

WSIS Publications

WSIS Stocktaking Report 2020



Information and
Knowledge Societies for
Sustainable Development Goals
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World Summit
on the Information Society
Turning targets into action
Geneva 2003 | Tunis 2005 | New York 2015



WSIS Stocktaking 2020 Global Report

ZERO DRAFT

(10 September 2020)

Introduction

Introduction to the Report on the WSIS Stocktaking 2020

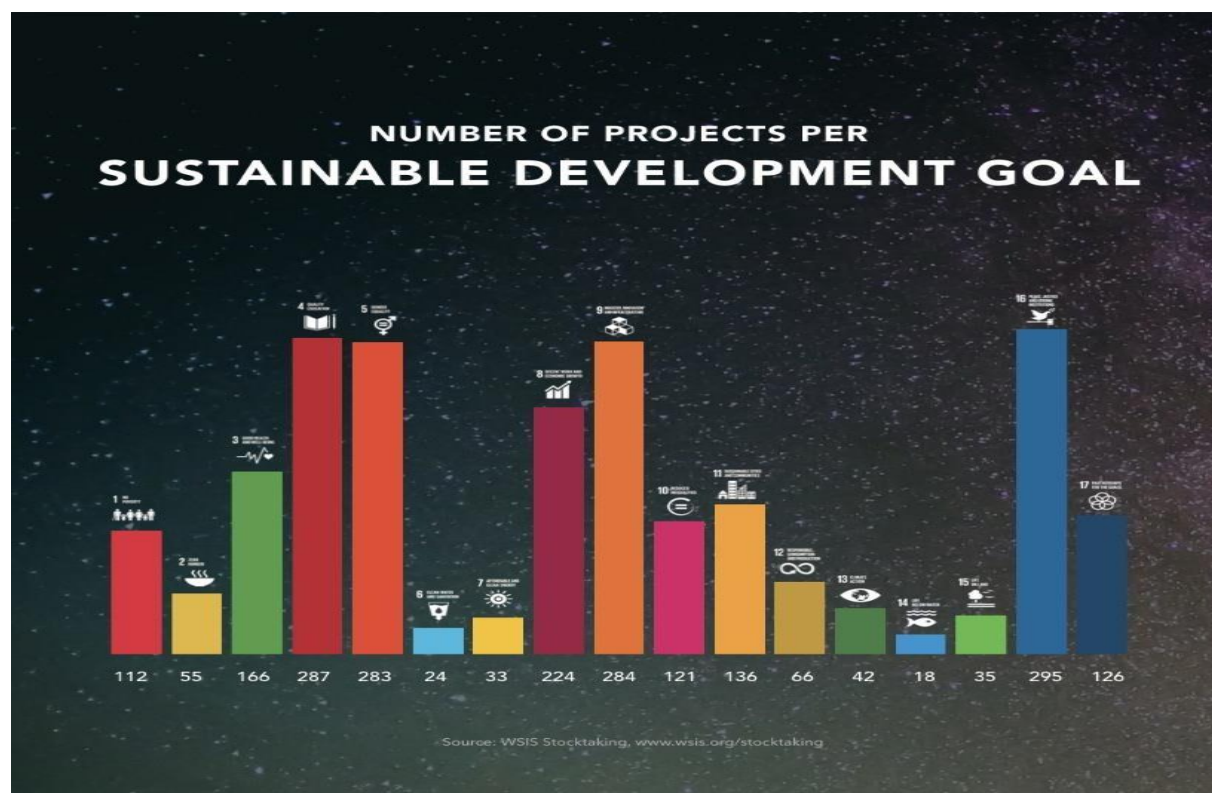
The principal role of the WSIS Stocktaking exercise is to leverage the activities of stakeholders working on the implementation of WSIS outcomes and share knowledge and experience of projects by replicating successful models designed to achieve the Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development.

The WSIS Stocktaking process was initiated in October 2004 during the Tunis phase of WSIS, and in the years since has come to comprise the database of:

- exchanges of information on projects
- sharing of best practices of certain regions
- initiatives related to the implementation of the 11 WSIS action lines
- linkage between the 11 action lines and the SDGs – a linkage that becomes more and more important over the years.

