61-TechNovator wireless charging solution for the drones

Title of the project, Contact Organization Name, Stakeholder type, Country

TechNovator wireless charging solution for the drones|TechNovator|Private Sector|Poland

Beneficiaries

In Belgium, we worked with the Prime Minister and National Security Council in their Covid-19 response. We develop our data products in close collaboration with, and with continuous feedback from, the end-users. Our team has the skills and experience to effectively engage end-users, understand their data needs, and identify key barriers and opportunities that might limit the potential impact of the data analytics tool. The main benefit for our end-users is that they receive an easy-to-use tool that offers a defining overview of what is happening in their respective countries, and where it is happening at a highly granular level. This allows them to act upon the pandemic in a more effective way with limited resources.

Website

<https://technovator.co/>

Description

We have found the solution that can help people in COVID time. Drones are very useful in such a period for different needs, food transportation, blood, tests, disinfection but still a problem with their autonomy. We can solve the problem with our wireless charging port for drones.

ICT Tools

Our wireless charging port for the drone can be useful for government organisation, police, military, rescue and security, climate control, also eligible for U-space program and also very requested for the other international markets.

Challenges

Government organisations that use drones for different needs, drone manufacturers, delivery, construction companies, etc. Using our wireless charging ports drones with endlessly perform all tasks assigned to them 24/7

Partnership

Yes, we are looking for partners to start pilot projects with them. They are energy sector, police, hospitals, clinics, delivery company, military, agrarian sector, drones manufacturers.

Replicability

Replicable, but depends on country, drones regulation, drone specification, partner needs

Sustainability

Yes, this project meets 3 of 17 sustainable goals. Sustainable cities and community (11), industry innovation and infrastructure (9), partnership for the goals (17).

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-agriculture

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 17: Revitalize the global partnership for sustainable development

Case62-Implementation of personalized cosmetics recommendations tailored to the client's needs (available on the website and in the conversational interface) in place of a closed salon with natural cosmetics

Title of the project, Contact Organization Name, Stakeholder type, Country

Implementation of personalized cosmetics recommendations tailored to the client's needs (available on the website and in the conversational interface) in place of a closed salon with natural cosmetics
innect feeCOMPASS sp. z o.o.Private SectorPoland

Beneficiaries

Our wireless charging ports for the drone

Website

<https://feecompass.com/en/>

Description

The project is a response to market challenges, including the consequences of Covid-19. The goal is to implement an innovative recommendation engine on the website (stage 1) and a conversational interface - chatbot (stage 2). As a result of the implementation of this tool, the client will receive personalized advice, which he could count on so far in the stationary shop. Due to the closure of the brick-and-mortar store and the cancellation of the fair and SPA activity, the client was deprived of the possibility of an individual conversation and the selection of cosmetics that would meet his/her needs.

In stage 1, the Needs Survey was implemented. After answering a few simple questions (e.g. age, complexion, major skin problems), the user-friendly survey recognizes the most important needs and recommends best-suited products. The purpose of stage 2 is to implement a conversation interface (chatbot) that provides individual customer service online 24 hours a day and enables the finalization of the transaction. Models of interface conversation paths were developed on the basis of prepared transcripts of real conversations with clients, professional knowledge of Creamy employees and the use of a set of data obtained in the survey. The goal of stage 2 is also to define customer profiles with different skin needs, segmentation and analysis of the product portfolio, which will further improve the e-commerce sales process.

ICT Tools

The project implemented in Creamy is an innovation at least on a national scale. Filters and offer comparison engines are commonly used solutions. The disadvantage of these solutions is the lack of certainty as to the choice of the optimal product. Data-driven AI solutions are becoming an alternative, but they need a relatively large amount of data for recommendations to be accurate.

The needs survey, powered by feeCOMPASS, allows you to overcome the disadvantages of the above practices by combining the seller's knowledge with AI solutions. The solution uses information about needs and preferences - collected and expressed in a language understandable to the customer, and an intelligent algorithm that creates a personalized ranking for each customer, based on the knowledge obtained from the seller.

The innovation of the chatbot for Creamy is the possibility of receiving personalized purchasing advice. It is possible due to the fact that the system applies knowledge depending on the needs and preferences of a given client, identified in stage 1, ie the needs survey. What's more, this mechanism provides a much smaller margin of error compared to generally available chatbots and automatic recommendation systems using ML / AI. This is especially true for new (unknown) customers.

The innovative nature of the solution is also evidenced by the flexibility and ease of its implementation in a different business environment, in particular the possibility of adapting to a specific entity or industry. The entire solution is based on a cloud based on kubernetes.

Challenges

The biggest challenge was working on increasing the accuracy of recommendations, which was especially emphasized by our client - Creamy, who cares about the satisfaction of his clients. A poorly selected cosmetic can even harm, and satisfaction translates into lasting relationships.

The accuracy of the recommendations was significantly improved through a unique solution for teaching the feeCOMPASS system from the best client advisors. In this way, the pro-customer experience of sellers is used by the system to sell successfully on the internet.

Partnership

We are looking for distributors, especially among e-commerce agencies that deals with e-commerce directly.

Replicability

Digital sales assistant can be applied for on-line retailers having wide (non-perishable) product range and their customers face a problems like:

- I know nothing about XYZ, help me find the right product
- I know what I need from ABC but want to quickly find the best option

It can be also implemented as advisor augmentation application for banks and energy distributors which want effectively highlight their edge (price/scope) for each customer.

Sustainability

By recommending products in a responsible way that matches customer needs we decrease the level of returned products/wastes. Customers might select "eco" need as one of selection criteria and it will be reflected in product recommendations provided.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-business|AL C10. Ethical dimensions of the Information Society

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 12: Ensure sustainable consumption and production patterns

Case63-IDENTT Vision

Title of the project, Contact Organization Name, Stakeholder type, Country

IDENTT Vision|IDENTT|Private Sector|Switzerland

Beneficiaries

The project is an important tool for building a competitive advantage in the face of Covid-19. The pandemic has changed the pattern of consumer behavior, which results in less interest in making purchases in the stationary. For Creamy, this meant closing / limiting significant sales channels (stationary store, partner points, fairs). However, offering cosmetics on-line is a big challenge, especially for customers who do not know the brand. Since Creamy's goal is to successively attract new customers, thanks to the project, customers will be able to count on professional advice on-line, qualitatively corresponding to that which they could have received in stationary so far. The above can be an important tool for increasing e-commerce revenues, and thus - staying on the market. The first effects of this are already visible. Already in the first weeks of using the survey, the interest in the best-suited product was twice as high; CTR + 63%; percentage of customer sessions with the product added to the cart + 56% . Another benefit for the company is a positive impact on the image - a modern company that uses digital solutions and cares about customer satisfaction. Benefits for retail customers: the opportunity to receive professional advice, which so far could only count on in stationary; facilitating the decision-making process - by answering a few questions, they will receive personalized recommendations according to their needs;

time saving - the tool communicates in an understandable language, the minimum set of answers gives recommendations for matching products.

Website

<http://www.identt.info/>

Description

The projects allows to confirm identity remotely - which is crucial to continue usual business processes. Promote business continuity and social distancing while provided highest security levels.

ICT Tools

Using AI and Deep Neural networks, on redundant and scalable infrastructure, we make it possible to securely onboard endusers any time, any where, across a number of industries and use cases.

Challenges

Manage the complex task of remote ID by applying our knowledge, technology and consultation.

Partnership

Yes. IDENTT actively seeks partners with whom we have a natural synergy through shared values and complimentary solutions to deliver added value to end customers.

Replicability

Yes. It is intended to be replicable over global server networks, local networks as needed. The process is fully automated. It can be scaled without the need to involve more personnel.

Sustainability

In the march toward paperless, friction free onboarding, we are eliminating physical barriers to the digital last mile, the end user.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications:

benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C7. ICT applications: benefits in all aspects of life — E-employment|AL C7. ICT applications: benefits in all aspects of life — E-science|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts

Case64-BOWWE

Title of the project, Contact Organization Name, Stakeholder type, Country

BOWWEBOWWEPrivate SectorPoland

Beneficiaries

Any entity required to confirm user identities. Confirm identity minimize fraud risk. Industries: banks, lenders, telecom, government offices, sharing industries, e-signatures issuers, legal, health.

Website

<https://bowwe.com/>

Description

Bowwe helps to sell products and services online, suggests how to do it more efficiently and monitors the results. Everything is supported by easy to use a website builder for users with no IT or eCommerce experience. We helped SME owners to start their business online in the time of the pandemic.

ICT Tools

BOWWE was made by using these technologies: Microservices, Java 1.8, Spring, Cassandra, Redis, MySQL, Big Data, Javascript ES6, TypeScript, Vue.js, Webpack2, Sass, PHP, Laravel, RESTful API.

Challenges

Effective online customer acquisition is a complicated process that requires IT and eCom knowledge, a marketing team, a lot of time, and tools that are not integrated and they are very expensive. Small businesses usually complete this process with the first step of creating a website, but that's just the beginning. They do not have enough resources and knowledge to complete all steps. That's why many of them say they don't have internet customers despite having their own website.

Partnership

No

Replicability

No

Sustainability

Yes, because we have a mobile application, which helps you to run your business from one place and just one device.

You don't need to waste your time, gas or money to check how is your business going every day.

Action Lines

AL C2. Information and communication infrastructure|AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C7. ICT applications: benefits in all aspects of life — E-employment|AL C7. ICT applications: benefits in all aspects of life — E-environment|AL C9. Media

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case65-COVID Toolkit

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID ToolkitSoftServePrivate SectorUnited States of America

Beneficiaries

We are concentrating on medium and small service companies. In Poland, there are about 1,8 mln small businesses, in the UK about 5.5 mln and in the USA about 27 mln and in the world over 300 mln.

Website

<https://www.softserveinc.com/en-us>

Description

We have developed a series of applications (tool kit) that can be used to prevent further spread of COVID as businesses re-open safely.

ICT Tools

The tool kit was developed using various commonly available technologies - java/.net/html5 and supports widely available platforms like desktop and mobile screens (windows, IOS, Android).

Challenges

The main challenges encountered relate to the proper understanding of the uprose cases, and then being able to appropriately test and validate our assumptions.

Partnership

We are always seeking partners to fund additional development, or provide collaboration in all aspects of software development.

Replicability

These components can all be replicated, and extended into new or different domains, and for different use cases.

Sustainability

Yes. These projects are sustainable in that they are software.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-business

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case66-Extended Capacity in Rural Alaska City Under “Stay at Home” Rule

Title of the project, Contact Organization Name, Stakeholder type, Country

Extended Capacity in Rural Alaska City Under “Stay at Home” Rule
SESP
Private Sector
Luxembourg

Beneficiaries

Primary beneficiaries will be anyone who has a need to implement controls in their business related to preventing/minimizing COVID.

Website

<https://www.ses.com/>

Description

SES has provided additional satellite capacity to Internet Service Provider (ISP) OptimERA to enable people in Alaska to take advantage of online resources to stay connected with work, students and teachers to work on distance learning programs, and patients to do video calls with the healthcare staff at the local clinic to discuss symptoms or issues they are experiencing, which was especially critical with COVID-19.

ISP OptimERA serves the city of Unalaska and its surrounding towns and islands, including world-famous Dutch Harbor, the largest fishing port in the United States. Unalaska has the largest full-time resident population in Southwest Alaska as well as many seasonal and part-time residents due to the fishing industry. OptimERA started working with SES in 2017 to provide backbone capacity so the ISP could serve the residents and businesses of this remote location that is 800 miles from the nearest fibre-based network.

ICT Tools

The Alaskan ISP leveraged increased network capacity by satellite from SES’s NSS-9, using C-band radio spectrum. SES is also providing OptimERA with a broad range of fully-managed infrastructure services, including Data Center Hosting Services, Uplink and Downlink Satellite Services, and IP Network Services for Internet connectivity, delivered over a primary SES teleport in Brewster, Washington.

Challenges

Optimera worked closely with SES and leveraged its C-band satellite capabilities in order to be able to lift any data caps for students, teachers and healthcare workers as well offering a discounted rate to people and businesses not already connected so they could work remotely.

Partnership

N/A

Replicability

This project is likely replicable in all areas covered by the C Band footprint of SES's NSS-9, to the limits of the available C Band capacity of the satellite

Sustainability

The Telecommunication component of this project doesn't rely on any governmental funding. It relies on commercial agreements, therefore the demand makes it sustainable based on existing satellite coverage and available capacity.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-environment

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case67-B-LiFE, SES and GovSat providing connectivity to a deployable Mobile COVID-19 Testing Laboratory to Italy

Title of the project, Contact Organization Name, Stakeholder type, Country

B-LiFE, SES and GovSat providing connectivity to a deployable Mobile COVID-19 Testing Laboratory to ItalySESPrivate SectorLuxembourg

Beneficiaries

Based on existing satellite coverage and available capacity, SES initially provided OptimERA with options to enable its successful commercial offering of high-speed, affordable internet, connecting people and generating new growth opportunities. With expanded capacity made available in April, residents, businesses, schools, healthcare clinics and other organisations in parts of Alaska could access city-wide WiFi and broadband services as always despite increased network demand due to the “Stay at Home” rule to address the COVID-19 crisis. The additional capacity provided to OptimERA has enabled people in Unalaska to take advantage of online resources to stay connected with work, students and teachers to work on distance learning programs, and patients to do video calls with the healthcare staff at the local clinic to discuss symptoms or issues they were experiencing.

Website

<https://www.ses.com/>

Description

The Piedmont regional government in Italy and healthcare professionals used the satellite-enabled mobile Biological Light Fieldable Laboratory for Emergencies, known as B-LiFE, to scale COVID-19 screening operations. The mobile laboratory was deployed to one of the worst-hit regions in Italy and will support COVID-19 testing of frontline healthcare staff, civil protection volunteers and police forces.

B-LiFE has been developed under ESA Space Solutions (formerly known as Business Applications) framework with the participation of the Belgium and Luxembourg governments. Since its inception in 2012, it has been used during the Ebola outbreak in Guinea and has been supporting a number of test cases for Belgium authorities.

The objective of the B-LiFE project is to bring a diagnostic capability as close as possible to the crisis area, thus providing an essential element of fast emergency response while preserving the safety of deployed staff and of the surrounding populations. The B-LiFE laboratory is designed to be easily transportable, facilitating the initial deployment and possible re-deployments in the area of operations according to the evolution of the crisis.

ICT Tools

For the B-LiFE concept to work, having reliable communications is paramount. The connectivity provided via satellite guarantees high quality and immediate communications, irrespectively of the situation on – site. It enables the real-time transmission of analysis results, two-way communication among on-site and remote experts, high-speed links allowing the transfer of large series of data, as well as case geolocation allowing real-time mapping of the epidemic.

The mobile laboratory relies on an end-to-end, satellite-enabled connectivity solution put in place by SES and builds on the previous successful projects under the ESA Space Solutions framework and the company's expertise in the emergency and humanitarian domain, in particular Emergency.lu. SES is responsible for the satellite connectivity service. The mission in Piedmont is supported by the Luxembourg Department of Defence, together with GovSat, by leveraging portable terminals as well as the high-performance capabilities of the GovSat-1 satellite. The solution, based on a lightweight portable manpack, enables secure 10 Mbps duplex connectivity for health data processing, real-time data transmission and communication with remote experts.

Challenges

The design of the solution requires to balance the demand of maximum performance (e.g. small terminals, high data rates) vs. availability of capacity/equipment for the area of operations. All this needs to be achieved under high time constraints. SES is benefiting of having the right teams, partners, extensive assets and experience.

Partnership

SES would be pleased to find new projects, requiring guaranteed connectivity for cloud-enabled health and emergency response solutions. SES will be happy to discuss with any entity working in this domain.

Replicability

Since its inception in 2012, B-LiFE has been used in various locations including West Africa. The platform can be deployed in a matter of days to the most remote areas and can relay information to reference laboratories in Europe. Secured high-throughput satellite communication service guarantees the connectivity required for the operations when and where needed. B-LiFE can support healthcare services during and after the COVID-19 pandemic, including for large-scale testing.

This project is likely replicable in all areas covered by SES satellites to the limits of the available capacity of the satellites.

Sustainability

B-LiFE deployment in Piedmont is supported by the European Space Agency (ESA) and the Luxembourg Department of Defence and led by the Université Catholique de Louvain with the support of the project partners including SES.

B-LiFE combines on-site and off-site resources, including specialized personnel and equipment, and applications deployed in the cloud. This approach facilitates the logistics and enables to reduce the need for local resources (staff and equipment on-site), which is positive from the point of view of mission costs. The platform also contributes to training local teams in taking over the sampling, supported remotely, thus further reducing the need for local deployment of staff.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 10: Reduce inequality within and among countries|Goal 17: Revitalize the global partnership for sustainable development

Case68-SATMED - Enabling Telemedicine in Remote Locations During COVID-19 via Satellite

Title of the project, Contact Organization Name, Stakeholder type, Country

SATMED - Enabling Telemedicine in Remote Locations During COVID-19 via Satellite
SES Private Sector Luxembourg

Beneficiaries

With this connectivity, telemedicine in critical times supports medical and nursing staff teams, while facilitating the exchange of diagnostics and information, prioritizing prevention. Concept was to provide PCR and Serology results in hours, so health, civil protection and law enforcement personnel can obtain results quickly, reducing the need for preventive self-quarantine in case of doubt. As a result, greater coordination of the Ministry of Health with hospitals and health centers was made possible under these critical health circumstances.

Website

<https://www.ses.com/>

Description

For years, Luxembourg Government's SATMED project has helped various NGOs by giving healthcare professionals access to a dedicated e-Health software via SES's satellite service. Thanks to the unparalleled reach of the satellites, the platform can be utilised even in remote locations, where no other means of connectivity are possible to deploy.

Friendship NGO serves two floating hospitals off the remote islands of Bangladesh and a hospital on-land. Patient data is sent from the Friendship Central server to the National Healthcare Database via satellite. The same connectivity also helps reinforce the triage system, which quickly identifies and refers patients to the dedicated governmental COVID-19 centres. Since the start of the COVID-19 outbreak in the country, the hospitals have served more than 10,000 patients.

SATMED is also utilised by the Serabu Hospital in Sierra Leone that is supported by the

German Doctors NGO and is responsible for providing care to thousands of patients. The hospital is located in a remote region and SATMED constitutes its only connection to the outside world. Drawing from its experience fighting Ebola in 2014, the hospital also expanded the existing triage system and set up information exchange with the dedicated government COVID-19 centres.

ICT Tools

SATMED is an e-Health cloud-based platform that allows real-time situational assessment and data exchange with other hospitals both in the country and abroad. It also supports provision of various critical services to the population. This existing solution has become increasingly important and necessary during the ongoing COVID-19 pandemic.

The monitoring and tracking of the spread of COVID-19 is key for identifying disease hot spots, management of resources and access to information. The software platform enables collection and presentation of epidemiological information with real-time visualization in a dashboard.

Depending on the requirements, SATMED's software is able to provide as part of its applications an automated mobile-based messaging system which allows to use multiple communication channels (i.e. SMS, voice, and social media) to send messages in multiple languages to the local population.

SATMED can also support provision of various other critical services such as access and storage of patients e-records, virtual consultation, remote reading of x-ray data, remote monitoring and management of critical supplies and logistics.

Challenges

There are many challenges when using health IT and e-health applications to support regional development programs and humanitarian operations: the cost of purchasing and maintaining software applications and providing secure data management; inadequate user friendliness; poor interoperability between IT solutions; and limited availability in remote locations.

SATMED overcomes these barriers by integrating within a single platform a wide range of capabilities, including access and storage of patient e-records, medical imaging, virtual consultation, e-learning, remote monitoring and e-health management. Furthermore, all tools can be accessed via a unique portal with a single user log-in and are available as web applications that can be readily used on desktop and handheld devices, without the need for a sophisticated local IT infrastructure. Last but not least, SATMED also provides services for data storage/back-up and satellite-enhanced internet connectivity allowing their use even in remote and underdeveloped areas.

Partnership

SATMED is meant for a wide range of users and is always looking for new partnerships including non-governmental and governmental organisations, hospitals, medical universities and global health institutions.

Replicability

SATMED has been in operation since 2014 and has cooperated with several partners incl. NGOs Friendship, German Doctors E.V., CURE International, ARCHEMED, GIZ Guinea, eMC, Charité Universitätsmedizin Berlin. SATMED has been installed in hospitals, remote medical centres and hospital ships in multiple locations around the world.

All e-health applications integrated within the platform are license free. The SATMED interface is easy and intuitive to use, and all applications are accessible by a single sign on. With a software as a service (SaaS) licensing and delivery/distribution model the platform is immediately accessible from any device with an Internet connection and a web browser. Last but not least, cloud data storage capabilities are provided (hosted in Luxembourg), compliant with data protection regulations.

The SATMED software can be used anywhere, subject to connectivity access; in the areas with no connectivity, satellite service needs to be put in place – therefore making it possible to replicate virtually in any location thanks to the global reach of SES's satellites.

Sustainability

SATMED is a project of the Government of Luxembourg, aimed at helping healthcare providers make better use of information technology and mobile health solutions everywhere it is needed. It has been implemented and operated by SES, the leader in global content connectivity solutions based in Luxembourg. The owner of the platform is the Ministry of Foreign and European Affairs of Luxembourg and specifically the Directorate for Development Cooperation and Humanitarian Affairs.

In light of the COVID-19 outbreak, the Government of Luxembourg made access to the SATMED platform available free of charge for healthcare professionals' community of selected health organisations to fight the pandemic.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 10: Reduce inequality within and among countries

Case69-COVID19 Medical Education Programme for doctors and health care professionals (HCPs) across Africa and the Middle East

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID19 Medical Education Programme for doctors and health care professionals (HCPs) across Africa and the Middle East
MedShr Private Sector United Kingdom

Beneficiaries

SATMED is dedicated to assisting non-governmental organisations that are providers of healthcare, education or health management services, governmental organisations that support regional development programs and humanitarian operations, institutes such as medical universities, hospitals and health management institutions. Thanks to the satellite reach, SATMED can be utilised in remote and underserved areas, with the lack or even absence of infrastructure.

SATMED has been tailored by the experience and expertise of non-governmental and governmental organisations, together with the innovative technologies of leading universities and IT companies in order to answer the needs of the global health community.

Website

<https://en.medshr.net/>

Description

In April 2020, MedShr launched the COVID19 education program, inviting all HCPs in Africa and the Middle East to join.

The program is hosted on the MedShr web platform and mobile app and consists of 2 key elements:

- 1) Case based discussion, allowing clinicians to share their own experiences and learn from colleagues through the MedShr platform.
- 2) Educational resources, curated by the MedShr medical team, providing targeted relevant content around the latest guidelines, publications and research. The educational cases are focused on prevention, investigation and management of COVID19.

MedShr curates and publishes resources via MedShr Open, a mobile first platform allowing HCPs to access content seamlessly as part of their day-to-day practice.

The MedShr COVID19 Education Program will be available to all doctors, nurses and registered HCPs across Africa and the Middle East reaching over 150,000 clinicians. 5 countries have been selected for local outreach: Nigeria, Uganda, Ethiopia, Jordan and Iraq. MedShr is developing partnerships with hospitals, universities and medical societies across the target countries, providing a forum for institutions to grow their digital medical community and improve local responses to COVID19.

ICT Tools

MedShr technology is transforming the response to COVID by addressing medical education internationally. Bringing high quality medical education, and peer to peer learning to doctors and HCPs who have not been able to access traditional medical education.

The MedShr's use of innovative technology allows HCPs to safely and securely share clinical cases in a compliant manner. This means no content in the COVID19 educational group can be saved or downloaded by participants and everything shared is encrypted and tracked.

MedShr is an app and web platform which allows HCPs to easily access content on their mobiles anywhere, at any time. MedShr uses social media promotion and performance marketing to bring HCPs from Africa and the Middle East onto the COVID19 education group. To keep HCPs engaged in the educational group and the educational cases, MedShr uses Email and Push notifications.

Finally, MedShr polls, allows for pre and post testing, clearly showing the change in behaviour over the MedShr educational campaign.

Challenges

This project has low commercial value and it has been necessary to apply for grants and seek partnerships with industry.

Time is a challenge, many HCPs in communities will be faced with a big work load. In order to educate HCPs despite the lack of time. MedShr focuses on being easy to access from mobile phone, and having content that is easy to review and share, eg. by having a quick post function.

Partnership

Yes. We are interested in partnering with Hospitals and Societies. Hospitals and Societies will help MedShr bring on additional membership and to able to support societies and hospitals work.

Moreover, we are interested in partnering with pharmaceutical and medical device companies – seeking funding to continue the work, or develop further programmes using the MedShr platform.

Replicability

The MedShr platform and membership has been built and tested over a period of 5 years. It would not be feasible to replicate the platform, membership and technology fast enough to launch a COVID19 education programme across Africa and the Middle East, as an immediate response to COVID19.

Sustainability

MedShr develops networks of physicians, and builds relationships with hospitals and societies encouraging them to share and post.

As MedShr membership grows – MedShr is able to deliver revenue from Pharmaceutical and Medical Device companies with targeted education towards HCPs across Africa and ME. Recently been awarded an educational grant by Novartis to educate around diagnosis and management of Heart Failure, with a target audience of community health workers and cardiologists across sub-saharan Africa. This revenue helps to sustain independent and vital medical education such as that focused on COVID19.

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-learning

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case70-Satellite Connectivity to Support the Government of Mexico's COVID-19 Telemedicine Network

Title of the project, Contact Organization Name, Stakeholder type, Country

Satellite Connectivity to Support the Government of Mexico's COVID-19 Telemedicine Network
SESP
Private Sector
Luxembourg

Beneficiaries

The primary beneficiaries are doctors, HCPs and the local communities they are treating. The doctors and HCPs benefit by acquiring knowledge, building network and interacting with doctors globally around best practice in COVID19. This ensures that doctors and HCPs are able to treat their local communities appropriately, based on most recent COVID19 guidelines available.

Access to medical education and the quality of the education provided locally to doctors and healthcare professionals is poor across Africa and many parts of the Middle East. Critical shortages of HCPs have increased pressure, with only 22 physicians per 100,000 people in Sub-Saharan Africa [World Bank, Physician Density]. Attendance at the majority of high-quality global/regional conferences are €500- 1000 per delegate [The Economic Cost

of Attending Educational Conferences, Rowe 2019]. Furthermore, these conferences are not accessible in times of COVID, minimising access to appropriate medical education.

With a shortage of physicians across sub-saharan Africa, limited access to medical education and poor quality of the education provided across Africa, MedShr is able to reach and educate doctors and HCPs around COVID19. Ensuring that doctors and HCPs are informed and able to treat communities across both Africa and the Middle East appropriately.

Website

<https://www.ses.com/>

Description

In the face of the COVID-19 pandemic and shortly after the Presidential Decree adopting extraordinary measures to combat the spread of the virus, SES offered free satellite capacity to the government of Mexico to support broadband satellite connectivity between 35 public hospitals. The Secretariat of Communication and Telecomm de México (the public provider of satellite services of the Secretariat of Communications), in coordination with the Secretariat of Health worked with SES to quickly launch the satellite-based telemedicine service. These 6 months of satellite capacity, provided at no cost to the government of Mexico, has enabled real-time telemedicine exchanges between medical and health teams, pandemic-related data collection and monitoring of the COVID-19 infection curve.

ICT Tools

Since April 2020, using more than 22 MHz of Ku-band capacity on the SES-10 geostationary satellite, SES has been supporting the Mexican telemedicine networks connecting 35 public hospitals and health centers treating COVID-19 patients throughout Mexico. These 35 Ku-band satellite links were installed by Telecomm de México which provided the remote equipment and terminals.

Links of up to 1 Mbps "downstream" and up to 512 Kbps "upstream" were achieved, making continuous and excellent quality bandwidth available for the transfer of high-resolution files, images, video, and data.

This broadband satellite technology has also allowed medical personnel, with local equipment, to analyse X-rays and scans of patients remotely, generate diagnoses and evaluate the appropriate treatment. Moreover, it has facilitated the gathering of data to better and more quickly understand COVID-19-related needs and conditions.

Challenges

Given the satellite, hub and antenna availability and the desire by all parties to implement the telemedicine service as quickly as possible, there were few challenges. In fact, excellent collaboration with the Mexican government (SCT and Telecomm) enabled the participants to rapidly deploy connectivity solutions before Mexico's anticipated COVID-19 peak. The fact

that SES had Ku-band satellite capacity and Telecomm de Mexico had the SES-10 hub and Ku-band remote antennas available for immediate deployment enabled the very swift commencement of operations. Flexibility and determination to help the people of Mexico enabled all parties involved to implement the project as quickly as possible. There were no meaningful commercial, administrative or bureaucratic barriers to implementation.

Partnership

Not applicable

Replicability

This project is easily replicable for other telemedicine and tele-education projects around the world. With health systems and public health authorities facing new pandemics, digital health solutions have become key components for coping with ongoing outbreaks such as COVID-19. ICT tools are indispensable for increasing the resilience, efficiency and quality of the health service delivery systems. This project is replicable subject to the limits of available capacity of the satellite and hardware.

Sustainability

Yes. The project is sustainable as long as the satellite capacity and equipment is available. The initiative is the result of a collaboration between the Secretariat of Communications, its satellite arm, Telecomm de México and the satellite operator SES (through its local subsidiary Sistemas Satelitales de México), for the benefit of the Secretariat of Health. The satellite capacity was delivered promptly and free of charge to the Mexican government. The network uses a Telecomm teleport, communicating with SES-10 and uses antennas rapidly deployed to hospitals which are part of the infrastructure that Telecomm has for emergencies.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 10: Reduce inequality within and among countries

Case71-SkyNet de Colombia and SES Networks Ramp Up Connectivity Services to Aid Worst-hit COVID-19 Colombian Amazonas Communities

Title of the project, Contact Organization Name, Stakeholder type, Country

SkyNet de Colombia and SES Networks Ramp Up Connectivity Services to Aid Worst-hit COVID-19 Colombian Amazonas Communities
SES Private Sector Luxembourg

Beneficiaries

The primary beneficiaries are the public hospitals, medical caregivers and, importantly, Mexicans afflicted with COVID-19. The Mexican Secretariat of Public Health selected 35 public hospitals they want connected. With this satellite connectivity, telemedicine in critical times enabled medical teams to efficiently and timely exchange diagnostic and other information, prioritize prevention around Mexico and facilitate daily coordination with national authorities.

Website

<https://www.ses.com/>

Description

The Colombian Ministry of Telecommunications (MinTIC) selected SkyNet to install, operate and maintain five free Wi-Fi hotspots in Leticia to connect residents, as well as a high-speed dedicated broadband service for the local hospital's medical and administrative teams to carry out telemedicine sessions and other eHealth activities to effectively respond to the crisis.

These Wi-Fi hot spots were installed in the following health centres: Hospital San Rafael, Gobernación del Amazonas, Centro de Epidemiología, Laboratorio de salud Pública Departamental, En la sede de la RTVC.

SkyNet has been leveraging SES services since 2015 to bring broadband services to Colombia's Amazon region, delivering high-speed internet access in Leticia empowering the local community, businesses and tourism industry.

SkyNet and SES, through its O3b non-geostationary (NGSO) satellite constellation, have extended their partnership and increased network capacity within days to support COVID-19 mitigation efforts. SkyNet could thus deliver reliable connectivity services to households and businesses in Leticia and enable access to e-learning platforms for local students impacted by COVID-19.

Residents and public institutions located in the two major cities of the remote department Amazonas have thus experienced efficient, reliable and high-performing Internet connectivity.

ICT Tools

SkyNet and SES offer managed connectivity services delivered via a hybrid combination of geostationary (GSO) and NGSO satellites to provide broadband, internet and trunking services in the extreme south of the country.

The five Wi-Fi free access hot spots allow the medical teams of the San Rafael Hospital in Leticia to share diagnostics and patients' information with other health. The Wi-Fi area around the local hospital of San Rafael de Leticia is provided via microwave antennas communicating with SES-14 GSO HTS satellite, in Ku-band.

SkyNet also provides a Wi-Fi hotspot in an additional zone, Puerto Nariño, as a 100% private initiative.

Challenges

Local availability of equipment (earth stations, base stations, routers) was a major concern as the transportation from Bogota airports or Colombia ports was temporarily disrupted by lockdown. Another challenge was for SES to ensure enough capacity is available on board the satellite to deliver the required connectivity.

Partnership

N/A

Replicability

This project is likely replicable in all areas covered by SES satellites to the limits of the available capacity of the satellites.

Sustainability

This project essentially relies on commercial agreements between private undertakings, with national government funding for Leticia and the Hospital; therefore, the demand has made it sustainable based on existing satellite coverage and available capacity.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case72-On line Learning programming for kids

Title of the project, Contact Organization Name, Stakeholder type, Country

On line Learning programming for kidsFuture leaders international groupPrivate SectorEgypt

Beneficiaries

The enhanced broadband connectivity service allows local medical staff to communicate with other health professionals in Colombia's capital Bogotá or institutions around the world. They benefit from tele-consultation services, collaboration with remote teams for faster speed to diagnosis, treatments and follow-ups for patients in the area.

Residents and healthcare centers can access free Wi-Fi through 5 Wi-Fi hot spots installed in Leticia, the southernmost city of Colombia.

The municipality premises of Puerto Nariño benefit from free connectivity in order to allow the Mayor and civil servants to pursue their activities during the lockdown, teleworking from their domicile and coordinating the COVID-19 efforts with Colombian institutions.

Website

<https://www.facebook.com/FLIG.Eg/>

Description

We learn programming for children online we learning them create education games to help them to be producers instead of users to Violent games to Transforming education into an enjoyable learning

ICT Tools

Online learning programming at international level in many countries, and organized international conference for distance learning and international conference for talent children

Challenges

The main challenge was difficulty persuading children to learn programming online & How to leave electronic games that incite violence, such as the game of Pubg & fortnight

Partnership

Yes, in USA

Replicability

No

Sustainability

Yes, we learn children to programmers and when they be adults they will create useful programs

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case73-MukuilimaSoko

Title of the project, Contact Organization Name, Stakeholder type, Country

MukuilimaSokoMbumba LapaquePrivate SectorDemocratic Republic of the Congo

Beneficiaries

Our benefit is helping children get rid of addiction to violent games and to be producers for useful game and to be creative

Website

<https://mukulimasoko.com>

Description

Mukulima_Lab will above all be an interprofessional crossroads, a place for exchanges and debates to make proposals about a local agronomic situation of a farm or an experimental station to apprehend and solve agricultural, environmental and sustainable development problems, at the different scales where they arise, from the plot, the seeds, the pesticides, the growing seasons to the planet.

A participatory space offering agronomists from different professions, teachers and researchers to exchange their knowledge and farmers to expose specific hazards occurring in their farms. Based on these exchanges, ways can be found to help the farmer in the evolution of his practices, and serve as examples for other farmers in other territories where the agronomic problems and pedoclimatic situations are similar.

In short Mukulima_lab wants to be a unique directory of agronomists, clinics and veterinary pharmacies, coupled with an agricultural library where farmers will freely diagnose diseases that attack their crops through access to a text, audio and visual library describing the pests of certain plants and crops. This library will be fed by local agronomists. An agricultural network of phytosanitary mutual aid to have all the complete information concerning pest diseases, seeds and advice on good agricultural practices and to take the best solutions.

ICT Tools

A web platform that Offers better accessibility to knowledge, also to a participation networking, through the deposit on the platform of content or consultation of complementary multimedia resources, for example. Students, scientists, ministries, researchers can access it from anywhere, at their convenience to consult, alert, make suggestions and surveys, question or share agronomic situations.

NB: the Mukulimasoko project has already succeeded in setting up 7 Community Farmers' Networks, knowing that a Community Farmers' Network is a gathering of at least 10 villages. 7 physical and virtual agricultural relay depots with agricultural right-hand men who inform us of the available stocks and update us in the virtual depots.

True that our project with its service of optimization of supply and demand of agricultural products works well. The reality of COVID-19 has revealed us some challenges, among which the one of logistics, the map directory of agricultural actors, so this reality motivates us today to digitalize the whole agricultural value chain adding to our project: a map directory of agricultural transporters and the buyer can call and set the costs and conditions.

Challenges

Obstacles related to the sources of financing to scale up, as the financing avenues remain very limited in Africa, even more so in DR Congo where even the banks do not have this

option nor the government.

Obstacles also stem from the profound upheaval in the agricultural economy where many buyers and farmers have no knowledge and experience in E-services.

With Internet tariffs remaining high, available bandwidth remains very low compared to the situation in other countries such as Rwanda, for example; and when one moves away from the capital or urban centers, difficulties in accessing the Internet are observed.

Also because of the high cost of connection many people remain disconnected from the Internet, financial and other services, the size of the market decreases and becomes a problem.

The poor state of the agricultural desert roads in some areas causes difficulties in transporting the goods to buyers and farmers, delivery throughout the country, but also to neighboring nations: Express delivery remains an obstacle.

Partnership

we look forward to networking opportunities such as :

The creation of bridges between the different economic zones of activities and agronomic development of other skies and between young innovators from different participating countries.

The creation of communities of solutions around our initiative in order to allow for long-term collaboration in several ways: technical support, resource mobilization, volunteering, sharing of information, good practices and modern methods used in agriculture.

Replicability

Although the MukulimaSoko platform works all over the DR Congo, Mukulima_Lab has the ambition to cover all 26 provinces of the country.

Sustainability

v The grouping of products for joint sales, a device for triggering stronger energy by lower energy;

v The permanent supply and satisfaction of large quantity orders in the medium and long term;

v A team of agricultural right-hand men to assist the farmers of the networks;

v The support to the displaced people from the different conflicts, who are mostly farmers, the solution motivating them to return to their environment and a way to improve their lives. A win-win cooperation sharing collectively the wealth generated and improving their lives (schooling, health).

v Slows down the rural exodus by the return of brains, the creation of employment for each associate and all the peasant layers. Shifting from subsistence agriculture to economic development thanks to the Investment Area, which will make it easier for everyone to be an actor in development.

v Digital literacy in the village groupings of the agricultural relay depots to create digital leadership and collective action capacities likely to transform the agricultural sector and for

each of them to benefit 100% from the advantages offered by MukulimaSoko in order to advance the three Pillars of GDP.