The WSIS Stocktaking process provides a register of activities – including projects, programmes, training initiatives, conferences, websites, guidelines, toolkits, etc. – carried out by governments, international organizations, the private sector, civil society and other entities. To that end, in accordance with paragraph 120 of the Tunis Agenda for the Information Society adopted by WSIS, ITU has been maintaining the WSIS Stocktaking Database as a publicly accessible system providing information on information and communication technology (ICT)-related initiatives and projects with reference to the 11 WSIS action lines (Geneva Plan of Action) and 17 SDGs.

The WSIS Stocktaking Portal provides a repository of best practices for stakeholders seeking updated information on progress in the implementation of WSIS outcomes (paragraph 28.e of the Geneva Plan of Action). The WSIS Stocktaking Platform, launched in February 2010, transformed the previous static database into a unique portal to highlight ICT-related projects and initiatives in line with WSIS implementation. The platform offers stakeholders exciting and interactive networking opportunities via Web 2.0 applications. As of 2015, the United Nations General Assembly, within the framework of the tenyear review of WSIS (resolution 70/125) called for a close alignment between the WSIS process and the 2030 Agenda for Sustainable Development (resolution 70/1). The WSIS Stocktaking process responded by highlighting the contribution of 11 WSIS Action Lines to the achievement of the 17 Sustainable Development Goals (SDGs).



The direct linkages between the WSIS action lines and the SDGs set out below are crucial to continuing to strengthen the impact of ICTs for sustainable development. Each United Nations action line facilitator has analysed the connections and relations between their respective action lines and the proposed SDGs and their targets to create a clear and direct linkage and an explicit connection between the key aim of WSIS – harnessing the potential of ICTs to promote and realize the SDGs – and the post-2015 development agenda, to contribute to the realization of the latter. The majority of the projects presented in this Report clearly showcase the linkage between their related action lines and the various SDGs and targets. At the WSIS Forum 2015, the SDG matrix was extremely well received by the WSIS community, offering as it does a better explanation of the potential of ICTs as enablers for sustainable development. A new component was introduced in the WSIS Stocktaking process in the form of reporting ICT success stories to best showcase the possible achievement of SDGs through the implementation of WSIS action line-related projects.

The principal role of the WSIS Stocktaking exercise is to leverage the activities of stakeholders working on the implementation of WSIS outcomes and share knowledge and experience of projects by replicating successful models designed to achieve the SDGs.

The WSIS action lines break down into 18 categories These include:

1. the role of governments and all stakeholders in the promotion of ICTs for development
2. information and communication infrastructure

3. access to knowledge and information
4. capacity building
5. building confidence and security in the use of ICTs
6. enabling environment
7. e-government
8. e-business
9. e-learning
10. e-health
11. e-employment
12. e-environment
13. e-agriculture
14. e-science
15. cultural diversity and identity, linguistic diversity and local content
16. media
17. ethical dimension of the information society
18. international and regional cooperation.

The 17 Sustainable Development Goals:

These include:

1. Goal 1: End poverty in all its forms everywhere;
2. Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture;
3. Goal 3: Ensure healthy lives and promote well-being for all at all ages;
4. Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all;
5. Goal 5: Achieve gender equality and empower all women and girls;
6. Goal 6: Ensure availability and sustainable management of water and sanitation for all;
7. Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all;
8. Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all;
9. Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation;
10. Goal 10: Reduce inequality within and among countries;
11. Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable;

12. Goal 12: Ensure sustainable consumption and production patterns;
13. Goal 13: Take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy;
14. Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development;
15. Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss;
16. Goal 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;
17. Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development.

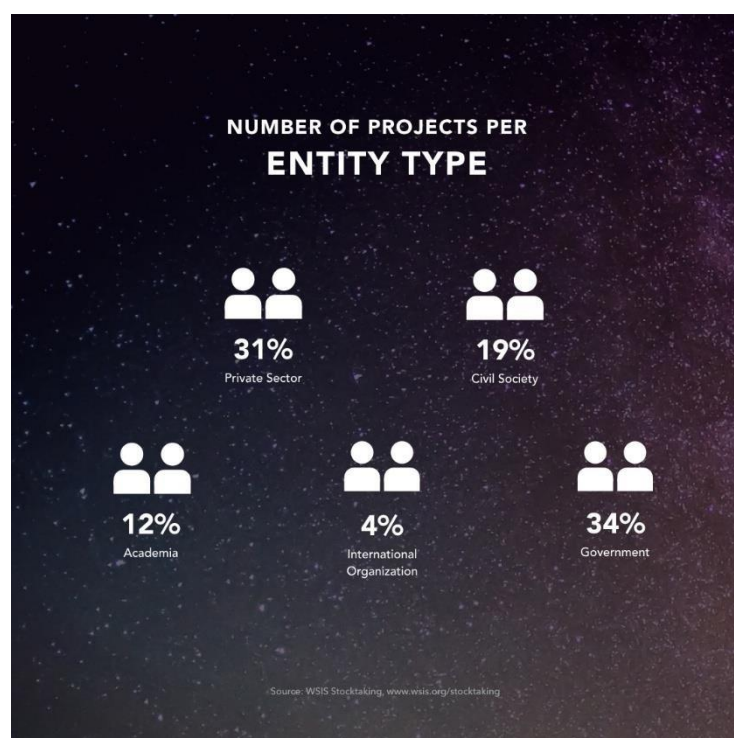
Executive Summary

Stocktaking Report Executive Summary – WSIS 2020

This year, 776 ICT-related projects from around the world were submitted for the Report on the WSIS Stocktaking 2018 by the WSIS Stakeholder community. The eleventh edition of the Report on WSIS Stocktaking set a new record of global multistakeholder engagement in implementation of WSIS action lines for SDGs. The Report will be presented during the WSIS Forum 2020, in Geneva. At the same occasion, an interactive session will be dedicated to the presentation of the results of this year's WSIS Stocktaking and to listening to the voices of the WSIS stakeholders' community on how to improve the process in the future.

The 2020 edition of the Report on the WSIS Stocktaking is the continuation of the series. This eleventh edition reflects around 776 activities relating to ICTs for development, submitted to the WSIS Stocktaking Platform from the 2nd July to 29th November, each one highlighting the efforts deployed by stakeholders involved in the implementation of the SDGs. The Report is based on the multistakeholder approach, including input from stakeholders from all over the world responding to ITU's official call in 2019 for Stocktaking updates and new entries. The inputs from WSIS action line facilitators and co-facilitators also contributed to the present Report.

The WSIS Stocktaking database (www.wsis.org/stocktaking) was introduced in 2010 and currently has more than 12 000 entries and a growing community more than 300 000 stakeholders. It is a unique global tool for collecting information and regular reporting on ICT-related initiatives and projects, carried out by governments, international organizations, the business sector, civil society, academia and other entities, in the context of 11 WSIS action lines. The WSIS Stocktaking process has been maintained by ITU since 2004, as requested by the WSIS Outcomes (Tunis Agenda for the Information Society, paragraph 120).



Since the WSIS Stocktaking process was established, ten editions of global Reports on the WSIS Stocktaking have been published, providing an overall picture of progress and an insight into the latest WSIS-related activities. The twelfth addition of the report will focus on contributions by stakeholders worldwide to WSIS and SDGs. This Report seeks to provide key findings on emerging trends in the development of the information society, and references major activities being implemented in the 18 areas covered by the 11 WSIS action lines and 17 SDGs.

The United Nations Economic and Social Council resolution 2017/21 on “Assessment of the progress made in the implementation of and follow-up to the outcomes of the World Summit on the Information Society” reiterates the importance of sharing best practices at the global level and, while recognizing excellence in the implementation of the projects and initiatives that further the WSIS goals, encourages all stakeholders to submit ICT-related projects and initiatives to the WSIS Stocktaking platform. The same resolution also reiterates the importance of recognizing excellence in the implementation of the projects and initiatives that further the goals of the WSIS process, and encourages all stakeholders to nominate their ICT-related projects for the annual WSIS Prizes contest, as an integral part of the WSIS Stocktaking process.

With the year-round ongoing call for updates and new entries, all stakeholders are invited to continue sharing best practices on the WSIS Stocktaking Platform and emphasize how ICT-related initiatives and projects are enabling SDGs.

All WSIS-related publications, including the Reports on the WSIS Stocktaking, are available to download at the ITU Bookshop.