Action Lines

AL C2. Information and communication infrastructure|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-agriculture

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 17: Revitalize the global partnership for sustainable development

Case74-WonderGames

Title of the project, Contact Organization Name, Stakeholder type, Country

WonderGamesWonderTreePrivate SectorPakistan

Beneficiaries

With as potential Beneficiaries :

The Congolese government through the National Agricultural Investment Plan

The Ministry of Agriculture and Rural Development

Peasant and Rural Organizations

Private farmers and agricultural buyers

Agronomists, researchers, schools, universities and teachers of agricultural sectors

International and national organizations organizing agriocles fairs

the main benefits/services:

A single B2B2C market place centralizing the supply and demand of agricultural products improving the functioning of the market for the benefit of agricultural actors through the precision and cost reduction of buying and selling operations. Innovation in real-time knowledge of the quantity of available agricultural products.

The coalition of villages into a community network of farmers by setting up virtual and physical relay depots in their production environment for the grouping of products and joint sales,

A system of triggering stronger energy through weaker energies enabling farmers to live decently and benefit from their activities, working in solidarity to better defend their interests and mutualize the sale of their products, with fair trade ensuring a stable price and a fair income for the players.

At the level of the local population, MukulimaSoko actively participates in :

The support to the displaced people from the different conflicts, who are mostly farmers, the solution motivating them to return to their environment and a way to improve their lives. A win-win cooperation sharing collectively the wealth generated and improving their lives (schooling, health).

Slows down the rural exodus by the return of brains, the creation of employment for each associate and all the peasant layers. Shifting from subsistence agriculture to economic development thanks to the Investment Area, which will make it easier for everyone to be an actor in development.

Website

<https://www.wondertree.co>

Description

We have developed a software platform for the physiotherapy, cognitive development and education of children with special needs. During COVID-19 parents haven't been able to take their children to special schools or clinics because of social distancing and because most institutions have been closed. But with our solution parents can make their children go physiotherapy, cognitive development, and education sitting at their homes. Our solution is accessible, affordable, and effective. Since it only requires a computer and a webcam. Here is a short video that shows how our product works: <https://youtu.be/IDbqSg8t5U8>

ICT Tools

Our software platform consists of 2 components. 1) Games: We have taken physiotherapy, cognitive and educational exercises and gamified them using augmented reality. This creates a very engaging and motivating experience for the child. The painful or boring physiotherapy becomes fun and gamification accelerates with development and learning. We have developed 18 games so far each of the games designed to improve a certain skill set in children (e.g: hand-eye coordination, balance, upper body movement, lower body movement, response time, memory, phonics, sorting, addition, subtraction, and many more). 2) Reporting: The progress of every child and their skill development can be monitored through our reports. The technologies that we are using are Pytorch and OpenVino for Human Pose Estimation. [ASP.NET](#) Core, Unity 3D, Azure for games, reporting, and hosting.

Challenges

Our main challenge is 1) The Hardware Requirements. Right now our solution has only been developed for Windows PC/Laptops that were released 5 years ago or sooner. Because of this, our solution is not accessible by parents who have PC/laptops older than 5 years, parents who have MacBooks, and parents who don't have any computer and only a mobile phone. This challenge can be overcome by RnD and further development through funding or saving up enough revenue from our sales. We have the expertise to bring our solution to older laptops, MacBooks, and mobile phones.

Another challenge is 2) Scaling The Solution: We are getting good traction from Pakistan regarding our solution. But we would want to scale our solution globally. This requires spending a budget on marketing and ads and having a small team that can manage customer relations and resolves their queries. Organically we have been able to penetrate 2 countries besides Pakistan but if we want to scale faster we would need funds that we can put into marketing, and hiring a small customer service team.

Partnership

We are looking for the following partners:

- 1) Research partners: We are looking for researching bodies that would be interested in partnering with us to do clinical trials or researches to clinically prove the efficacy of our product. A medical university would be an ideal partner.
- 2) Resellers/Distributors: We are looking for partners in different countries that would like to resell our product in their countries.
- 3) NGOs and Govt bodies: We are looking for NGOs and Govt bodies who have a mandate of working for education, physiotherapy, and the development of special needs children. If we have a big enough order (in terms of purchase) we can even customize/localize our games and make new on-demand games for them.

Replicability

This project is scalable and replicable easily. In our solution, we have developed games that are based on physiotherapy, cognitive and educational exercises used by teachers and therapists. These games have been designed in a way that all children can play and learn from them. Our solution only requires a computer and a webcam in order to be played. This makes our games highly replicable in every area of the world as long as they have a computer and a webcam. Another thing that adds to the applicability of our solution is the fact that our solution can be made available in every language (since everything is developed by our team). This localization has been done in Qatar. We presented our solution to MADA (the Qatari regulatory body for disability and assistive technology.) and they asked us to convert our games into Arabic. We were able to convert the game into Arabic in 1 week's time. And now MADA is about to accredit our games and help us promote our games in Qatar for the Qatari citizens.

Sustainability

Yes, this project is sustainable. Our business model is \$3 per child per month. It is a monthly recurring revenue model. Our pricing is based on the purchasing power of the people of the

country i.e we are charging \$10 in Malaysia and \$20 in Qatar.

Our capital cost has already been incurred and we don't have a big variable cost since the entire solution is online and does not require additional resources when the users increase. We launched our solution for parents for their special needs children in Aug 2020 so far we have 170 parents who have downloaded the games. With some optimization to our sales, we will be able to get more paid users and make our solution cashflow positive and scalable.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case75-Bring the reality of Tele-Health in developing countries

Title of the project, Contact Organization Name, Stakeholder type, Country

Bring the reality of Tele-Health in developing countriesSolercool technologies LLC(Trading as solerchil in Africa)Private SectorUnited States of America

Beneficiaries

Our primary beneficiaries are children with special needs (children with autism, cerebral palsy, down syndrome, developmental delays, slow learners children with physical disabilities, and children with cognitive disabilities). The benefit of our solution for these children is their development in motor, cognitive, and academic areas. Our solution can be easily installed at homes so parents do not need to take their children to a hospital, therapy center, and school. Our solution also provides well-needed exercise and a way to have fun for the children since they can't go outside during COVID times. Another benefit of our solution is that it is easily accessible, affordable, and effective. It's accessible because it only requires a laptop and webcam in order to work. It is affordable because it is 70% cheaper than conventional therapy for a month and it is effective because it uses the power of gamification to engage and develop the child.

Website

<https://www.solercool.com/about.html>

Description

solercool technologies through her Tele-health department managed to bring the relativity of tele-health to Africa . Using our spoke and hub strategy we deployed our tele medicine software to the marginalized people in Uganda ,Rwanda and in Bostwana and Haiti who were at that time restricted to move from their villages to other places where they could have gotten services . With our Artificial intelligence Teleconferencing software ,341000 women and 220090 children were able to seek medical services from our virtual doctors .

ICT Tools

Our major tools are the Artificial intelligence video conferencing tool (which uses automated sign language interpretation to also allow disabled have access and use it) which was developed in house, the electronic medical records platform which allows us store medical records for all our patients (developed in house) VSAT Satellite technology for Internet (since most of the places we work have no 3G internet) and a USB satellite modem .All these were meant to vail our project end user have access to doctors world wide without having any interruption

Challenges

Our major challenge wad poor connectivity in some areas where our customers were coming from . our team worked with the respective governments and put VSAT satellite data hotspot in some areas where there was totally no internet. More to that many people could not easily adopt the video conferencing method of seeing the doctor .Our team came up with various online campaigns targeting those in our areas of scope ,educating members of the society about the new normal and how video conferencing is the way to go.

Partnership

We looking at scaling and we are looking for Health care Ngos that we can scale this initiative with in their countries of operation . We also looking for Financial partners who could actually some how helps fund some key issues like internet connectivity. These can be governments or private sector or Ngos

Replicability

Tele-health is the way to go .I for one i believe that it will be hard for people who had gotten used to meeting their doctors at the comfort of their homes to back to lining up at the doctors physical doors. The new normal has proved that even those countries where tele-health has not been adopted in the past ,now is the order of the day .As i speak our tele-health services are now covering Uganda Haiti ,Rwanda ,Bostwana , Haiti and scaling to South Africa and UAE. We are seeking partnerships with various governments to allow us bring this important health aspect to their countries

Sustainability

Solercool technologies originally makes solar powered refrigeration technology which she sells to farmers and food transporters to avoid post harvest loss .This partly brought in money to make sure the tele-Health services reach the four corners of the world .More to that those who use our tele-health services pay some reasonable amount of money and this was and is used to increase the scope of the project . We also get grants from friends and family members to periodically avail us with financial support .

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case76-Htwet Toe (MYVAS4AGRI)

Title of the project, Contact Organization Name, Stakeholder type, Country

Htwet Toe (MYVAS4AGRI)Village Link Company LimitedPrivate SectorMyanmar

Beneficiaries

Our major beneficiaries were women and children but later added male patients . We also had the key NGOs as our key beneficiaries for example medical team international used our tools to offer services in 8 refugee settlement in Uganda. We can not forget the governments especially of Uganda who used our technologies to also store other patients' records in other government hospital

Website

<https://www.linkedin.com/company/villagelink.co>

Description

We provide a digital platform for farmers that provides key farming information and connects them to agriculture professionals, products and services so that they may still increase their farming productivity during COVID. Our app is assisting more than 750,000 farmers in Myanmar with the farming knowledge they need, especially in the pandemic as field extension workers can no longer visit them. Moreover, through our e-commerce feature

in the app, farmers can find farming services online, allowing them to access products and services easier than before. The highlight of this project is providing individual farmers with personalized farming advisory services through using satellite data such as weather and crop monitoring data, to help them increase their climate resiliency and combat climate change.

ICT Tools

Through our mobile app "Htwet Toe", farmers can access anything they need for farming without leaving their farms. The app is also integrated with remote sensing analytics engine which provides farmers with contextual farming advisories which are created using satellite derived crop data, weather data and GIS data. We are also experimenting with Cognitive Artificial Intelligence that automatically detects pest and diseases on crops and provides the most appropriate recommendation.

Challenges

-Online purchasing behavior amongst farmers is still low. Through education and customer awareness, we will be able to overcome this particular challenge.
-Mobile internet data cost is relatively high and farmers prefer to spend it for entertainment and social media. We can overcome this by introducing gamifications in the app which keeps the farmers engaged while using our app.

Partnership

-We are looking for financial institutions to partner with so that we can extend financial products digitally through our platform to farmers. Moreover, we also want to co-create innovative crop insurance products for smallholders in the country using satellite derived crop and climate data.

Replicability

The project is easily replicable as both our backend and frontend systems are designed and developed using scalable architecture and the entire app ecosystem is hosted on a cloud. Moreover, we have created many APIs for our services which can be easily integrated to a new app in a new project. The model can be replicated in any geography without any substantial upfront tech development cost. Since we developed our project with being digital native in mind, all of our operations are also very streamlined and agile as we only need 10-15 people to serve 750,000 farmers in our platform. Even our contextualized advisory services for farmers are automated through machine learning and require very little human input to send personalized messages to farmers.

Sustainability

The project is both financially and operationally sustainable as we are able to generate revenue from the satellite data we have created for Myanmar and also able to monetize by allowing companies and organizations to promote their contents and products to our userbase. It is also sustainable for stakeholders since our project is helping them improve

their farming productivity, in turn increasing their income, and at the same time helping them minimize wastage and losses during the growing season.

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C9. Media

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 10: Reduce inequality within and among countries|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

CAse77-SenetecGas

Title of the project, Contact Organization Name, Stakeholder type, Country

SenetecGasSenetec AfricaPrivate SectorZimbabwe

Beneficiaries

- Smallholders/Growers/Farmers (access to farming knowledge, climate-crop based personalized advisory services, access to products)
- Contract farming organizations (farm management tool, climate-crop based personalized advisory services, satellite-based farming intelligence)
- Extension workers (access to farming knowledge, farm management tool)

Website

<https://www.facebook.com/senetec-africa/>

Description

Senetec Africa introduced SenetecGas, a smarter and simpler way of ordering LP Gas in the comfort of your home on your phone and getting it delivered to your doorstep.

ICT Tools

SenetecGas uses smart metering and mobile technology that helps us monitor gas cylinders, allow customers to order gas on their phones and schedule deliveries before gas ever runs out.

Challenges

The main challenge is the initial high upfront cost of purchasing the systems for the customers. It can be overcome by engaging financial institutions to provide Pay-as-you-Go Credit Loans.

Partnership

We are looking for strategic partners to supply and deliver LP Gas countrywide. We are also looking for financial partners to provide Pay-as-you-Go Credit Loans targeting low-income households.

Replicability

This project is replicable targeting low-income households by engaging financial institutions to provide Pay-as-you-Go Credit Loans that lowers the initial high upfront cost.

Sustainability

The project is sustainable as it reduces the spread of Covid-19 by promoting the ordering of gas on your phone in the comfort of your home, and helps reduce the cutting down of trees as cooking fuel.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-environment

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

Case78-Protecting sensitive data in cloud

Title of the project, Contact Organization Name, Stakeholder type, Country

Protecting sensitive data in cloudDuoKey SAPPrivate SectorSwitzerland

Beneficiaries

SenetecGas targets off-grid urban and rural households, and under-served urban areas thereby helping reduce the spread of Covid-19 and the switch from harmful firewood and charcoal as cooking fuel.

Website

<https://duokey.ch>

Description

With digital security threats on the rise as the world grapples with COVID-19, encryption is more important than ever. DuoKey mission is to protect the privacy and sensitive information when using cloud.

ICT Tools

We help companies and individuals to store highly sensitive documents or files in cloud services with an innovative way to protect the encryption key using MPC (Multi-party computation). We offer strong privacy and trust by hiding the encryption key from the cloud provider. We provide key management as a service.

Challenges

Enterprises that store corporate data in on-premises workstations and servers rely on network security and endpoint security solutions for data protection. The management of large data volumes is likely to incur significant costs. Enterprises can increase their availability, scalability, and operational efficiency by moving to the cloud or adopting virtualization.

Partnership

Willing to work with government and public/NGO for helping them to move their workload to cloud while keeping their sensitive document protected and own/keep control of their encryption keys in their jurisdiction.

Replicability

DuoKey is fully replicable as the organization owns the encryption keys.

Sustainability

DuoKey helps secure our work from home, protects the integrity of critical public health information, and keeps our communications with friends and family confidential.

And yet some governments and organizations are pushing to weaken encryption, which would compromise the health and security of billions of people and nations around the world.

Action Lines

AL C2. Information and communication infrastructure|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 16: Promote just, peaceful and inclusive societies

Case79-Retail Queue Management Solution

Title of the project, Contact Organization Name, Stakeholder type, Country

Retail Queue Management Solution|Earlyone|Private Sector|Armenia

Beneficiaries

We target mainly financial services/insurance as Tiers 1 and Health/Public sector as Tiers 2. But we start our deployment with humanitarian organizations that need strong document protection for highly sensitive documents.

Website

<http://earlyone.com/>

Description

Earlyone has released a new solution to battle the outcomes of the coronavirus outbreak. Besides, Earlyone has improved the existing solution by offering a new feature to its users - QR check-in that allows contactless activation of virtual tickets created with Earlyone app.

ICT Tools

Programming languages: C#, ASP, JavaScript

Technologies and systems: Android OS, Apple iOS, Linux/Unix, Microsoft Windows, Microsoft .NET Platform

Challenges

Due to the COVID-19 outbreak, many Governments around the world are putting restrictions and limits on the number of people that can gather in one place, such as supermarkets, shops, pharmacies or public facilities.

Partnership

We are open to new partnerships all around the world as our solution can be implemented anywhere.

Replicability

This project can replicated to meet the needs of an institution that has unusual type of customer flows. This needs to be discussed.

Sustainability

The pandemic will leave its mark on the society. One of the main competitive advantages of organizations will become the extent to which they ensure the safety of their customers.

Action Lines

AL C2. Information and communication infrastructure

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case80-WomenLead

Title of the project, Contact Organization Name, Stakeholder type, Country

WomenLeadCCEducare MyanmarPrivate SectorMyanmar

Beneficiaries

Earlyone's primary beneficiaries are those institutions that have a limit on the capacity of customers that their premises can sustain at a certain time period.

The solution will help those institutions to

- Control entry to premises to limit the number of customers allowed in
- Limit opportunities for COVID-19 to spread by eliminating crowding outside
- Minimise waiting time of shoppers by scheduling their entry time beforehand

Website

<https://www.cceducare.org/>

Description

Womenlead is hosting an online workshop program which is targeting to women lead businesses who are facing challenges in Covid-19 outbreaks. We train them to skill up their digital skills to able to overcomes Covid-19 challenges. We have already trained 200 Women across Myanmar, and now targeting to focus on helping them grow their businesses.

We received positive feedbacks from women-led businesses who completed our training and improving their marketing and selling skills using digital technology.

ICT Tools

We use the Learning Management System (LMS) to train women-led businesses and also teach them digital skills such as how to use email, cloud system, social media, digital marketing skills.

Challenges

Women in businesses in Myanmar are facing multiple challenges, especially those who have lacked access to the skill set to improve their business. There are many challenges being faced by women from vulnerable communities. Top 3 challenges are below here in Myanmar;

1. Lack of business skills (business, marketing, digital, etc.)

In the vulnerable area, there are very few professional education such as business training and marketing training which lead women to make it more difficult to start or improve their businesses 2. Knowledge about financial access

Vulnerable communities in Myanmar have very little access to financial knowledge and access to financial resources (loans, investment, etc.)

3. Motivational factors

Socio-cultural barriers, Women need to take care of family and also it is not easily accepted by an immediate family that women to lead the role in business

However, there are many women who are working to support family income

Partnership

For partners, we are working with women-led businesses.

Replicability

Yes.

Sustainability

Plan A) Build a platform to sell local-made products via website or platform or Social Media (Facebook, instagram, etc.) to promote local-made products from WomenLead Network

WomenLead will gain percentage % from the profits of the transactions and invest those into growing network across myanmar as below;

1) Trainings in other cities;

From the fund that WomenLead received, WomenLead will host additional workshops in other cities

2) Grow Networks;

WomenLead will promote to grow networks

3) Mentorship;

WomenLead will dedicated to promote their members businesses into international network and also provide continuous membership and trainings to the members

***This plan is to make sure we can support ourself 100% sustainability without any sponsorships at the end of the project.

Our Alumni team member Chit have experience in information technology for more than 10 years and also have experience in building a platform for selling products.

Our Alumni team member Stella have her own local made products called StellaCollections which produced hand-craft rattan bags and selling those product into local and international marketplace.

Plan B) Setting up WomenLeader Membership Community with yearly fees

Inviting women in businesses to become a member by payment fee 15,000 MMK per year (equivalent to \$10 per year)

Member benefits are

Assess to mentorship program with volunteer women from businesses

Assess to trainings/ workshops/ forums with member rates

Be in a network of women in businesses across Myanmar

**Estimate 2.5 k members sign up in the first year and 50% growth on the next year

***This is the plan if we can get partial or in-kind support from local or international organisations to support us for our works in continuous activities.

Potential supporters;

Gender-Team from International Finance Corporation: IFC

Business Coalition for Gender Equality Association (BCGEA)

Myanmar Women Leadership Network (For Mentorship)

Our Alumni team member Chit is already a member of BCGEA and working with Akhaya Women Myanmar. Our alumni team member Htet is a teacher and an alumni of Women Leadership Network which she can support in mentorship sessions.

Plan C) Funding or In-kind Support for ongoing activities

Create an impact analysis report

- Proven record of achievements from the program
- Networks of women in business across Myanmar

2. Apply funding

Apply fundings especially supporting to economic empowerment and women inclusion

Potential funders;

- Dana facility
- UN Women
- USAID

3. Request for sponsorship

Apply fundings especially supporting to economic empowerment and women inclusion

Potential funders;

- Dana facility
- UN Women
- USAID

With the funding we received, we will continue to host trainings in other states and regions;

Revisit to the program plan and re-structure to made it more effective

Upgrade the program materials

Alumni participants to provide mentorship support to the current one

Continue to grow network not just locally but also planning to do cross-border projects with YSEALI Alumni from Southeast Asia countries

***This is the plan if we get full support from local or international organizations to continue our program not just local but also in SE Asia countries.

Action Lines

AL C2. Information and communication infrastructure|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case81-I LOVESWAG Media 's Artists Ecommerce site and Communication Platform

Title of the project, Contact Organization Name, Stakeholder type, Country

I LOVESWAG Media 's Artists Ecommerce site and Communication Platform| LOVESWAG MEDIA|Private Sector|Botswana

Beneficiaries

Vulnerable women who are leading impactful business. 200 women in 7 states and regions of Myanmar.

Website

<http://www.iloveswagmedia.co.bw/>

Description

The project is available in the form of mobile app and website. It is an Artist's digital monetization platform. Its to market and digitally promote an artist's commodities like music and merchandise.

ICT Tools

Instant messaging Apps like Telegram, Messenger API integration.
Service Query request form
Traffic Monitor Analytics
Social media profile Sharing integration

Challenges

The project faced low traffic visit to the website and mobile app due lack of marketing funds for it to be promoted on a global scale. Lack of internet connectivity by users

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-business

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case82-Home health care

Title of the project, Contact Organization Name, Stakeholder type, Country

Home health careHeallaxPrivate SectorPakistan

Beneficiaries

Artists, Developers and individual entrepreneurs can use the platform in the pandemic times to create direct sales with their fans and customers and complete market their projects digitally.

Website

<https://heallax.com>

Description

Heallax has connected patients to nurses and physiotherapists through online website and calls centre booking . This has led to decrease in the hospital visits of patients and hence reduction in infectivity in Covid time when even visiting a hospital for simple stitches removal can be indanger your health.

Heallax vision is to provide home health care services such as Nursing ,physiotherapy and caretkaer services at affordable prices via oir heallax application / website and call centre throughout Peshawar city and eventually grow into whole pakistan .

ICT Tools

The concept of heallax is connecting nurses , physiotherapists and caretakers to people at one click . simple tapping on the booking button , and they will be connected to the nearest reliable registered healthcare workers via GPS integrated system in our application.

The Technologies integrated are Google Maps , online payment methods , adobe tools .

Challenges

1. The first challenge was providing healthcare workers who won't be the cause of spread of virus . for that , we used regular PPEs . and Regular santizing before every patients visit .
2. Second was tranport of our health worker , which we aim to partner up with careem , uber and bykea .
3. Challenges with government support which we aim to solve if we are given support from WHO and other relavant support organization.

Partnership

We are looking for partners in world health organziation and other health organizations through whom we can become a better entity and representatives of health .

Replicability

Yes this project is replicable and expandbale . since the App uses GPS integration that can be expanded to cities . The business can be expanded rapidly with ample support by organziation .

Sustainability

yes it is sustainable , as on every connection of patients to health worker , heallax take 25% percentage of payment from health care worker services rendered to patient. In this way , the more we connect patients , the more we earn money and sustain ourselves.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case83-SOOP (School on our Phone)

Title of the project, Contact Organization Name, Stakeholder type, Country

SOOP (School on our Phone)SOOP TechnologiesPrivate SectorPakistan

Beneficiaries

primary beneficiary are the Patients and elderly/special people who are in need of home health services .

The benefits are :

1. In covid times , when even a simple visit to hospital can prove disastrous for health , Heallax health workers provide quality services in order to reduce Hospital visits and risk of infection.
2. Reduction in tranport costs for patients who visit hospitals oftenly . also leading to decreased pollution .
3. Reliable and Afforable healthcare workers that ensure quality services .
4. Provision of Jobs to health workers who were jobless .
5. Our project also aims to include female population workers for post pregnancy care of mothers .

Website

<https://soop.io>

Description

We worked on virtual classrooms to enable the tier-2 schools and colleges to continue delivering education to their students despite corona.

ICT Tools

Ruby on Rails

Challenges

Achieving the Product Market Fit, enhance the technology adoption in the education sector of Pakistan.

Partnership

E-learning

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case84-Ott plateforme family app for use messaging and peer to peer contact

Title of the project, Contact Organization Name, Stakeholder type, Country

Ott plateforme family app for use messaging and peer to peer contactsarl idenet geolocalisationPrivate SectorAlgeria

Beneficiaries

Schools, Colleges, and universities.
Transparency in the financial management of institutions. Communicating the student's progress to parents seamlessly through our app. Enabling remote learning for students.

Website

<http://www.ide-net.com>

Description

ott app on android and ios for family contact and possibilité for Sos sending for children and possibility to create groupe of members or friends also it's integrated a peer to peer that

allow to see the other also messaging and sending documents or photos it's sécurisé and we give it's a authentication with OPT

ICT Tools

integrated a peer to peer that allow to see the other also messaging and sending documents or photos it's sécurisé and we give it's a authentication with OPT

Challenges

the challenge is to prouf that our ott is also helpfully and can do the same think that do the great actors like whatapp ou viber , we do it now we hope it's will have the same confiance from our people and why not international

Partnership

yes in communication and opportunity to développe it more

Replicability

no

Sustainability

yes it's will développe more and we have a vision that allow us to see more and get opportunity.

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C7. ICT applications: benefits in all aspects of life – E-science|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case85-DZmeet Visio conference and webinar

Title of the project, Contact Organization Name, Stakeholder type, Country

DZmeet Visio conference and webinarsarl idenet geolocalisationPrivate SectorAlgeria

Beneficiaries

all person need Ott service family , friends B2B or B2c it's the same the idea is to create this service in our country for a spécifique way of communication with a national security for the data

Website

<http://www.ide-net.com>

Description

dzmeet is a webrtc integration with two other platforme one for medical and other for learning we use peer to peer protocol java and android studio for the two app android and xcode for ios we develop them

for the crisis of corona virus as it's a very good way to help our population in other to be connected it's a free development wich is actually on production

ICT Tools

for the crisis of corona virus as it's a very good way to help our population in other to be connected it's a free development wich is actually on production
dzmeet is a webrtc integration with two other platforme one for medical and other for learning we use peer to peer protocol java and android studio for the two app android and xcode for ios

Challenges

the real challenge is to prouf that we can do what great group do we are ingeneer in this model of work and hope to change some thing that way this solution is free we try to help the more we can

Partnership

yes for promotion and develops the solution more

Replicability

no

Sustainability

yea for more integration on a workplace and other tool

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C7. ICT applications: benefits in all aspects of life — E-employment|AL C7. ICT applications: benefits in all aspects of life — E-environment|AL C7. ICT applications: benefits in all aspects of life — E-agriculture|AL C7. ICT applications: benefits in all aspects of life — E-science|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case87-Orbit-Ed

Title of the project, Contact Organization Name, Stakeholder type, Country

Orbit-Ed Orbit-Ed Private Sector Pakistan

Beneficiaries

B2B and B2c ,institution and all type off user for the app or for the fullweb

Website

<https://www.orbit-ed.com>

Description

We rolled out our online experiential learning tool for k12 during the pandemic to help educators teach, engage, and manage students in their online classes. Our 3d interactive games designed for science learning helped students learn in a fun environment while our AI based engine captured their learning progress and provided important insights to teachers and parents about the cognitive abilities of each student. Our tool is designed to fulfill three goals during the pandemic:

1. Make the job easier for teachers
2. Engage students, make the best use of their time, and promote self-learning

3. Keep a record of their learning behaviour and guide parents and teachers in making informed decisions.

ICT Tools

Our software system consists of:

1. A cloud based web application (LMS) that allows teachers to conduct online classes, manage students, and keep learning and assessment records. It maintains individual student accounts allowing them to attend classes, learn through our interactive gamified content, take quizzes, and view personal performance in each subject/topic.
2. 100+ 3D STEM topics are included in our application
3. An AI based analytics and reporting engine that provides multi-tiered reporting to students, teachers, parents, and administrators
4. An augmented reality based mobile application providing fun learning opportunities during these challenging times

Challenges

Two core challenges faced during the rollout have been:

1. Professional development of teachers: online professional development/training exercises have been challenging for our teams. With all the information overload, teachers are overworked and took longer than usual to have a full grasp of our online tool. However, after spending more than a year in this new routine, both our team and teachers are better prepared (ready) for the PD sessions.
2. Internet connectivity and lack of devices: this has been and still is a major bottleneck especially in the public sector where students either do not have PCs or it is shared between multiple siblings with overlapping time. Our tool now allows recorded/self-learning brackets which somehow caters to this problem.

We also optimized our content/application so that it runs on 4G too now

Partnership

We are now looking to scale the project to more cities/regions and in order to do so, we need to partner up with donors who are willing to fund the marketing and sales activities as per our growth plan.

Replicability

The content we have created is cross cutting between multiple curricula including IB, Cambridge, NGSS, Common Core, and the National curricula of Pakistan making it usable in a wider geographical area. Our platform is cloud based, can be accessed from anywhere around the world and can support more than 30,000 simultaneous users. We have built, rolled out and iterated the product. All this makes the platform scalable and replicable. With the right growth partners, It is now ready for scaling to more regions.

Sustainability

The software development for this project has been completed with the help of government of Pakistan and some private investors. The only costs incurred now are of sales, marketing, and support activities which are now being supported by our SaaS model in which we charge monthly fee to each user for using our platform and content. The fee is as low as PKR 50 per user per month. It makes the platform affordable to users and sustains the project.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case88-Mma B Covid19 Social Welfare Registry App

Title of the project, Contact Organization Name, Stakeholder type, Country

Mma B Covid19 Social Welfare Registry App Spectrum Analytics Private Sector Botswana

Beneficiaries

Primary beneficiaries of our application are:

1. Teachers: our tool provides a one stop shop for teachers. All the necessary resources including reading material, lesson plans, interactive games, related videos, and assessments are provided within Orbit-Ed reducing the preparation time for each lesson. Our content is inline with IB, Cambridge, NGSS, and National Curriculum of Pakistan which makes it easier for teachers to embed this in their ongoing routine lectures.

The AI engine of our application automates the assessments and reporting part for teachers producing personalized results while providing guiding pointers on the progress of the whole class.

2. Students: the core value Orbit-Ed delivers to students is in providing interactive science content for students that makes learning a fun activity for them. At Orbit-Ed - we believe – learning is inherently a fun activity and the pedagogical approach followed by educators should keep it so. Children are born curious, hungry to learn more, and that is what our tool does – keeping their curiosity alive. Our AI engine also identifies learning patterns for students which makes it easier to identify where each student excels/lacks.

Website

<https://web.facebook.com/SpectrumAnalyticsBW/>

Description

In April 2020, Botswana government instituted a nationwide lockdown to combat the Covid19 virus. It therefore committed to provide food relief to its most vulnerable citizens. Unfortunately no database existed of the vulnerable in society therefore social workers had to be sent house to house around the whole country to identify, register, assess and deliver food baskets to the vulnerable. Crucial inefficiencies include the following:

- Manual and paper-based processes
- Visibility of beneficiaries
- Enrolment of beneficiaries.
- Delivery of social relief.
- Reporting and Accountability.

MmaB (which is short for Mma Boipelego meaning social worker) app is a digital registration platform that automates the registration, assessment and enrolment of vulnerable citizens on the COVID-19 Food Relief programme. It offers Program administrators reporting dashboards for effective and efficient programme management. The collection and aggregation of data behind the scenes would give the government actionable insights that will allow them to plan, monitor and evaluate the programme effectiveness in a data driven way – optimising the supply chain and delivering required interventions to vulnerable citizens in a timely manner.

Mma B will also be expanded to include modules for all NGOs/Charities/Foundations which are assisting in providing help to the vulnerable in society.

ICT Tools

The adoption of MmaB provides a digitised solution that addresses the manual and paper-based administered system. MmaB automates the registration, assessment, and enrolment of vulnerable citizens. This reduces costs, increase efficiencies, provide data for evidence based decision making and allow for better service to the vulnerable in our society.

Universal Access for Beneficiaries.

- e-forms (Mobile, Web, USSD, Facebook Messenger & WhatsApp)

Digital Workflows for Operational Users.

- e-Operations (Mobile, Web)

e-Records for Document Management

- e-Record Keeping

Data for Actionable Insight Derivation.

- Data Management (Pipeline Tools & Technologies, Governance, Security, Privacy) Dashboards for Programme Managers and Administrators.
- Data driven M&E.
- Live e-Reports.

These features would also be available in the module for NGOs/charities/Foundations.

Challenges

In terms of the Covid19 Food Relief the challenges were:

- The process of registering and assessing citizens for vulnerability involves house to house visits by social workers. This is a health risk as it poses both social workers and the public to COVID-19 transmission.
- The information required to assess Batswana for COVID-19 Food Relief Programme eligibility is collected through a manual and paper-based process.
- Social workers additionally have to assess each household using an assessment matrix.
- Those who have not been enrolled are never given feedback that they do not stand to receive food relief from the government.
- For each region (district, town or city council) in the country, the information on vulnerable citizens is then sent on a spreadsheet to coordinators at the Ministry of Local Government and Rural Development.
- With the delivery of food packages requiring trucks for delivery, regional government, for example Gaborone City Council, register truckers and assign delivery jobs manually.
- The end-to-end process is entirely manual and heavily paper based.

Solution

- MmaB automates the registration, assessment and enrolment of vulnerable citizens on the COVID-19 Food Relief programme.
- It offers Program administrators reporting dashboards for effective and efficient programme management.
- The collection and aggregation of data behind the scenes would give the government actionable insights that will allow them to plan, monitor and evaluate the programme effectiveness in a data driven way – optimising the supply chain and delivering required interventions to vulnerable citizens in a timely manner.
- For example, administrators can know the quantities of items required per ward, village or region, and reconcile food inventory ordered from suppliers with that deliver to Batswana.
- Social workers can know vulnerable citizens and their needs at the touch of a button.

Partnership

Financial partners: the system has more potential beyond being a registry for Covid19 Food relief. It can be expanded to include:

- Registry for all Protection Services housing all government programs ranging from school feeding schemes, destitute and orphan assistance schemes, agricultural and farming

subsidies, veteran benefits and old age pension scheme administration etc.

- NGOs/Charity/Foundation – modules need to be designed to offer a similar service to organisations also helping the vulnerable in our society. Collation of this data and Governments would allow for a greater transparency and data in making policy decisions.
- Donor platform – a module can be built to connect individuals and institutions who want to donate to the vulnerable in society. This module would allow the vulnerable to appeal on the system and be matched with donors.

For all of these modules, we would need to fund the development and rollout.

International Partners: we believe this system is replicable across the world. We would need partners in various countries to sell it to governments and other stakeholders for use in their various localities.

Technical partners: Assistance with best practice and guiding our team through process of building and scaling the different modules.

Replicability

Yes this project is replicable. The Mma B app is a digital citizen self registration that can be used for Covid19 registration of vulnerable people. It uses web, app, WhatsApp, FB messenger and USSD. This app can be used for any form of emergency relief or efficient self registration need. It is also a universal register for any social welfare programs hence it is applicable in any country that currently does not have a digital register of its citizens but also has welfare programs.

Sustainability

The main selling point for the application created is that it would 1. Save man hour costs related to collecting vulnerable people data when done manually 2. Save costs related to travelling across the country, stationary, accommodation etc. 3. Reduce man hours related to manual reporting and assessment of vulnerable individuals. 4. Reduce wastage of resources related to double counting, poor assessment etc.

All of these saved costs would easily compensate for the cost of setting up the system, maintenance and licenses that a Government would have to incur. To further reduce the cost, governments can leverage digitisation funds across the world which could pay for initial development costs using grants hence reducing cost of licenses.

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-government

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 10: Reduce inequality within and among countries|Goal 16: Promote just, peaceful and inclusive societies

Case89-qareme-app Telemedicine With E-payment

Title of the project, Contact Organization Name, Stakeholder type, Country

qareme-app Telemedicine With E-payment|denet|Private Sector|Algeria

Beneficiaries

Vulnerable Citizens: Efficient and transparent delivery of COVID-19 food relief and protection services to vulnerable Batswana. This would reduce potential hunger, delays and anxiety experienced by the citizenry.

Government: By optimising the process through automation, the Ministry can deliver relief quickly and cost effectively. This system saves many hours needed to manually collect data and associated costs and time taken to deliver.

Administrators: Programme managers will get a dashboard that offers actionable insights for not just Monitoring and Evaluation, but for planning, designing and delivering evidence-based interventions on managed programmes. This will have a positive impact in the lives of many Batswana counting on relief from Government programmes.

Beyond COVID-19, the government can extend the solution to cover the management of other relief programmes offered by the Department of Social Welfare, assisting social workers to make the vulnerable visible around Botswana.

Mma B will also be expanded to include modules for all NGOs/Charities/Foundations which are assisting in providing help to the vulnerable in society. This would provide an opportunity for Govt to fully see all efforts for vulnerable people in the country.

Website

<http://care.dzmeet.com.dz>

Description

we développe a platforms with responsive application devices ios android and connect them to e-payment for téléconsultations and medical use there accès for professional of medical corp and also patient accès for all catégorie of doctors

ICT Tools

we use 3 plateforme and integrate peer to peer to the app and virtuel room we are hoping to be international application

Challenges

the challenge of the first app mido cal in algeria connected to epayment and also the first stable and optimized application

Partnership

yes for more developing it and more opportunity for environnement to connect it to labotory and imagery center and other

Replicability

no

Sustainability

no

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C7. ICT applications: benefits in all aspects of life — E-employment|AL C7. ICT applications: benefits in all aspects of life — E-environment|AL C7. ICT applications: benefits in all aspects of life — E-agriculture|AL C7. ICT applications: benefits in all aspects of life — E-science|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case90-Business Management Application

Title of the project, Contact Organization Name, Stakeholder type, Country

Business Management Application TAP ERPP Private Sector Pakistan

Beneficiaries

all persone need doctors also professional of medical corp

Website

<https://trapaccounting.com>

Description

We offered virtual employees to run our application while managing business activities. There was need regarding to control and safe from Covid-19 pandemic, indeed, to offer low cost services needs to be offered to business in the situation.

ICT Tools

It is an application which is available at global level. It is developed with different stakes e.g. PHP, JavaScript(JQuery and others), and other tools. It automates whole business globally.

Challenges

No doubt competition was there in the market but it's our potential to overcome the situation and now working more for business community. No issue regarding development of application but marketing efforts needed so we did. Currently we feel better to run business smoothly.

Partnership

Yes! we need investment to grow more and more. Area does not matter. We focus to grow TAP all over the world as we need local offices at popular cities of some countries. So partner from any country can approach us to operate TAP at his own country even globally.

Replicability

No

Sustainability

Yes! It is for business and we believe to serve life time. We would offer reliability regarding automation of their activities and safe their data. We would be with them as their business exists.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C7. ICT applications: benefits in all aspects of life – E-science|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure

access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case91-Entnest - Home of Entrepreneurs

Title of the project, Contact Organization Name, Stakeholder type, Country

Entnest - Home of Entrepreneurs Entnest Private Sector Switzerland

Beneficiaries

We target all businesses at international level while offering to automate their activities among departments over the setup including branches located all over the world.