Actionline: 1.0

WSIS Prizes Contest 2020 Nominee

In **Algeria**, The Algerian government is deploying an extraordinary effort to promote and indirect investments (**Algerian Investment Map**); in the country, in the meantime the growth of the number of demands addressed directly to the central office ministry of to their agencies. Their diversity and complexity needs implementation of information systems that can respond to the investor's needs, requests and for the government aid decision makers. The information systems support the decision of the choice of the nature of investment, favorable region and, best location inside industrial zones, government through the ministry needs a fellow up of the projects, their concretization, the respect of engagement and specifications during and after project realization. The project is relevant to **SDG8, SDG9, SDG12**.



In **Argentina**, development of the platform **Partes y Alertas** that allows improving communication between the Ministry and the state-run educational establishments to ensure a fast and effective response. The main objectives are to automate the process of uploading reports and alerts; centralize information in a single database and carry out a correct follow-up of the reports and alerts throughout. We define "REPORT" as the daily report that records the news that affects the pedagogical issues and/or the normal functioning of the school. These news can become alerts in the near future if not given proper attention. Reports will be classified according to different categories: PMI (Maintenance and Infrastructure Report), PNO (News report) and PMO (Furnishings) Within this system, we define "ALERT" as a warning aimed at activating a series of actions, carried out by the Ministry of Education and Innovation, in situations of potential conflict and / or danger. The project is relevant to **SDG16**.

In **Azerbaijan**, **Azerbaijani Women in the ICT Club (AWIC) - Femmes Digitales (FD)** is a non-profit organization established in 2014, aiming to attract more women interested in ICT. The organization's goal is to bring together interested parties from public & private sectors, academia & non-governmental organizations by providing the opportunity to support for increasing the professional participation of women in the ICT sector, as well as participating in the development of technological & technical products. The FD Club encourages people to step out of their comfort zone, to experiment and learn new things. Our Club aims: to transform the image of girls and women in the ICT sector and corporate and media perceptions of women; to contribute to the competitiveness of the Azerbaijan economy through development of modern and working skills in the ICT sector; to increase

the number of women and girls turning to technological education and to stimulate them for professional development in the sphere of ICT; to support academic research and innovative projects in the field of technology; to develop the technological and the entrepreneurial skills of our members through trainings and projects; to draw attention to the women role in ICT sector on a regional, national and international level; to provide a platform of connections, resources and opportunities; to create a pipeline of women to fill leadership positions in corporate Azerbaijan; to demonstrate that advancing women directly contributes to the prosperity of all; to influence top leaders in all sectors to recognize the purchasing power of women; to encourage girls and young women to choose business and technology careers. The project is relevant to **SDG5, SDG16**.



In **Bangladesh**, **quality education** is the project designed because students are similar because they have a lot energy and need to be through movement concerning quality education, nothing is more important than to make sure that you do not define quality education is board, not only in its way: quality education is board, not only its purpose, but also in terms of what it entails. When we look at quality education, we therefore need to not only look at the aggregated number, we have to disaggregate them and look at what is the situation for girls, for children with special needs, for indigenous groups. The project is relevant to **SDG4**.

WSIS Prizes Contest 2020 Nominee

In **Bangladesh**, according to Honorable prime minister's vision 2021, the public services of Bangladesh will be transformed digitally as e-government applications which will simplify the service delivery process reducing TCV. The ministries and directorates of Bangladesh have been individually working on digitizing their services but all the initiatives have been separate, individualistic and non-compatible till 2017. In 2017, the government realized the requirement for a holistic and coordinated platform for conducting the digitalization activities through a centralized unit. For this purpose, in 2018 in collaboration of Bangladesh government and a2i programme of ICT Division, a specialized unit named Digital Service Accelerator was developed who focused on providing technical and advisory support to government agencies regarding their service digitization and implementation. The first milestone for this unit was to conduct digital service government roadmap (two days workshop) for all ministries, divisions and subordinate organizations from January 2018 to October 2018 where every ministries and their subordinate organizations participated in their existing service analysis and future digital service designing and implementation planning process. As the next step of the Digital Service Roadmap, to accelerate the digital service design and implementation process, a unique methodology named **Digital Service Design Lab (DSDL)** was introduced which is used for the designing

and implementation planning processes of the services of different ministries and other agencies of the government of Bangladesh. Through this workshop, the Digital System's Module & Feature Identification, Through extensive analysis of the existing systems of the organization, the design and implementation of a integrated service delivery platform is finalized. The DSDL of 20 ministries have been conducted and 308 G2C, 208 G2B and 122 G2G services have been designed for digitalization. 07 ministries have completed the procurement phase. The project is relevant to **SDG10, SDG17**.



WSIS Prizes Contest 2020 Nominee

In **Brazil**, **StartOut Brasil** is a non-profit program, sponsored by public and private Brazilian organizations, which supports the immersion of Brazilian startups in some of the world's most promising innovation ecosystems. The initiative provides the entrepreneur a complete experience with training in internationalization; market intelligence; networking with potential customers, investors and partners; and support for softlanding. Carried out by the Ministry of Economy, Ministry of Foreign Affairs (MRE), the Brazilian Trade and Investment Promotion Agency (Apex-Brasil), the Brazilian Service of Support for Micro and Small Enterprises (SEBRAE), and the Brazilian Association of Science Parks and Business Incubators (Anprotec), the program has already been in Buenos Aires, Paris, Berlin, Miami, Lisbon, Santiago and Toronto. The project is relevant to **SDG9**.

In **Brazil**, this joint initiative between Cetic.br/NIC.br, Unesco and the SDG Academy consists of a 10-week massive open online course (MOOC) for addressing ICT as a critical component for achieving the SDGs (**Tech for Good**). Highlighting the relationships between ICT and the SDGs – through access to information, service provision and measurement – the course explores digital divides and inequalities; reviews data needs, sources and institutional arrangements; discusses connections between ICT and Health, Education, Governance, Infrastructure and finance; addresses Artificial Intelligence; and covers emerging issues related to ICT, ie- privacy, ethical issues, data rights, cybersecurity, and ewaste. Lead faculty come from different organizations, sectors and geographic locations, offering a variety of perspectives on the topic. Ultimately, learners are encouraged to think critically about the role of technology for sustainable development and to make informed decisions for their lives and work. In 2018, the course had 1,323 learners from 130 countries aged 25 to 74. Available at the edX platform, all video lectures, readings, assignments are online and free of charge. In its second run, 1,650 people have enrolled.

Currently available in English, Spanish, Portuguese and under translation in Russian, future editions will be made available in all UN official languages. The project is relevant to **SDG1**,

SDG2, SDG3, SDG4, SDG5, SDG6, SDG7, SDG8, SDG9, SDG10, SDG11, SDG12, SDG13, SDG14, SDG15, SDG16, SDG17.

Course Logistics & Requirements
This course is self-paced, which means that you can access all of the content as soon as the course begins on September 22, 2019. You have one year to complete all of the materials.

The course is structured around a series of pre-recorded video chapters and includes comprehension questions, readings, discussion activities, and a final exam. Each of these course components can be completed at a time that is convenient for the learner prior to the deadline, which is the next date of the course. Each video chapter will have a short quiz that directly follows it, followed by a discussion activity at the end of each module.

In addition to the asynchronous components of the course, we will also host special live events with course instructors and diverse action experts throughout the year. Keep an eye out for updates from this course, subscribe to the SDG Academy newsletter, and follow us on social media to learn when these special live events will take place.

The estimated time commitment to complete all course components is 7-9 hours per week, though this depends heavily on the learner and teacher algorithms for taking the course.

Structure
Course components include:

- Pre-recorded lectures (3-7 videos per week)
- Readings
- Weekly quizzes
- Discussion activities
- A final exam
- Pre and post-course surveys

Grading & Certificates
When this course is used for credit-granting, we encourage learners to track with their own institutions to explore the options of granting credit for online coursework.

This course contains weekly video chapter questions, reading quizzes, a final exam, and pre- and post-course surveys.

For "Verified Learners," only the discussion activities (20%) and the final exam (20%) will count toward your grade.