Website

<https://www.entnest.com>

Description

It has become clear that COVID-19 has affected our world in almost every way. Catering to this explosion of time spent online, and to the rapid acceleration of first-time entrepreneurs, Entnest is perfectly positioned to leverage our ICT technology to support, connect and inspire the global entrepreneurship ecosystem. Our video conferencing technology also enables people who otherwise would be at home alone to connect with colleagues, like-minded people, clients, investors and more. Improved communication and collaboration helps the entire supply chain, from the individuals, to the organizations like coworking spaces, incubators, accelerators etc., to the governments of the nations we are active in. We have also recently been accepted as a partner of the Global Deal, a multi-stakeholder initiative for social dialogue and inclusive growth – a partnership of governments, businesses and employers’ organisations, trade unions, civil society and other organisations. The aim of the Global Deal partnership is to benefit from, and contribute to, a

platform that highlights the value of social dialogue and strengthens existing co-operation structures.

ICT Tools

Entnest is in itself a coded digital platform with a spectrum of in-house built tools like video conferencing technology (both 1:1 and group), smart matching, marketplace-style services exchange, community and event management, space and room booking systems and more. We promote digital transformation by enabling communication within teams and communities, and across team and communities, both locally, nationally and internationally. Online, there are no national borders and we believe in the human right of global communication and collaboration.

Challenges

The main challenge in ensuring efficient use of ICT as a COVID-19 response is the focus on collaboration rather than duplication of efforts. It is great to see so many new initiatives, but often a lot of these initiatives requires a digital infrastructure and the entrepreneurs behind the initiatives want to build their own network or their own community. This takes a lot of effort, energy, time and money, and is often almost identical to hundreds if not thousands of other communities. Since 2015, Entnest has been focused on developing a digital infrastructure that not only allows for global communication and collaboration, but also allows for initiatives to set up their own private sub-communities within which to discuss and take action on their own projects. This means the entrepreneurs can focus 100% on their mission, and not need to worry about digital infrastructure. This also means that each initiative has its own private space for internal communication and collaboration, while also being able to find external support in numerous different ways.

Partnership

We are looking for partners within government (supporting and inspiring innovation and entrepreneurship), NGOs (to support local entrepreneurs gain access to knowledge, partners, investment and clients for more impact), corporates (to take a more active role both for entrepreneurship within the company itself and in terms of collaboration with startups and scaleups), and innovation support organizations like coworking spaces, incubators/accelerators, investment groups, educational institutes etc. (who want to provide their members with a dedicated all-in-one toolbox while improving connectivity and collaboration opportunity with the wider global network).

Replicability

Entnest is a digital platform for local and global communication and collaboration, in order to improve the impact and success of entrepreneurs everywhere. Entnest is globally applicable and scalable, and we intend to aid entrepreneurs in every country. The most effective way for Entnest to enter and bring positive effects to a new market is to establish a cooperation with local entrepreneurs and initiatives.

Sustainability

Entnest is sustainable as we are building a strong yet flexible digital infrastructure. As a service (not a product), we are not dependent on raw materials, and we intend also to take a proactive position in the sustainable economic development of our active markets through the Entnest Fund. Entnest is committed to donating at least 51% of its profits to the Entnest Fund, which will in turn re-invest that capital back into the Entnest community in the form of micro-grants, subsidies and direct investments. In this way, we support our community members with knowledge, tools, like-minded people and financially, in a way that will ensure the sustainability of the Entnest values, concept and platform, and most importantly, the success of our members.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case92-Jincheng Joint Defense Joint Control Checkpoint Inspection Control Register System

Title of the project, Contact Organization Name, Stakeholder type, Country

Jincheng Joint Defense Joint Control Checkpoint Inspection Control Register System
China Mobile Group Shanxi Co., Ltd. JinCheng Branch
Private Sector
China

Beneficiaries

Our primary beneficiaries are the members of Entnest. These members are either individual entrepreneurs, those that work with entrepreneurs (investors, coaches, consultants, program managers etc.), or what we can Support Organizations (coworking spaces, incubators, accelerators, investor groups, business networks, educational institutes,

governmental organizations, NGOs and a few other groups). The main benefits can be defined by our 3 fundamental pillars: 1) Our trust and relevance based community, created through our invite-only system. 2) Our aggregation and improvement on the ease-of-use of tools, as we have brought the main tools entrepreneurship needs in one place in a simple to use way. 3) The ability for creation of private members-only sub-communities within Entnest, to facilitate communication and collaboration within a coworking space for example, while also enabling the members of this coworking space sub-community to go "beyond" this sub-community and communicate and collaborate with entrepreneurs outside that organization, globally.

Website

<http://www.10086.cn/sx>

Description

As China's first online traffic bayonet epidemic prevention and control system, it assists in the information management and control of mobile personnel during the epidemic, shortening the inspection time from more than 5 minutes to more than 1 minute, greatly improving the efficiency of traffic and reducing cross-over between personnel infection. More than one million pieces of high-value data were collected and analyzed to provide a basis for government decision-making on epidemic prevention and control. It has great influence on social society and it was reported by CCTV13, Shanxi Daily and other media and they have been affirmed by Secretary Zhang Zhichuan of Jincheng City, Deputy Mayor Liang Liping and the New Crown Epidemic Prevention Headquarters. The system was developed by China Mobile, and the embedded company logo greatly promoted the corporate image.

ICT Tools

Log in by scanning the QR code and clicking on the SMS link; the system has a built-in itinerary query function, which can track the user's detailed itinerary positioning trajectory within a month, operator information sharing, and full network coverage. The data is synchronized with the database of the Municipal Bureau of Statistics in real time, and real-time detailed reports are provided for the government to analyze and make decisions. Cloud network integration technology, support multi-system compatibility (support WINDOWS, linux, Android), multi-scene access (mobile terminal, PC, large screen), multi-service functions (personnel track positioning, personal identification information authentication, access information registration, etc.) "Support dynamic and seamless expansion. The above practices have effectively promoted regional and national informatization management and realized digital transformation. It embodies the values of WSIS, sharing information, eliminating the gap between rich and poor and diseases.

Challenges

In 2020, the new crown pneumonia epidemic is sweeping the world, and companies are facing resumption of work and production. How to balance the prevention and control of the epidemic and economic and social development? Actively using information technology to improve the efficiency of investigation, control and registration and reduce exposure risks have become the key. Based on its own network advantages, Jincheng Branch of China Mobile Communications Group Shanxi Co., Ltd. has developed an inspection and control registration system for the government, which is published through a unified H5 page, for personnel information filling, itinerary information management and control, data verification, SMS interaction, and database analysis Inquiry and other functions provide standard interfaces to form an integrated application system for inquiry, management and control.

Partnership

Look for partners worldwide. Partners do not need any hardware deployment except handheld terminals that can access the Internet. The system can be deployed remotely through APP, applet, B/S, etc. In theory, it can be copied and promoted quickly and easily in any country and region with an Internet environment in the world.

Replicability

This system is extremely replicable. We have carried out promotion and replication, and have received good results. The community version of the joint epidemic prevention and control system of Zezhou County, Yangcheng County, and Gaoping City of Shanxi Province, and the joint prevention and control system of the new crown pneumonia epidemic in Changzhi City and Yangquan City have completed system deployment and application through cooperative development and code replication. This system is a Browser/Server structure, developed based on the IIS middleware environment, relying on Shanxi Mobile and other three-level security assurance systems and Jincheng Mobile cloud platform, and adopts distributed deployment of databases and application systems. Villages and cities in any country and region can be deployed through the Internet. Realize remote deployment.

Sustainability

Facts have proved that global cooperation in the fight against the new crown epidemic is a long-term task. The system can quickly log in through various methods such as URL, SMS link, scanning QR code, etc., and can check the entry and exit of various personnel, recent geographic location and other data. Realize informatization control, traceability, and analysis; as the new crown epidemic continues to spread around the world and the new crown virus variants continue to be discovered, the global fight against the new crown epidemic will be a arduous and long-term task. The system will contribute to deepen cooperation for the world and fight together The new crown epidemic has made a positive contribution.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to

information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case93-Saudi enablement program

Title of the project, Contact Organization Name, Stakeholder type, Country

Saudi enablement program Arabic computer systems Private Sector Saudi Arabia

Beneficiaries

The beneficiaries are the general public and government departments. Realize the information management and control of entry and exit personnel, greatly alleviate the pressure of manual registration of vehicles at 31 prevention and control checkpoints in Jincheng, shorten the inspection and registration time from more than 5 minutes to more than 1 minute, improve the efficiency of passage, and greatly reduce the chance of cross infection between personnel. Record the name, ID card, place of origin, destination, specific address, reason for coming to advancement and body temperature of the migrants. The data is synchronized with the database of the Municipal Bureau of Statistics in real time, and real-time detailed reports can be provided. More than 1 million pieces of data were provide reference for government decision-making on epidemic prevention and control.

Website

<https://www.acs.com.sa/careers/>

Description

Saudi Enablement Program is Enabling the youth to contribute to their own growth and the prosperity of Saudi Arabia. This initiative primarily involves equipping them with the skills that are in demand in the contemporary marketplace. The SEP involves actual hands-on practice in a real work environment.

Project Objectives:

- Building a career-path. The SEP was initiated to help fresh graduate students to chart their own career path in the field of information technology. The program targets students with a

non-IT Bachelor's degree if they are interested in the IT field; or have certificates related to IT like: Management Information Systems (MIS) or an IT diploma.

- Simplify job duties in the IT field. The SEP is developed by IT experts who are aware of the skills needed for entry level jobs and which do not need a high level of expertise--skills which even a fresh candidate, with active support from mentors, will be able to acquire.
- Cover companies' employment shortage. SEP is aimed at helping cover employment shortages at Saudi companies. Many local and international companies in Saudi Arabia are unable to find qualified Saudi employees to be employed in IT. The existing experienced talent demands very high salaries.

Results achieved:

- Knowledge transfer. The program offers on-job training opportunities with close supervision by technology leaders who are experts in their field to support fresh talent and enable them to master critical needed areas in IT field.
- Program release Certificate talent with based knowledge practice
- Saudi Enablement Program challenge talents to get qualified self-motivated employees who are seeking for continues skills & experience development

impact generated.

- Saudi Enablement project will minimize the gap between university's outcomes and market needs.
- Participating in minimizing unemployment rate.
- Increase women's opportunity in IT field within Saudi Arabia

ICT Tools

ACS is always looking for utilizing technology to enhance employee's productivity by improving work efficiency and reducing wasting time over routine and duplicated tasks. Since we are living in the digital transformation Era, ACS believes that automating business processes and giving employees ICT tools will have a great positive impact over individuals' performance as well as organizations overall productivity.

Examples of ICT Tools in ACS;

- ITSM Ticketing tool
- CRM
- IVR Tools
- Asset Management tool
- Recruitment portal

Challenges

Main challenges

- Emerging technology: A major challenge is to train a workforce to meet the demands of emerging technology in IT. This will require an imaginative curriculum that will select bright minds to be groomed in AI, Blockchain, IOT and the like.
- Companies behavior. Most IT companies do not trust employees with limited experience.

Fresh candidates who do not qualify for well-paying jobs after the training can find it discouraging and may be motivated to give up further learning. Mentors and counsellors need to ensure the spirits are kept high.

- Employees behavior. Employees with limited skills have commitment issues. They may be unsure of what they want to be or do. They may leave the program before getting the needed qualification planned for them, this will inevitably affect the development of their skills in the IT field.

- Expertise mindset. Some experts are very conservative. They fear of getting replaced with younger people. So they may not facilitate information access.

- Complicated role of IT positions. Simplifying IT jobs to be included in the program is another challenge since all IT jobs cannot be easily simplified to fit fresh graduate students' capabilities.

- Changing in Career path: The dynamic nature of the market is such that skills need to be updated at frequent intervals. This can be dissuasive

Project's future perspectives.

Recruitment portal: Saudi Enablement Program plans to develop a dedicated portal which will be integrated with other recruitment portals to serve as a source for candidates for the program, and, after completion of the program, candidates can refer to the recruitment portal to explore opportunities for experienced IT personnel.

AI Technology: SEP plans to use AI technology to understand the standard tasks for each position and map the needed skills and experience for each task. This can help building and simplifying a career path for new aspirants.

Expand to non-IT jobs: The core Idea of this program is to simplify the requirements for different IT jobs and hand-hold new employees, assisted by experts who are aware of the challenges of the desired position. This practice has succeeded in a couple of IT fields such as technical support and cyber security. This indicates that the practice can be expanded to any other position regardless of the sector.

Involved universities: We envisage, shortly, to tie-up with Saudi universities to make SEP more effective and all-encompassing

Include high school students: SEP can include high-school students during their summer vacations for short IT-skills' training programs

Partnership

In ACS, we believe that the most strategic way to enhance business outcome, Scale Innovation and solve business challenges is through PARTNERSHIPS.

partnership agreement with a firm whose corporate goals and values augment in a company Due to our strategic partnerships with different local and international technology leaders, ACS has managed to expand our expertise skills, develop our services portfolio and increase our Addressable market. business that does share primary objective may lead to increase values customer loyalty

We are pleased to work with the many domestic and international technology Partners.

• UI path

- HP
- Huawei
- Dell EMC
- Lenovo
- Simtix
- Esri
- Clsco
- Hewlett Packard
- Exceeders

Replicability

The program Idea can be replicated with any field. All needed is expertise in field who can simplify jobs requirements and understand the real need within the same field.

We are planning to expand to cover all Saudi and going outside Saudi

Sustainability

Yes

The project is based on the basic jobs with simple defined task either to help customer, monitoring & field remote support which is always needed. And if replaced with new technology the need is still exist to follow up and guarantee continues operations.

Action Lines

AL C4. Capacity building

SDGs

Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 17: Revitalize the global partnership for sustainable development

[Case94-www.anna.tn](http://www.anna.tn)

Title of the project, Contact Organization Name, Stakeholder type, Country

www.anna.tnHOPE HORIZONPrivate SectorTunisia

Beneficiaries

Please make a selection for Target beneficiary group(s) or enter a value for Other target beneficiary group(s).

1. Indigenous and nomadic peoples
2. Migrants
3. Older persons
4. People with disabilities
5. Refugees and internally displaced people
6. Remote and rural communities
7. The poor
8. The unemployed
9. Women
10. Youth

Other target beneficiary group(s) (please specify) :

Companies which are looking for specialist in IT for entry level.

Website

<https://www.facebook.com/HopeHorizon.AI.Startup>

Description

www.anna.tn is a free access web application which predict the probability of being COVID+ from a simple list of clinical datas and geolocation of the user. www.anna.tn is an intelligent worldwide accessible screening method for COVID19. www.anna.tn is based on artificial intelligence algorithms. Anna has been statistically tested, sensitivity was about 80% and specificity about 75%.

ICT Tools

Anna will allow any human being on earth with an internet connection to be able to perform a simple screening of COVID19. Anna is using artificial intelligence technology perfectly integrated in a web application. This web application is a cutting edge method, easy to use, that allow a pathology screening using only an internet connection.

Challenges

Anna was already used by over 20'000 users over the world but mainly in Tunisia. The main challenge for Anna is to become known worldwide. We believe that Anna can save lives around the world, and the main challenge to achieve this goal is to launch a worldwide promotionnal campaign wich needs to raise funds or to have sponsors. We think that having an official partnership with organization like WHO or other national healthcare institutions will help Anna to be known and used by significantly a larger number of human being.

Partnership

We are looking for partners in healthcare sector. Organizations like WHO, national institutions, pharmaceutical labs, or other companies interested in high technology and human well being.

Sustainability

Sustainability of the project is depending on the presence of sponsors which is depending on the number of users worldwide.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case95-Sustainability Digital Platform

Title of the project, Contact Organization Name, Stakeholder type, Country

Sustainability Digital PlatformstcPrivate SectorSaudi Arabia

Beneficiaries

Any human being on earth, any user who doubt he is COVID+.

Website

<https://www.stc.com.sa/>

Description

Project supported the NGO charities by allowing them to register to stc as a beneficiary and avail volunteering opportunities to stc employees covering the COVID opportunities engagement

ICT Tools

We used web portal and Business process management (BPM) tools to support the needed requirement implementation, web application technology all based on open source technologies.

Challenges

Bootstrapping new project in the pandemic crisis was very challenging, we were in the stage of hiring and aviation lock-down occurred, the development model have changed to offshore instead of onsite

Partnership

Our partners are the NGO charities, whenever help needed, we are there to support and help

Replicability

The applied concept can be introduced and used for any other corporate to support sustainability and corporate social responsibility, of enabling corporate employees to involve in their community

Action Lines

AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case96-Capsule

Title of the project, Contact Organization Name, Stakeholder type, Country

CapsuleStartup Business GatePrivate SectorPalestine

Beneficiaries

Non-Profit Governmental Organization and Charities, as well as the public training organization. Also our stc employees are the main stockholders from our side

Website

<http://www.delivery.ps>

Description

The idea of the project is to start with registering patients when they start using the program and on a growing basis

The user's medical record is recorded in their visits to doctors, medications used, etc.

The record is viewed by the doctor visited by the user

There is no need to explain what kind of previous medications the patient has used

ICT Tools

Digitalize the medical records

Challenges

Separated Care Centers, and No Past Medical Records...

we must to implement it and push more efforts to digitalize the past medical situation

Partnership

Ministry of Health of Palestine & Jordan

Replicability

Yes

to each country can make a centralized database

Sustainability

Sure, Health Care need every time and extended

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 17: Revitalize the global partnership for sustainable development

Case97-Aseel project

Title of the project, Contact Organization Name, Stakeholder type, Country

Aseel projectstcPrivate SectorSaudi Arabia

Beneficiaries

All Community ,, Doctors,, Health Care Centers

Website

<https://www.stc.com.sa/>

Description

Aseel chatbot is an NLP & ML powered solution that will be developed to provide features that will efficiency impact on safe employees time and help on data driven decision making, it's helped to improve working from home experiences as it provide services between departments .

ICT Tools

NLP & ML Chatbot, RESTful API integration

Challenges

The integration between many systems and application to provide centralized repository, the start of the project and gathering the needed resources

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C6. Enabling environment

SDGs

Goal 13: Take urgent action to combat climate change and its impacts

Case98-Ajman free zone - Ajman, United Arab Emirates

Title of the project, Contact Organization Name, Stakeholder type, Country

Ajman free zone - Ajman, United Arab EmiratesAjman free zonePrivate SectorUnited Arab Emirates

Beneficiaries

Efficiency Impact (Safe time.
Data driven decision making.
Decrease false requests volume)
Accuracy(Minimize human errors.
Alignments & Consistency.
Comparing)
Sustainability Factor(Better user experience.
Interactive agent.
Accessible 24/7)

Website

<https://www.afz.ae/en>

Description

During the pandemic, Ajman Free Zone enabled a work from home and remote working system using capabilities of the automated and digitalized services. AFZ also took advantage of cloud technologies, giving customers easier access to their services via a centralized portal that seamlessly connects investors with its employees.

AFZ also made use of its Robotics Process Automation (RPA), which was designed to support internal operations to speed up the process to fulfill investor demand and expectation and to utilize the existing technologies in the customer journey.

ICT Tools

As earlier pointed out, AFZ made use of cloud technologies to help in the provision of services for the investors--which is part of the digital transformation journey of AFZ. Under this move, the AFZ aimed to provide and extend all its services through cloud service--ensuring that all services are reachable everywhere at any required time.

Meanwhile, RPA represents another form of technology that AFZ is using to support and back up the daily operations. It is also used to reduce manual intervention where the investor will submit his request in one for the areas and will be processed by the RPA technology without human intervention. RPA technology has been deployed in parallel to support the cloud services and to process investor's requests.

Challenges

One of the key challenges faced was the deployment of the RPA technology, especially during the pandemic as providing the training to employees served as a challenge. The issue was resolved via the provision of ample training sessions that involved the participation of employees during the implementation phases and during the User Acceptance Test (UAT), making them aware of the procedures and the required action from their side for the cases. This also involved the continuous follow up and process review after the system deployment.

Another challenge was making sure that the customer was aware of the process-- taking advantage of Ajman Free Zone social media advertising practices, the customer became more active and interactive in knowing all the new services by encouraging them to follow our accounts on social media.

Partnership

At AFZ, we see partnerships as a key factor needed to enable the success of these services and businesses in itself. With this in mind, the AFZ looks forward to using new services to develop and enhance the community process. Our technology partners and market leaders in AI and RPA serve as our main focus. Market leader technology partners are the focus of Ajman Free Zone when it comes to deploying and practicing new technologies. Market leader in Robotic Process Automation is also the focus of Ajman free zone along with Cloud service providers as they are the enablers of the new Technologies. The use of these technologies is a main factor to AFZ's business continuity--making sure that it is a global best practice that is adhered to constantly.

Replicability

The RPA system is replicable and can be duplicated in operations as it maintains a repeated workflow that can be deployed and impeded in its day-to-day operations. This project can be replicated by adding more services into the platform. The RPA is capable of handling more services within the same platform as it was designed to explore and to handle more services that will lead to consumer satisfaction. These service are not limit to one. The RPA was designed to manage further service and to handle them as per the designed scope, which can be further expanded to cover extra process and ensure that process and workflow follows the required deigned plan for it considering the project requirements.

Sustainability

The project is deemed sustainable as it comes down to maintaining the new technologies and opening the door for innovation.

Action Lines

AL C6. Enabling environment

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case99-Athena Times

Title of the project, Contact Organization Name, Stakeholder type, Country

Athena Times Athena psychiatric & de-addiction treatment center Private Sector Bangladesh

Beneficiaries

The main parties that will benefit from these systems are AFZ investors who make use of the cloud services by accessing their portal from anywhere and when they would need to begin their services. As an example, the RPA system is used to process customer requests that leads to faster service request processing time, which in turn, will increase customer satisfaction and will benefit the customer in processing his requests in fast and quicker ways.

Another likely advantage gained is that employees can easily work remotely. This is

attributed to the presence of RPA, which supports the daily operation and minimize the time taken in providing the required service to the customer.

Website

<https://athenaltbdb.com/>

Description

As Athena works with mental health and it was one of the most significant area to focus on during the pandemic. As social media usage within people grew, we started hosting Facebook live shows to address the mental well being of individuals. We focused on how to deal with stress and anxiety during pandemic, Living ahead of Corona, Women's health in current pandemic, Pregnancy during Covid pandemic, mental wellbeing during pandemic and more. We welcome industry experts, international practitioners to address the burning issues.

ICT Tools

Social media (Facebook, YouTube): We used Facebook live and live streaming platform Stream yard to host different guests and practitioner to talk about the pressing issues during the pandemic. We ensures the content was circulated properly so that we can touch maximum lives. Our content on social media has 4,00,000 organic reach.

Digital content: We created and distributed digital content to reach out to people who does not have the awareness of mental health and the significance of it. We focused on increasing the literacy on this issue.

PR and media: With collaborating with different PR and media representative, we distributed the content to reach the mass audience.

Email outreach: We outreached to many individuals through email to spread the awareness on mental health and well being.

Challenges

The main challenge is breaking the taboo regarding mental health. People are not still comfortable talking about mental health. The taboo can be broken by constantly taking initiative for the betterment of mental health and talking about the issues that needs the attention.

We think breaking the taboo will open avenues that we can explore and ensure betterment of the society in the long run. Along with that, the pandemic situation is prolonging and it will start having its effect on the people eventually. In order to tackle that, we need to level up our initiative and ensure we create and maintain awareness for mental health and well being.

Partnership

Government
International Patron

Replicability

Yes the project is replicable to some extent. It can be replicated by hosting similar Facebook live show on Facebook. But having good quality spokesperson might not be replicable as we have prominent resources with us.

Sustainability

The project deals with mental well being and it is an essential necessity that is needful for people of every walks of life. We can continue the project with our initiatives and keep raining awareness on mental health and well being. Plus, the resources and technology used in the project is also sustainable .

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case100-Agromedium

Title of the project, Contact Organization Name, Stakeholder type, Country

Agromedium Agromedium Kft. Private Sector Hungary

Beneficiaries

Working professionals
Students
Family
Young adults
Teenagers
Woman
Pregnant women
Individuals with mental health issues

Website

<https://agromedium.com/hu/>

Description

Our solutions target are the big farms and the smallholder farmesrs too. Each type of farms need to make good decisions about input products.

The Agromedium is a mobile application, a digital information database for the farmers and agricultural advisors. The users can use it offline and online too, and they can get up to date information about the agricultural input market.

ICT Tools

Smartphones (features, apps); Web platforms (forums, communities, e-governance); Cloud (data storage and computing, Big data); Software solutions (programs and packages)

Challenges

It is a free decision support system, an up to date information database for the farmers and agricultural advisors. The Agromedium helps the users compare the plant protection products, fertilizers and seeds in several aspects so they can make a good decision. Those companies who are make farm management software no need to make these databases, no need human resource for it, they can focus the more important things. We can make market research for the input product manufacturers, governments, authorities and we can show trends for they, even for the whole of Europe. We can help the flow of information to adopt good practices in other countries.

Partnership

No

Replicability

Proven/ Scale-up stage

Our software is available just in Hungary at now from the Apple App Store, Google Play and Huawei App Galery.

Sustainability

We want to expand the Agromedium to all in Europe. We start the Agromedium system in Romania in the mid of 2021, and in 2022 want to be in every European country.

We want to develop in the Agromedium an agricultural dropshipping system for the farmers

and the distributors and we want to develop a social media platform where can the farmers and advisors discuss the actual agri- horticultural problems (it is in progress and available at the end of 2021).

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 12: Ensure sustainable consumption and production patterns|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 17: Revitalize the global partnership for sustainable development

Case101-Muffaker app

Title of the project, Contact Organization Name, Stakeholder type, Country

Muffaker appWaselat AIMuffaker for educational services Co.Private SectorPalestine

Beneficiaries

Everybody who need to make decisions about plant protection, nutrient replenishment and sowing.

Website

<https://www.facebook.com/Muffaker-307254966128302>

Description

Designing a comprehensive e- application covering all aspects of learning : academic, life skills & crafts, systematically classified into major and sub-major concepts according to age & mental abilities ; particularly targeting 3-12 yrs children with special needs supported with interactive learning methods & parents app. to follow up the progress and development of their children.SUPPORTED WITH MEASUREMENT TO DETECT THE DEGREE OF DISABILITY

ICT Tools

Using unity in developing the app. Enemy videos & effects enabling easier understanding for the concepts for better learning

Parents app'll facilitate the follow up

App'll be available in the store for android & IOS

Challenges

Collecting data based on a scientific basis, designing a comprehensive content(+450 concepts) suitable for special needs children: specialist in each field & special needs specialist

New to the market: suitable prices, variety of concepts, marketing campaign & awareness workshops in the educational institutes.

Partnership

not in this stage

Replicability

By adopting scientific experiments in such interesting interactive learning method

By collecting more data to design more interactive concepts

By targeting normal children with such comprehensive interactive learning system

Sustainability

Collecting data for more than 450 concepts

Supervision of special needs specialist, with other specialists in all other fields, to make sure that this category is perfectly able to use this app

Parent flexible access to the progress & development of the child through parent app.

Hard copy of the concepts (product) are already available in the market & special needs institutes' feedback is very satisfactory & promising

Action Lines

AL C4. Capacity building | AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all | Goal 10: Reduce inequality within and among countries

Case102-Muffaker app

Title of the project, Contact Organization Name, Stakeholder type, Country

Muffaker appWaselat AlMuffaker for educational services Co.Private SectorPalestine

Beneficiaries

Palestinian society and in general Arab societies consist of 48-50% children with 3% annual increase . 12% of this children population is with special needs

3-12 years children can be found in :

*Special needs institutes

*Kg's

*Primary schools

*Fun educational programs

*Children in Diaspora

Website

<https://www.facebook.com/Muffaker-307254966128302>

Description

Designing a comprehensive e- application covering all aspects of learning : academic, life skills & crafts, systematically classified into major and sub-major concepts according to age & mental abilities ; particularly targeting 3-12 yrs children with special needs supported with interactive learning methods & parents app. to follow up the progress and development of their children.SUPPORTED WITH AMEASUREMENT TO DETECT THE DEGREE OF DISABILITY

ICT Tools

Using unity in developing the app. Enemy videos & effects enabling easier understanding for the concepts for better learning

Parents app'll facilitate the follow up

App'll be available in the store for android & IOS

Challenges

Collecting data based on a scientific basis,designing a comprehensive content(+450 concepts) suitable for special needs children:specialist in each field& special needs specialist

New to the market: suitable prices,variety of concepts ,marketing campaign & awareness workshops in the educational institutes.

Partnership

not in this stage

Replicability

By adopting scientific experiments in such interesting interactive learning method
By collecting more data to design more interactive concepts
By targeting normal children with such comprehensive interactive learning system
By designing the concepts as VR

Sustainability

Collecting data for more than 450 concepts
Supervision of special needs specialist, with other specialists in all other fields , to make sure that this category is perfectly able to use this app
Parent flexible access to the progress & development of the child throw parent app.
By designing the concepts as VR
Hard copy of the concepts (product) are already available in the market & special needs institutes' feedback is very satisfactory & promising

Action Lines

AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 10: Reduce inequality within and among countries

Case103-UMAN

Title of the project, Contact Organization Name, Stakeholder type, Country

UMANAjadPrivate SectorPalestine

Beneficiaries

Palestinian society and in general Arab societies consist of 48-50% children with 3% annual increase . 12% of this children population is with special needs

3-12 years children can be found in :

*Special needs institutes

- *Kg's
- *Primary schools
- *Fun educational programs
- *Children in Diaspora

Website

<https://ajadagency.com>

Description

It reduces the closeness between individuals and increases social distancing, and avoid use biometric devices to manage the attendance.

ICT Tools

by using (UMAN App) you For scheduling & arranging, Application of recording work diaries and workers , creating reports and accounts and archiving them.

Challenges

To maintain security and functionality, we need to increase the specifications of the servers, We need more Developers for the updates on the Web application and the Mobile App.

Partnership

yes, Investment financially.

Replicability

No, it's new in market.

Sustainability

Yes, this application can work for long time , as we are using new technologies and available any ware.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all

aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C7. ICT applications: benefits in all aspects of life — E-employment|AL C7. ICT applications: benefits in all aspects of life — E-environment|AL C7. ICT applications: benefits in all aspects of life — E-agriculture|AL C7. ICT applications: benefits in all aspects of life — E-science|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case104-AIoT, Machine Learning, Drone Deployment, Precision Agriculture

Title of the project, Contact Organization Name, Stakeholder type, Country

AIoTs, Machine Learning, Drone Deployment, Precision Agriculture OREL Vision Private Sector Pakistan

Beneficiaries

Contracting companies, and contractors, Subcontractors, Manpower companies, Work site managers and construction project managers.

Website

<https://www.orelvision.com>

Description

We are IoTs based ML company working on drone and deploys multiple type of sensor difference Govt. sector, Including Agriculture Department, Mines and Minerals exploration and mine detection and other defense projects for the Govt. sector organizations

ICT Tools

AIoTs, Sensors, Python, PHP, Mysql etc.

Challenges

in crop reporting the differentiation of similar species crops from other like wheat from barley etc.

The problem overcome through NDVI values with min max and means.

Partnership

Currently, Technological partner are required to enhance our capabilities.

Replicability

yes, this project can be replicated within Pakistan other provinces Punjab and Sindh and other Geography like Africa etc.

Sustainability

Yes this project is sustainable. In Precision Agriculture and related including Climate Change are implementable and sustainable.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-agriculture|AL C11. International and regional cooperation

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 13: Take urgent action to combat climate change and its impacts

Case105-Saral Haryana

Title of the project, Contact Organization Name, Stakeholder type, Country

Saral HaryanaNicPrivate SectorIndia

Beneficiaries

Agriculture, Crop Reporting Services KP,
Mines and Mineral,
HZM company,
Ministry of Climate Change, Islamabad.

Website

<https://www.nic.in/>

Description

Migrant workers incoming and outgoing records

ICT Tools

National

Challenges

No

Partnership

No

Replicability

No

Sustainability
No
Action Lines
AL C1. The role of governments and all stakeholders in the promotion of ICTs for development
SDGs
Goal 3: Ensure healthy lives and promote well-being for all Goal 5: Achieve gender equality and empower all women and girls Goal 6: Ensure access to water and sanitation for all Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation Goal 10: Reduce inequality within and among countries Goal 11: Make cities inclusive, safe, resilient and sustainable Goal 12: Ensure sustainable consumption and production patterns Goal 13: Take urgent action to combat climate change and its impacts Goal 14: Conserve and sustainably use the oceans, seas and marine resources Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss Goal 16: Promote just, peaceful and inclusive societies Goal 17: Revitalize the global partnership for sustainable development

الطائف Case-106
Title of the project, Contact Organization Name, Stakeholder type, Country
الطائفالطائف Private Sector Saudi Arabia
Beneficiaries
Haryana people
Website
https://www.itu.int/net4/wsis/stocktaking/Surveys/Surveys/Submit/15863048637525604#sform
Description

<p>ICT Tools</p>
<p>Action Lines</p> <p>AL C1. The role of governments and all stakeholders in the promotion of ICTs for development</p>
<p>SDGs</p> <p>Goal 1: End poverty in all its forms everywhere</p>

<p>Case107-Telecommunications Industry Support for COVID-19 Response</p>
<p>Title of the project, Contact Organization Name, Stakeholder type, Country</p> <p>Telecommunications Industry Support for COVID-19 Response Ghana Chamber of Telecommunications Private Sector Ghana</p>
<p>Beneficiaries</p>
<p>Website</p> <p>https://telecomschamber.com/</p>
<p>Description</p> <p>i. Members have put in measures to ensure our network remains robust to support businesses and individuals amid the crisis.</p> <p>ii. Zero rated official online/e-learning platforms for schools across the country.</p> <p>iii. Giving citizens free access to a wide range of educational materials for students</p> <p>iv. Zero-rated calls to the National COVID-19 response number (112)</p> <p>v. Zero rated access to government information websites for citizens to obtain daily updates</p>

on COVID-19

- vi. Zero-rating of government portal to enable seamless work from home for selected government employees.
- vii. Institutional partnerships with the Government to broadcast emergency communications using our network infrastructure to educate the general public
- viii. Free SMS text messages per day to customers in, partnership with Ghana Health Service (GHS).
- ix. Social Media daily tips on COVID-19
- x. COVID-19 notifications on our Customer Apps
- xi. Providing SIM cards, airtime, Internet connectivity and devices to some hospitals, for contact tracing & other government institution
- xii. We have been encouraging our customers to avoid cash transactions and use Mobile Money to make and receive payments; have made it easy to register
- xiii. Collaborating with the Bank of Ghana to implement free mobile financial services transactions within certain bands to promote digital forms of payments and augment social distancing which will reduce the rate of new infection.
- xiv. Waiver of Mobile Money charges for up to GHS100
- xv. Commercial deals and packages have been offered to all customers.

ICT Tools

SMS, Social Media, Digital Financial Tools (Mobile Money), Mobile Data Connectivity

Challenges

Prank calls to the emergency lines, - Educations
Perceptions that COVID-19 was not real - Education

Partnership

No

Replicability

We would use this to handle all national disasters and emergencies. The project demonstrates how government can work with the private sector to manage these challenges

Sustainability

The project was about the customers of our members. It is about survival and it makes it sustainable as business we appreciate we only have a business when our people are healthy and safe

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-environment

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 17: Revitalize the global partnership for sustainable development

Case108-Data & AI

Title of the project, Contact Organization Name, Stakeholder type, Country

Data & AISDAIA Private Sector Saudi Arabia

Beneficiaries

Citizens of Ghana, Students and Pupils, Government Agencies and their workers

Website

<https://sdaia.gov.sa/>

Description

All

ICT Tools

All

Challenges
All
Partnership
Yes
Replicability
All
Sustainability
All
Action Lines
AL C8. Cultural diversity and identity, linguistic diversity and local content
SDGs
Goal 11: Make cities inclusive, safe, resilient and sustainable Goal 13: Take urgent action to combat climate change and its impacts

Case109-AI Nawras (FPS) is nominated in the UN's WSIS Prize 2021 in the E-Environment Category
Title of the project, Contact Organization Name, Stakeholder type, Country
AI Nawras (FPS) is nominated in the UN's WSIS Prize 2021 in the E-Environment CategoryGloban Aviation CorpPrivate SectorPhilippines
Beneficiaries
All

Website

<http://www.globanaviation.ph>

Description

AI Nawras (FPS) is nominated in the UN's WSIS Prize 2021 in the E-Environment Category,

ICT Tools

AI Nawras (FPS) is nominated in the UN's WSIS Prize 2021 in the E-Environment Category,

Challenges

AI Nawras (FPS) is nominated in the UN's WSIS Prize 2021 in the E-Environment Category,

Partnership

AI Nawras (FPS) is nominated in the UN's WSIS Prize 2021 in the E-Environment Category,

Replicability

AI Nawras (FPS) is nominated in the UN's WSIS Prize 2021 in the E-Environment Category,

Sustainability

AI Nawras (FPS) is nominated in the UN's WSIS Prize 2021 in the E-Environment Category,

Action Lines

AL C6. Enabling environment

SDGs

Goal 6: Ensure access to water and sanitation for all

Case110-Network engineer

Title of the project, Contact Organization Name, Stakeholder type, Country

Network engineerKafaatPrivate SectorSaudi Arabia

Beneficiaries

AI Nawras (FPS) is nominated in the UN's WSIS Prize 2021 in the E-Environment Category,

Website

<https://sdaia.gov.sa/>

Description

Tawalklna
Sahaty
Eatmrna
Boroog

ICT Tools

AI
Big data
Integrations

Challenges

With a good team a challenges will be a game

Partnership

Why not

Replicability

No

Sustainability

Yes

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C7. ICT applications: benefits in all aspects of life – E-science|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case111-Infrastructure

Title of the project, Contact Organization Name, Stakeholder type, Country

InfrastructureBechtelPrivate SectorKenya

Beneficiaries

Too many benefits

Website

<https://www.bechtel.com/>

Description

Use Technology to work remotely and engage with client effectively. .

ICT Tools

BIM

Challenges

Government side does not have necessary hardware and limited connectivity

Partnership

No

Replicability

Yes.

Sustainability

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-government

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 13: Take urgent action to combat climate change and its impacts|Goal 17: Revitalize the global partnership for sustainable development

Case112-Tawkalna

Title of the project, Contact Organization Name, Stakeholder type, Country

TawkalnaSDAIAPrivate SectorSaudi Arabia

Beneficiaries

Government client

Website

<https://sdaia.gov.sa/?Lang=en>

Description

Sharing thoughts for Twaklana application

Action Lines

AL C6. Enabling environment

SDGs

Goal 1: End poverty in all its forms everywhere

Case113-同一个目标

Title of the project, Contact Organization Name, Stakeholder type, Country

同一个目标深讯科技 Private SectorChina

Beneficiaries

NA

Website

<https://sxit.com.cn>

Description

戴口罩，加强防护

ICT Tools

TCP、HTTP

Challenges

成本控制

Action Lines

AL C4. Capacity building

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Case114-COVID19 Society

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID19 Society Nabeel Yasin Training and Consulting Center Private Sector Yemen

Beneficiaries

员工, 更好工作

Website

<https://nabeelyasin.com.ye/>

Description

The impact of the Covid19 on our life is huge in many ways , and to overcome this impact I have my initiative , which is an a independent none government online web based , localized collaboration platform for the COVID19 for all interested individuals , stakeholders , NGO/INGOs ..etc.

To discus , share real stories , positive stories of COVID19 survivors , raise awareness , share ideas , lessons learned , real data collection , COVID19 data science , suggestion , ideas , donations , initiatives and projects aiming to help reducing the impact of COVID19 on my society .

ICT Tools

- 1) Website CMS such as WordPress with plugins
- 2) Mobile Data collection tools such as kobo toolbox
- 3) Smartphone App (iOs and Android)

Challenges

Internet Access
Digital literacy
Rural Areas
Financial Support

Freedom of speech
Social Taboo

Partnership

Yes ,in the arears such as website designing , Blogs , Data collection tools , BI Dashboard , Smartphone App developers

Replicability

Yes , this project is replicable , and the project could be implements in many countries and could linked together .

Sustainability

Yes the project is sustainable , Donations and operation cost sharing from Projects and sponsors .

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case15-Algeria Doctors Directory (Atibaa el djazair)

Title of the project, Contact Organization Name, Stakeholder type, Country

Algeria Doctors Directory (Atibaa el djazair)|Algeria Doctors Directory (Atibaa el djazair)|Private Sector|Algeria

Beneficiaries

Anyone who concerned about the COVID 19 and its impact on our life and interested in how to overcome the pandemic .

Website

https://play.google.com/store/apps/details?id=dz.sebrou.docts_guide.app

Description

Our application collects the information we receive from volunteers in Algeria to help patients, facilitate their research and reduce the financial losses of the Algerian state in public health.

We collect phone numbers and addresses of doctors, hospitals, pharmacies, medicines, medical supplies, medical laboratories and blood donors.

The application has been downloaded by more than 100 thousand Algerians, the ratings on the Play Store have exceeded 12 thousand, and we receive messages of encouragement from citizens every time.

ICT Tools

When people provide assistance to each other, such as: donating blood or providing medicines and medical supplies that are not used for free or at a cheap price, then brotherhood and solidarity spread between individuals and society.

All the patient needs to benefit from the information we have collected is a smart phone and he can browse it without the Internet, especially in areas that do not have an Internet flow.

Challenges

Despite our limited financial capabilities and without revenues, we work hard to provide all the information that the patient needs in all the states of Algeria, such as: doctors, blood donors, medicines, associations, ambulances ... etc., and we will develop the application more in order to add everything the patient needs In Algeria, such as: collecting financial donations for surgical operations and collecting donations from volunteers to build a hospital with international standards in Algeria, and this helps the Algerian state's economy and serves public health and reduces pressure on public hospitals

Partnership

We ask for the help of the Algerian state in order to collect the largest number of information that we did not reach in order to help patients

Replicability

Anyone can collect information in order to help patients and provide them with all the information they need, but it is better for Algerians to unite around one institution.

Sustainability

Despite our limited financial capabilities and without revenues, we work hard to provide all the information that the patient needs in all the states of Algeria, such as: doctors, blood donors, medicines, associations, ambulances ... etc., and we will develop the application

more in order to add everything the patient needs In Algeria, such as: collecting financial donations for surgical operations and collecting donations from volunteers to build a hospital with international standards in Algeria, and this helps the Algerian state's economy and serves public health and reduces pressure on public hospitals

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case116-G_DETTE

Title of the project, Contact Organization Name, Stakeholder type, Country

G_DETTEMA SOLUTIONPrivate SectorAlgeria

Beneficiaries

Our cooperative application is a link between volunteers and patients in order to provide assistance to patients for free or at the lowest prices, and this reduces financial losses and expenses spent by the Algerian state on public health and increases the Algerian economy.

Website

<https://gdette.com>

Description

Debt collection has become a mitrass piece in a company, many who have declared bankruptcy because of the latter, company is always looking for a very effective and least expensive guarantee to ensure local and / or international debt collection.

Blacklisting a company or an individual, according to the law of each country, is the cheapest guarantee to ensure debt collection, a simple closure in a contract which gives you the right to publish your debts in a consulted database. internationally.

This procedure will allow companies and individuals to honor their contractual commitments if not their reputation in the market is compromised. "gdette.com" is an international

platform that allows you to consult and/or blacklist companies and individuals who do not meet the deadline for payment of their debts.

ICT Tools

The technology used is web application – mobile application

Challenges

1. Create a unique and global database
2. Adoption of our project by governments
3. Help companies and individuals who find it difficult to repay their debts.

To be able to overcome the main challenges it is necessary to have good communication and the commitments of the governments adhered to the concept

Partnership

Yes, I am looking for a partner who supports the communication part of my project

Replicability

No, it's not reproducible

Sustainability

Yes, so there are always forward economic transactions and credit operations, the debt collection guarantee is present

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 10: Reduce inequality within and among countries|Goal 12: Ensure sustainable consumption and production patterns|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case117-Online booking center

Title of the project, Contact Organization Name, Stakeholder type, Country

Online booking center|probooking|Private Sector|Algeria

Beneficiaries

Present a new credit guarantee solution, effective and that does not afflict the change in value according to supply and demand as a real estate mortgage for example, for economic operators and individuals

Website

<http://www.iprobooking.com>

Description

The activities carried out by Iprobooking consisted in selling remotely and the use of e-payment technologies. The system (IProBooking) shows to the client all the necessary information about his operation, so he can buy the product from his place

ICT Tools

In Algeria we have a lack in digitisation so we search for other solutions such as QR code, where the client needs just to scan the barcode to make his reservation without using any credit card, also we are the only company that made an agreement with Algérie post company because we are 100% Algerian

Challenges

One of the challenges we faced was the complete absence of e-payment systems in Algeria when we first started, and we overcome it by developing the latest e-payment methods and techniques (payment via the Qr code)

Partnership

Yes we are looking for partners, from all over the world which are interested in online booking and tourism

Replicability

The project is replicable and available for copying from other companies, in condition those companies must be 100% Algerian, and they must have an agreement with the financial institutions in Algeria

Sustainability

Yes, our project is sustainable, whereas the hotels started to sell their products via digitisation, where the rate of booking increased by 150% since they started working with the platform

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-business

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Part 5: International Organization

Case1

Title of the project, Contact Organization Name, Stakeholder type, Country

Organization NameInternational OrganizationSwitzerland

Beneficiaries

Beneficiaries

Description

Projects and Activities

ICT Tools

ICT Tools

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case2

Title of the project, Contact Organization Name, Stakeholder type, Country

ITUInternational OrganizationSwitzerland

Beneficiaries

Who are your primary beneficiaries and what are the main benefits/services?

Website

<https://www.itu.int>

Description

What projects and activities has your organization introduced during the Coronavirus disease (COVID-19) Pandemic to continue working efficiently and to create a social impact helping other stakeholders?

ICT Tools

Which technologies/ICT tools are you using and how is it enhancing digital transformation in your organization?

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-government

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all

Case3

Title of the project, Contact Organization Name, Stakeholder type, Country

ITU International Organization Switzerland

Beneficiaries

Who are your primary beneficiaries and what are the main benefits/services?

Description

What projects and activities has your organization introduced during the Coronavirus disease (COVID-19) Pandemic to continue working efficiently and to create a social impact helping other stakeholders?

ICT Tools

Which technologies/ICT tools are you using and how is it enhancing digital transformation in your organization?

Action Lines

AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case4-AFLI initiatives

Title of the project, Contact Organization Name, Stakeholder type, Country

AFLI initiativesThe Arab Federation for Libraries & Information (AFLI)International OrganizationTunisia

Beneficiaries

Direct beneficiaries:

=====

1. Librarians and information professional in MENA region (Middle East & North Africa) as they preserve community culture; protect and provide access to information.
2. Professional Library Associations.

Indirect beneficiaries:

=====

3. Community/users: As Librarians are actively engaged in the community, enabling them to fulfill their roles will require developing their skills, it is imperative in a world in which technological advances and the changing in information-seeking behavior of library users are affecting everything libraries do.

Website

<http://arab-afli.org/main/index.php>

Description

Initiatives implemented by the Arab Federation for libraries & information (AFLI), coinciding with the Corona virus crisis

- A cultural program includes a series of webinars deals with a variety of topics in the field of libraries, information, knowledge and crisis management. One of the webinars was on the

role of knowledge management in crisis management: Corona virus as a model. Eight webinars were conducted until now, and it is still ongoing. The webinars is broadcasting live on AFLI YouTube channel due to the high turnout.

- Honoring best active libraries during the period of the Covid-19. libraries were divided into: large & medium libraries and small libraries. The initiative ends by the end of May 2020.
- The Knowledge Continues Initiative on AFLI Facebook group, which is a short record of well-known academics and professionals in the Arab world to talk about the importance of continuing knowledge and readership during the period of home quarantine. The number of posts exceeded 25 posts.
- Honoring young children in drawing competition aged from 6 years and less and from 7 to 10 years. Three prizes for each category were dedicated for the winners.
- Under process: free courses for MENA professionals.

ICT Tools

Different technologies are used like:

1. webinar service (zoom) to provide AFLI webinars during quarantine, announcing our activities through different social media channels such as:

- Facebook: announce the activities and communicate with our beneficiaries.
- YouTube: Live broadcasting the webinars.
- Slideshare: sharing the content of the webinars to our beneficiaries.
- Repository: backup of recorded webinars series on AFLI.

- Involving in virtual experience improved Arab librarian's ICT skills, readability to engage, and enroll in various professional webinars, courses available on the web.

- Promoting modern information literacy skills that would support the concept of virtual learning in the community which help in creating a true information society.

- Building a sustainable learning platform gives opportunities for continuing development and improves access to information resources for library & information professionals all over the Arab countries equally, especially for those how suffer from lack of professional training due to the unstable conditions.

- Maximizing knowledge sharing among Arab librarians through virtual meeting, which led to generate new ideas ready to be adopted regardless of the cultural context.

Challenges

- Sustainability of the program after the current presidency of the Boards is over.

Partnership

No.

Replicability

This was not the first time that the Arab Federation for Libraries & Information (AFLI) provides webinars for the Arab Librarians & Information professionals, as AFLI conducted many webinars before during the year 2013, and the webinars are currently replicated again from the year 2019-2022.

Sustainability

The initiatives can be sustained.

Financial sustainability: AFLI voluntary staff works to coordinate and conduct the webinars to ensure a steady flow of maintaining and continuing the program with support from AFLI who will pay for the webinar service.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case5-#YREstayshome challenge

Title of the project, Contact Organization Name, Stakeholder type, Country

#YREstayshome challenge Foundation for Environmental Education International Organization Denmark

Beneficiaries

- students age 11-25 years old
- teachers
- parents
- communities
- different stakeholders

Website

<https://www.fee.global/>

Description

YRE International is publishing on different social media environmental challenges for students to share their story from lockdowntime and environmental improvements. The best stories will be awarded.

ICT Tools

- interactive webinars via ZOOM for students <https://www.yre.global/webinars> e.g. about indoor photography, YouTube influencers etc.
- webinars via ZOOM
- computers, laptops, cameras, microphones for interviews (students) for e.g. interviews <https://yrehub.global/2020/05/11/state-of-emergency-is-over-stay-at-home/> ; <https://yrehub.global/2020/04/22/china-vs-world-pollution-vs-depollution/>
- software programmes for making videos from activities <https://yrehub.global/2020/05/06/lockdown-alone-together/>

Challenges

The main challenge is access for students from different countries to tools that can be used to share stories. We are working with 45 countries, some are developing countries, so not all students have access to tools and internet. We try to provide opportunities to attend the webinars via mobile and options to post stories via us to help them to minimise the access problem.

Partnership

- partners for webinars that can help to develop skills for life for students e.g. using different softwares, or videography
- partners to publish stories from students

Replicability

yes, it can be used by students from every country on the world and challenges are universal and valid for all students

Sustainability

Project is aiming to build the skills in students as an ambassador of the environment and influence your community while being at home. Indeed, YRE students from all around the world show solidarity by staying inside to avoid the spread of COVID-19, but FEE and the YRE programme also want to transform this unusual time into an opportunity for you to keep investigating environmental topics and to have a little fun!

Action Lines

AL C4. Capacity building|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 17: Revitalize the global partnership for sustainable development

Case6-SoCCs Buddies

Title of the project, Contact Organization Name, Stakeholder type, Country

SoCCs Buddies Asia Initiatives International Organization United States of America

Beneficiaries

The primary focus of SoCCs Buddies are underserved girls and boys across India. We are currently implementing the program in Lucknow, Bhubaneswar and Yavatmal in India, and expect to expand this to our project sites soon. The key program benefits include:

- Empower girls and boys by imparting conversational English skills
- Create incentives for education for both mentor/teachers and students
- Emphasize personalised learning by focusing on skills specific lessons
- Ensure academic continuity with a focus on self-expression
- Encourage creativity

Providing opportunities for people to earn and redeem SoCCs for goods and services ensures a continuous build up of “social capital” within communities. We believe this form of capital is equally important as financial capital, especially at a time of crisis. With people currently under lockdown and schools closed, instructions are taking place online. However, poor children were getting left out of this. With SoCCs Buddies, participants will still be able to re-engage with their schools. Beneficiaries of our program also commit to tutoring three younger children in their neighborhood which ensures a trickle-down of the learning. “Data cards” and digital devices are provided to participants to facilitate this.

Website

<https://asiainitiatives.org/>

Description

In response to the COVID-19 pandemic, Asia Initiatives has launched an innovative program known as SoCCs Buddies, aimed at bettering learning outcomes for the students in under-served communities in India. SoCCs Buddies blends our award winning SoCC (Social Capital Credits) system with a pool of mentors to deliver individualized teaching and English Language instruction. Fluency in English is considered an essential skill in India that influences both employability and wages. Our program also helps address the learning attrition during the Covid 19 lockdown and other disasters. An additional benefit includes developing their skills and preparing them to access global online resources from sites such as Khan Academy and Byju. Our mobile app will allow both teachers and students to login in and track their progress, and earn and redeem “SoCCs” within the app for various goods, services and recognition offered. Redemption items range from reusable menstrual pads, digital skills sessions, digital devices, and scholarships

ICT Tools

The primary technology used for SoCCs Buddies is a mobile app “SoCC App” (available on both Google Play & iOS), developed with the help of CampusGroups Inc. and Zoom. Prior to the launch of the SoCC App, our local partners and beneficiaries in India, Ghana, Kenya and the USA were manually tracking participation for total SoCCs earnings, and other program-related data through SoCC books and Excel sheets. Asia Initiatives would receive data in various formats from its local partners which would then have to be standardized to ensure uniformity across countries and regions. Our goal is to use persuasive technology for behavior change. The number of items and their values on SoCC Earning and Redeeming menus are tweaked to achieve the goals set by the community itself. With our App, we can now consolidate everything into one digital platform. This enhances our ability to manage our programs, communicate with our partners, all in one place. This digital transformation is allowing us to exponentially scale up our SoCCs model. The combination of SoCCs with Zoom, has also enabled us to bring distant-learning experience to underserved children in India

Challenges

Current challenges include transitioning to distance learning due to limited student access to suitable digital learning devices and limited availability of reliable broadband connection. This is exacerbated by the fact that multiple students have to share devices which takes away precious time from these lessons. Asia Initiatives is addressing this challenge by raising funds to provide these devices and data cards for Internet connectivity.

A secondary challenge is to leverage a pool of skilled volunteers and mentors to be trained at short notice. Understanding the socio-economic, and religious differences is crucial to successfully implementing the program. The challenge is further compounded by the

linguistic and cultural diversity of different regions of India where these schools are located. Given the heterogeneous environment, it is of prime importance to identify and match the appropriate mentors with the students. The socio-economic and cultural differences are reiterated and highlighted during mentor training.

Partnership

We are exploring local, as well as multi-sector partnerships to support the existing project and help expand our reach – both in the long and short term.

Our short-term needs include additional volunteers for imparting virtual lessons in conversational English, STEM subjects, mindfulness, art classes, and skills such as mask making from low-cost materials. Since children's educational success depends on an array of essential support and opportunities both at home and within the community we believe in a holistic approach to education and realize the urgency to remain resilient.

A second area is leveraging support of the parents through raising awareness and encouraging parental engagement in their children's education. We believe that building a meaningful and sustained connection between the parents, students and the school staff will ensure a successful transition back to normalcy and prove to be less stressful for the children.

Our long-term requirements include acquiring low-cost digital devices to ensure continuity of learning, volunteers to impart training skills to the teachers and field staff to ensure a successful digital transformation, and reconfiguring lessons to blended and individualized learning. Nutritional requirements for the students during prolonged lockdown are another area we plan to explore.

Replicability

The concept of combining Zoom and SoCCs for imparting virtual lessons can be replicated anywhere provided the students have digital devices and internet. The learning modules developed by Asia Initiative experts are simple and easy to implement with no special training requirements. Flexibility has been built into the modules to ensure that the lessons can be modified depending on the level of interaction between the students and mentors. Mentors from any part of the world can be onboarded easily and training can be imparted through the Zoom platform. A commitment to the cause and time dedication of a couple of hours a week is all that is required. This open set-up is perfect for a diversity of views to be incorporated into the lessons which will prove to be enriching for both mentors and students alike. The modules are being currently field-tested in Lucknow and will be expanded to our sites in Odisha and Maharashtra.

Sustainability

The SoCCs Buddies model is based on a low cost approach to imparting education and its replicability and flexibility ensures that it is sustainable. At its core, the very concept of

SoCCs is to develop a sustainable non-financial currency - an alternative reward model to encourage social bonding within communities and across the world for the common good of all. It builds on the concept of the “Commons” and leverages the local resources. Since SoCCs Buddies blends a mobile app with a video conferencing platform, we are confident this idea is here to stay.

With a constant stream of volunteers eager to empower the students in India, we expect our teacher availability to remain high. The App is easy to use both for the teachers to schedule the lessons, as well as, for the students to keep track of the SoCCs points earned and redeemed. Files and pictures can be easily uploaded for this purpose. Students will be able to invite friends/peers to join the program and earn SoCCs for that. The activity tracking and redemption on the App ensures that SoCCs earned will automatically be rewarded by the system.

Action Lines

AL C4. Capacity building

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 10: Reduce inequality within and among countries

Case7-Test

Title of the project, Contact Organization Name, Stakeholder type, Country

TestTestInternational OrganizationSwitzerland

Beneficiaries

Test

Website

<https://test.test.test>

Description

Test
ICT Tools
Test
Challenges
Test
Partnership
Test
Action Lines
AL C3. Access to information and knowledge AL C7. ICT applications: benefits in all aspects of life – E-learning AL C7. ICT applications: benefits in all aspects of life – E-health
SDGs
Goal 1: End poverty in all its forms everywhere

Case8-Apprise Audit
Title of the project, Contact Organization Name, Stakeholder type, Country
Apprise Audit United Nations University International Organization China
Beneficiaries
Apprise Audit was developed as a tool to support frontline responders to better identify victims of labour exploitation and forced labour. The app is downloaded on the front-line responders' phone but is ultimately a tool in the potential victims' hands. A broad cross-section of stakeholders worked together to design an app that is user-friendly and appropriate for use with various actors. Screening questionnaires were developed for different sectors and translated in the most common languages among migrant workers' communities. Apprise Audit not only utilizes technology to enhance workers' ability to voice

their needs, but also has a positive impact on inspector's capacity to execute their responsibilities.

Apprise Audit enhances workers' voices, improves auditors' work and facilitates data collection and analysis on working conditions in global supply chains. Worker interviews conducted with Apprise Audit are more confidential and private than in-person interviews. The use of technology, headphones, and the gamification of the screening process make workers, particularly women and migrant workers, more comfortable to share and report on their working conditions than when talking to an auditor. The app's intuitive design made it easy for workers, including those with low literacy levels, to navigate and undertake the interview.

Website

<https://cs.unu.edu/>

Description

As the COVID-19 pandemic has disrupted supply chains around the world, stakeholders have been engaging the Apprise Audit team to discuss potential modifications to the application as they adapt and adjust its operational usage in the evolving circumstances. For example, due to travel restrictions between and within countries, some auditors have been unable to complete routine factory inspections where they utilized Apprise Audit. The absence of these inspections may leave workers more vulnerable to exploitation as mechanisms to ensure accountability and compliance are interrupted. Although designed as a tool to be administered by a frontline responder and used by workers, stakeholders have expressed interest in modifying Apprise Audit to allow workers to instead self-administer the questionnaire.

In other cases, local audit teams are able to visit factories, and there has been interest from stakeholders in adding new questions to the Apprise Audit questionnaire to inquire about COVID-19 related matters. These could include questions regarding the availability of hand-washing facilities, mask distribution and usage, adherence to social distancing guidelines and any other protocols mandated by governments or corporations that are applicable in factories. This will continue to support major corporations to understand practices in the factories that comprise their supply chains.

ICT Tools

Apprise Audit is a multi-lingual mobile phone application that was designed to overcome challenges associated with social compliance auditing and to improve frontline responders' detection of indicators of labour exploitation and forced labour during worker interviews. Downloaded on the auditor's phone and used to interview workers through an audio questionnaire, Apprise Audit is comprised of questions that assesses the working conditions of factories and other facilities in global supply chains. It was developed and refined by a

group of stakeholders, which includes auditors, workers, brand representatives and human trafficking experts. Apprise Audit flags indicators of vulnerability adapted from the International Labour Organisation (ILO)'s "Indicators of Forced Labour". Following the interview sessions, the responses are summarised and any vulnerabilities that were flagged are used to direct auditors' on site inspections. Afterwards, interviews are uploaded and organised on a web-server which can be accessed by companies to analyse and track factories' performances. This content management system allows authorised users to collate, analyse and track worker interview data.

Apprise Audit is promoting digital transformation within supply chains of multinational corporations, enabling them to easily track labour exploitation within supply chains in order to make changes to working conditions.

Challenges

There are many challenges in the social auditing process such as time constraints during factory visits; lack of privacy during interviews; workers appearing to be coached and not feeling safe enough to speak out; communication barriers; and a lack of consistent analysis methods. Auditors rarely cover ILO indicators of forced labour in a comprehensive and consistent manner during worker interviews. These issues result in an overall lack of frequency, privacy, confidentiality, and consistency in workers' interviews during social compliance audits. These issues deeply affect workers' possibility to speak out and auditors' capability to identify indicators of labour exploitation during factory visits. This results in victims - and exploitative factories - remaining unnoticed.

By providing a summary of workers' feedback in real-time, the app highlights areas for further investigation. It also allows auditors to reach out to more workers and bridge language barriers through its multilingual audio-questionnaires. Data collected through the app can be collated on a content management system, and screening responses can be accessed, analysed, and shared by authorised users and their organisations. This facilitates efficient and consistent data collection of workers' interviews, enables data retention and tracking of factories' working conditions over time.

Partnership

Apprise Audit is a project that was developed in a partnership between The United Nations University Institute in Macau and the Mekong Club. This collaboration combines the expertise of a research institute focused on the intersections of information and communication technology and international development with an anti-slavery non-profit organization that focuses on business engagement. Through harnessing the power of the private sector to change business practices and engaging corporations to lead the fight against modern slavery this unique combination brings together relevant stakeholders to catalyze change. Limited understanding of forced labour in supply chains translates to high reputational and business risk for companies, so adoption of Apprise Audit is not only a net positive for workers' protection and human rights but also is beneficial for companies,

providing further incentive. This collaboration is actively pursuing new partners to support the piloting and implementation of Apprise Audit in supply chains of multinational corporations all around the world. Specifically, Apprise Audit is well suited for any corporation that is seeking to better understand practices on the ground in the factories and facilities that comprise their supply chains to proactively enhance worker protections and complete their due diligence.

For anyone interested in more information, getting involved or sponsoring this project, please reach out to apprise@unu.edu

Replicability

Apprise Audit was purposefully designed to be easily replicable and tailored to unlimited geographies and scenarios, and to allow for additional questionnaires and translations to be easily added. For example, shortly after the testing phase of Apprise Audit had concluded, two companies requested and supported translations into three additional languages (Tamil, Hindi and Kannada), which has now been completed to allow for the tool to be used to conduct worker interviews in India and other countries with workers who speak these languages. Currently the application is available in the following languages: English, Bangla, Burmese, Mandarin Chinese, Tagalog, Tamil, Hindi, Kannada, Thai and Vietnamese, as it has been primarily utilized in Southeast Asia thus far. The addition of more languages is a straightforward process involving the translation and verification of the questionnaire and new languages can be rolled out quickly upon request to enhance replicability in any part of the world. Similarly, question lists can be updated and modified for sector specific applications through consultation with stakeholders. Not only is the application itself both replicable and scalable, but it also enhances the replicability and reliability of information that is gathered through social compliance auditing.

Sustainability

Apprise Audit was designed as a complementary tool to be integrated into the existing workflow of social auditors and to not add any additional resource burdens that would inhibit implementation. It does not require the construction of additional infrastructure to facilitate its usage, as it leverages an already existing, low-cost technology (i.e. the mobile phone) that is widely available. Corporations can easily and sustainably include this tool in their operations, and it presents a low-cost, high impact solution to help address the issue of labour exploitation in supply chains. From an environmental perspective it has almost non-existent impact and given its ability to be adopted and disseminated throughout the world, it can overcome resource constraints in a sustainable manner. After initial adoption and refinement of best practices, it does not necessitate additional resources that would lend it to be unsustainable in the longer-term.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to

information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-science|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C11. International and regional cooperation

SDGs

Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 10: Reduce inequality within and among countries|Goal 17: Revitalize the global partnership for sustainable development

Case9-African Digital Schools Initiative (ADSI)

Title of the project, Contact Organization Name, Stakeholder type, Country

African Digital Schools Initiative (ADSI)|Global E-Schools and Communities Initiatives- GESC|International Organization|Kenya

Beneficiaries

In conjunction with Ministries of Education and local education authorities in countries across Africa, GESCI's African Digital Schools Initiative (ADSI) is currently emphasizing aspects of implementation which also address immediate needs in the context of the COVID virus. These features are currently enabling:

- Secondary school teachers to develop skills in designing and developing both ICT-based exemplary lesson plans and curricular materials for their learners as they continue to take a blended learning professional development course. Their work is shared on a peer to peer basis through our community of practice platform.
- Teacher Professional Development is equipping teachers with more skills to device and practice new digitally-driven pedagogies ways to make both teaching and learning more flexible and with reduced time constraints. Teachers acquire the professional skills to prepare exemplary ICT-based lesson plans and develop learning resources for online/offline access by their learners.
- Learners to continue their studies through our online learning resources platform which provides access to subject-specific resources.
- School management and local education boards to implement a structured and incremental roadmap for whole school ICT development.
- Ministries to monitor and assess these developments at first hand as possible pointers to new and more flexible approaches to teaching and learning which are increasingly being facilitated by the availability of new and cheaper digital technologies.

Website

<https://gesci.org/>

Description

GESCI COVID-19 Response: <https://gesci.org/news-room/news/single/news/detail/News/gescis-covid19-response/>

Global e- Schools and Communities (GESCI) is primarily responding to the COVID crisis in education through:

- Launching a Students' Resources for online learning platform: <https://bit.ly/2Lf1uEN>
- Teacher Professional Development (Coding webinars: <https://bit.ly/3cylT2c>
- Engaging teachers through the Community of Practice: <https://bit.ly/3dyvojh>
- The e-Readiness Framework and Costing of ICT Integration Model

ICT Tools

The teachers and students GESCI is reaching out are using mobile phones, laptops, tablets and internet connectivity to access material provided on Open Educational Resources platforms. This has completely shifted focus on face to face learning as more teachers are now creating content and delivering it to learners through Facebook Live, Youtube live or recording videos and sharing via websites they have developed.

This addresses GESCI's key focus on transforming secondary schools into digital schools of distinction through integration of ICTs in teaching and learning.

Challenges

Given that many teachers and students are now in remote areas of their respective countries, they have limited access to internet and digital devices. As a result, not all can access the resources. GESCI has reached out to other educational partners to curate content and package in compact discs, MP3 and MP4 files which can be aired on national radio or Television. The two mediums are easy to access and in doing that, we also reach out to all learners.

Partnership

[Yes. Collaborating with national and local education authorities in designing teacher training activities specific to maintaining student learning. These include liaising with national curriculum institutes on learning content development standards by teachers.](#)

[A new partnership has developed with subject - cluster teachers in skills development for quality lesson planning and learning resource development. Connections and remote communications with wider circles of teachers through the Community of Practice.](#)

[Enhanced relationships with partners and donors through the pursuit of a shared mission to contribute to learners in a time of crisis while maintaining longer term programme objectives.](#)

Replicability

[Yes. Currently, the project is being implemented in Côte d'Ivoire, Kenya and Tanzania. The project, with all its platforms, frameworks and support, is easily contextualised for any country to implement successfully. An independent mid-term review of ADSI is available at \[www.gesci.org\]\(http://www.gesci.org\)](#)

Sustainability

Yes. Mindful that countries need to adopt policy which ensures that ICT technologies are accessible and affordable for all citizens and that ICTs are fully able to support national development policies to promote growth and reduce poverty, the ADSI model provides a systematic approach to the development and absorption of ICT as a tool for sustainable educational development. Working directly with ministries of education and local education authorities, long term sustainability is being fostered by:

- Involving key partners in design, planning and implementation of project processes and activities to promote and ensure institutional ownership of project activities as well as build capacity
- Focusing on institutionalization of project activities and processes and strengthen capacity at all national, district/zonal and school level and address institutional capacity needs to ensure long-term impact and sufficient follow-through capacity within key institutions
- Building the capacities of schools to attain and retain Digital School status which, as an ongoing ICT improvement initiative the Digital School
- Regularly reviewing implementation and where possible exercising flexibility by adjusting/responding to project challenges and barriers. ADSI obtains regular feedback from key stakeholders about progress and strategies
- Providing ongoing project evaluation to provide feedback on performance and promote course correction and sustainability
- Recruiting and engaging School Officials and National Expert Champions who receive training in ADSI and assist in facilitating ADSI expected changes and outcomes.
- Developing community support and ownership for the project in the school communities.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 17: Revitalize the global partnership for sustainable development

Case10-COVID-19 Response in Burkina Faso and Cambodia

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Response in Burkina Faso and Cambodia Save the Children US International Organization United States of America

Beneficiaries

The primary beneficiaries of these projects are the people who lack reliable access to information which is important to improving their livelihoods and well-being, due to illiteracy, geographical obstacles, poor Internet connectivity, the high cost of smartphones and computers, gender barriers, etc. and/or those who cannot be reached via traditional communication channels (TV, film, Internet, newspapers and radio). The 3-2-1 Service is unique in that it is a pull information service, where users can proactively access the information they need, when they need it. In 2019, 6.4 million users listened to 67.5 million key pieces of information. In 2020, Viamo is on track to double this impact. When the global COVID-19 pandemic hit, Viamo acted quickly to add messages, based on WHO messages, on all of their 3-2-1 Services. As of May 20th, more than 5.7 million listeners have listened to over 15.8 million key messages related to COVID-19 (updated impact statistics:

<https://viamo.io/covid-19-response/>).

Website

<https://www.savethechildren.org>

Description

In Cambodia and Burkina Faso, through the USAID Breakthrough-ACTION project, and in partnership with each country's Ministry of Health, Save the Children, and Viamo have coordinated communication campaigns using Viamo's 3-2-1 Service to quickly disseminate essential information related to COVID-19 nationwide, for free.

In Burkina Faso, Save the Children and Viamo developed twenty key messages, including those addressing local misconceptions, a COVID-19 knowledge quiz, and a remote training curriculum for community health workers. The content was validated by the Ministry of Health, recorded in five languages (Moore, Dioula, Fulfulde, Gulmancema and French), and made available to anyone with a mobile phone, simply by calling '321'. From March 26th to May 20th, approximately 15,000 unique callers listened to 120,000 key messages on the Service in Burkina Faso.

In Cambodia, Save the Children and Viamo developed ten messages to promote understanding, prevention, and treatment of the diseases as well as an interactive audio game to test COVID-19 knowledge. The messages are now being recorded in Khmer, pre-

tested, and then finalized to be made available on the Service. When the content is live, Viamo's MNO partner Cellcard will send SMS messages to their 3 million subscribers to promote the content.

ICT Tools

Partnering with Viamo, Save the Children is focusing on access to evidence-based information via basic mobile phones. Through even the most simple mobile phones, users can access the 3-2-1 Service. The 3-2-1 Service is a free, on-demand information service, available via voice and text channels. At its core, the Service is a tool for behavior change. It provides expert-approved, relevant messaging to users at scale through their phones. Users dial 321 and then navigate through the system until they find the information they are seeking. The message content is accurate, but simple and in the local language the target population uses, so callers are able to understand and act on the necessary information. This increased knowledge will lead to actions that improve development outcomes, such as improved behaviors needed to prevent the spread of COVID-19. The Service allows partners like Save the Children to surpass barriers of illiteracy, geographical obstacles, poor Internet connectivity, cost of ICT-enabling devices, gender, and more, to reach those most in need of their information. By adding COVID-19 information to the Service, callers can easily find the specific information they need at the time when they need it, in a language they understand. The Service is currently available to 200 million mobile subscribers in 18 countries worldwide.

Challenges

Given the fact that COVID-19 is a new virus, with a high number of unknowns related to protection, treatment, and spread, and which we are learning about over time, the main challenge is to develop and validate content even while scientific knowledge about the virus continues to evolve, and ensure that the content is comprehensible for lower-literacy people who have little access to other sources of trustworthy information. This challenge can be overcome by continuously adding and adapting content, which we are well-positioned to do through this partnership with the MOH and Viamo.

Addressing fake information and rumours while maintaining trust of the audience is another challenge. However, the 3-2-1 Service provides a place for trustworthy, validated information, and enables us to promote accurate information. With a deep knowledge of local context, together we can address specific misinformation and disinformation through the key messages that we put on the Service.

Once the messages are made available through the Service, letting people know that they are there to access when they need them is another challenge. This is overcome through marketing by Save the Children, the partner MNO, and government partners, to ensure the end users are aware of the resource available to them.

Partnership

Both Viamo and Save the Children are always looking for partners to expand our work. All content experts are able to partner with Viamo to develop content, either related to COVID-19 or any other relevant theme or topic, for the 3-2-1 Service in any of its 18 operating countries (Afghanistan, Botswana, Burkina Faso, Cambodia, the DRC, Ghana, Indonesia, Madagascar, Malawi, Mali, Mozambique, Nepal, Niger, Nigeria, Rwanda, Tanzania, Uganda and Zambia). Common content on the Service includes topics such as health, agriculture, weather, news, human rights, governance, and more. If you have relevant and actionable information that you want to provide to beneficiaries, that content can be added to the Service in partnership with Viamo. Save the Children is always expanding its network of community-based and international partners across its 120-country footprint.

Replicability

The project is highly replicable. Viamo's 3-2-1 Service concept can be replicated in any country where it is possible to partner with a national mobile network operator (MNO) and a content partner. Currently, the Service operates in 18 countries globally, and in 2019 reached 6.4 million listeners who listened to 67.5 million key messages. Recently, the 3-2-1 Service launched in both Niger and Indonesia, increasing the Service's ability to reach millions more people. Save the Children can adapt the message content to local languages in any of the additional 16 countries where Viamo operates the Service. COVID-19 information can also continue to be added to the Service in Burkina Faso and Cambodia, as well as to the other Services in countries where both Save the Children and Viamo are operating. The Service is also well-positioned to add any other evidence-based content needed as the pandemic progresses, and can also be used to make relevant content available for any sectoral area.

Save the Children has a global network of experts who design behavior change and risk communication and community engagement campaigns. For the current partnership, the project is focused on COVID-19 information, but the team has experience developing behavior change campaigns across a wide spectrum of topics, so could replicate the project within its footprint of 120 countries either to address the COVID-19 outbreak or other topics.

Sustainability

This project is sustainable. The 3-2-1 Service was launched nine years ago in Madagascar and has been replicated in 17 other countries since, with all of them still running successfully. The unique value-add of the 3-2-1 Service is that it is free to the user. This is sustainable because Viamo has established a partnership model where MNOs agree to provide free airtime and promote the Service among their subscribers. They do this as they have vested commercial interest. Gains from increased customer loyalty and higher average revenue per user offset the ongoing operational costs for the MNO.

Furthermore, the Service does not require users, or organizations, to invest in new technology, such as tablets, radios or TVs. The Service is designed to function on mobile

devices that users already have - whether they are smart phones or simple phones. In countries with the Service, the average mobile penetration rate is 83%, which is determined based on the number of SIM cards issued. This significantly exceeds the rates of radio or television ownership, which are 43% and 39% respectively, meaning that a larger number of individuals have access to the mobile information sources than television or radio.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C10. Ethical dimensions of the Information Society

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case11-Remote surveying of child caretakers in Rwanda

Title of the project, Contact Organization Name, Stakeholder type, Country

Remote surveying of child caretakers in Rwanda
Save the Children US
International Organization
United States of America

Beneficiaries

The primary beneficiaries of this data will be Rwandan children, ages 0 to 12, who have been displaced from school due to the COVID-19 outbreak, along with their families, schools, community-based child services organizations and the Ministry of Education.

The survey will allow Save the Children, community-based organizations and the Rwandan government to identify the difficulties that caretakers face when caring for children in their homes during the day and to address any resulting child welfare issues by tailoring services to meet those needs.

Website

<https://www.savethechildren.org>

Description

Rwanda, like most countries in the world, has taken different prevention measures including “lockdown” (mandatory sheltering in place within citizen’s homes), social distancing, travel restrictions, closure of schools and other activities to manage the spread of the pandemic. Schools tend to be the safest places for children around the world because they are the primary conduits for recognizing and reporting child neglect and abuse, so their closures in particular put children at risk.

Save the Children Rwanda is working to ensure that girls and boys (with or without disabilities) are safe in their homes and are able to exercise their rights to learn, survive and be protected. As a key part of that effort, Save the Children has teamed with GeoPoll to use that company’s software platform to conduct a 2-way SMS survey of adults caring for children in Rwanda. The goal of the survey is to establish the extent of caretakers’ support for their children’s learning and well-being while schools are closed due to the pandemic in order to respond with appropriate services and interventions.