In Canada, A NEW REALITY: TECH SUMMIT FOR GIRLS is a one day summit to spark innovative creativity in the minds of young women and girls from underrepresented communities in NYC & NJ to gain technical skills to prototype design solutions for the 17 global goals. A NEW REALITY, inspires girls of color and girls from low income communities to interact with the latest technology to consider careers in the tech and STEM fields. At the summit girls create designs to solve issues facing their community. Through the ForUsGirls Foundation, we run coding programs in Canada for marginalised girls and now coding programs in New York City with partners like SAP Next-Gen. Girls leave our coding program and summit with gained coding skills, leadership skills and design thinking skills and the ability to empathize and prototype. We are training the next generation of tech innovators and leaders. A NEW REALITY TECH SUMMIT First edition: August 18th, NYC Second edition: May 24th, NYC Total Girls Impacted 300. The ForUsGirls Foundation C for Coding program Spring 2018 Fall 2018 Spring 2018 Girls impacted 100. All girls gained new coding skills htmls/css/javascript and design thinking skills. The project is relevant to **SDG17**.

In Cuba, the technology platform for the community of Plaza de Marte in Santiago de Cuba aims to contribute to the dissemination and use of information technologies, as well as to allow access to multisectoral information to the community that resides or transits through the community area of Plaza de Marte in the city of Santiago de Cuba. This project was born as part of the actions conceived for the 500th anniversary of the City of Santiago de Cuba in 2015. It consists of the construction of a platform of computer services that can be accessed through a free WiFi that provides services to the community adjacent to the emblematic Plaza de Marte, located in the nerve center of the city and becomes a cultural and recreational focus . The project has had a great impact on the community by providing a platform in the form of a digital ecosystem oriented to the citizen so that it can access for free content of local interest, technological knowledge, encourages the use of technologies, as well as to educational, scientific, sports and healthy and cultural entertainment content. It also promotes knowledge and care of the environment. The project is relevant to **SDG4**.



In **Dominican Rep., "República Digital"** is a program that drives digital transformation to improve the quality of life of citizens through the use of the new technologies developing digital competences in the population, promoting the digital economy, extending the broadband coverage and providing online public services. All components of the strategy include the cross-axis of social inclusion and cyber security. It is a program that includes more than 20 projects distributed in 4 axes: education, access, digital economy and digital government. Between the scheduled goals to 2020 are the delivery of computers to a million students and 80,000 teachers of the public education system, digital enabling of 2,150 public schools, granting of scholarships in technology to 20,000 university students and digital literacy and ICT capacitation of more than 2 million people belonging to vulnerable groups, installation of 1,000 public hotspots for free internet access, enabling a trunk network at national level of optical fiber to expand the broadband coverage and reduce the cost of the internet access, digital literacy of 100,000 small and medium businesses, development of the national software industry, online provision of 1000 public services and creation of the national cyber security center. In these three years, significant impacts have been recorded in different orders. The hundreds of online services and Wi-Fi points that have been launched, have brought the benefits to the inhabitants of every corner of the country. The simplification of procedures has made Public Administration more efficient and transparent, while cybersecurity projects make cyberspace a safer environment for citizens and organizations. Thanks to the results obtained, many indicators of international organizations begin to reflect significant advances, such as the impressive increase in internet penetration, the percentage of online services and the country's own competitiveness. The project is relevant to **SDG1, SDG4, SDG5, SDG8, SDG9, SDG10, SDG16, SDG17**.

WSIS Prizes Contest 2020 Nominee

In **Egypt**, the project **Qodwa Technology for Women Empowerment** harnesses ICTs to foster the socio-economic development of women and girls in areas of education, health and employability in order to enabling them to participate in the decision-making process and play effective role in developing their communities. The project Pillars are: (1)

Employability: Increasing self-employment and income generation opportunities by inspiring women and girls to lead entrepreneurial promising life with high impacts towards improving their communities. (2) Health: Enhancing women and girls' health by bringing professional health services at their doorstep using advanced technologies such as the "Telemedicine solution" and "the Women Mobile Health Unit". (3) Education and Knowledge: as education is the passport to any real development the project enhanced the educational services through: 1) The "Illiteracy Eradication solution" a simple, self-based,

interactive computer tutorial includes topics in fields of health, education, political rights, family care, and the environment. 2) The “Tabluter” is a customized ergonomic embedded computer on a tableya that runs for four independent users. it reaches out girls and women in their own homes and teach them how to read and write in Arabic. 3) The mobile IT Club Supporting the community developmental efforts through constructing buses which are constructed to provide advocacy campaigns and specialized training programs. 4) Women and child portal that Supports the creation of knowledge society through exchanging their information, experiences, and knowledge. (4) Networking & Integration: Establishing vital network of all stakeholders and participants to integrate the above interventions. The project main results are institutional development of 400 NGOs, knowledge management and educational services to 1.5 M women and girls, health services to 1260 beneficiaries, MSMEs, Entrepreneurial, and vocational capacities to around 75000. These direct results are indirectly transferred to 1200 NGOs and 3 Million beneficiaries nationwide. The project is relevant to **SDG1, SDG3, SDG4, SDG5, SDG8, SDG17**.