ICT Tools

Mobile phone penetration has rapidly increased in Rwanda, making them a vital tool for communication. Conducting research in Rwanda has traditionally been done through face-to-face interviews which can be time-consuming and costly, requiring trained interviewers to travel. Save the Children teamed up with GeoPoll, a developer of innovative mobile data collection to conduct remote surveys of adult caretakers on the welfare of children at home due to lockdowns. GeoPoll specializes in difficult-to-reach populations that often can only be reached via mobile due to safety, transportation or other issues. GeoPoll has pre-existing partnerships with the mobile network operators in Rwanda and was able to quickly collect data from 500 households using 2-way SMS surveys following a script designed by Save the Children technical experts. GeoPoll surveys are undertaken at no cost for respondents and offer an integrated technology that delivers phone credit incentives upon a survey’s completion. GeoPoll’s technology can be used without Internet access or smartphones, allowing access to an ever-growing population of individuals who only have a basic mobile phone. Surveys can be conducted in multiple languages and allow an interaction with respondents, which is collected and reported anonymously with adherence to data security and internationally-accepted research standards.

Challenges

GeoPoll offers a solution to target specific populations based on sending out an opportunity to participate in a 2-way SMS survey, so the message content must be carefully designed by the Save the Children project team. There can be challenges attaining the ideal number of completed surveys based on the eligibility requirements for respondents (in this case, adults caring for children 0-12). Even when respondents meet the initial eligibility screening, other types of qualifications can be more difficult to meet.

Partnership

Both GeoPoll and Save the Children are always looking for partners to expand our work. GeoPoll's software and services can be used around the world to support the mobile data collection needs of both local and international NGOs by offering several ways to monitor, engage and inform priority populations both on- and off-line. Save the Children is always expanding its network of community-based and international partners both in Rwanda and across its 120-country footprint.

Replicability

The project is highly replicable. This type of rapid data collection can be undertaken in dozens of countries globally. When administering surveys via SMS, GeoPoll can reach deep into developing country populations - without the need for Internet connectivity or smart devices - to regularly engage target populations to track the impact of interventions, external threats (such as COVID-19, Ebola, etc.) and the impact of training and information campaigns. Surveys are conducted at no cost to the respondents and can allow for reengagement of the same individuals or the same overall population over time to track impact and behavior change.

Save the Children has a global network of experts who design behavior change and risk communication and community engagement campaigns. For the current partnership, the surveying is focused on the care of students at home due to COVID-19, but the surveys could be designed to gather information about any topic and GeoPoll's platform could also be used for sending messages to support those campaigns based on the data gathered.

Sustainability

The project is sustainable. The COVID-19 outbreak is not only making it clear that traditional face-to-face data collection activities are temporarily impossible, it is spurring NGOs and other entities to undergo a digital transformation of their data collection methods. The use of a 2-way SMS mobile platform is the most inexpensive way for local NGOs, governments and implementers to gather reliable, frequent and accessible information to monitor, engage and inform the public and beneficiaries. GeoPoll's platform can be configured and used at low cost in virtually any country. Save the Children's content production methodologies can be standardized and used as a guide for content production for any technical area.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C7. ICT applications: benefits in all aspects of life — E-employment|AL C7. ICT applications: benefits in all aspects of life — E-environment|AL C9. Media

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 14: Conserve and

sustainably use the oceans, seas and marine resources|Goal 16: Promote just, peaceful and inclusive societies

Case12-Senior Management Connectivity

Title of the project, Contact Organization Name, Stakeholder type, Country

Senior Management Connectivity|Ministry of Foreign Affairs|International Organization|Liberia

Beneficiaries

All Ministers Deputy Ministers, Assistant Ministers, Directors and Essential staffs are beneficiaries and their primary services is to receive and share information on COVID - 19.

Website

<http://www.mofa.gov.lr/public2/index.php>

Description

The Division of Information & Communications Technology (ICT) through this project has connected all senior staff or senior management phones and personal laptops/tables/iPad to the internet to enable them have access to information or updates from stakeholders to promptly respond to the COVID-19 outbreak. This connectivity have allow senior management to create what'sup groups, virtual meetings via zoom among other social groups for information sharing which is presently helping stakeholders to adequately contain the spread of the virus.

ICT Tools

The Division is using Cisco Routers, Switches, Wireless Controller, Uninterruptible Power supply, zoom software, internet protocol (IP) addresses, Polycom virtual equipment for communications.

Challenges

Finance is one of the main challenges and this can be overcome when the Division of ICT is empower financially.

Partnership

Yes, the Ministry of Foreign Affairs needs partners especially in the area of Information & Communications Technology (ICT). As it stands, the Ministry's network infrastructures need equipment to replace the old or damaged ones.

Replicability

No, this project is only focus on the COVID-19 pandemic

Sustainability

Yes, this project is sustainable. This is because the Division of ICT has competent and professional technicians who are capable to have this project running until the deadline.

Action Lines

AL C3. Access to information and knowledge|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C9. Media|AL C11. International and regional cooperation

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case13-Conectadas by Sheva and Tigo Guatemala

Title of the project, Contact Organization Name, Stakeholder type, Country

Conectadas by Sheva and Tigo GuatemalaSHEVAInternational OrganizationGuatemala

Beneficiaries

Women in Guatemala from 15 years up. We have trained 4,360 women during COVID trainings who have learned how to have virtual meetings, how to work remotely, how to promote their businesses, and how to learn new during, all using mobile technology.

Website

<https://www.sheva.com/>

Description

During COVID we have taught more than 4,000 women how to take advantage of mobile technology to stay connected, learn new things, and promote their businesses.

ICT Tools

We are paving the road for digitalization in Guatemala. We teach from basic level what are mobile tools, including Facebook, Instagram, Zoom, Google Drive, Canva, Google Calendar, and Google Hangout.

Challenges

Our main challenge was finding participants. We had a goal to reach 250 women. We were amazed with the amount of support we had from the media, and we were able to train 4,000 women.

Partnership

We are looking for more women who would like to be trained and participate in the virtual program.

Replicability

Tigo El Salvador and Tigo Colombia are looking for virtual projects where they can also use ICT tools. We have provided with our steps so they can understand how they can replicate it as well.

Sustainability

Yes, the program has been sponsored by Tigo Guatemala, the biggest telecom company in the country. We are now looking for new companies and partners who would like to sponsor or get trainings.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C7. ICT applications: benefits in all aspects of life – E-government

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 16: Promote just, peaceful and inclusive societies

Case14-Focus Group AI for Health Working Group on Digital Technologies for Health Emergencies, AI for Good Webinar Series on Contact Tracing

Title of the project, Contact Organization Name, Stakeholder type, Country

Focus Group AI for Health Working Group on Digital Technologies for Health Emergencies, AI for Good Webinar Series on Contact Tracing International Telecommunication Union International Organization Switzerland

Beneficiaries

The general public and policymakers.

Website

<https://aiforgood.int.int/>

Description

The ITU-WHO Focus Group on AI for Health has a working group on Digital Technologies for Health Emergencies
The AI for Good Webinars have a series on contact tracing using mobile technologies

ICT Tools

Zoom, Bluetooth, Wifi, GPS, cellphone masts

Challenges

I don't understand why this question is mandatory

Partnership

Sure

Replicability

Why is the geographical coverage form in this format, should global be the default? currently it's not even an option.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case15-COVID19 emergency response: Venezuelan Migrants

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID19 emergency response: Venezuelan Migrants Fundacion Abba Colombia International Organization Colombia

Beneficiaries

Primary beneficiaries: Venezuelan migrants

Main benefits and services they received:

- Each person is subscribe to our database
- After registration they are able to received a sanity kit during this emergency
- We give priority to mothers with children so they can received sanitary assistance
- Connecting them with national authorities so they can received in hand solutions to return to their country

Website

<https://www.abbacol.org/>

Description

Since Covid 19 started, Fundación Abba Colombia is developing a key work in frontline response; Together with national authorities the organization is helping and providing aid to migrants Venezuelan families who have been affected during COVID19 in the city of Bogotá, Colombia. Fundación Abba Colombia, is also supporting refugees and migrants during the COVID19 pandemic, including deploying humanitarian and social support teams to provide aid in refugee camps built by Venezuelans in Bogota, Colombia.

With the use of ICTs, together Fundación Abba Colombia with the pertinent authorities in Colombia: police, red cross Colombia and migration Colombia are responding during the emergency the country is facing. the use of mobiles and other technology equipment has enable us to have effective response and help in an immediate way the migrants who are at the bus terminal in north of Bogota to return to Venezuela.

The social impact that Abba Colombia has done so far is possitive, helping during this emergency, and at the same time building stong connection with other entities so we can

achieve together the goals.

The main activities for this project we are focussing on are:

- Registration on a database platform of venezuelan migrants who are receiving support during the covid19 emergency
- Giveaway sanitary kits to the venezuelan families
- Logistic support and coordination so venezuelan families can return to Venezuela in buses

To highlight, this is with the use of ICTs, which makes our project coordination easier.

Since covid19 started, Fundación Abba Colombia has provided help to: 200 Families monthly.

It is also to highlight that most of the migrants who are receiving help from Fundacion Abba Colombia are also included in a process of access to work, sanitation, education, this with the help of national entities.

ICT Tools

To promote digital transformation in our organization to develop our projects in a national, regional and international level, we use different types of technologies, computers and mobiles are the main ones; different programs like: social media, digital media, graphic programs are essential for our work.

Creating a database to have information of the venezuelan families who are receiving help is also an ICT tool that give us effective response.

This are ways to promote the work we are developing, and at the same time have effective results.

At a regional level we use our website and social media which enable us to be recognized as well be more effective in emergencies like covid19.

At a national level, as well, we have our website platform that give us access to connect with other entities in Latin America.

At an international level, as mention before our staff uses international mobiles and computers that enable us to connect with other countries.

Challenges

The main challenges encountered are the resources that our organization does not have at the moment to give support to all the migrants who required assistance during the covid19.

- To overcome this challenge we are looking to partner with other entities to develop an effective work

Another main challenge encountered is the lack of ICTs tools

- To overcome this challenge we are looking to partner with entities working in this area.

Partnership

Yes, as mention before in the area of technology, as all our registration process is via online on a database, as well the emergency assistance planning is being develop with the help of ICTs and technology tools.

Replicability

Yes, this project can be replicated in a regional level the different areas of Colombia where Venezuelan migration is at its top. At the same time it can be replicated at a national level, not only in Colombia but other south american countries where the covid19 is increasing and migration as well.

Sustainability

Yes. This project is based on the sustainable development goals, and yes it is sustainable as well.

SDG No. 6: Ensure availability and sustainable management of water and sanitation for all

SDG No. 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

SDG No. 17 Strengthen the means of implementation and revitalize the global partnership for sustainable development

The project is sustainable as together with national institutions we are providing access to migrants so they can be included in society, receiving first aid during covid19, but providing them tools so they can have access to sanitation, education and work.

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-agriculture|AL C7. ICT applications: benefits in all aspects of life — E-science|AL C11. International and regional cooperation

SDGs

Goal 6: Ensure access to water and sanitation for all|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case16-Child helplines and the COVID-19 pandemic

Title of the project, Contact Organization Name, Stakeholder type, Country

Child helplines and the COVID-19 pandemic|Child Helpline International|International Organization|Netherlands

Beneficiaries

Children and young people in over 100 countries where child helpline operate

Website

<https://www.childhelplineinternational.org/>

Description

Child Helpline International has created a repository of information on how child helplines are responding to the pandemic.

Child Helpline International is committed to providing support to child helplines as they navigate through the COVID-19 pandemic. we have collection a selection of tools, articles and other resources being shared across the international community of children's rights practitioners. We are gathering resources from our child helpline members about ways child helplines are adapting to the COVID-19 pandemic. We have set up a Dropbox folder for our child helpline members that brings these resources together.

In addition, we have worked together with our partners to provide practitioner led webinars and knowledge sharing sessions. and to complement our capacity building efforts we have used social media to highlight he crucial role that child helplines have been playing in the response to children and young people at greater risk of violence due to the lock downs across the globe.

ICT Tools

Web-based communication tools, social media, zoom. we have been forced to more our operations to remote working, providing many lessons along the way. This experience is transforming the ways in which child helplines operate, increasing their web-based service delivery to reach more children and young people in need.

Challenges

Internet connections are not reliable in many countries. remote working of child helpline

Partnership

We are working with numerous partners and stakeholders

Replicability

This is not project but an ongoing effort to ensure that child helplines are accessible throughout the pandemic

Sustainability

Yes, the network model has proven to be self sustaining for over 17 years.

Action Lines

AL C2. Information and communication infrastructure|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C7. ICT applications: benefits in all aspects of life – E-science|AL C11. International and regional cooperation

SDGs

Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case17-Bloom

Title of the project, Contact Organization Name, Stakeholder type, Country

BloomChaynInternational OrganizationUnited Kingdom

Beneficiaries

Calls to domestic abuse helplines have jumped by up to 30% across the world. Chayn's own web traffic to access resources tripled. There are real consequences behind this lack of support for survivors.

People experiencing abuse, as well as those still healing from abuse or sexual trauma may not be able to go to their trauma-group or therapy due to lockdown measures. Being in an abusive environment during self-isolation may also limit their ability to participate in calls or online conversations which can be traced by their abusers. Whilst adaptations and extension of support across the sector take place, our network of volunteers have developed and launched a web-based community support service which aims to provide a high impact, accessible and scalable solution for those experiencing domestic abuse.

Here is just some of the feedback we received from participants, highlighting the impact of our work:

“You guys are doing a great job and raising awareness. I'm glad I found the group.”

“Knowing someone cares always helps!”

“A positive thing from the session is that other people think the way I do - that maybe I'm not crazy for feeling everything that I do.”

Website

<https://Chayn.co>

Description

Bloom is a web-based trauma support, run by Chayn for abuse survivors. Our vision was to recreate a physical group setting into an online one. The content offers the best from Chayn's experience, Women's Aid's Power To Change, Rockpool's Sexual Violence Recovery Toolkit and validated by leadings experts in the field.

With digital transformation affecting many industries during Covid, there is an urgent gap with regards to online trauma groups for survivors that we are working to bridge through this project. Bloom recently concluded their 10-week pilot program, delivered to participants via the messaging app, Telegram. This program saw a direct impact on participants by providing tips, tools, and support.

Chayn will be expanding Bloom's service from one course to five courses. In terms of the ICT's, we will explore the options for wider adoption through different social media and communication channels. Furthermore, given the interest in this programme by other violence against women charities and local authorities - we will be running a six-month learning programme that would also involve incubating our practices within 5 other organisations. Thus creating a new type of frontline service that can be adapted by others in the sector to make this scalable and sustainable.

ICT Tools

Chayn is one of the leading tech for good non-profits that has led the way for digital transformations at a national and international level, winning many awards for our use of technology. Through the use of Telegram, an end-to-end encrypted chat app like WhatsApp, as our main form of communication, we were able to reach a global audience and create a group-setting completely online. Social media posts on Instagram, Facebook, and Twitter were integral to the promotion of our groups and were in large part responsible for sign-ups to participate in Bloom. We also utilized a crisp integration with Slack so that group members could chat directly with a Bloom team member without the group member leaving Telegram and disrupting the experience, while simultaneously allowing the Bloom team to communicate through Slack and share conversations within our shared workspace.

Challenges

Initially, one of the main challenges we faced was that users did not check Telegram regularly and would fall behind on course material. Despite this, it was still necessary for us

to provide Telegram as an option for participants because of its security, safety, and anonymity features. To overcome this issue, we are also introducing Whatsapp as an option for group participants. This is a more widely used app so users will be more likely to receive our messages.

Partnership

We're a learning and sharing kind of organisation. As we experiment and learn different ways of supporting more survivors of abuse, we want to share this journey with other organisations and groups.

We're looking for 5 organisations in the UK and 5 from outside the UK to be part of our learning programme. We'll train you in what we've learned, share our resources which you would be free to remix and edit (with attribution) and work with us to move the field of remote trauma support forward. We will not be sharing any identifiable details of participants of any of the courses.

This programme is open to any organisation working with adult survivors of child abuse, domestic abuse, sexual violence and any other form of gender-based violence. Though our work is designed around the needs of women and non-binary people, we are open to working with organisations of any gender. We especially welcome those focusing on marginalised communities.

Replicability

Bloom has structured its courses and support platforms to be replicable by anyone looking to run similar online based support groups. All courses are openly licensed and we've documented how we run it. We have also built an accessible website where organisations can sign-up to run their own tech back-end for supporting confidential group therapy using existing systems. Findings from our six-month long learning programme will also make replication easier for other organizations. We're launching a training programme in December that will allow 10 organisations to take part in a year-long learning and sharing community, helping us test, document and share the impact of this methodology.

Sustainability

This project is environmentally sustainable as it is run entirely through web-based applications. In the pilot of this project, 4 volunteers spend over 500 hours over 14 weeks to run a course for 100 people which is a beautiful feat of willpower and commitment. Having secured funding, we're now developing income-generating streams where we can train corporate organisations and large social enterprises in delivering such programmes of their own. We're going to continue applying for grant funding too to ensure this project can continue growing and innovating, and sharing our learning with the global violence against women space.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 5: Achieve gender equality and empower all women and girls

Case18-COVID-19 Hygiene Hub

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Hygiene Hub
CAWST (Centre for Affordable Water and Sanitation Technology)
International Organization
Canada

Beneficiaries

The COVID-19 Hygiene Hub is a free service that supports actors in low- and middle-income countries (LMICs) to rapidly design evidence-based hygiene interventions to combat the coronavirus.

This COVID-19 Hygiene Hub platform has three principal functions:

- * to connect institutions and organisations implementing hygiene programmes in response to COVID-19 with technical advisors who can answer questions and provide detailed advice in real time
- * to provide access to a searchable set of resources which summarise current evidence and guidelines and make practical recommendations for crisis-affected or LMIC settings
- * to offer a platform for sharing what is working among governments, international organisations, and civil society actors.

The COVID-19 Hygiene Hub is a core partner of the WHO/UNICEF Hand Hygiene for All Global Initiative.

Website

<https://www.cawst.org/>

Description

The COVID-19 Hygiene Hub is a free service to help actors in low- and middle-income countries rapidly share, design, and adapt evidence-based hygiene interventions to combat COVID-19. We bring together governments, international agencies, and NGOs along with technical advisors and researchers in public health, behaviour change, and implementation

science to enable effective hygiene programmes that curb human-to-human transmission of the novel coronavirus (SARS-CoV-2) responsible for COVID-19 in homes, communities, schools, health care facilities, and other public spaces. Our broad partnership is housed at the London School of Hygiene & Tropical Medicine (LSHTM) that draws on scientific, operational, and creative expertise from a network of organisations. This initiative was developed by individuals from LSHTM, the Centre for Affordable Water and Sanitation Technology (CAWST), and the Wash'Em team. The strategic direction of the COVID-19 Hygiene Hub is guided by a steering committee comprising senior representatives of leading international agencies, including the World Health Organization, the World Bank, UNICEF, the Global WASH Cluster, the International Federation of the Red Cross, WaterAid, Oxfam, and Action contre la Faim.

ICT Tools

The COVID-19 Hygiene Hub offers:

- * Up to date resources: available in English, Spanish, French, and Arabic, these answer frequently asked questions, synthesise the evidence and provide practical recommendations.
- * Technical advice: If users can't find an answer to their question in our resources, or want contextualised guidance, they can get technical advice in real time. A roster of experts based in various parts of the world answer questions using the chat feature on our website.
- * A platform for humanitarian actors to connect with each other. They can share their ideas, what their organisation is doing to respond to COVID-19, what's working in their context, and what isn't. We share these case studies from all over the world. Through the COVID-19 Hygiene Hub group, a recently developed feature, also facilitates open and peer-to-peer questions and sharing.
- * Our interactive online map has captured over 211 different initiatives in 65 countries, ranging from a response app in Kenya, to working with faith leaders in Afghanistan and with sports celebrities in Tanzania. We have supported 128 organizations in 54 countries. The COVID-19 Hygiene Hub resources answer common questions; they are available in 4 languages have been read more than 21,000 times. A roster of technical advisors based in various parts of the world answer questions using the chat feature on our homepage, to further support with developing effective hygiene behaviour change projects for COVID-19.

Challenges

In outbreaks and crises, implementing organizations are often under pressure to act quickly and begin project implementation right away. Sometimes this urgency results in choices that compromise the way projects are designed and implemented with potential negative effects on the acceptability, effectiveness and sustainability of projects. We provide general guidance on the process of hygiene behaviour change intervention development.

Each context is different and therefore the determinants of handwashing behaviour will also be different in each context. That means that there is no one-size-fits-all approach to handwashing promotion. We connect with humanitarians in diverse settings and offer a

summary of what works to change handwashing and hygiene behaviours.

"We're not just fighting an epidemic; we're fighting an infodemic." —Dr Tedros Adhanom Ghebreyesus, Director-General, World Health Organization. The COVID-19 Hygiene Hub connect experts with practitioners to share scientifically-backed information about COVID-19 and how to fight it.

Partnership

We bring together technical advisors and resources, governments, international agencies, and NGOs for effective hygiene programming. We welcome participation of global stakeholders! Please connect with us and let's find a way to collaborate.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-employment|AL C9. Media|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 10: Reduce inequality within and among countries|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case19-COVID-19 Food Systems Emergency response in the SAHEL region

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Food Systems Emergency response in the SAHEL region|Global Open Data initiative for Agriculture and Nutrition (GODAN)|International Organization|Canada

Beneficiaries

1- Governments: Managing emergency food stocks and mitigating food systems disruptions
2- producers/processors: learning where food gaps are/market opportunities
3- Consumers/buyers aware of availabilities and prices. Benefits are immediate, and thanks to analytics, allowing for long term planning.

Website

<https://www.godan.info>

Description

Discussing with relevant Stakeholders in Mali, Niger and Burkina Faso, we designed a 4 modules action plan using data as key tool in the countries/region response: 1- Implementing emergency food stocks management module 2- Establishing predictive analytics models (with NEF) to help countries forecast and mitigate food systems disruptions 3- Landscaping and integrating modules as integral part of the country's agriculture/food management systems 4- Module extension to farmers/processors, including a market place for producers and consumers. It is therefore an emergency response plan, but yet, building up the long term sustainability of the Ag/Food management systems in the region.

ICT Tools

1- Geodata for tagging food/agri resources 2- predictive analytics making use of supercomputing facilities available locally 3- User friendly apps designed for senior leaders, for producers, and for consumers.

Challenges

- Weak infrastructure/connectivity: Overcome through off line processing capacity
- Low English literacy: Using pictograms and local language
- Weak capacity: Integrated training programmes using local GODAN champions as trainers.

Partnership

ICT Ministries, Statistics depts, Ministries of Agriculture; Farmer associations; universities.

Replicability

Yes. The four modules in the project were designed in collaboration with the three target countries, but are most suitable and easily replicable in other parts of Africa, as confirmed through requests received from other countries. GODAN has partners in 127 countries, with trained trainers/champions ready to lead, and a very broad range of expertise readily available.

Sustainability

Yes. The modules will be implemented within the ranks of the contributing units (especially Governments) therefore they will be fully integrated in the day to day operations during and beyond the project.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-employment

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Case20-Using Talking Books to Strengthen Health Education and Service Delivery in Northern Ghana during the COVID-19 Pandemic

Title of the project, Contact Organization Name, Stakeholder type, Country

Using Talking Books to Strengthen Health Education and Service Delivery in Northern Ghana during the COVID-19 Pandemic
Amplio Network
International Organization
United States of America

Beneficiaries

The project supports community health nurses (CHNs) and volunteers (CHVs) to more effectively deliver health education messaging to the households within their catchment areas. During the pandemic CHNs and CHVs are being relied on to deliver essential information regarding COVID prevention, signs and symptoms, and recommendations for treatment. Additionally, they are responsible for providing timely updates on government restrictions. The Talking Books support CHNs and CHVs in providing consistent and reliable messaging to community households.

By strengthening and supporting the health system, the project ultimately benefits households and community members in these media dark and rural areas. These individuals are traditionally disadvantaged due to poverty, remoteness, low literacy, and language barriers. Listening to health education messages indirectly benefits their households and broader communities through knowledge sharing and, ultimately, reduced transmission of COVID.

The project is being implemented in 8 districts in the Upper West Region of Ghana: Jirapa, Nadowli, Lambussie, Nandom, Wa West, Sissala West, Lara, and Sissala East. The current direct beneficiaries include the 179,176 people that interacted with Talking Book messages between April and July.

Website

<https://www.amplio.org>

Description

In Ghana, the government's COVID-19 response is focused on two major cities. In rural remote areas, vulnerable populations are at risk. Even in the best of times, community health workers struggle to provide basic health education and services. In northern Ghana, limited access to mass media means that thousands of citizens do not have access to reliable information on COVID-19.

In response, Amplio and its affiliate Literacy Bridge Ghana (LBG) are partnering with Ghana Health Service (GHS) and UNICEF on a COVID-19 awareness campaign. Community health nurses (CHNs) and volunteers (CHVs) are using the Amplio Talking Book audio device to share consistent and accurate local language health messaging on COVID-19, meningitis, and other health issues.

The project is currently being implemented in 207 Community-Based Health Planning and Services (CHPS) zones in eight vulnerable districts in the Upper West Region. This poverty-stricken region faces increased risk of the virus spreading due to cross-border trading activities with Burkina Faso. Most big organizations in the area have shut down. Our project is the main intervention reaching these media-dark, rural remote communities.

ICT Tools

This project is using the Amplio Talking Book, a rugged, battery-powered audio device for low-literate users. With Talking Books, governments and NGOs can share local language content with rural remote communities. Users can play messages on demand and record their feedback. A built-in speaker lets families and groups listen and learn together. Because Amplio's technology collects usage data and user feedback, organizations can monitor program engagement, identify issues and trends, and continually update content for greater impact.

At a regional level, Ghana's health system is already overburdened. Even in the best of times, CHNs and CHVs struggle to deliver health education and services. With Talking Books, we're helping to lighten their load. They can deliver consistent and accurate health messages more efficiently, allowing more time for patient care.

Nationally, this project could scale through Ghana's CHPS zones. In 2019, we conducted a successful pilot at five community health posts. CHNs used Talking Books to deliver health messages during antenatal care visits and child welfare clinics. As a result, they had more time to provide services.

Internationally, Talking Books are being used to promote digital inclusion across multiple sectors, including agriculture, health, education, gender, and livelihood development.

Challenges

Through our ongoing monitoring of the project we have identified the following challenges:

1. CHNs and CHVs are on the frontlines, leading to higher turnover. We are training GHS managers on Talking Book technology, so they can train new staff as needed. Safety is a priority. We are providing training and guidelines on COVID-19 preventative measures, as well as personal protective equipment (PPE), to all CHNs and CHVs involved in the program.
2. The situation is continually changing as the global community learns about the virus. We need to rapidly respond to the pandemic and address emerging health needs. We are monitoring Talking Book usage data and user feedback and administering community surveys. This monitoring helps us understand community issues and concerns. We are creating and deploying new content to meet the evolving needs of the community.
3. GHS has limited time and capacity to take on the project. The key is to integrate Talking Books into the services they provide. We are adapting the project's initial capacity-building goals to provide a longer timeline and more support. We want to position GHS to manage their Talking Book program for ongoing health education delivery, now and beyond the pandemic, to reduce cost and increase sustainability.

Partnership

Yes, we are seeking funders. As expressed in other sections, we have worked closely with Ghana Health Services (GHS) from the start of the pandemic. This project is locally led, with a multi-stakeholder approach. However, the project is currently being supported by Amplio and private donor funding because of the need for rapid response. GHS is strapped for time and resources to monitor the program. Specifically, we're looking for funding so we can continue to support GHS with monitoring and capacity building, to strengthen program impact and sustainability.

Replicability

Yes. Through past and current Talking Book programs, Amplio, LBG, and UNICEF have built a strong partnership with Ghana Health Service and laid the groundwork for a potential regional or nationwide scale-up.

Over the last 4 months, Ghana Health Directorates, CHNs, and CHV have been trained in the Talking Book technology in 207 CHPS zones. Currently, we are reaching the 'most remote' by distributing Talking Books to the CHVs who cover the hardest to reach communities. However, we want to put more Talking Books into the hands of more CHVs to ensure that we're reaching all households, so that no one is left behind. In addition, we hope to expand the project to four vulnerable districts in the Northern Region.

Beyond COVID-19 response, we have a blueprint for adapting/scaling the program the CHPS zones, regionally or nationally. This would significantly increase GHS's capacity for health education and service delivery in rural remote communities.

Amplio's partners in other countries (Liberia, Zambia, Ethiopia) are working to integrate COVID messaging into their Talking Book programs, regardless of program focus/sector.

Sustainability

Yes. While the initial project has focused on COVID-19 and a recent meningitis outbreak in the region, more funding would allow GHS to purchase their own Talking Books, so that they can continue to update content and share important health education messaging in the future. There would be initial investment to procure enough devices to cover the CHPs zones, train CHNs and CHVs on the devices, and set-up the technology. However, once Talking Books are established, the ongoing inputs would be primarily for new content production, device maintenance, and some ongoing support.

In interviews with CHNs and CHVs during a 2019 Talking Book CHPS pilot, prior to pandemic, health care providers explained that the Talking Book allows them to start their patient interactions with a common understanding of health education messaging, thus giving them more time to focus on important health care service delivery and referrals. Many CHNs and CHVs do not speak the local language, so Talking Books help overcome that barrier. CHNs also said that Talking Books helped to significantly increase men's participation/engagement in ANC visits and child wellness clinics.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case21-CHAGAMKA community based youth inspiration ICT Hub

Title of the project, Contact Organization Name, Stakeholder type, Country

CHAGAMKA community based youth inspiration ICT Hub
Norwegian Refugee Council
International Organization
Uganda

Beneficiaries

Kampala urban poor and urban refugees who have access within their locality to be able to continue with self reliance initiatives amongst Covid 19 pandemic restrictions and protocols

Website

<https://www.nrc.no/>

Description

Promoting business online through the community digital hub and continued diverse online free courses

ICT Tools

An online platform with diverse services has been created and urban poor and refugees supported to have free access. Internet of good and reliable speed has also been provided accessible to the most vulnerable in Kampala

Challenges

Those accessing the Community digital Hub "CHAGAMKA (Swahili word meaning be inspired" are many and some come from far. Scaling the digital hub through establishing more of the same concept will bring great transformation to the most vulnerable and reduce the levels of poverty in urban settings

Partnership

Yes those offering free online courses, foundation and sponsors for students who aspire paid online courses, those with gadgets like laptops and computers as donations etc

Replicability

Yes, in Kampala other areas mainly inhabited by refugees and urban poor, its suburbs and other urban towns in Uganda especially those hosting refugees like Arua, Adjumani, Hoima and Mbarara

Sustainability

The project will be handed over to Local NGO's who are part of the initiative and are already having other projects that support refugees

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal

8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case22-Africa UN Knowledge Hub on COVID-19

Title of the project, Contact Organization Name, Stakeholder type, Country

Africa UN Knowledge Hub on COVID-19|United Nations Economic Commission for Africa|International Organization|Ethiopia

Beneficiaries

Member States, General Public, Policy Makers, UN Officials, UN Partner organizations (AU, etc.)

Website

<https://www.uneca.org>

Description

The Africa UN Knowledge Hub for COVID19 is a portal developed by the UN Development System in Africa to act as a one-stop-shop on information and resources relevant to Africa on the COVID-19 pandemic. The Hub harnesses information and resources from credible sources including WHO, regional UN agencies, Ministries of Health of African governments, and credible news channels amongst other reliable information sources. The portal also provides intelligent data dashboards and an intelligent, contextualized federated search engine to provide up-to-date and trusted information on the pandemic in a user-friendly manner.

ICT Tools

AI/ML, data visualization, Drupal CMS, Federated Search Engine technology with advanced algorithms, information harvesting - these technologies and the portal are part of the overall digital transformation process taking place within the UN system to improve regional coordination and responses to common issues affecting the Member States served by the different UN agencies in the region.

Challenges

Short timelines, limited resources, the scope of collaboration required, technology awareness across all partners - the project was delivered under the OIBC framework to ensure collaboration across all agencies was done in a coordinated fashion.

Partnership

We have worked with different partners, internal and external. We continue to welcome technology partners as well as partner organizations with similar interests.

Replicability

Yes - technologies are implemented in a modular way and can be easily replicated.

Sustainability

Yes, the project is supported by existing resources within the UN system and additional resources to be provided under the OIBC framework.

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 3: Ensure healthy lives and promote well-being for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case23-Epidemic safety control platform

Title of the project, Contact Organization Name, Stakeholder type, Country

Epidemic safety control platform|China Mobile Group Shanxi Co., Ltd.|International Organization|China

Beneficiaries

ThroughThe Epidemic safety control platform of China Mobile, ordinary users can timely and accurately get relevant epidemic policy information, and at the same time, they can also timely and accurately fill in relevant procedures when moving across regions.For the epidemic management personnel, the relevant policies can be timely and accurately conveyed to the corresponding people and the epidemic control of the floating population can be effectively carried out, thus improving the efficiency of policy transmission and management.

Website

http://www.10086.cn/index/sx/index_351_351.html

Description

Through The Epidemic safety control platform of China Mobile, electronic information registration and pre-reminder were carried out on the provincial prevention and control checkpoints. The Epidemic safety control platform of China Mobile can accurately analyze the location of mobile users in Shanxi Province, and at the same time, users of the prevention and control checkpoints in Shanxi Province, all the entry and exit checkpoints can receive the pre-notification message of information filling. The text message contains the website link for information filling, and the user directly enters the page for information filling through the link. At the same time, it can accurately push the text message to the local people from other places, so that they can report to the community or village committee in time. Through the use of The Epidemic safety control platform of China Mobile, it can timely and effectively remind the mobile target population during the epidemic, which plays an important role in the prevention and control of the epidemic in Shanxi Province.

ICT Tools

The system uses Spark-Streaming for real-time signaling processing, uses Kafka to receive data sources, uses Oracle to load real-time rules, uses Redis to cache data, uses Spark rule computing engine to divide the target population of rules into nine categories and three triggering modes, and analyzes the position signaling data of the whole population strictly according to the rules. By analyzing the data, the upper application can accurately match the corresponding rules according to the real-time location of the user and send relevant SMS reminders, so as to meet the needs of epidemic prevention and control.

Challenges

During the epidemic period, personnel mobility is high, personnel sources are complex, and data sources are numerous. Traditional data analysis methods cannot effectively support epidemic prevention and control. Big data platforms can integrate signaling data, Internet data, MR data, industry data, asset management data, etc. Data from multiple channels is analyzed and processed uniformly, which improves the efficiency of data analysis during the epidemic.

Partnership

none

Replicability

The Epidemic safety control platform of China Mobile can expand the location acquisition capabilities and precise push capabilities of related customer groups to other industries, such as government, tourism, public security, finance and other industries. In other industries, according to actual business needs, according to the geographical location of the customer group Change, carry out accurate information push, effectively carry out policy

publicity, traffic information notification, tourism information promotion and other related information pushes, effectively improving the efficiency and accuracy of policy information transmission in various industries.

Sustainability

The Epidemic safety control platform of China Mobile on the basis of epidemic prevention and control, relying on Shanxi Mobile's big data platform, provides real-time analysis by acquiring location signaling related data, using intelligent mining and analysis methods, and providing big data for the information service needs of major industry customers SAAS service capabilities of public information, build an ecosystem of public information services, realize core capabilities based on rule engine configuration, meet the public information service needs of government and enterprise customers, and play the role of big data technology in boosting public information services.

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case24-Global Goals

Title of the project, Contact Organization Name, Stakeholder type, Country

Global GoalsUnited NationsInternational OrganizationIndonesia

Beneficiaries

All

Website

<http://www.un.org>

Description

Gugus Tugas Covid-19

ICT Tools

Yes

Challenges

Global Goals can making good for all

Partnership

Yes. Usa, China, Europe

Replicability

United Nation Program

Sustainability

Yes

SDGs

Goal 1: End poverty in all its forms everywhere

Case25-Business - to - business - to - consumer online marketplaces

Title of the project, Contact Organization Name, Stakeholder type, Country

Business - to - business - to - consumer online marketplacesUnited Nations Development ProgrammInternational OrganizationIndia

Beneficiaries

Retailers and wholesalers

Website

<http://www.undp.org>

Description
Creation of a new innovative ideology product solution based on the subject areas and the conceptual frameworks of the food systems and the food value chains
ICT Tools
Digital financial services and the blockchain technologies
Challenges
Deployment of the product solution in the e-commerce platform channels and this activity could be worked upon via the tasks of marketing the product solution
Partnership
Not applicable
Replicability
Not applicable
Sustainability
This product solution is sustainable due to the objective of enabling the utility factors in the subject areas of the digital financial services and the financial inclusion
SDGs
Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture Goal 12: Ensure sustainable consumption and production patterns

Case26-Digital technologies and innovations

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital technologies and innovations|United Nations world food programme CERFAM KEPT|International Organization|India

Beneficiaries
Telecommunications industry and the agricultural food crops sector
Website
https://innovationthrive.com/
Description
Creation of new Innovative ideologies product solutions based on the subject areas and the conceptual frameworks of the digital financial services and the blockchain technologies.
ICT Tools
Digital financial services and the blockchain technologies in the subject areas and the conceptual frameworks of the covid - 19 response projects and activities.
Challenges
Impact management on the society and the communities which are overcome via the creation of knowledge building and knowledge enabling books on the subject areas and the conceptual frameworks of the digital financial services and the blockchain technologies.
https://climatechange612.wordpress.com/2021/07/12/online-website-marketplace-for-the-knowledge-building-and-the-knowledge-enabling-books/
Partnership
Not applicable
Replicability
Not applicable
Sustainability
This innovative ideology product solution is sustainable via the implementation of the zero hunger sustainable development goals.
Action Lines

AL C2. Information and communication infrastructure|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C7. ICT applications: benefits in all aspects of life – E-science|AL C11. International and regional cooperation

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 17: Revitalize the global partnership for sustainable development

Case27-Virtual Programme: Strengthening Humanitarian Leadership

Title of the project, Contact Organization Name, Stakeholder type, Country

Virtual Programme: Strengthening Humanitarian Leadership Fundacion Abba
Colombia International Organization Colombia

Beneficiaries

Youth between 18-35 years old

Website

<https://abbacol.org/>

Description

The virtual programme in "Strengthening Humanitarian Leadership" trains learners in the humanitarian sector and provides the tools necessary to develop leadership skills in humanitarian settings and under continuous pressure, especially during the covid19 pandemic. This programme was designed by Fundacion AbbaCol team during covid19 - 2021 to train young people from different backgrounds in Colombia. The programme has practical and innovative online modalities. The structure consists of: 12 modalities or modules. This programme is totally online and we are promoting it to generate a humanitarian leadership sense response upon other stakeholders during the COVID19 pandemic.