WSIS Prizes Contest 2020 Nominee

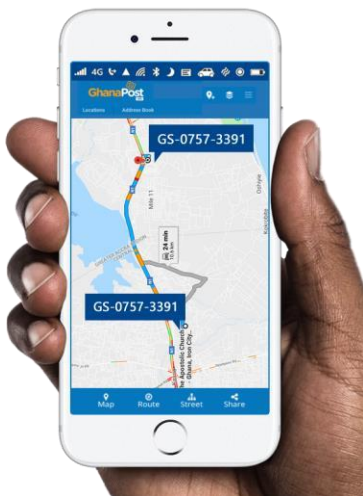
In **Eswatini**, in an effort to ensure that a functional health system exist in the Kingdom of Eswatini, the government through the Ministry of Health has developed a centralised robust **Client Management Information System (CMIS)**. The purpose of the CMIS is for the systematic collection of clinical service data, storage, processing, analysis and actionoriented reporting, dissemination and use of quality information for improved health care provision, patient management and decision making. To realise the benefits of the system, the basic requirement is that it needs to be accessible to all of the country’s health facilities and centers. To assist the government’s efforts in proving better health care services, the Eswatini Communications Commission, through the Universal Service Obligation Fund, initiated a project to connect fourty five (45) rural health facilities and centers around the country to the centralised platform. The wireless broadband connectivity project for health centers, provides connection speeds of between 20 and 50 mbps to the centralised CMIS platform for all the health centers and is deployed using the latest wireless technologies. In addition, the project also covers all adjacent public service centers to the health facilities.

The project is relevant to **SDG1, SDG2, SDG3**.



WSIS Prizes Contest 2020 Nominee

In **Ghana**, the objective of **GhanaPostGPS** is to implement novelty digital address system critical for effective tracking and identification of all landed properties and locations in Ghana to facilitate delivery of door-to-door and emergency services for Ghanaian residents. The system has made some achievements, as GhanaPostGPS address is mandatory requirement for acquisition of national ID card and accessing other government services, such as company registration, passports, drivers' license, social security cards etc. Today, banks require GhanaPostGPS address before opening account or accessing loan, making it possible for petty traders or small business owners to access bank services. Before GhanaPostGPS, it was impossible due to poor property addressing regime. Increasingly, a number of applications for API sharing has been approved for organizations for system integration for verifications, running online taxi and courier services, thereby creating jobs. Through the Nation Builders Corp, Government has recruited over 25000 graduates deployed across country to help tag all landed properties with GhanaPostGPS addresses, which has also been beneficial in door-to-door deliveries, pickup services, tracking locations etc. GhanaPostGPS has online panic buttons allowing for easy communication between users and Police, Fire and Ambulance incase of imminent danger. It gives just in time location information to providers of the services. The project is relevant to **SDG3, SDG8, SDG9, SDG11, SDG16**.



WSIS Prizes Contest 2020 Nominee

In **India**, The **ARISE programme**, has already transformed the lives of 500 Girls, who have achieved sustainable employment as technicians after getting short-term skill training on various electronic and home appliance products. The programme is being organised in partnership with one of the world famous electronic gadget manufacturing company, SAMSUNG. The Technical Education Training & Skill Development Department signed a MoU with M/S Samsung India Electronics Private Ltd., in the year 2014 and a subsequent MoU in 2018, with the objective of employment generation for Girls through skill training and also to bridge the digital gender divide through a unified strategy of “include, up-skill & innovate”. Keeping a note of the study in G20 countries in 2016 instituted by OECD wherein it was found that the gap in labour market participation rates between men & women aged 15-64 was around 26%, the Government of West Bengal put special emphasis on designing of an inclusive skill development strategy. With dedicated Industrial Training Institutes with such facilities have been established for women in the State, helps in a more focused approach to reach out to the most deprived segments of the society. At Technical Education & Skill Development Department, we work for thousands of underprivileged Girls from poor households, in West Bengal, who do not have quality formal education to develop their careers. They become employable and change their future on acquiring skill training delivered through the programmes in our Industrial Training Institutes (ITI). The project is relevant to **SDG1, SDG4, SDG5, SDG9, SDG16**.