The "Strengthening Humanitarian Leadership" programme is endorsed by HPass, a UK organisation who provide the globally recognised humanitarian digital insignia, and Fundación Abba Colombia provides each participant with a diploma upon completion of the

course. These are awarded at the end of all modalities. Other organisations such as WICID at the University of Warwick are joining this programme as well.

The programme promotes leadership sense while learners are being trained, as well creates a humanitarian capacity as they develop the programme. The used of ICTs is key as currently the programme is all online and virtual. What makes unique this programme is the design: videos, graphs, images etc as everything is virtual and digital, this to create a real sense of the humanitarian training they are receiving online.

ICT Tools

Currently as the programme is virtual we have created and upload the program into an online platform so students can access, the used of mobiles and computers are used during the training program to promote digital transformation. As well we have design the program online, our design team created the programme virtually to impact the learners as they received their training. This programme is definitely promoting digital transformation as we are training the people in the humanitarian area in a different way to they can responde properly during the pandemic of covid19.

Currently are making a possitive impact at national, regional and international level.

Challenges

Main challenges:

- The learners need access to computers and ICTs to get involved into the training programs.

As an organization we are trying to collaborate with other entities so we can have ICTs equipments for those learners who are unable to have ICTs like computers or mobiles.

- As well the programme is currently for spanish speaking community, but we want to have it in english speaking community as well.

Partnership

Yes, currently looking for partners in the educational area and technology area

Replicability

Yes this program is replicable, we want to expand the program into all the Latin-American countries as the program is currently in spanish, in a near furture we would also like to replicate and design the program in english speaking countries.

Sustainability

Yes the program and project is sustainable. It currently works under the Sustainable Development Goal No. 4 quality education, promoting as well virtual access to education to low income students and other communities.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C11. International and regional cooperation

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 16: Promote just, peaceful and inclusive societies

Case28-SahlaJour

Title of the project, Contact Organization Name, Stakeholder type, Country

SahlaJourUXLIInternational OrganizationAlgeria

Beneficiaries

Beneficiaries of our solution are the consumers in order to avoid the slow waiting, chains by using very adapted and well-conceived practices in order to avoid the propagation of the COVID and other advantages already mentioned, also this solution will help the suppliers and store managers to avoid the direct transmission of the COVID and to manage efficiently the orders and the appointments.

Website

<https://uxli.co.uk/>

Description

Streamline and manage and solidify the relationship between service provider/product and customer,
Increase the quality, reliability and security of customer management,
Facilitate the reservation of services online,
create an evolutionary base and an advanced life methodology,
limit real contact between consumers in order to limit the spread of COVID,
avoiding Great congestion and overcrowding in the establishments and places of purchase and sale,
encourage more productivity and health care in crowded places,
establish a permanent connection between the customer and the service provider avoiding any causes of COVID,
use the power of technologies to improve the quality of life.

ICT Tools

SahlaJour is a web and mobile app based national startup that will help service and product requesters to order their needs online and through very powerful notification management, track their requests and retrieve them when they are ready, This startup also helps service providers to manage their customers well over time by enabling a powerful investment of both parties' time, we will use GCP technologies to manage our customer' sensitive data very accurately and advanced security protocols.

for the front end and backend, we will use flutter technologies with spring and SQL Data Base.

high security level using https, data validation, hachage, SQL (Sequelize), GCP and every update in our field.

Challenges

- Technological barriers such as
 - + Electronic payment is not admirable for Algerians (2020: 52% used at least once the internet in 2020 according to statistics from the World Bank. Algeria has, today, more than 24 million Facebook users, or 55% of the population. For the gender distribution; 62% of Facebook users are men against only 38% of women).
 - + For this we will use the payment via check or direct payment
 - The non-availability of high-speed internet which allows the good exploitation of the platform in several regions of Algeria.
 - For that we will use a basic version with the most basic functionalities and in parallel a complete version.
- but in the other countries this solution will work perfectly

Partnership

Processeurs de paiement. GIEMONAÏTIQUE
Gouvernement Algérienne (établissements étatiques)
Entreprises
Cabinets

Replicability

Yes,
the idea of making such a app, but our strategy is to do contracts and use best technologies

Sustainability

Yes,
Don't waste time because our, Platforms can reach multiple areas in a very short time
Save energy
Grow your own produce

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C9. Media|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case29-EtuAide

Title of the project, Contact Organization Name, Stakeholder type, Country

EtuAideUXLIInternational OrganizationAlgeria

Beneficiaries

the beneficiaries of our solution are the pupils and bachelors, also universities and learning center, also persons who have a very good reputation.
We make the relation and we manage it in order to do our best in term of collaboration, security, and monitoring.

Website

<https://uxli.co.uk/>

Description

EtuAide is an online platform where students register or subscribe by paying subscription tickets, this platform will help them to choose their path by using the analysis of students' data and with the help of other students or alumni that will lead to contact these new baccalaureate students, which allows us to overcome the geographical and logistical barriers that have hindered the effectiveness of other voluntary guidance organizations. EtuAide also helps students in their career path by connecting them with mentors in different fields, as well as notifying students of internship and scholarship offers, through an easy, efficient and reliable platform.

ICT Tools

EtuAide is a web and mobile app based national startup that will help service and product requesters to order their needs online and through Big Data and ANAD(data analysis(ACP, ,AFC, AFM, CA, ANOVA, regression)).

Also we will use an interactive application with flutter and spring, and also high security level using https, data validation, hachage, SQL (Sequelize), GCP and every update in our field.

Challenges

- Technological barriers
- Electronic payment is not admirable for Algerians (2020: 52% used at least once the internet in 2020 according to statistics from the World Bank. Algeria has, today, more than 24 million Facebook users, or 55% of the population. For the gender distribution; 62% of Facebook users are men against only 38% of women).
- For this we will use the payment via check or direct payment
- The non-availability of high-speed internet which allows the good exploitation of the platform in several regions of Algeria.
- For that we will use a basic version with the most basic functionalities and in parallel a complete version

Partnership

Processeurs de paiement. GIEMONAÏTIQUE
Gouvernement Algérienne (établissements étatiques)
tutoring center

Replicability

Yes,
the idea, but We do contracts and use best technologies

Sustainability

Yes
Platforms that can reach multiple areas in a very short time
Save energy
Grow your own produce
Don't waste time
Eradicate ignorance and educational failures
Provide high class education

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-employment

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 16: Promote just, peaceful and inclusive societies

Case30-Vaccine

Title of the project, Contact Organization Name, Stakeholder type, Country

Vaccine Bangladesh Red Crescent Society Sylhet Unit International Organization Bangladesh

Beneficiaries

Always

Website

<https://bdracs.org/souvenir-item/>

Description

We, the work-loving philanthropists, work in all areas of the Bangladesh Red Crescent Society.

ICT Tools

Yes

Challenges

I Can Challenge. Face To Others Conditions

Partnership

Yes

Replicability

Yes

Sustainability

Yes

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts

Case31-Educational Youth

Title of the project, Contact Organization Name, Stakeholder type, Country

Educational Youth Shorter College International Organization United States of America

Beneficiaries

Son, ChaD J. Williams; intellectual disability; disability services provided. Jelisa D.Cooper.

Website

<https://www.students.shortercollege.edu>

Description
Professional services; respectively cultural adaptations youth sports/ healthcare? Jelisa D Cooper.
ICT Tools
Transportation, mentorship, sports
Challenges
Teaching self respect, cultural adaptations rhetorically, and leadership.
Partnership
Yes
Replicability
Youth recreation program as well women rehabilitation innovation. Commercial non-profit
Action Lines
AL C1. The role of governments and all stakeholders in the promotion of ICTs for development
SDGs
Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Part 6: Other

[Case1-Www.k-12math.info](http://www.k-12math.info)

Title of the project, Contact Organization Name, Stakeholder type, Country

www.k-12math.info K-12math.info inc Other United States of America

Beneficiaries

The website helps anyone "... to help a 7 year old to add whole numbers" . Be they classmates, parents of, teacher of, school content coordinator, reference librarian, materials developer, and others.

Website

<http://k-12math.info>

Description

The project continues to help a learner and those who help a learner to learn and understand elementary and secondary school mathematics without a classroom.

ICT Tools

A simplified user interface is used. Information is displayed in a "calendar style" format with over a 1,000 "months" of links to elementary and secondary school mathematics resources.

Challenges

To improve global understanding of mathematics. This is being achieved by providing an age appropriate information searching resource.

Partnership

Yes, anyone developing OER/Open Access elementary and secondary school materials that has been properly tested for the age group.

Replicability

No, because www.k-12math.info is a globally available Open Access (free) educational resource, which provides links to many of the world's best OER/Open Access math educational resources.

Sustainability

Yes, it continues to add new links to its' over 6 500 age appropriate links of CK-12, Khan Academy, AAAknow, NCERT (India), Ukuqonda Math (South Africa), A+Click (United Kingdom) and others.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-learning

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

[Case2-Www.k-12math.info](http://www.k-12math.info)

Title of the project, Contact Organization Name, Stakeholder type, Country

[Www.k-12math.info](http://www.k-12math.info)K-12math.info incOtherUnited States of America

Beneficiaries

The website helps anyone "... to help a 7 year old to add whole numbers" . Be they classmates, parents of, teacher of, school content coordinator, reference librarian, materials developer, and others.

Website

<http://k-12math.info>

Description

The project continues to help a learner and those who help a learner to learn and understand elementary and secondary school mathematics without a classroom.

ICT Tools

A simplified user interface is used. Information is displayed in a "calendar style" format with over a 1,000 "months" of links to elementary and secondary school mathematics resources.

Challenges

To improve global understanding of mathematics. This is being achieved by providing an age appropriate information searching resource.

Partnership

Yes, anyone developing OER/Open Access elementary and secondary school materials that has been properly tested for the age group.

Replicability

No, because www.k-12math.info is a globally available Open Access (free) educational resource, which provides links to many of the world's best OER/Open Access math educational resources.

Sustainability

Yes, it continues to add new links to its' over 6 500 age appropriate links of CK-12, Khan Academy, AAAknow, NCERT (India), Ukuqonda Math (South Africa), A+Click (United Kingdom) and others.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 1: End poverty in all its forms everywhere

Case3-China Unicom epidemic prevention and control big data platform

Title of the project, Contact Organization Name, Stakeholder type, Country

China Unicom epidemic prevention and control big data platform
China Unicom Network Technology Research Institute
Other
China

Beneficiaries

China Unicom epidemic prevention and control big data platform can bring benefits to government departments, enterprises and individual users.

The epidemic prevention security level evaluation model in the platform can evaluate the epidemic prevention security level of each grid in the city based on factors such as residents' self-isolation, high-frequency activity and other behavior, population density and migration characteristics, public sentiment and attention, etc. This work provides certain

data support in scientific prevention and precise policy implementation to government departments.

In addition, by obtaining the employees' recent activity trajectory as well as the security level of their office, enterprises know the employees' risk of infection. Thus, companies arrange for resumption of work orderly and reasonably.

For the individual user, the security level of each area is public including the grid's resident isolation, the proportion of high-frequency active groups, and whether there are confirmed cases in the vicinity, etc. Therefore, individual users can make a reasonable schedule.

Website

<http://www.chinaunicom.com>

Description

In the early stage of the coronavirus disease (COVID-19) outbreak, China Unicom adopted various schemes to support the prevention and control of the outbreak. Based on the analysis of telecommunications big data, China Unicom provides users with the service of "inquiry of places visited within 14 days" to help relevant departments improve the efficiency of itinerary inspection of mobile personnel. In addition, By analysis of operator big data, we can obtain the complete location information of users reported by communication base stations from countries, provinces, and cities to scenes, streets, and buildings. Based on this data resources and technology, China Unicom launches an epidemic prevention and control big data platform combined with SEIR Infectious disease model, establishing an epidemic prevention security rating evaluation model to evaluate the epidemic prevention security rating of various areas of the city. The platform provides strong support for the government in terms of epidemic situation research and judgment, precise epidemic prevention and control and resumption of work under the resume.

ICT Tools

Based on the SEIR model, operator's big data epidemic prevention work is mainly carried out at two levels: controlling the source of infection and controlling the transmission route. In terms of controlling the source of infection, China Unicom analyses the data of population migration across provinces and cities to obtain the inflow population of the epidemic area, locate and track the inflow population of the epidemic area.

In terms of controlling transmission route, based on operator big data, China Unicom obtains users' location information, activity rules, call records and online behavior characteristics to backtracks users' space-time trajectory. using machine learning algorithms, people who made close contact with them can be found. In addition, high-frequency active people can be identified so that their activity trajectory can be focused on effectively. Thus, number of susceptible people exposed to infected people will be reduced.

Through the above measures, China Unicom provides certain technical support for scientific prevention and precise implementation.

Challenges

There are two main challenges in the analysis of epidemic data. First, the timeliness requirements are high while data processing is difficult. Because the analysis involves massive data of millions of users in multiple cities, it is necessary to preprocess the data and perform feature extraction in the process of multidimensional analysis and combine machine learning for model training and optimization at the same time. However, the situation of the epidemic is changing rapidly, and early detection can prevent it earlier. Fortunately, we have an excellent technical team and sufficient computing resources. After several rounds of program discussions, the efficiency of data processing has been effectively improved to meet the timeliness requirements. Second, the difficulty of team communication during the epidemic increased. Because of work from home during the epidemic, communication between colleagues is not smooth, and it is easy to delay the project process. To this end, we actively formulate a remote communication mechanism, set delivery documents, and arrange unified communication time, etc. to ensure effective cooperation of the team through multi-party coordination.

Partnership

If any government or enterprise wants to detect migration in his own city or region, evaluate the safety level of the concerned area, improve the level of automation in epidemic prevention and control, scientifically and orderly monitor suspicious personnel and arrange for resumption of production, welcome to contact us. Thus, we can work together to overcome the coronavirus disease (COVID-19) as soon as possible.

Replicability

This project can be copied to other applications, mainly in the replicability of two aspects. One is data, and the other is technology. The operator big data comes from the production network and has comprehensiveness, multidimensionality, neutrality, and integrity. Through the cross-correlation of these different dimensions of data, users' identity, location, behavior and other information can be obtained. Thus, user's dynamic label library completes the holographic portrait of the user and accurately reflects the user's behavior status in real time. As long as we grasp the characteristics of users, we can carry out analysis on different topics. The second is analysis technology. When using label data for analysis, not only statistical analysis is used, but also more emerging big data technologies such as machine learning and natural language processing. These technologies can be combined with different analysis topics to produce different decision suggestions.

Sustainability

This project contributes to the realization of sustainable development. In the short term, it is difficult to completely eliminate the coronavirus disease (COVID-19), the impact of coronavirus disease (COVID-19) has been received globally. Thus, the epidemic prevention and control work has been gradually normalized. The assessment of security levels in key areas, the detection of migration and the analysis of public opinion can ensure that social

individuals participate equally in epidemic prevention and control, improve self-prevention capabilities, and can help the government to carry out resumption of work in an orderly manner and realize social long-term sustainable economic development.

In addition, the data and technology used in this project are replicable without causing damage to the natural environment. On the contrary, if the technology of this project is reused in other applications, it can reduce the consumption of computing resources and save electricity and labor costs, which contributes to sustainable development.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 16: Promote just, peaceful and inclusive societies

Case4-Taleemabad - Making education come to life

Title of the project, Contact Organization Name, Stakeholder type, Country

Taleemabad - Making education come to lifeOrendaOtherPakistan

Beneficiaries

The Taleemabad platform is aimed at i) providing education to children living in remote access areas, who do not have access to the same learning opportunities as children who go to high-cost private schools in the cities, ii) parents who have become disillusioned with education and its benefits through years of being exposed to subpar education that has not brought any improvement in their lives, iii) children with stunted learning levels. Even before the pandemic hit, Pakistan's education system was struggling. Around 22.5 million children were out of school, while those in schools reported extremely stunted learning levels, with 48% of 5th graders being unable to read a sentence in their native language, and 66.8% not making the transition from primary to secondary grades successfully.

We are providing free content to these children through the multiple channels mentioned before. The app contains all the features of the Taleemabad platform - animated video

lessons, gamified tests, parent portal and adaptive learning - at a minimal cost of 20 PKR (0.13 USD) per week.

Website

<http://orendaproject.org/>

Description

During school closures, education can be kept alive through digital means. Out of the 70.9 million children in Pakistan, nearly 40.4 million have access to television, and 24.5 million have latent access, i.e. digital access through a parent's mobile phone/device, while close to 1M children own a personal device.

The Taleemabad learning series is the national curriculum of Pakistan presented in an engaging animated format, consisting of hundreds of video lessons and thousands of assessments. Through contextualised storylines and engaging characters, we can build a deep relationship with children which enables us to retain their attention for longer thus helping us instil deep-rooted learning. The content (lessons, assessments, practice questions) is available in Urdu, English and soon in multiple regional languages. Before COVID-19, the series was mainly distributed through the means of the Taleemabad App (bit.ly/taleemabad) - an adaptive platform, cognizant of user learning levels, allowing it to curate a specialised curriculum according to each user's unique learning needs. The platform now has close to 250,000 users with 2000 new users coming to the platform each day.

ICT Tools

As mentioned before, close to 40.4 million children have access to a television, 24.5 million have latent access, and 1 million children have a personal device. Smartphone penetration and the constant increase in 3G/4G connectivity has allowed us to take the Taleemabad platform all across Pakistan, and in places where access to these resources is limited, we are now able to reach them through television.

Recently, Taleemabad was picked by the Federal Government for daily broadcast on a free to air special new channel called 'Teleshool', run by the national broadcaster. Taleemabad is also being aired on a Provincial cable channel called 'TaleemGhar', launched by the Punjab government, and is also available on a content aggregator called IIm Exchange, launched by the LEAPS study faculty at Harvard. Our placement on these channels, plus a very strong surge in growth (35,000 new users joined the platform in April, compared to 2500 in February) means that we have a serious shot at reaching a substantial number of children with Television, or latent smartphone access.

Challenges

Content production is an expensive activity in terms of time and money. To date, we have produced 480 videos but to keep up pace with the rate at which tv channels are burning through content (4 hours per day, for 5 days a week) we need to keep churning out more videos. Till now we have made content for Grades K-3 and Grade 6, and are in the process of creating content for Grades 4 and 5 to complete our spectrum of primary grades content and provide a complete primary learning solution to help children build a strong academic foundation.

Tv broadcast of content does help in taking content to the masses but it doesn't provide a way for children to practice what they've learnt. It also does not provide a mechanism for user feedback, which makes it near impossible to quantify the impact that is being achieved and also, what needs to be improved. Mechanisms such as workbooks or people being redirected to the Taleemabad App would help us engage our audiences better and provide better results.

Partnership

We are looking for funders to help us complete our goal of creating content for the entire K-12 spectrum. We also need partners for evaluation of our content and to conduct impact assessments to make us more cognizant of our shortcomings and help us pivot to provide an even better learning solution.

Replicability

In the past 5 years, we have gathered a team of experienced curriculum developers, assessment specialists, data analysts, designers, developers, and animators. These team members have also often travelled to rural Pakistan together, engaging with students and understanding their pain points. As such, they are well equipped to design and produce an educational platform that can begin to solve these problems for the students. The content creating process has become linear and can be replicated anywhere in the world.

Sustainability

By the end of this year, we are expecting to cross 1.3 million users on the platform, with a 20% conversion rate of paid users. By charging users 20 PKR (0.13 USD) per week for the premium features of the app, we can become self-sustainable by taking it to scale.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls

Case5-Sustainable @EDU CONTINUITY PLAN
Title of the project, Contact Organization Name, Stakeholder type, Country
Sustainable @EDU CONTINUITY PLAN Millennium@EDU SUSTAINABLE EDUCATION Other Switzerland
Beneficiaries
Ministries of Education, Ministries of ICT, Telecom Operators, Students and Teachers
Website
https://millenniumedu.org
Description
Provide support to design and implement EDUCATION CONTINUITY PLANS to face the challenges of wide-scale remote learning using ICT Tools
ICT Tools
Devices, Platforms, Connectivity, Management Tools
Challenges
Coordination between stakeholders
Partnership
Telecom Operators, Ministries responsible of ICT and Education
Replicability
The development of Sustainable@EDU CONTINUITY PLANS are applicable to any country and are based in international frameworks created by the most relevant organizations
Sustainability
1. The Sustainability of the project is assured by the participation of telecom operators and the integration in their business models; 2. The Sustainable@EDU CONTINUITY PLAN are linked to a Sustainable@EDU MASTER PLAN https://millenniumedu.org/sustainableedu-continuity-plan/
Action Lines
AL C1. The role of governments and all stakeholders in the promotion of ICTs for development AL C2. Information and communication infrastructure AL C5. Building

confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life
– E-learning

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 17: Revitalize the global partnership for sustainable development

Case6-Smart Agriculture Hub

Title of the project, Contact Organization Name, Stakeholder type, Country

Smart Agriculture HubSkyFarmsOtherNetherlands

Beneficiaries

We have an angel investor Dialogue Group, and have crowdfunded within our community. The main benefits have been keeping operations sustainably growing so that we can achieve SDG #2 Zero Hunger by 2030.

Website

<http://SkyFarms.io>

Description

Let thy food be thy medicine. We are involved in organising community resources and connecting AgTech to areas that are in desperate need of better food security, and to secure future food supply chain strength. Providing access to the tools everyone needs to keep food local and available, which helps populations fight Covid-19 with ample, healthy, fresh local food. Moving consumers to food citizens is crucial for future survival of new outbreaks and crisis preparedness.

ICT Tools

We became data driven org after our Hacks Against Hunger participation in WSIS 2018 Geneva. We now have over 800 stakeholders across the world collaborating collectively through a community platform where we match people with the local resources, space, training, volunteers, to remove any barriers that are keeping them from becoming actively involved in community supported agriculture. Much of the new agriculture technology is appealing to those in the digital world, and our open-source software development guides users to the resources tailored specifically for them.

Challenges

Main challenge is further funding so we can train new impactors and get more HUBs up and running so the network can scale. We also have an internal team who cannot dedicated full energy and time to the growth because they are not paid.

Partnership

We are actively adding Stakeholders to our AgSphere, a collection of agTech impactors and innovators, businesses, Ngos, universities who can contribute to faming access, and growing anytime, anywhere.

Replicability

It is a resilience and resource network, designed with an impact kit that anyone can download and receive our support to open their own local HUB, (much like SlowFood) and begin to recruit local stakeholders, volunteers and agripreneurs.

Sustainability

Yes. So far we have been a strong community of over 300, up and running with our blood, sweat and tears. Our passion comes from the value and purpose that being involved in the power of digital agriculture and how it is transforming our incentives and perceptions around farming.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-agriculture

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Case7-Inclusive Design in Africa webinar series

Title of the project, Contact Organization Name, Stakeholder type, Country

Inclusive Design in Africa webinar series in ABLE.org Other Kenya

Beneficiaries

The primary benefit of the webinar series are government representatives, educators, ICT sector, Fintech, city planners, business leaders and other African countries responsible for digital accessibility policy and implementation. The main benefit of the webinar series is to have a comprehensive discussion about the long-term benefits of digital inclusion, assistive technology and inclusive design by engaging global digital accessibility experts and leaders to share lesson learned and how to tips.

Website

<https://inable.org/>

Description

As the global COVID19 pandemic continues, the lives of the global population have been dramatically altered, bringing into sharp focus just how much we rely on digital systems and products for essential services in our day to day existence. Sadly across Africa, many people with disabilities are experiencing a secondary source of isolation—digital isolation. To address this digital accessibility gap in Africa, we at inABLE quickly launched a monthly Inclusive Design in Africa webinar series that investigates how Africa can prepare to move forward in improving digital access for all people, as a matter of priority.

The first-ever Inclusive Design in Africa webinar on the topic about "Inclusive Design in Africa: Why Equal Access is Imperative and How to Achieve it" had 180 registered attendees from around the world. Attendees from Africa made up the largest attendee group with webinar registrants from Kenya, Nigeria, Rwanda, South Africa, and Uganda.

ICT Tools

inABLE utilized the Zoom video communications, a cloud platform for video and audio conferencing, chat, and webinars across mobile, desktop, and room systems. Facebook, Twitter and LinkedIn social channels are used to advertise the webinars to maximize attendance. The first-ever April 30th webinar included live sign language interpreters and a professional caption typist to ensure both live and recorded version of webinar were accessible. Also, the recording was uploaded to YouTube and linked to [InclusiveAfrica.org](https://inclusiveafrica.org) webinar landing page- <http://inclusiveafrica.org/webinar/april-30-2020>

Challenges

Ensuring complete digital accessibility the Zoom webinar for every registered participant comes with challenges because we don't know the special needs of each participant and their knowledge of the platforms. For example, the attendee needs to enable "closed captions" on their own computer to see captions and the size of their computer screen could impact their ability to see sign language interpreters. The recording and a webinar transcript is provided after the webinar. Also, a live chat and question feature is available during webinar to address problems or answer questions. However, the participant must be

familiar enough with Zoom to use this feature. Please note that at this time both the recording and transcript are only available in the English language.

Partnership

Yes, corporate support is needed to cover the costs of Zoom subscription, sign Interpreters, profession caption typist and other creative marketing costs. Google supported the April webinar.

Replicability

Yes, inABLE is working on a production play book that could accelerate the speed of webinar set up and advertising to respond to relevant digital accessibility topics, innovations and advancements in Africa. The online global reach is limited by cultural or technology barriers, including language (English) Internet and computer assistive technology access at this time. Hopefully, in time, digital isolation as a result of a lack of Internet, computer technology, digital accessibility will be addressed by governments so that EVERYONE can be included if they choose.

Sustainability

With support from charitable and business partners, as well as digital accessibility champions, tech-innovators and advocates this webinar series is very sustainable. Post webinar recorded viewings can be scheduled at live or remote digital accessibility events.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case8-Zimba Mart

Title of the project, Contact Organization Name, Stakeholder type, Country

Zimba MartZimba WomenOtherUganda

Beneficiaries

Zimba Mart focuses specifically on women. There is no marketplace, physical or online that is specifically targeted to women merchants, yet women form the largest percentage of small scale suppliers of home, agricultural produce and clothing apparel.

The main benefits include;

Online marketing: The platform is intended to expose products from women entrepreneurs to local and international markets. We are currently promoting these products on our various social media platforms such as Facebook, Instagram and twitter, Product branding and packaging: As we onboard these businesses, they have to meet a certain standard and hence these businesses are required to improve their products and branding in this regard,

Inventory Management: During the continuous process of updating the stock on the mart, businesses can keep track of inventory from our records.

Financials and bookkeeping: The businesses keep track of sales on Zimba Mart and are advised on how to grow revenue based on the demographics that are interested in their products. Data provided by google analytics.

We create employment opportunities for women by easing their access to market for goods and services they produce using e-solutions and digital marketing.

We enhance export competitiveness of these SMEs leading to increased revenues for these enterprises.

Business to Business Linkages for example a baker on our platform will be linked to a wheat flour supplier reducing cost of acquiring goods and may be able to negotiate lower prices because of the Zimba Women relationship.

Website

<https://www.zimbawomen.org/>

Description

Women-owned Small and Medium Enterprises (SMEs), which make up an estimated one fifth of the Ugandan economy in terms of employment, are likely to suffer disproportionately as a consequence of this outbreak. As Zimba Women, we have introduced the SME E-Commerce and Digitization Resilience Programme through the Zimba Mart e-commerce platform to respond to this challenge by (1) Identifying women-owned or women-led SMEs which have fundamentally sound value propositions but have been severely impacted by COVID-19; (2) Providing dedicated COVID-19 impact analysis and contingency planning to these SMEs through offering business training and digital literacy training via our online platforms; (3) On-boarding SMEs onto the women-owned, women-tailored e-commerce platform to both adjust to the market dynamics created by COVID-19 lock down actions and begin to take advantage of the latent market opportunities offered by e-commerce in Sub-Saharan Africa; and (4) Provide bespoke follow-on support to the women-owners/leaders to enable them to protect their enterprises and take full advantage of e-commerce opportunities. All support is also provided remotely when necessary.

ICT Tools

We have adopted the use of e-commerce digital tools which have presented numerous opportunities. Africa is a massive market, with a growing population of 1.28 billion people, a network of over 15 million SMEs and merchants and a rising internet connection of 453 million users. Research firm Statista estimates that the e-commerce sector in Africa generated \$16.5 billion in revenue in 2017 and forecasts that to grow to \$29 billion by 2022. In general, and during lock down, SMEs on-boarded on the Zimba Mart platform have benefited from adopting an e-commerce approach in a number of ways, including lower transaction costs; reduction in advertising and promotion costs; rapid communication between buyers and sellers; ability to reach new customers; shorter supply chains; and eliminating physical limitations. Due to this; we have moved most of our women trainings online to enable the on boarded SMEs learn how e-commerce is enabling their business growth and to encourage them to update their social and business pages to take advantage of the increased traffic to their sites due to the Zimba mart. The Zimba mart has also given us more visibility as we have customers from not only Kampala our main office location, Eastern and Western Uganda but also as far as the US from customers making food orders for their families in Uganda.

Challenges

Technology both hardware and software: As we grow our vendor database, obtaining technology to achieve growth so that we are able to accommodate more vendors onto the platform is still a challenge such as address system software and using the appropriate shopping cart solution that shall boost growth on the platform.

Some of the women do not have equipment like mobile phones or computers to access the mart to monitor their sales and orders – currently our support center has five networked computers. In a bid to solve this, after COVID-19 lock down we want to increase on these so that we are able to support more women.

In Uganda, there is still lack of awareness and capacity constraints among Small Medium Enterprises and consumers which are hindering the uptake of e-commerce. – We plan on increasing our visibility and those of our vendors through advertising on various platforms like websites and social media, advocacy during the training and newsletters. Generating the targeted traffic towards the platform is one of our major key needs.

Partnership

Yes, currently we are looking for partners who are intent on raising bars to enable the empowerment and development of women entrepreneurs in Africa by adopting digital transformation such as Online Payment System providers such as PayPal, WePay, Logistic support partners like DHL, Safe boda, Internet providers like MTN, Airtel, International organizations such as International Trade Center, International Council for Small Businesses, US Agency for International Development, Cross border trade organizations for our exporters and Fulfillment centers/warehouses.

Replicability

Yes, this project can be replicated. Zimba Women is currently working with over 10000 women-owned businesses and women in STEM in Uganda, Kenya, Nigeria, South Africa and other African countries. These women have received business training and digital literacy training through our technology platforms. Through the Zimba Mart e-commerce platform powered by Zimba Women, 70% of women have been able to earn additional income for their families because they can market to buyers outside their community. They also get fair pricing because Zimba Mart enables them to deal directly with the customer instead of unscrupulous middlemen. The Zimba Mart targets up to 1,000,000 of the 6,000,000 million Ugandans with access to the internet. We have seen first-hand the impact these improved businesses have had in the lives of these women. With stronger finances, they have been able to improve lives for their families like better education, better nutrition and better healthcare. This same model can be replicated within other female-oriented business communities in other countries because access to larger markets is a huge motivating factor for self-employment and entrepreneurship for women in Africa.

Sustainability

Yes, this project is sustainable in the sense that the different Small Medium Enterprises (SMEs) on boarded onto the platform shall continue to receive businesses development trainings from the Zimba Women consultants and professionals. From these trainings, the female vendors will understand how to ensure product quality and in turn there will be an increase in demand for their goods in areas beyond their current network reach. As the community of female led SMEs grows in Uganda, so does the number of women vendors increase on the platform. Our women have a higher propensity to use their earnings and increased bargaining power to buy goods and services that improve family welfare which creates a virtuous cycle: female spending supports the development of human capital, which fuels economic growth in the years ahead. In terms of economic sustainability, there will be increased flexibility towards achieving the consumer's requirements as a result of these trainings. The female vendors shall also have access to a global reach of consumers whom they would not have had access to via offline channels. The Zimba Mart platform also aims at achieving social sustainability through bringing more women that were previously marginalized from the labor market into the formal workplace and equipping them with digital literacy skills. There will also be a link between the Ugandan market as a developing country and other developed countries. In turn, this will expose the vendors to a global pool of consumers.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-employment|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 17: Revitalize the global partnership for sustainable development

Case9-Funding technological initiatives against Covid-19

Title of the project, Contact Organization Name, Stakeholder type, Country

Funding technological initiatives against Covid-19Oman Technology Fund (OTF)OtherOman

Beneficiaries

N/A

Website

<https://www.otf.om>

Description

The novel COVID19 has turned a global pandemic which haven't been seen for roughly a century, and has put enormous pressures on the healthcare system and the economy alike. The pandemic has caused a major economic ripple with the bulk of shops, restaurants and other services closed in the Sultanate of Oman

OTF has allocated USD 2.6m (OMR 1m) from Fund to immediately fund startups (SMEs) dealing with the day to day problems facing the Oman population and also invest in long-lasting solutions to fight chronic disease and pandemic situations

The purpose is to support and motivate the existing companies (portfolio and non-portfolio) to deal with the current crisis and encourage the youth to come up with high tech. ideas to facilitate remote engagement and care which can help the society.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case10-COVID-19 Research Program

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Research Program The Research Council Other Oman

Website

<https://www.trc.gov.om>

Description

The Research Council has launched a national program and called for pre-proposal for projects addressing the current COVID-19 Pandemic. The pro-proposals must focus on COVID-19 epidemic and address the clinical & public health scope, and non-clinical scope. The non-clinical scope include but not limited to:

- 1) Artificial intelligence
- 2) e-learning during pandemic (problems and solutions),
- 3) Emergent tracking and monitoring technologies.
- 4) Economic and business impact
- 5) Crisis Management.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C7. ICT applications: benefits in all aspects of life – E-science

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case11-Track querying APP

Title of the project, Contact Organization Name, Stakeholder type, Country

Track querying APPChina TelecomOtherChina

Beneficiaries

There are beneficiaries for both individuals and the society. Through risk prediction and epidemic forecast, individuals get to know the risk region and probability as well as their own status, which largely helped with reopening the economies, getting people back to work, and continuing to protect the country, which benefit both the economy and the quality of life through open and transparent data.

Website

<http://www.chinatelecom.com.cn/>

Description

To help reopening the economies, getting people back to work, and continuing to protect the country, China Telecom has launched a product, namely track querying application, to provide the individuals subscribers with five major functions: itinerary query, contact query, epidemic forecast, return to city query and regional risk query. The itinerary query function allows queries to all cities or countries stayed or visited within the last 14 days. The contact query function checks close contact risks with infected person. The epidemic forecast function predicts the cumulative number of infected people nationwide. The return to city query function checks the number of people who have left their residence. The regional risk function calculates the close contact risk regarding the current location. Interfaces to other stakeholders are also provided.

ICT Tools

Big data and open source architecture techniques are applied, through components of zookeeper, yarn, kafka, spark, more than 20 open source components have been deployed in the category of storage, computing, and management. The system provides platforms with capability of cross-domain data correlation based on network data and location data. The SIR model is introduced to analyze the development trend of the epidemic. In the SIR model, seven factors are used: average recovery time, transmission rate, number of people cured, number of deaths, average incubation time, population mobility, and the strength of government prevention and control mechanisms. The spatial clustering analysis algorithm, DBSCAN is used to quickly cluster to pin down key areas and generate risk heat map.

Challenges

1. Location data validity, completeness and accuracy. It is overcome by collecting 2/3/4/5G signaling, IMS signaling and mobile DPI record, integrating 2/3/4/5G user positions based on a big data platform and building coarse and precise positioning capabilities.
2. Privacy protection. It is overcome by desensitizing the original signaling data, i.e., masking the calling party number, to protect the user's privacy.

Partnership

No

Replicability

Yes, the three major telecommunication operators in China have all provided similar projects. If the telecommunication operators have integrated mobile network/IMS signaling data, the project can be replicated.

Sustainability

Yes, this project provides information of risk for individuals during pandemic or crisis, although COVID-19 is not a commonly occurred situation, regional and small-scale contagion emerges ever now and then. It could be applied to daily life as a common tool as well as further utilized as certificate for specific tasks.

Action Lines

AL C2. Information and communication infrastructure|AL C5. Building confidence and security in use of ICTs

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case12-THE TECHNOLOGICAL INNOVATION COMMITTEE

Title of the project, Contact Organization Name, Stakeholder type, Country

THE TECHNOLOGICAL INNOVATION COMMITTEE
Ministry of Technology and Communications
Other
Oman

Website

<https://www.mtc.gov.om/tic>

Description

The technological innovation committee has been formed in coordination with Oman Supreme Committee for Dealing with COVID-19 and in line with government's efforts to limit the spread and counter of coronavirus Covid-19 by adopting IT solutions as modern IT alternatives in dealing with its impact. The committee called upon all the innovators in the field of emerging technologies, whether individuals or private sector companies to provide them with the consultancy and support their initiatives to become technological solutions contributing to mitigate the severity of Coronavirus outbreak. The committee has many responsibilities and role, Undertake supervising all IT initiatives directed to counter Coronavirus

Partnership

The Committee headed by Minister of Ministry of Technology and communication and representative of members from ministry of Telecommunication Regulatory Authority, Sultan Qaboos University, The Research Council, Public Establishment for Industrial Estates, Oman Technology Fund and Oman ICT Group.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case13-"G Suite for Education"

Title of the project, Contact Organization Name, Stakeholder type, Country

"G Suite for Education"Ministry of EducationOtherOman

Beneficiaries

Students and teachers

Website

<http://www.moe.gov.om>

Description

"G Suite for Education" Students and teachers will be able to use the platform, a group of free Google applications designed specifically for schools to share documents, digitally attend class, submit assignments take tests electronically and communicate with students. The digital education platform can also be used from any computer or mobile phone and access assignments, tutorials and share comments electronically. Through this platform, education in the Sultanate is moving towards a new phase, which mainly depends on distance learning.

Partnership

Oman mobile

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C7. ICT applications: benefits in all aspects of life – E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case14-Behar plus platform

Title of the project, Contact Organization Name, Stakeholder type, Country

Behar plus platformMinistry of Agriculture & FisheriesOtherOman

Website

<https://www.maf.gov.om>

Description

Behar Plus is an online market place for fresh fish sellers and stores to offer their merchandise to individual customers in the first such platform primarily targeted at the retail segment of the market,

The portal allows the individual consumers to check out what's on offer in their neighbourhood fish stores or local outlets, select the fish and quantities they want online

Behar Plus makes it simple for individuals and families to do all of their shopping for fresh fish online, without having to step out, and thereby adhere to the 'stay at home' guidelines championed by the Omani authorities amid the current pandemic.

Behar is one of three Omani start-ups selected by Oman Technology Fund (OTF), a specialised government-backed fund that invests in IT and innovative startups, for funding support from an endowment of RO 1 million earmarked for Omani entrepreneurial initiatives spawned by the COVID-19 crisis

Partnership

Oman Technology Fund

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C7. ICT applications: benefits in all aspects of life – E-agriculture

SDGs

Goal 12: Ensure sustainable consumption and production patterns

Case15-A voice-based community media platform to support rural and low-income communities in dealing with the fallout from COVID-19

Title of the project, Contact Organization Name, Stakeholder type, Country

A voice-based community media platform to support rural and low-income communities in dealing with the fallout from COVID-19
Gram Vaani Community Media (Onion Dev Technologies) Other India

Beneficiaries

Our primary beneficiaries are rural and low income communities, those with no internet connectivity and industrial laborers in urban cities. Mobile Vaani demonstrates how low-literacy people without internet access can not only consume but create content for community development. Our COVID service provide the communities 1) access to authenticated information in local language and context, helps counter misinformation 2) provide feedback: Capturing ground realities on health and socio-economic situations

during the pandemic by facilitating a bottom-up information flow 3) self- assess especially on behalf of the elderly and very young children, to understand their risk of COVID-19 and next steps. Our partners are helping us to guide at-risk people to the right government health facilities and track their progress. 4) Other non-health issues shared by users affecting their lives, such as ration, gas, rent and financial needs, are also being addressed with concerned authorities via our community volunteers.

Website

<https://gramvaani.org/?p=3631>

Description

Our technology solution empowers hard-to-reach communities (low literacy, rural, without internet) for combating COVID-19 through Awareness building, countering misinformation, seeking community feedback, self-assessment survey and guidance and grievance redressal. Launched on March 23rd, 2020 it has partnered with 27+organisations and received 600k+ calls from 200k+callers, 8k+ user stories. Our solution is fully operational and is being used in 80+ districts in 10 states and through few country-wide programs too. Operated on basic phones, Mobile Vaani (a community media platform) provides not only an option for communities to access information but also contribute towards reporting the ground situation,this is useful for policy makers. MV phone application accessed via smart phones provides an easy option to forward audios to those without internet. We've build more than 150 audio capsules based on technical advisories for issues such as building empathy and understanding among users; keeping children and parents engaged at home during lockdown. We are connecting users with partners for relief measures like running community kitchens, providing cash, and helping with health emergencies. Self-assessment survey results are shared with trained partner response teams and collated information is being shared with state/district government machinery for quick action.

ICT Tools

We are running COVID-19 related services on five state specific COVID-19 IVRS (missed-call and toll-free

number) helping access of authenticated information, seeking community feedback, identifying high risk cases and also facilitating grievance redressal amongst the rural communities. COVID related services are also running in our Mobile Vaani clubs present across 10+states in the country and has accumulated 2M+ users, along with being a rich source of learning and innovation in terms of novel processes for content development and field operations, to embed technology based interventions in the day to day life of communities. We've also sent in addition 200k+COVID related awareness calls in 10 languages across 11 states in the country. Over 100 partners (government, non-governmental organisation, private sector) in various domains like Health, Gender and Sexual Rights, Nutrition, Agriculture etc. use our Mobile Vaani across the various states of the country including some with pan-India presence. All the COVID-19 content is available on the Mobile Vaani application. The mobile app also allows users to forward content to those without smartphones. Using simple technologies and social context to design tools, we've been able to impact communities in Afghanistan, Pakistan, Namibia and South Africa too.

Challenges

Response to the COVID-19 service has been very good in partnership with other organisations including state governments, in geographies where we are working. We are also getting calls from other geographies where our technology can be applied and are exploring partnership with new organizations for a structured response in these areas. Partnership with field response partners in wider geographies will help in local response and will lead to larger impact. A wider publicity of the IVR phone number will also increase uptake of the service across all hard-to-reach communities in the country and beyond.

Partnership

Yes, we are looking for partners 1) To publicize the service 2) In areas where Mobile Vaani clubs are not present but our technology can be applied, we are looking for partners for content-moderation and response (especially related to health –related medical counseling and local action with governments) 3)Funding partners: We started COVID services totally pro-bono and raised some funds, we'll need financial support to sustain our COVID related services in the long run.

Replicability

Yes, the project is completely replicable. The Mobile Vaani technology platform is the medium through which users access media or create their own content through the IVR system. The backend component of the platform allows content moderation of user-generated messages, and automated data analysis of platform-based surveys. The backend interface also gives content moderators the option to publish any noteworthy user-generated content to the Mobil Vaani Facebook page for others to hear through the popular social media platform. The same IVR service is being re-purposed for COVID-19 response. All our projects with partners use the same technology, with tailor-made content and options designed to meet the end-user's needs via Mobile Vaani IVR and/or mobile application. This applies to all our past and ongoing projects nationally (within India) and internationally.

Sustainability

Our service and partnerships fosters sustainability in terms of the community demand it creates on-ground. There is a sustained user base of communities calling to the IVRS and the Mobile Vaani application since many years. Our technology is being used by partners for programs which are sustainable and many are institutionalised within the government systems such as our partnership with Bihar Rural Livelihood Promotion Society encouraging women to access maternal health information through mobile phones. We also leverage existing platforms at our end and our partners' end for all our programs to help maintain sustainability of our work

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C9. Media

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case16-On-cloud hospital

Title of the project, Contact Organization Name, Stakeholder type, Country

On-cloud hospitalChina TelecomOtherChina

Beneficiaries

The primary beneficiaries are the hospitals are the patients. The main benefits are as follows: First, IT maintenance in local is reduced, the only work required are to dock and test in the given environment. Second, the deployment of all healthcare applications are accelerated. Third, the solution could be replicated to other hospitals to allow sharing of business and information systems among hospitals.

Website

<http://www.chinatelecom.com.cn/>

Description

To accelerate the construction of dedicated hospitals for COVID-19, China Telecom launched the on-cloud hospital solution. All medical systems and information systems are deployed on cloud, to save the time consumed on the deployment and installation of required IT equipment. provide computing and storage capabilities for the deployment of core systems such as hospital information systems and image storage transmission systems.

The all-on-could solution accomodates all major business and information system on cloud, including the hospital information system (HIS), laboratory information system (LIS), and picture archiving and communication systems (PACS), as well as the operation management, resource management, knowledge management, and customer service, such as queuing system, and all databases.

Regrading the famous Huoshen Shan and Leishen Shan hospital, only 3 days have been spent on the deployment of the network and cloud resources.

ICT Tools

For one hospital, 7 dedicated cloud servers are deployed to support the services and applications, the same type of services are allocated in different underlying servers. A pair of host and backup databases are designed, data are backed up timely to make sure the availability and reliability.

Challenges

The major challenges are the security and privacy issue regarding the health data. The project has a multi-level security mechanism, which prevents user misoperation and dirty data, and ensures data integrity. Security mechanisms are designed for database storage, retrieval, extraction, release, and management at all levels and angles. The project adopts international standard encryption algorithm to encrypt the transmission of sensitive data on the public network to ensure the security of sensitive data. The project has an authority management function, preventing illegal user access, deletion, modification or disclosure of data .

Replicability

Yes, it could be and has been replicated, as we build the Huoshenshan on-cloud hospital first, and replicated the solution to Leishenshan hospital.

Sustainability

Yes, this project initiated the on-cloud hospital construction, although COVID-19 is not a commonly occurred situation, regional and small-scale contagion emerges ever now and then. It could also be applied to general hospitals as a common template.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case17-Amakomaya (Mother's Love)

Title of the project, Contact Organization Name, Stakeholder type, Country

Amakomaya (Mother's Love)Yagiten Pvt. LtdOtherNepal (Republic of)

Beneficiaries

Following are the beneficiaries of the project for pregnant mother and their family members:

- 1) By using Amakomaya Content app, Mothers and her family members can get personalized audio, video and text messages together with timely notification to access available services offered from nearest health facilities.
- 2) Pregnant Mother can get latest offer provided from local government in the app as notification.

3) Pregnant mother can use self - evaluation danger sign features in app. If she falls under the danger zone, she will be rescued from her location for further treatment.

4) Pregnant mother can get toll free dial number to get instant remote support and consultation.

Following are the benefits for health workers and health institution.

1) By using Amakomaya Care and Vial-to-child app, health workers can record client data in the app even in absence of internet connection.

2) Health workers can instantly access the report from the recorded data which will help them to have instant decision.

3) Health workers will instantly produce and access HMIS reporting format. That will reduce their workload.

4) Ministry of Health and population (MoHP) will instantly access all the live collected data from each health facilities.

Website

<http://www.amakomaya.com>

Description

A mountainous country Nepal has challenging places in terms of increasing access to health information for the pregnant mothers and infant babies. Since last 8 years “Amakomaya” (Mother’s Love) initiative has deployed unique android apps to strengthen the Nepal’s health system by empowering both pregnant women and health workers with the improvement of access to need-based health information together electronic recording and reporting of client data. Till date more than 16,000 pregnant mothers and 25,000 infant babies have been tracked and benefited from the application system.

Due to the COVID-19 pandemic lockdown pregnant mothers are not able to receive Antenatal Care (ANC) and babies are not able immunized. To help mother and child maintaining at least 1-meter physical distance the project has introduced time-based appointment system for the client in local clinic. Through the app, beneficiaries can reserve their time-based appointment. This feature will help to reduce the crowd in health facilities and outreach clinics in urban and rural area. Also the app have direct access to the toll free number 16600100046 with the partnership of Midwifery Association of Nepal and Paropakar Maternity and Women’s Hospital, Thapathali, Kathmandu.

ICT Tools

The project has used AI based mobile android application that can be used by both service receiver (client) and service provider (health workers). The application is covering all aspects those start from pregnancy, child birth and immunization to baby age up to 2 years To integrate all the process in same platform the project has developed three different app interface and connected in single reporting system which is interoperable with the existing Health Management Information system (HMIS) of Nepal government. This app provides personalized and need based informative tips with important notification about services to

pregnant mother and her family members in audio, video and text format. Also, from this app mothers can access 24/7 toll free phone number to get instant support during urgency. In same manner the mother can check their danger sign and in critical situation which record GPS data to support instant rescued by various mode of facilities such as 4-wheeler ambulance or even helicopter.

In other side health workers use QR-Code technology to register and search women from the data. The recorded data are instantly presented in the HMIS report. GSM based fetal heartbeat rate detection system helped to continuously monitor fetus.

Challenges

Following are the major challenges:

- 1) Lack of proper training for health workers including training for higher officials in Health Ministry has caused delay in the expansion of the project.
- 2) Lack of locally developed maternal and child health related audio/video content.
- 3) Lack of locally hosted cloud service connected with local network has unnecessary increased operating cost.
- 4) Lack of proper electronic health guideline and roadmap of Nepal government have created lots of duplicated in the application development side.

Partnership

We are looking following partners.

- 1) Partners to develop maternal and child health related audio/video content.
- 2) Partners to build the locally hosted cloud services.
- 3) Partners for providing training to health workers and higher official of the Health Ministry.

Replicability

Yes, the project is replicate in developing countries like Nepal. It could be replicated in South Asian Region as well as African countries.

Sustainability

The project is sustainable because it directly strength the National health system. So it is high priority of every country government. Till now most of the local government of Nepal have invested for this project from their own financial resources. Specially the government have invested for the android mobile devices and implementation cost. Yet government have not invested cost for development of application and hosting of the application.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case18-Business meets Technology

Title of the project, Contact Organization Name, Stakeholder type, Country

Business meets Technology
Women Economic and Leadership Transformation Initiative
Other
Nigeria

Beneficiaries

Our beneficiaries are young women aged 14-30 who are tech business start-ups trying to find their feet to be entrepreneurs. We through this webinar series taught them to come up with disruptive tools

Website

<https://weltsi.org.ng/>

Description

The Awesome entrepreneur applying Critical thinking(No.1 skill to sail through COVID-19 and the New future). This webinar series developed their minds, showed them technological start-up tools etc

ICT Tools

These were the tools we taught them how to use-

- GOOGLE MY BUSINESS
- GOOGLE ANALYTICS
- G SUITE
- HUBSPOT CRM
- CANVA
- SLACK
- WAVE
- EVERNOTE
- SOCIAL MEDIA

Challenges

The epileptic network was a major problem. Most of them needed monetary support to wade through the storm while trying to start or improve on their already existing tech. businesses.

Partnership

Yes ,we are looking for partners who can help them to keep leveraging other tech tools that may be easier for navigation and venture capitalists who may want to fund these start-ups and support them

Sustainability

Yes it is because we've seen how far the women in the past have created jobs,and also increased their capacity, literacy and adoption of new technology into their businesses in the past.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life – E-business

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 17: Revitalize the global partnership for sustainable development

Case19-ekShop Phone e NittoPONNO

Title of the project, Contact Organization Name, Stakeholder type, Country

ekShop Phone e NittoPONNOekShop, a2iOtherBangladesh

Beneficiaries

Following the outbreak of COVID-19 in Bangladesh, the mobility and assembly of people across the country have been greatly limited by the authorities. COVID-19 has brought on the disruption of normal life; people on lockdown are not able to go out and buy their necessities. While emergency products are available and many organizations are ready with assistance, regulations and restrictions have been an obstacle. By onboarding volunteers from nearly all districts of Bangladesh, ekShop has aimed to fully utilize its root-level reach (via the rural e-commerce aggregator and Digital Centers) and serve all the general public in this lockdown stage. Particularly for those areas that are under strict lockdown outside of the capital and inside.

Website

<https://a2i.gov.bd/>

Description

ekShop is currently running the nationwide logistics of emergency groceries and medical supplies. ekShop has attained the support of “333”, a government ordained national call center to aid the citizens in this trying time. Locals can dial to 333 and NRBs can dial to 09666789333 and ask their pressing concerns regarding COVID-19. “333” operators will receive orders from citizens who are in search of emergency supplies. Citizens can order medicines, groceries, and other emergency goods. After the order has been put through by 333 operators, ekShop will then forward the order list to available volunteers, who in return buy from the nearest open shops. The volunteers and volunteer organizations are selected locally to the order delivery location, wherein a database has been created according to their delivery range. Orders are also taken through a Facebook page automated chatbot for maximum reach.

ICT Tools

1. Web and mobile application for order processing - Digitizing usual grocery buying and maintaining quarantine measures for all parties involved
2. Virtual call center to confirm the order - Utilizing dormant workforce and managing volunteers remotely.
3. Facebook chatbot - Using popular social media to engage more of the population and encourage them to order online instead of going out.

Challenges

Managing the logistics till the last mile for perishable goods. Most of the emergency products are groceries and perishable food products, so stocking and warehousing will prove to be difficult. Due to lockdown measures, the national logistic supply chain for all sorts of products has been greatly affected by the point of incapability to transfer anything. Also, the demands of certain products (masks, hygiene, essentials, etc) skyrocketed and the supply for these products everywhere started to get overwhelmed and eventually dwindle. By using ekShop’s e-commerce and logistic network, we have been able to source products directly from suppliers and farmers and used the National Post chain to directly deliver them to the concerned parties.

Partnership

Yes. Partners involved in the e-commerce industry and companies engaged with volunteer organizations aiding people in an emergency. Also, non-profit organizations looking to help out people under quarantine in need of essential products.

Replicability

It can be easily replicated in similar countries like Bangladesh, for example, Nepal, India, etc. Since the initiative does not require heavy technology or intricate customization, it can be replicated even in lower economic conditions. All that is required is Facebook connectivity (for the chatbot order) and stable call-center support, with a large group of voluntary workers.

Sustainability

ekShop is the country's only rural e-commerce and logistics aggregator having more than 6000 physical outlets at the union level in Bangladesh. It is partnered with all major e-commerce, payments and logistics players in the country. We can merge the initiative with ekShop's existing system and all the local shops within it.

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-business

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case20-GoCC4All: Using IT to Provide Access to TV and to National and Local Emergency Information to the Deaf-Blind Community

Title of the project, Contact Organization Name, Stakeholder type, Country

GoCC4All: Using IT to Provide Access to TV and to National and Local Emergency Information to the Deaf-Blind Community
Dicapta Foundation
Other
United States of America

Beneficiaries

The primary beneficiaries are members of the deaf-blind community, although the emergency alerts are useful for everybody.

GoCc4All has geolocation capabilities that allow sending the user's location information to a provided emergency contact in case the user is at risk. Sending the user's location information can be automatically triggered by a life-threatening emergency alert or manually by the user.

Website

<https://www.dicaptafoundation.org>

Description

We are using our app GoCC4All to deliver information and emergency alerts related to the Coronavirus to people who are deaf-blind. The pandemic created a challenging situation for the deaf-blind community since they rely on touch to communicate and their access to news is limited due to the limited TV accessibility.

GoCC4All was created with deaf-blind users in mind and delivers live TV captioning and emergency information through mobile devices and Braille displays. Its users can read the information in different ways: on the screen, on a braille display, or using the voice-over feature of their devices. Users can control the pace, and size of the text and configure the format to fit their needs.

Due to the pandemic, we added 2 new caption streams to our app: COVID19 INFORMATION (talks about how it spreads, how to prevent infection, etc.) and COVID19 NEWS (includes recommendations by the National Association of the Deaf about preparing for a hospital visit during the pandemic).

Also, places like Puerto Rico are broadcasting a daily coronavirus related civil message. GoCC4All users can receive and access this message as everybody else on the island does thanks to our emergency alerts feature.

ICT Tools

GoCC4All uses pervasive technology to create a system that is accessible and easy to use. It uses geolocation to provide emergency alerts that correspond to the area where the user is located.

GoCC4All promotes digital transformation at a national level by providing an accessible way for people who are deaf-blind to access TV and emergency alerts.

Challenges

The main challenge is to gain the involvement of the media industry to widen the offer of caption streams included in the app. Deaf-blindness is a low incidence disability, so this community is overlooked by the TV industry and not considered under the 21st Century Communications and the US Video Accessibility Act (CVAA) implementation.

Partnership

No

Replicability

Yes, the TV Captions section of GoCC4All can be easily adapted to be used in other countries that use ATSC and NTSC standards. The emergency alerts could be adapted to other emergency alert systems that use the Common Alerting Protocol (CAP) developed by the Organization for the Advancement of Structured Information Standards (OASIS). The primary beneficiaries are members of the deaf-blind community, although the emergency alerts are useful for everybody.

Sustainability

This project can be sustainable by donations provided by those that want to serve the deaf-blind community.

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable

Case21-Dashboard sur l'évolution de Covis-19

Title of the project, Contact Organization Name, Stakeholder type, Country

Dashboard sur l'évolution de Covis-19EADNOtherAlgeria

Beneficiaries

Algerian Health Ministry

Website

<https://www.eadn.dz>

Description

The project consists of a dashboard with an integrated map that shows the evolution of different statistical indicators about the evolution of the Covid-19 pandemic in Algeria. The dashboard is used during the daily press conference that the health ministry does to inform the public about the numbers of confirmed, recovered, and deaths scattered over the country's provinces.

ICT Tools

ESRI ArcGis

Challenges

Time: we had to develop the dashboard quickly so it can be used in order to inform the public about the Covid-19 pandemic evolution and raise awareness of the danger it represents.

Replicability

Yes, this type of projects could be used to track the evolution of any kind of situation in the country.

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case22-Website for awareness and communication about Covid-19

Title of the project, Contact Organization Name, Stakeholder type, Country

Website for awareness and communication about Covid-19|EADN|Other|Algeria

Beneficiaries

Algerian Ministry of Health

Website

<https://www.eadn.dz>

Description

The project consists of a website divided in several sections concerning awareness raising and recommendations around Covid-19 in which People can find the answers to their questions. It's a central point where all the updates are available.

ICT Tools

Wordpress

Challenges

Time: we had to develop the site quickly so it can be used in order to inform the public about the Covid-19 pandemic evolution and raise awareness of the danger it represents.

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case23-Providing cloud PBX services

Title of the project, Contact Organization Name, Stakeholder type, Country

Providing cloud PBX services|IT-Spark LLC|Other|Armenia

Beneficiaries

UCOM, ROSTELECOM, BEELINE

PBX and call center

Unlimited extension numbers, The ability to quickly and easily organize a call center, Transfer calls (if busy and not answering or the employee is unavailable), Call waiting, ringtone while waiting, Integration with CRM systems, Auto attendant / IVR / voice menu

Website

<https://ipats.su>

Description

SOCAP-COVID-19 Project
Projects to help travel companies
Projects to help courier companies
Remote Work Projects

Challenges

Problems of organizing telephone communications in this situation
Organize telephony competently with our help

Partnership

Armenia, Russia
We are looking for partners for the integration of CRM systems

Sustainability

Our projects are individual and flexible.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure

SDGs

Goal 17: Revitalize the global partnership for sustainable development

Case24-YEEP project

Title of the project, Contact Organization Name, Stakeholder type, Country

YEEP project|Job In Rwanda Foundation|Other|Rwanda

Beneficiaries

Our primary beneficiaries are students, employees and employers who wish to keep their mind busy in learning on line. The main benefit is to give be usefull in this period and the main service are those course

Website

<https://jobinrwanda.org/>

Description

the main project is to create and put on line courses in different areas which helped and still help the rwandan population, students, employees and employers to keep learning while staying home.

ICT Tools

We are using internet and applications that allow us to create course and and social media to promote our courses and spread the informaytion to the whole contry.

Challenges

The main challenge is to get people who can help us to create courses and put them on line. We would like to have some funds so that we may hire some people who can be in charge.

Partnership

Yes we are looking for partners ,we already created <https://campus.jobinrwanda.org/> which is the platform where people can get courses we would like to get funds to empower that platform

Replicability

This project nac be replicable in any other situation that demands people to stay or work at home, in a situation where people can not be allowed to move

Sustainability

This project is sustainable in terms of its importance to the rwandan people. It is very important that people keep empowering themselves even they are not allowed to move

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 16: Promote just, peaceful and inclusive societies

Case25-মেসার্স মিলন মেডিকেল হল

Title of the project, Contact Organization Name, Stakeholder type, Country

মেসার্স মিলন মেডিকেল হল pharmacy Other Bangladesh

Beneficiaries

Pharmacy

Website

<https://msmilonmedicalholl.business.site/>

Description

মেসার্স মিলন মেডিকেল হল
ওসমানী রোড ৩৩৭০ নবীগঞ্জ হবিগঞ্জ সিলেট বাংলাদেশ
moloy201326@gmail.com
moloy201326@yahoo.com
Mobile:+8801716201326

ICT Tools

মেসার্স মিলন মেডিকেল হল
ওসমানী রোড ৩৩৭০ নবীগঞ্জ হবিগঞ্জ সিলেট বাংলাদেশ
moloy201326@gmail.com
moloy201326@yahoo.com
Mobile:+8801716201326

Challenges

Health support

Partnership

Bangladesh

Replicability

মেসার্স মিলন মেডিকেল হল
ওসমানী রোড ৩৩৭০ নবীগঞ্জ হবিগঞ্জ সিলেট বাংলাদেশ
moloy201326@gmail.com
moloy201326@yahoo.com
Mobile:+8801716201326

Sustainability

মেসার্স মিলন মেডিকেল হল
মলয় চক্রবর্তী

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government

SDGs

Goal 11: Make cities inclusive, safe, resilient and sustainable

Case26-মেসার্স মিলন মেডিকেল হল

Title of the project, Contact Organization Name, Stakeholder type, Country

মেসার্স মিলন মেডিকেল হল pharmacy Other Bangladesh

Beneficiaries

Pharmacy

Website

<https://msmilonmedicalholl.business.site/>

Description

মেসার্স মিলন মেডিকেল হল
ওসমানী রোড ৩৩৭০ নবীগঞ্জ হবিগঞ্জ সিলেট বাংলাদেশ
moloy201326@gmail.com
moloy201326@yahoo.com
Mobile:+8801716201326

ICT Tools

মেসার্স মিলন মেডিকেল হল
ওসমানী রোড ৩৩৭০ নবীগঞ্জ হবিগঞ্জ সিলেট বাংলাদেশ
moloy201326@gmail.com
moloy201326@yahoo.com
Mobile:+8801716201326

Challenges

Health support

Partnership

Bangladesh

Replicability

মেসার্স মিলন মেডিকেল হল
ওসমানী রোড ৩৩৭০ নবীগঞ্জ হবিগঞ্জ সিলেট বাংলাদেশ
moloy201326@gmail.com
moloy201326@yahoo.com
Mobile:+8801716201326

Sustainability

মেসার্স মিলন মেডিকেল হল
মলয় চক্রবর্তী

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government

SDGs

Goal 11: Make cities inclusive, safe, resilient and sustainable

Case27-AReality - AR that sale

Title of the project, Contact Organization Name, Stakeholder type, Country

AReality - AR that sale Reality Unit sp. zo.o. Other Poland

Beneficiaries

Producers, retailers, eCommerce - in a word each and every company that is selling products or services.

Website

<https://www.realityunit.one/>

Description

Augmented Reality (AR) as a tool that allows eCommerce and retailers visualize real-life view of products before buying them.

ICT Tools

augmented reality, machine learning

Challenges

AReality is supporting businesses in overcoming threats that come with COVID. Mainly lockdowns of retail businesses, and problems with ordering items without witnessing their real-life views.

Partnership

Yes, a startup always looks for partners ;) We're looking mainly for companies, that would like to implement our solution, from a variety of industries, but main focus is on eCommerce.

Replicability

Yes, AReality works as Stripe-instead of transferring payments, we transfer AR experiences, and give our partners an access to them by API or SDK.

Sustainability

Yes, the project is available for everyone, doesn't exclude anyone from using it.

Action Lines

AL C9. Media

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 12: Ensure sustainable consumption and production patterns|Goal 17: Revitalize the global partnership for sustainable development

Case28-Promotion of organic Agriculture information During covid 19

Title of the project, Contact Organization Name, Stakeholder type, Country

Promotion of organic Agriculture information During covid 19sciencecastOtherKenya

Beneficiaries

Farmers be it maize farmers, livestock farmers, vegetable farmers i cover a wide range to help all farmers stick with that psoroptes mange in thier livestock, that blackspot in there kale and fall army worm

i target organic farmers because i love my environment and food security is one goal i do pursue

Website

<https://sciencecast.co.ke>

Description

its a self developed projects to assist farmers access agriculture extension services on there phones

i do write articles and share them in various farmer WhatsApp groups ,Telegram groups ,twitter ,Facebook groups and individual farmers whom i get access to. i use my own airtime to do comprehensive research and provide farmers with latest technology farming updates

enganging farmers in the social media ansd sometimes skype so i help farmers for free and its really interesting

My big challenge and worry is how to get to the rural farmers on the ground who lack smartphones

ICT Tools

my laptop and tablet
use them through social media to engage the farmers
the good thing about social media is sometimes you even get consultations from international farmers

Challenges

the challenge of getting down to the rural farmer on the ground who lacks smartphones to access this information
to overcome these governments create radio channels specifically for agriculture information where we can easily converse through zoom and benefit the farmer on the ground

Partnership

yes
Radio stations, TV stations (communication), NGOs, government of Kenya, smart farmer

Replicability

yes, it has been done by most companies on their website the only difference is that I get this information to their various groups and engage them

Sustainability

YES, well I do it as a hobby plus the enthusiasm I have for it
I just want to further it in various radio stations by requesting free sessions

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C9. Media

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Case29-27" interactive monitors

Title of the project, Contact Organization Name, Stakeholder type, Country

27" interactive monitorsLEVEL 33 AV sp. z o.o.OtherPoland

Beneficiaries

business, education, administration

Website

<http://www.level33.rzetelnafirma.pl/>

Description

We generally promote videoconferencing equipment, which in the Covid-19 era allows you to stay connected despite keeping social distance. The possibility of working on joint documents, very good audio and video, is something that all entrepreneurs, offices and private persons need now and in the near future.

ICT Tools

Multi-Touch Display

3-Camera Array

8-Microphone Array

Integrated Speakers

DISPLAY: LED 27", 1080p, 16:9, Capacitive Touch Screen Display

ROOM SIZE: Up to 16 x 16 ft (5 x 5m)

CAMERA SYSTEM: 3 Camera Array, Horizontal Field of View (HFOV): 160 Degrees

Combined, Camera Distance: Up to 16ft

AUDIO SYSTEM: 8-Microphone Array, Microphone Pickup Range 0-16 ft., Integrated Stereo Speakers, Acoustic Echo Cancellation, Automatic Gain Control (AGC), Automatic Noise Reduction

INPUTS: HDMI in x 1, RJ45 x 1

Challenges

convincing decision-makers about the benefits of a high culture of working from home. The 27 "touch screen monitor can be used as an additional monitor at home or in the office. Due to the fact that the device is equipped with excellent cameras, microphones with noise reduction system and speakers, it will be a perfect combo for work. Possibility of remote

work on documents and the possibility of editing them not only keeps social distance, but also saves time and money. A monitor of this size is ideal for transport and will fit in virtually any car trunk. The device is thin and very light, which is another advantage. In a word, it is an ideal solution. for a modern manager in the Covid-19 era.

Partnership

I am able to organize and finalize the sale of even large volumes myself. We can also train new users in the optimal use of the equipment and handle possible warranty claims.

Replicability

The project can be considered as continuous.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C7. ICT applications: benefits in all aspects of life – E-science|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 17: Revitalize the global partnership for sustainable development

Case30-Pandemic Control Tool Kit (PCTK)

Title of the project, Contact Organization Name, Stakeholder type, Country

Pandemic Control Tool Kit (PCTK)China Mobile Information Technology Company LimitedOtherChina

Beneficiaries

PCTK is designed for individuals, communities, enterprises to help evaluating infection risk and guide social distancing during pandemic time such as COVID-19.

For individuals, this project provides a standard and easy way to check close contact risks and gives health and isolation suggestions. For communities, this project reduces panic and suspicion during pandemic and offers additional information for quarantine decisions. For enterprises, this project helps bringing people back to offices and bringing business back onto its feet.

Website

<http://www.10086.cn/>

Description

As work resumption carried out across the country bringing up infection risks, China Mobile released a series of pandemic control tools (PCTK) in order to help tracking mobile phone users' history access to high risk areas, provide infection contact risk alert and guide social distancing.

PCTK consists of high risk area access query, health codes, close contact risk alert, and student online check-in. The tool kit is based on China Mobile network signaling data, from which provinces and cities that mobile phone users visited in 14 days can be recorded. As to data security and user privacy, all data analysis and transmission process is strictly encrypted and protected against intercept. Moreover, detailed user track is not displayed, exposing less security risks.

PCTK was launched in China Mobile APP, WeChat applet and HTML5 websites in February 2020. It has 5,730 billion PV and 3,000 billion queries until July 2020, serving 31 provinces, 21031 organizations and government agencies. Health code for enterprises was used in 144 companies. Health codes for individuals and communities have totally 13.73 billion queries. Close contact risk alert has 230 million queries, serving 12,534 communities and 180 school classes.

ICT Tools

About high risk area access query and close contact risk alert, risk assessment is based on mobile phone network signaling data and current infection/close contact case distribution. In addition, base station locations and data roaming are taken into consideration to refine the contact risk model.

About accessibility, PCTK support auto-login in 4G network with user's consent.

About data security, data requests and responses are strictly encrypted. Detailed user track is not displayed, and mobile phone number is obfuscated in display.

Challenges

Main challenges are about data accuracy, data security and short development time. User tracks are highly dynamic. Inaccurate user track may cause confusion and misunderstanding. Lots of effort were put in getting the most accurate positions that were closest to user's real time positions from network signaling data. Base station locations and data roaming are also taken into consideration to refine the contact risk model. About data security and privacy, data requests and responses are strictly encrypted and detailed user are were not displayed. There are tools created to generate applets and the tool kit were launched in days.

Partnership

National Health Commission of the PRC
China Academy of Information and Communications Technology (CAICT)

Replicability

This project has been replicated in an APP CAICT created and get more widespread. It could also be implemented by companies with possession of mobile phone network signaling data. It could also be used in travel passes and other scenarios.

Sustainability

This project is sustainable as the signaling data is a crucial part in China Mobile business support systems and it will be continuously updated. The tool kit will serve as long as social distancing is needed and travel risk needs to be evaluated.

Action Lines

AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case31-IEEE HAC-SIGHT COVID project program

Title of the project, Contact Organization Name, Stakeholder type, Country

IEEE HAC-SIGHT COVID project program|IEEE Standards Association|Other|United States of America

Beneficiaries

The primary beneficiaries are residents in rural areas of underserved communities in developing countries around the world.

Website

<https://www.ieee.org>

Description

The COVID-19 pandemic has affected the world in an unprecedented manner, and as such, the IEEE Humanitarian Activities Committee (HAC) has adapted its requirements to better enable IEEE volunteers to contribute. For that reason, HAC and IEEE SIGHT (Special Interest Group on Humanitarian Technology) Projects have joined forces to prioritize grassroots proposals that have a strong potential for immediate impact in the fight against COVID-19. Ideally, projects will have good connections with local IEEE organizational units (OUs) and engage a significant number of IEEE members.

IEEE received over 100 applications by its members. The IEEE Selection Committee awarded 73 projects [see:

<https://docs.google.com/spreadsheets/d/1VL3cr8R0nLBoERCeSfytfhweh9NUGe0LJANc0EYcPac/edit#gid=0>] from 25 countries with a financial fund used to support the projects, ranging from supporting online education and digital literacy, health diagnostics and monitoring, teleworking platforms for essential institutions such as hospitals, interactive webGIS-based pandemic vulnerability mapping, to train women in engineering with information literacy skills to prevent the spread of misinformation.

ICT Tools

The COVID-19 projects awarded by IEEE propose a number of different ICT tools for digital transformation, such as blockchain technology as it allows for a secure and transparent supply chain platform, reducing logistics time; access to technology and education by allowing people to receive academic content online via tablets or computers. In addition to these ICT tools, IEEE volunteers will serve as content developers and deliverers. They will also serve as mentors and facilitators to the students in the educational program. IoT will be used to facilitate communication among patients and healthcare professionals for monitoring and measuring via the cloud.

Challenges

It is too early to determine the main challenges that may be encountered along the way.

Partnership

Please refer to this document which elaborates on the various ongoing projects. If interested in collaborating in any of the listed projects, please contact Holly Schneider Brown, Director, Public Imperatives and Corporate Development, IEEE at: h.s.[brown@ieee.org](mailto:h.s.brown@ieee.org).

Replicability

N/A

Sustainability

IEEE's grant program supports selected projects vetted by engineering experts that show particular promise, however, it is too early to determine the sustainability of these projects.

Action Lines

AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life — E-government

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 12: Ensure sustainable consumption and production patterns

Case32-Social Mapping to find out how aware persons with disabilities (PWDs) are about the Covid-19 pandemic.

Title of the project, Contact Organization Name, Stakeholder type, Country

Social Mapping to find out how aware persons with disabilities (PWDs) are about the Covid-19 pandemic.BRIDGE FoundationOtherBangladesh

Beneficiaries

-Besides distributing disability allowances, the government should ensure financial grants for PWDs and increase the existing allowances.

disabled citizens and those who can work from home

Website

<http://bridgebd.org/>

Description

Bridge Foundation, a non-government organisation, conducted a survey to find out how aware persons with disabilities (PWDs) are about the Covid-19 pandemic.

ICT Tools

According to the survey, 53.7 percent of women with disabilities are unemployed at the moment, but they have the skills to work.

Challenges

While disseminating information on Covid-19, government and non-government entities should ensure that they are available in sign language and Braille.

-Counselling should be made available for PWD

Partnership

Digital services that would be accessible through work from home

Replicability

The awareness campaigns on prevention and treatment of Covid-19 could reach people with non-disabilities in a normal way, but they have not fully reached those with speech, hearing and visual PWDS

Sustainability

In order to break the monotony of staying indoors, various skill-enhancing and educational courses can be introduced online for PWDs.

It is essential to implement social security services for COVID 19

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C7. ICT applications: benefits in all aspects of life — E-employment

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case33-Laibu Mkononi - A library in the palm of your hand.

Title of the project, Contact Organization Name, Stakeholder type, Country

Laibu Mkononi - A library in the palm of your hand.HelloOtherKenya

Beneficiaries

Our beneficiaries are vulnerable children aged 6-13 years from remote areas of Kenya, the program is still new but our main objective is to increase literacy levels, reduce technophobia and enhance their critical thinking skills and make them great at solving problems.

Website

<https://www.techeck.co.ke>

Description

Our focus is on digital access and inclusion for the remote, socio-economically deprived areas by use of smartphones and tablets as an innovative way of engaging children aged between 6 and 13 years. Lack of educational resources to support learners and teachers during this pandemic is a key trigger of this concept.

With COVID-19 pandemic, majority of the children especially candidates are unable to access online classes or curriculum materials due to lack of a computer or internet connection, Laibu Mkononi in partnership with two community libraries in target areas is lending devices preloaded with offline content to help children hone their understanding of a subject, read a storybook or play educational games in a controlled environment, our objective is to enable them to access specific curriculum-aligned subject content to enable them not only be at par with their peers once school resume but also to have had an opportunity to learn about technology and pass their exams.

No website yet, but we have a presence on social media, our Twitter handle is @LMkononi

ICT Tools

Every child deserves the chance to learn, through the Laibu Mkononi project, we are using digital devices to promote early Literacy in Kenya and provide equal access to quality offline and open source electronic resources such as curriculum-based materials, storybooks, educational videos and games, through lending of smartphones, tablets, E-readers, and laptops preloaded with the mentioned electronic content and to the target population, on an hourly to long term basis and at no cost to the loanee. This means that children who don't have access to a computer or internet connection can substitute it with our Laibu Mkononi devices and engage in informal learning activities anywhere and anytime.

The devices come secured with parental Control software to limit the applications' accessibility and the time spent on the device, currently set to one and a half hours a day but unlimited storybook reading, therefore creating a safe space for them. Our content is from free emerging mobile learning programs and curriculum-delivery platforms that seek to improve or expand access to learning content for children.

Challenges

The main challenge is scarcity of devices as the list of beneficiaries keeps on increasing, to reduce the gap, I use a donated printer to print hard copies of materials to keep those on the pending list engaged as they await their turn to access the devices. The materials are distributed free of charge.

Partnership

Yes, in the resource mobilization, general consultancy, and financial aid to repair donated devices. This is an ongoing project.

Replicability

Yes, the project can be replicated elsewhere, I started the project in Kibera, one of the biggest impoverished settlements in the capital city, Nairobi and then replicate the same to Moyale, a marginalized border town about 700 kilometers from Nairobi. So far it's going as planned but I find Moyale beneficiaries to be more aggressive.

Sustainability

Affirmative, the overheads so far are to the minimum, if the devices are well taken care of, they will be of benefit to many children in our target areas.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls

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have access to a computer or internet connection can substitute it with our Laibu Mkononi devices and engage in informal learning activities anywhere and anytime. The devices come secured with parental Control software to limit the applications' accessibility and the time spent on the device, currently set to one and a half hours a day but unlimited storybook reading, therefore creating a safe space for them. Our content is from free emerging mobile learning programs and curriculum-delivery platforms that seek to improve or expand access to learning content for children.

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Replicability

Yes, the project can be replicated elsewhere, I started the project in Kibera, one of the biggest impoverished settlements in the capital city, Nairobi and then replicate the same to Moyale, a marginalized border town about 700 kilometers from Nairobi. So far it's going as planned but I find Moyale beneficiaries to be more aggressive.

Sustainability

Affirmative, the overheads so far are to the minimum, if the devices are well taken care of, they will be of benefit to many children in our target areas.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls

Case34-Poetry and Essay Anthology on Covid-19 Pandemic

Title of the project, Contact Organization Name, Stakeholder type, Country

Poetry and Essay Anthology on Covid-19 Pandemic Society of Young Nigerian Writers Other Nigeria

Beneficiaries

General Public

Website

<http://www.societyofyoungnigerianwritersblog.blogspot.com>

Description

Call for entries were sent out to poets and essayists to write any topic on Covid-19. We published an electronic poetry and essay anthology on Covid-19 Pandemic.

ICT Tools

Social Media tools

Challenges

There are many challenges but lack of funds played a prominent part

Partnership

Computer Guild of Nigeria (CGN) and Infortude Consult

Replicability

Other literary and publishing platforms have started replicating same.

Sustainability

We hope to be updating it with new and fresh entries

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case35-Sandtime

Title of the project, Contact Organization Name, Stakeholder type, Country

SandtimeSandstream Development Sp. z o.OtherPoland

Beneficiaries

Unlike the other time tracker app, this one was designed by the manager for managers, so it is not only useful for employees but also handles necessary managerial activities like reporting, monitoring, measuring, etc..

Website

<https://sanddev.com>

Description

Time tracker app for better reporting/managing the home office work. The tool has been developed by Sandstream company due to our internal need for reporting time spent on each project. The request came from the management. Therefore it is not only suitable for employees but also handles all the necessary things needed by managers, like: reporting, data for invoicing, managing assignments to the projects, etc...

ICT Tools

The whole app is written in modern web technologies, working as a SaaS so that users can use it on PC/Mobile/Tablets, etc...

Challenges

People working from home have a problem with proper reporting time spent on each project. Currently, each of us is learning how to work from home and how to report it... Using our app allows us to collect proper data, so all the additional things related to the reporting time spent on each project are handled by sand time.io.

Partnership

Only those who want to share the tool.

Replicability

It is SaaS, so it is replicable by definition.

Sustainability

Due to several mechanisms that could be enabled, the users can report and monitor their time without disruptive actions. We also plan to implement geofencing for a better user experience. Besides that, we developed several features that help keep the ethical aspect of reporting time. For instance, we developed a mechanism for rounding reported hours and minutes in the very ethical and right way (do not favor any of the employees or employers).

Action Lines

AL C5. Building confidence and security in use of ICTs

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case36-Brindando conocimiento/Glosario informático

Title of the project, Contact Organization Name, Stakeholder type, Country

Brindando conocimiento/Glosario informáticoGlosarioITOtherArgentina

Beneficiaries

Los más beneficiados son las educadores, maestros y/o alumnos. Los profesores utilizan el sitio web como referencia o fuente para sus alumnos y el servicio es que sólo se necesita de Internet.

Website

<https://www.glosarioit.com>

Description

El proyecto es un sitio web, el mismo es www.glosarioit.com y se trata de un glosario informático. La búsqueda y definición de algún término es el principal motor del sitio web.

ICT Tools

La herramienta es el sitio web www.glosarioit.com desde allí y desde cualquier región los usuarios pueden aprender conceptos nuevos y enriquecer/ampliar su conocimiento.

Challenges

El principal desafío es tener el sitio web en otros idiomas y no sólo en español. Para superar esto es necesario de gente especializada (traductores) para la correcta traducción del mismo.

Partnership

Sería interesante toda el área que se relacione con la educación, la tecnología, la informática e Internet. Aunque también en diferentes bibliotecas o centros educativos (en especial en IT).

Replicability

Se podría reproducir en más países al poder ser la traducción en el idioma nativo de la región. Aunque, al ser un sitio web, sólo con Internet alcanza para su acceso.

Sustainability

Resulta sustentable a nivel ambiental y social. Asimismo es deseable para los diferentes internautas. A nivel económico sería a base de donaciones y contribuciones de diferentes partes y agentes.

Action Lines

AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C7. ICT applications: benefits in all aspects of life – E-environment

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 10: Reduce inequality within and among countries

Case37-BizB

Title of the project, Contact Organization Name, Stakeholder type, Country

BizBBizBOtherPakistan

Beneficiaries

Our customers in Pakistan are actively looking for affordable preloved apparel but don't have one homogenized platform for this need where their anonymity would be maintained as well. Within a week of launch with only 25 dresses in the inventory, we started getting sales and had 10 registered sellers by the end of the month. This early traction showed us that the need is there and a huge gap exist in the market which we aim to fill. Statistics show that 50% of a woman's wardrobe is rendered useless and we are providing them an opportunity to make money off of their unused assets and save thousands on buying new dresses that they love without feeling guilty about it. And we have successfully been able to resonate this message among our audience.

We are now working on the social stigma that is attached with publicly telling that one is wearing or selling a preloved apparel to create a community that supports and is proud to be sustainable

Website

<https://bizb.store>

Description

BizB is a marketplace for the buying and selling of preloved dresses which was started with the aim of promoting sustainable fashion in Pakistan. The corona virus broke out soon after we started and our sales spiked! On a global level, there was a spike in second hand buying and selling by June 2020 with the second hand market growing into a 68 billion dollar market in a matter of 4 months! The reason mainly was that people were more morally conscious given the turn of events and how everyone's lives changed. Another reason was that people suddenly had decreased pocket sizes. So to help more and more people go second hand in Pakistan, we partnered with more influencers to spread awareness and break the taboo linked with second hand buying in Pakistan and have now to date served more than 5000 customers.

ICT Tools

All of our business is purely online and we have an app and a website. All the buying and selling is digitized and we are empowering women technologically who can now earn sitting at home without any extra investment.

Challenges

- 1- Technology restraint for seller who don't have good quality phones.
- 2- Breaking the social stigma of convincing people that its not degrading to buy second hand rather its the responsible choice to make.

Partnership

We are looking for partners that can help us in monetary terms so that we can expand our operational capacity since currently that is a bottleneck for us and also help us increase our reach out to customers.

Replicability

Being the first movers, the brand equity and loyalty we've built with our customers is something not replicable and that sense of personalized dealing is what gets people coming back to us.

Sustainability

3 dresses per wardrobe. 100000 wardrobes. 300000 dresses making our platform house to one of the biggest variety of stylish preloved apparel suiting to all tastes.

50% of a woman's wardrobe is useless which is thrown out filling up landfills every passing second.

BizB is the first preloved dresses platform in Pakistan helping women enjoy their love of fashion without burning a hole through their pocket and also make money off of their wardrobe, all while sitting in the comfort of their home.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C10. Ethical dimensions of the Information Society

SDGs

Goal 12: Ensure sustainable consumption and production patterns

Case38-We Care

Title of the project, Contact Organization Name, Stakeholder type, Country

We CareGSMAOtherUnited Kingdom

Beneficiaries

Mobile users are the main beneficiaries of the We Care initiatives. Under this framework, we have brought together the mobile operators in 21 countries worldwide with the public sector, not only creating a public private partnership for a specific project but building the framework for a continued private-public collaboration. Now more than ever, telecommunications networks are a nation's critical infrastructure, and through "We Care" we unite this key industry, where companies are fierce competitors, to work as one with the government.

Furthermore, since the projects aim at tackling societal problems, "We Care" contributes to provide solutions for the most vulnerable people and communities. The initiative has indeed a strong focus on inclusivity, either being the direct objective of the project, e.g. digital inclusion, assistive tech or infrastructure deployment, or being one of the key considerations when deploying a technological solution, e.g. in Tunisia using SMS against cell broadcasting in the Early Alert Warning System to reach people with feature phones.

Website

<https://www.gsma.com/>

Description

Now more than ever, and especially since the COVID-19 pandemic, telecommunication networks are a nation's critical infrastructure, and through the We Care initiative, we unite this key industry, where companies are fierce competitors, to work as one with the government. Furthermore, since the projects aim at tackling societal problems, We Care contributes to develop and strengthen trust between citizens and institutions, bringing them closer together.

Under the We Care initiative we have brought together the mobile operators in 21 countries worldwide with the public sector, not only creating a public-private partnership for a specific project but also building the framework for a continued public-private dialogues. This has contributed to the effort put in place to respond to COVID-19, where trusted relationship between the public sector and the mobile industry has been critical to fight the pandemic and to keep the economy and society functioning while social distancing is the norm.

ICT Tools

The We Care model provides a multi-stakeholder platform where mobile operators join forces as an industry with policymakers to allow the mobile phone and mobile networks to provide various solutions to social problems at national level. Each solution is designed to positively impact society, including:

- Digital Inclusion
- Children and Mobile Technology

- Assistive tech
- Contribution to Public Safety
- Transparency
- Disaster Response
- Environmental Care
- Mobile Privacy
- Infrastructure Development
- Reduction of Handset Theft

Since We Care's launch in 2014, 30 projects have been launched involving more than 70 mobile network operators and 30+ governmental institutions in 21 countries, and we systematically organised a press conference for each launch with local press and media. One of the main objectives of the press conference is to promote the use of mobile technology as a catalyst to transform the lives by providing access to essential services and timely information.

Challenges

Stakeholders involve in each GSMA We Care initiative include all local mobile operators and the local government and/or regulatory authority. Additional partners, such as Government Agencies or NGOs can also contribute to the project. For each project, we look for commitments at CEO level and at Minister/Head of Regulatory Authority level for the public sector. So the main challenge is to unite this key industry, where companies are fierce competitors, to work as one with the government. To overcome this challenge, the model allows stakeholder to choose among a list of 10 different topics including as many implementation configurations as possible. Indeed, projects are always designed according to the local context.

Here is an example of a complex We Care project in Tunisia involving many different stakeholders:

- Mobile Operators Orange, Ooredoo and Tunisie Telecom
- The Ministry of Interior
- The Ministry of Defence
- The Ministry of Communication Technologies
- The Ministry of Health
- The National Telecommunication Regulatory Authority - INT
- The National Institute of Data Protection - INPDP
- National institute of Methodology

Partnership

We are currently looking to further develop partnerships with NGOs and International Organizations. Building partnerships with these stakeholders will allow us to strengthen the We Care model, and provide greater impact on citizens and bring a different perspective and dimension for each project. Organisations can include UNDP with their Accelerator Lab

for example. This partnership will allow us to combine UNDP's expertise and local ecosystem with our GSMA members' network, uniting more than 750 operators with almost 400 companies in the broader mobile ecosystem, including:

- Handset and device makers
- Software companies
- Equipment providers
- Internet companies
- Adjacent industry sectors

A partnership with UNDP will help us to find and grow local solutions that are already working and accelerate the learning process about what works and doesn't by experimenting with many different angles to a problem.

Other potential partners include the NGOs, which will allow us to leverage expertise from everywhere, especially by valuing those in communities facing social challenges.

Replicability

Initially, We Care was only focused in Latin America (launched in 16 countries of the region), until 2018 when we've decided to replicate the model in other regions. Today, We Care has been expanded in Sub-Saharan Africa, Middle East & North Africa and Asia-Pacific.

Examples include:

Latin America: Argentina's mobile operators committed to transparency in personal data use through measures providing customers greater transparency and clarity around the handling of their personal data.

Sub-Saharan Africa: Rwanda's mobile operators, supported by Rwanda's Ministry of ICT and Innovation, joined forces to drive mobile internet adoption and increase digital literacy, by using the GSMA's Mobile Internet Skills Training Toolkit (MISTT) to train sales agents and educate customers on how to access mobile internet services.

Asia-Pacific: South Korea's mobile operators implemented the GSMA Black List, allowing reported lost or stolen phones to be blocked both home and abroad.

MENA: Tunisian mobile operators developed an SMS Disaster Alert System in collaboration with the Tunisian Ministry of Interior and the Tunisian Ministry of Technologies of Communication and Digital Economy.

Sustainability

Since its launch in February 2014, the We Care model has proven to be sustainable through the following results:

- 30 We Care initiatives launched in 21 countries
- 8 SDG impacted

- 70 Mobile Network Operators involved
- +30 governmental institutions involved across 21 countries, including Ministries of ICT, Interior, Health, Telecommunication Regulatory Authorities, National Meteorological Agencies, etc.

Moreover, the funding model for any GSMA We Care initiative is very simple and flexible. For each project, participating mobile operators are required to contribute in-kind or in-cash to deliver the solution. We ask the public sector to endorse the initiative, promise to further support the mobile industry and usually contribute in-kind (facilitate, leverage Government's network etc.). And finally, the role of the GSMA is to facilitate dialogue between stakeholders, provide technical assistance, manage the project and raise awareness of each initiative (events, digital channel, PR partners...)

In 2021, we expect to launch a new We Care initiative in Democratic Republic of Congo (DRC) following strong demand from local stakeholders.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C3. Access to information and knowledge|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C10. Ethical dimensions of the Information Society

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 13: Take urgent action to combat climate change and its impacts|Goal 16: Promote just, peaceful and inclusive societies

Case39-Digital and Civic Action Among Arab Young Adults in the Time of COVID-19

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital and Civic Action Among Arab Young Adults in the Time of COVID-19 UNESCO Youth As Researchers Other Lebanon

Beneficiaries

Our main beneficiaries are the young Arab adult population (20-35 years old) who are active in both digital and civic initiatives. Our research will highlight the digital and civic alternatives that were successful in building and strengthening social support during the pandemic. Our research will be publicly available on the Youth As Researchers website and discovers Arab young adults driving change in their communities using ICTs and identifies the support they need to be more effective in their cause. Many Arab states are conflict affected already and are dealing with additional burdens posed by the pandemic and associated economic deterioration without social safety nets. Meanwhile young adults are helping, both locally and regionally, fortify their skills and education online during an extremely uncertain time and the solutions and spaces they create hold relevant policy and practice implications for volunteerism, digital, and civic action. Many of our interviewees lacked enough meaningful coverage in their communities for the change they bring on a daily basis and publishing this research is one small way of recognizing them. If we had an online directory/platform with a knowledge repository we could be generating much more content and visibility about these young positive deviants in our region.

Website

<https://yar.bangkok.unesco.org/>

Description

The UNESCO Youth As Researchers Arab States Team 1 was established in October 2020 as a virtual research collaboration to investigate the alternative digital and civic activities Arab young adults (20-35 years old) and how successful they were at building social support during this pandemic. Using ICTs we designed our mixed-methods approach, obtained ethics approval for our research proposal, and are now in the data analysis phase unpacking our 1100+ quantitative web-based survey results (where all 22 Arab states are represented) and our 24+ in-depth virtual interviews with youth NGO/digital & civic initiative founders across the Arab states.

ICT Tools

Using Google Meet and Zoom we meet at least once every week, sometimes twice if necessary. Zoom was also used to conduct our virtual interviews with young Arab NGO/digital & civic initiative founders. Google forms was used to launch a bilingual, English and Arabic, web-based survey to solicit responses from Arab young adults aged 20-35 years. We maintain daily communication via a WhatsApp group and use a common google drive to store all our data, work related materials, meeting minutes, track progress on tasks, and share a common weekly to do list and agenda. This virtual collaboration is at a regional level involving 8 multidisciplinary research members from Egypt, Iraq, Lebanon, occupied Palestinian territories, Qatar, Sudan, Syria and Yemen. In concluding our in-depth virtual interviews with young Arab NGO/digital & civic initiative founders we are preparing a directory online to be shared with our interviewees so that they may learn about each other, meet, and exchange ideas.

Challenges

Throughout our study we wished we had access to a grant that would enable us to build a directory and knowledge repository for NGOs/digital and civic initiatives founded by youth in the Arab states to enable greater regional coordination and exchange. The experiences of young Arab NGO/digital and civic initiative founders resemble each other as we are all dealing with a similar fabric in our communities, many of which are affected by conflict and negatively impacted by the weak structural foundations in which we find ourselves operating in. At the same time, many of the Arab young founders share the belief that volunteering, both digital and civic, is essential in character building, augmenting self-esteem, and expanding one's perception of the world. We would have really benefited from access to a nationally representative sample of young adults from each Arab state's government-based central bureau of statistics. In addition, it was challenging to create a questionnaire that a diverse Arab people from 22 separate states could equally relate to so it would have been especially helpful to be guided in this process by sub-regional (Mashreq, Maghreb, Gulf and Least Developed Countries) social science researchers.

Partnership

We are looking for web developers and graphic designers interested in building an online platform with an ability for youth founded NGOs/digital and civic initiatives to self-register, peruse a directory with filtering mechanisms based on area of work, location, size, and others, as well as generate content, communicate and exchange ideas. It would be great to have e-government partners as well to facilitate the registration and/or other transactions needed by young Arab founders through our digital platform.

Replicability

Our virtual research can be replicated in this and other regions in the world and we encourage this as it allows for really meaningful regional collaboration across disciplines. For research to truly make an impact and possibly translate into actionable or implementable projects it needs to be motivated by a strong 'why', one of which is being of service to a community. Research is often constrained by international funding agendas external to the community and affects how research is framed and whether it reflects the research priorities of the community it seeks to benefit. Our virtual research team has acted as a teaching platform where the potentials of each team member are nurtured and honed together. It offers a much needed perspective on what extent do we, as collective youth researchers in the region, need to be more assertive to funders. It could also encourage multi- and trans-disciplinary research as an exercise in thinking together, opening communication channels about common concepts, and improving our understanding of the world based on relations with others.

Sustainability

This is a volunteer based UNESCO supported program. I do believe that this program can be sustainable particularly if we are able to garner resources that will help us build a youth-

based NGO/digital and civic initiative platform in our region. Any research product born out of a virtual collaboration with a strong motive can potentially be published and if successful, this publication can be used to justify the serious intention of the team and with it they could apply for a grant to implement their actions or encourage policies or practices. In 2050, this region will witness almost 300 million young adults entering the labor market and they will need jobs, which are currently not available. By sustaining a project such as this and enabling regional teams to deliver action based on evidence, it promote jobs for the younger generation in the long term.

Action Lines

AL C2. Information and communication infrastructure|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 16: Promote just, peaceful and inclusive societies

Case40-3m movement

Title of the project, Contact Organization Name, Stakeholder type, Country

3m movementDasa wismaOtherIndonesia

Beneficiaries

Public

Website

<https://dasawisma.id>

Description

mask movements every week
reminds to always apply washing hands, wear a mask, keep your distance

ICT Tools

Hp

Challenges

the public still disputes the health protocol

Sustainability

this project will continue until the covid 19 outbreak ends in all countries

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 1: End poverty in all its forms everywhere

Case41-EA

Title of the project, Contact Organization Name, Stakeholder type, Country

EANICOtherSaudi Arabia

Beneficiaries

To have a controls on COVID-19

Website

<http://www.sdaia.gov.sa>

Description
Tawkalna
ICT Tools
application
Challenges
The time was a big challenge
Partnership
SDAIA
Replicability
I can't say yes or no is depending
Action Lines
AL C1. The role of governments and all stakeholders in the promotion of ICTs for development AL C2. Information and communication infrastructure AL C3. Access to information and knowledge AL C5. Building confidence and security in use of ICTs AL C6. Enabling environment AL C7. ICT applications: benefits in all aspects of life – E-government AL C7. ICT applications: benefits in all aspects of life – E-business AL C7. ICT applications: benefits in all aspects of life – E-learning AL C7. ICT applications: benefits in all aspects of life – E-employment AL C7. ICT applications: benefits in all aspects of life – E-environment AL C8. Cultural diversity and identity, linguistic diversity and local content AL C11. International and regional cooperation
SDGs
Goal 1: End poverty in all its forms everywhere Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture Goal 3: Ensure healthy lives and promote well-being for all Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all Goal 5: Achieve gender equality and empower all women and girls Goal 6: Ensure access to water and sanitation for all Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all Goal 8: Promote

inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case42-usuus

Title of the project, Contact Organization Name, Stakeholder type, Country

usuusmohmdOtherSaudi Arabia

Beneficiaries

dkjddj

Website

<https://www.itu.int/net4/wsis/stocktaking/Surveys/Surveys/Submit/15863048637525604>

Description

sjjs

ICT Tools

djjddj

Challenges

suhd

Partnership

suhdsj

Replicability

sjjs

Sustainability

suus

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life – E-government|AL C7. ICT applications: benefits in all aspects of life – E-business|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-employment|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C7. ICT applications: benefits in all aspects of life – E-science|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case43-ID

Title of the project, Contact Organization Name, Stakeholder type, Country

IDTalesOtherFrance

Beneficiaries

Oh kostet

Website

<https://www.thalesgroup.com/en>

Description

I don't COVID-19

ICT Tools

I don't have you

Challenges

How enter SDID be cows ergattern help

Partnership

I see ok

Replicability

How do you know that you have the money

Sustainability
I don't know what the plan
Action Lines
AL C11. International and regional cooperation
SDGs
Goal 1: End poverty in all its forms everywhere

Case44-global summit
Title of the project, Contact Organization Name, Stakeholder type, Country
global summitمركز المعلومات الوطنيOtherSaudi Arabia
Beneficiaries
the community of ksa
Website
https://nic.gov.sa/
Description
twaklna app
ICT Tools
twaklna app
Challenges

making all the people register in the app

Partnership

yes

Replicability

yes, many nation can benefit from the program

Sustainability

yes , it serves as multi-perpous

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government

SDGs

Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all

Case45-global summit

Title of the project, Contact Organization Name, Stakeholder type, Country

global summitمركز المعلومات الوطنيOtherSaudi Arabia

Beneficiaries

the community of ksa

Website

<https://nic.gov.sa/>

Description

twaklna app

ICT Tools

twaklna app

Challenges

making all the people register in the app

Partnership

yes

Replicability

yes, many nation can benefit from the program

Sustainability

yes , it serves as multi-perpous

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-government

SDGs

Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all

Case46-tk

Title of the project, Contact Organization Name, Stakeholder type, Country

tktkOtherChina

Beneficiaries

tk

Website

https://www.tk.cn/?utm_source=ADe1c37583cfd5480&fromId=59845

Description

tk

ICT Tools

tk

Challenges

tk

Partnership

tk

Replicability

tk

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 1: End poverty in all its forms everywhere

Case47-西南院

Title of the project, Contact Organization Name, Stakeholder type, Country

西南院 ChainOtherChina

Beneficiaries

无

Website

<https://www.itu.int>

Action Lines

AL C6. Enabling environment

SDGs

Goal 1: End poverty in all its forms everywhere

Case48-project manager

Title of the project, Contact Organization Name, Stakeholder type, Country

project managerelmOtherSaudi Arabia

Beneficiaries

goverment service

Website
http://elm.com.sa
Description
non
ICT Tools
non
Challenges
working remotely effectvely
Partnership
no
Replicability
na
Sustainability
na
Action Lines
AL C1. The role of governments and all stakeholders in the promotion of ICTs for development
SDGs
Goal 1: End poverty in all its forms everywhere Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture Goal 3: Ensure healthy lives and promote well-being for all Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all Goal 5: Achieve gender equality and empower

all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case49-1

Title of the project, Contact Organization Name, Stakeholder type, Country

11OtherChina

Website

<https://www.itu.int>

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 1: End poverty in all its forms everywhere

Case50-other

Title of the project, Contact Organization Name, Stakeholder type, Country

other 中通服咨询设计有限公司 OtherChina

Website

<https://www.cicdi.com/html/1/#page3>

Action Lines

AL C9. Media

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case51 الوقايه خيرآ من العلاج تجنب فيروس كورونا

Title of the project, Contact Organization Name, Stakeholder type, Country

OtherYemen الوقايه خيرآ من العلاج تجنب فيروس كوروناالوقايه خيرآ من العلاج

Beneficiaries

المستفيدون هم المجتمع المحلي الذي يباشر اتعليمات ويتبادل بثقافه الصحيه والثقافيه ولاجتماعيه في نشر اتوعيه الذي حصل عليها من غيره ويمنحها لاسرته ولاخرين

Website

<https://drive.google.com/file/d/1UB1CMRx0q6lRRmeH8PPcSbclciSEEKvL/view?usp=drivesdk>

Description

نشر اتوعيه المجتمعيه من الافرد للاسره وللقرية وللمدريه والمدينه حيث ان بناء المخاطر في تجنب الفيروس على كل شي في حياة المجتمع حيث بهدف المشروع إلى تغليف المجتمع في توعيه على تجنب الفيروس في كل تقنيه وحتراف

ICT Tools

اتواصل الجماعي هو افضل الوسائل لنشر اتوعيه المجتمعيه في وقتنتالحاضر حيث ان اتواصل في كل انواعها هو افضل الوسائل وطرق اسهله والمباشره في السوق بروحه رياضيه ومسؤليه

Challenges

- 1- اولاً. انظافه اليدينه
- 2- تجنب المخاطه-
- 3- لبس الكمامات-
- 4- لبس الكفوف-
- 5- اللبس اتعليمات التي تعمل على القضاء-
- 6- الوقايه-
- 7- غسل الفواكه-
- 8- غسل كل شي يدخل المنزل-

Partnership

نعم نريد شركاء تعاون ودعم مادي ودعم مالي لانها هي ستنتفع المجتمع في توسع الوقايه من الفيروس كورونا في هذا الوطن العربي الاصيل الذي يباشر اتعليمات ويتبادل بثقافه الصحيه والثقافيه واجتماعيه في

Replicability

نعم اتفضل أن يكون مستداما في

Sustainability

حيث إننا نريد استدامه طويله لهذا المشروع الذي حصل عليها بكل الطرق للحفاظ على الحياه المدنيه الانسان الاستمرار في الحياه الاجتماعيه في بيئته خاليه من الامراض

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development|AL C2. Information and communication infrastructure|AL C3. Access to information and knowledge|AL C4. Capacity building|AL C5. Building confidence and security in use of ICTs|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-learning|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C7. ICT applications: benefits in all

aspects of life — E-employment|AL C7. ICT applications: benefits in all aspects of life — E-environment|AL C7. ICT applications: benefits in all aspects of life — E-agriculture|AL C7. ICT applications: benefits in all aspects of life — E-science|AL C8. Cultural diversity and identity, linguistic diversity and local content|AL C9. Media|AL C10. Ethical dimensions of the Information Society|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 5: Achieve gender equality and empower all women and girls|Goal 6: Ensure access to water and sanitation for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation|Goal 10: Reduce inequality within and among countries|Goal 11: Make cities inclusive, safe, resilient and sustainable|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 14: Conserve and sustainably use the oceans, seas and marine resources|Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss|Goal 16: Promote just, peaceful and inclusive societies|Goal 17: Revitalize the global partnership for sustainable development

Case52-family hand

Title of the project, Contact Organization Name, Stakeholder type, Country

family handMinistry of Tourism and HandicraftsOtherAlgeria

Beneficiaries

Raw material collector; Domestic work (family) that transforms raw materials to meet customer needs; client (looking for service).

What distinguishes this type of business is the small number of employees, and they are usually direct relatives of the business owner and it is called family business, and it is characterized by creativity.

Website

<http://www.mta.gov.dz/>

Description

the Hand Family project contributes greatly to sustainable development, because it works on a balance between social and economic sustainability. It promotes family work and what productive families produce in several areas (such as traditional industry and crafts, agriculture, fishing...etc.) , It also works on equality between men and women in sharing the burdens of life, the Hand Family project divides the roles of the family work team, so we find women producing and men marketing the product, and we find in family work an advantage which is creativity in the marketed product, in terms of packaging or promotion and The quality of the product, and these goals are found in the 17 United Nations Program for Sustainable Development.

ICT Tools

Electronic application

Marketing the product, was it a semi-factory product converted for family work to be manufactured according to customers' requests

Challenges

Challenges:

Disintegration of the family.

Success, when it becomes a curse and negatively affects the family.

Expansion of the project.

Project outlook:

The internal system of productive families to protect the family from disintegration and maintain success.

Feasibility studies for expansion projects.

Partnership

Chambers of Handicraft and Crafts

Agriculture and sea fishing

Replicability

No; This is due to the customs and traditions of the people, and the nature of their lives.

Sustainability

Yes, family work has existed since ancient times since the existence of man, so any work that a family does to improve its living conditions, as long as a person seeks to improve his standard of living is always looking for the permanence and expansion of his work.

Action Lines

AL C4. Capacity building

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case53-Online filing of affiliation files: remote affiliation

Title of the project, Contact Organization Name, Stakeholder type, Country

Online filing of affiliation files: remote affiliationCACOBATPHOtherAlgeria

Beneficiaries

the beneficiaries of this service are employers in the construction, public works and hydraulics sectors.

Website

<https://www.cacobatph.dz>

Description

Remote affiliation is a process which consists of the online affiliation of new employers of the BTPH without any file and without travel to our agencies, especially during these particular health periods by using web service mechanisms with organizations such as the national center of trade register and the national social insurance fund.

ICT Tools

We use an API and we consume web services provided by trusted organizations. we also use SS certificates to encrypt and secure traffic between users and the Caisse.

Challenges

We did not encounter any particular difficulties, once the web services were put online, new employers were able to use this platform to join online.

Partnership

No, we don't need a partner at the moment.

Replicability

No, this project is not replicable, we have developed our own source code to interconnect with web services.

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-government

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case54-confido

Title of the project, Contact Organization Name, Stakeholder type, Country

confidoconfidoOtherAlgeria

Beneficiaries

- 1 Reducing the costs of the election process
- 2. Conducting the election process transparently using blockchain technology
- 3 The process does not need to count the votes because the counting is automatic in conjunction with the election process
- 4 Review the elections and confirm transparency or not
- 5 Eliminate the crisis of trust between the citizen and the state

Website

<https://www.cfpahammamet.cf>

Description

Conducting the election process from home to achieve the principle of distance

ICT Tools
blockchain technology ,python ,qt designer ,powerbi
Challenges
اجراء عملية الانتخاب من المنزل لتحقيق مبدأ التباعد
Partnership
No
Replicability
yes In all elections
Sustainability
yes , Contribute to the advancement of the national economy
Action Lines
AL C7. ICT applications: benefits in all aspects of life – E-government
SDGs
Goal 17: Revitalize the global partnership for sustainable development

Case55-design and implementation of a production management system at the onaaph level
Title of the project, Contact Organization Name, Stakeholder type, Country
design and implementation of a production management system at the onaaph level onaaphOtherAlgeria
Beneficiaries

onaaph

Website

<http://www.onaaph.dz>

Description

nothing

ICT Tools

java desktop technologies with client server and vpn attachment

Challenges

spread the application across the national territory

Partnership

no

Replicability

no

Sustainability

yes it is sustainable because the project is in server client and will be spread throughout the national territory

Action Lines

AL C2. Information and communication infrastructure

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case56-Digital Content Writing Training for Visually Impaired People to be A Digital Nomad Talent

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital Content Writing Training for Visually Impaired People to be A Digital Nomad Talent
Suarise
Other
Indonesia

Beneficiaries

Our beneficiaries are Visually Impaired People (VIP) in Indonesia, mainly blind and low vision.

A digital content writer is a skill set that enables a person to work anywhere with a computer and internet connection. This occupation has been done offline and remotely even before the pandemic hit. The field can embrace blind and low vision opportunities since it mainly focuses on writing. The writing portion is 90% of the job, and it is very plausible for VIP to excel in this as long as they are familiar with creating documents with screen readers and browsing the internet to research.

Once they are capable, they can either:

- apply for a digital content writer job,
- become a freelance content writer, or
- promote their own business better.

Even better, they can execute all responsibilities remotely, safely in their house without the necessity to mobilise and risk their lives to covid-19 exposure.

The training involved 27 trainees, spread awareness of VIP competency, and introduced an inclusive and accessible workflow to more than 200 people in various companies, including HR and decision-makers.

Website

<http://www.suarise.com>

Description

Suarise held digital content writing training that focuses on capacity building for the blind community to work remotely as a digital content writer. The competency is vital because they lost their work during the COVID-19 pandemic due to the immobility effect of lock down and being prone to contaminated surfaces.

Through digital content writing competency, companies have a higher potential to recruit

visually impaired people, become freelance content writers, and promote their own business whenever possible through digital platforms.

The training runs for five months, focusing on four skill sets to enable them to work as a digital nomad:

1. SEO Article development
2. Social Media Editorial Plan
3. Search Engine Marketing (SEO)
4. Digital Press Release

Modules are equipped with quizzes and accessible working documents to ensure the comprehension of the topics in theory and practice. These documents guide participants who mainly use screen readers for a systematic and easy writing process for specific content output.

The training is divided into two-part, with 100% online execution:

1. 18 in-class-sessions to develop the writing skill and
2. Two months of On Job Training (OJT) to simulate the remote-working situation and build their writing portfolio.

Content assignments that pass the evaluation will be published as their portfolio on talents.suarise.com website. At this point, the talents are ready to work professionally. They will get the rapport and certificate accordingly based on their achievement during the training.

ICT Tools

Digital accessibility (a11y) in document and website , online classroom (google classroom) , Zoom (accessible video conferencing).

All the aforementioned technologies are paramount in creating an inclusive and accessible digital ecosystem for People with disabilities (PwD), especially for those who use screen readers as the assistive technology to access the content. Digital accessibility implementation is fundamental to ensure that organizations/companies are inclusive of PwD. It is not rocket science, yet many do not know how to make a document accessible, how to make a website to be accessed easily by the PwD community, set and run an inclusive and accessible meeting that accommodates employees with various physical and sensory conditions.

Challenges

On the organization sides, Visually impaired people (VIP) are the second least recruited by companies than other types of disabilities (Dnetwork, 2019). Mobility, office accessibility, misconception in providing braille documents, and lack of potential inclusive job awareness have been the most significant barriers for employers to recruit them. VIPs tend to work as

the typical stereotype (masseur), street musician, or run their own business. Therefore, companies have no idea how blind employees can contribute to their organization as valuable employees.

Nevertheless, when the company try to give opportunity, they are clueless in integrating them in the system, from workflow, documentation, meeting, even communication. For this reason, on International Disability Day, we held a disability confident employer conference. The event intends to introduce and present how people with disability, especially VIP work, and give examples and best practices to perform inclusive organization. The models are provided through webinars from experts and talk shows from companies who have started this implementation. And disability capacity showcase are shown through website and videos during the event.

The event's recap can be accessed on <https://www.suarise.com/disability-confident-employer>. The website shows the graduate trainees' profiles, portfolios, calls to action for companies to recruit and/or explore the talent's portfolios.

Partnership

We are looking for partners for the following purpose:

1. Sponsor the training;
2. Accept the trainee in their internship scheme;
3. Media who actively covers stories how a Visually Impaired People is important as an active player in the digital economy;
4. HR Organisation, institution, alliance or community who actively advocate to recruit PwD, especially VIP
5. Training partner who can support in delivering training in their area;
6. Telecommunication operator who can support in giving internet data package;
7. HR, and Job portal who can make their platform accessible and promote inclusive recruitment.

Replicability

This project can be replicable in any part of the world with a good internet connection.

Sustainability

The project can be sustained in two ways:

- 1) Using private/government partnership to enable the organisation (Suarise) to run the process through sponsorship/CSR scheme
- 2) Whereas sponsorship is not present, pay later applied, where trainees are obligated to pay for the training cost only after they get a job.

Action Lines

AL C3. Access to information and knowledge|AL C4. Capacity building|AL C6. Enabling environment|AL C7. ICT applications: benefits in all aspects of life — E-employment|AL C9. Media

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all|Goal 10: Reduce inequality within and among countries|Goal 17: Revitalize the global partnership for sustainable development

Case57-internet

Title of the project, Contact Organization Name, Stakeholder type, Country

internetAPJIIOtherIndonesia

Beneficiaries

areas that are not reached by signal

Website

<https://apjii.or.id/>

Description

abandoned village

ICT Tools

promotion on social media

Challenges

the area of Indonesia which has islands and is very wide, the method must use wireless and underwater optical cables

Partnership

yes.. subang , majaengelka, natuna, kendal

Replicability

using wireless in a faraway village

Sustainability

there are still many villages that have not been delivered to the internet

Action Lines

AL C2. Information and communication infrastructure

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

[Case58-https://www.facebook.com/](https://www.facebook.com/)

Title of the project, Contact Organization Name, Stakeholder type, Country

<https://www.facebook.com/Rosey> Mozammel Womens CollegeOtherBangladesh

Beneficiaries

<https://www.facebook.com/>

Website

<https://www.facebook.com/>

Description

<https://www.facebook.com/>

ICT Tools

medium

Challenges

<https://www.facebook.com/>

Partnership

<https://www.facebook.com/>

Replicability

working pending

Sustainability

very nice

Action Lines

AL C5. Building confidence and security in use of ICTs

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 13: Take urgent action to combat climate change and its impacts

Case59-Education

Title of the project, Contact Organization Name, Stakeholder type, Country

Educationpanchbariyahat s a dhakil madrasahOtherBangladesh

Website

<http://119234.ebmeb.gov.bd/>

Action Lines

AL C7. ICT applications: benefits in all aspects of life – E-science

SDGs

Goal 14: Conserve and sustainably use the oceans, seas and marine resources

Case 60-COVID-19

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19Abbas Ali High SchoolOtherBangladesh

Beneficiaries

Our Students & guardians

Website

<https://www.itu.int/net4/wsis/stocktaking/Prizes/2022>

Description

Facebook, Messenger, Imo

ICT Tools

National/International

Challenges

Ignorance

Partnership

Our local area

Replicability

Yes

Sustainability

Yes

Action Lines

AL C3. Access to information and knowledge|AL C7. ICT applications: benefits in all aspects of life – E-learning|AL C7. ICT applications: benefits in all aspects of life – E-health|AL C7. ICT applications: benefits in all aspects of life – E-environment|AL C7. ICT applications: benefits in all aspects of life – E-agriculture|AL C7. ICT applications: benefits in all aspects of life – E-science|AL C11. International and regional cooperation

SDGs

Goal 1: End poverty in all its forms everywhere|Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture|Goal 3: Ensure healthy lives and promote well-being for all|Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all|Goal 12: Ensure sustainable consumption and production patterns|Goal 13: Take urgent action to combat climate change and its impacts|Goal 16: Promote just, peaceful and inclusive societies