In **Indonesia**, the **Multistakeholder Election Literacy and Monitoring in Digital Era** project based on local condition: the Indonesian General Election 2019 was one of the biggest political elections in Indonesia’s history, partly because it also covered the election of the executives and the legislative of the Indonesian government. The rapid development of technology had also affected the election, where there were so many practices of ICT usage during the election period. Drawing upon this matter, as a research center that focuses on the development of digital society, we wanted to create a project that addresses digital literacy that is related to election issues. However, we also realize that this project will target a wide audience of Indonesian society, be it from the aspect of their age or from the aspect of their work background. Therefore, we established this project by having collaboration with various multistakeholder, ranging from civil society organizations, corporations, and government institutions. This project has produced several outputs that are aligned with our goals to approach various actors of the election that covered young voters and political actors. This project consists of several core activities, such as (1) election monitoring through social research and press conferences; (2) election literacy through the creation of focus group discussion (FGD) series with KPU, Facebook Indonesia and PERLUDEM; (3) election literacy through the creation of nation-wide essay competition

that raised the issue of election and it was executed in collaboration with BAWASLU. The project is relevant to **SDG4**.



WSIS Prizes Contest 2020 Nominee

In **Indonesia**, the government is currently present not only as a regulator but also as a facilitator in a **IoT Makers Creation**, a series of collaboration events in the form of hands on workshops, competition, exhibition, business matching, and incubation. After enabling the ecosystem with necessary regulation, government takes the role as voorijder to boost ecosystem. Indonesia is now in early state of the development of IoT thus government action is properly needed in order to make IoT reaches its economic of scale. By this project, we expect that we can have many IoT solutions created by makers and community. The solutions will have local characters as well as specific to overcome many problems in Indonesia. Thus, with many solutions are available, the supply is enough to reach economic of scale as well as with local solutions, the demand also reaches economic of scale as the user can feel significant impact from the implementation of IoT. This series of events will not succeed without vigorous collaboration between Ministry of Communication and Informatics, Association of Internet of Things Indonesia, Ministry of Industry, telecommunication industries, and so on. From the best of our knowledge, this project is one of the biggest collaboration projects in ICT sector with the involvement of every stakeholder is high. Throughout 2019, there have been hands on workshops with around 250 teams of IoT makers & developers in ten cities in Indonesia. 100 IoT solutions have been collected to join the competition. We chose the top 10 IoT solutions with local character and have specificity in Indonesia to be showed in exhibition. The exhibition gave broad exposure to the makers as well as gave solid evidence to the society that we already have solutions which are applicable to solve their problem. After that, we create business matching event to give the selected makers opportunities to present their project to related State Owned Enterprises. We also incubate the proper solutions in various incubator, e.g. IoT Labs. The project is relevant to **SDG9**.



WSIS Prizes Contest 2020 Nominee

In **Italy**, **STEMintheCity** is a great initiative being promoted by the City of Milan in order to develop a “STEM-oriented” culture free from gender barriers and stereotypes to help guide young women to studies in fields of science and technology, to promote careers for women in these fields, and to further digital education at all levels. The project started in 2017 and the second edition was organized in 2018. On 2018 STEMintheCity further extended its reach with the creation of STEM+A. The letter “A” here stands for “art” and has been added to the STEM acronym to indicate both how digital is an enabling factor in all education and career development and how the creative, humanistic component is essential in generating new ideas and innovative content. Target. STEMintheCity offered activities for all ages—from elementary school to on through middle school, high school, university and beyond. Creating an alliance with the adults responsible for the growth and education of our youth is important, so STEMintheCity promoted a range of initiatives intended for parents and teachers. Main activities: training days about coding and digital skills for 50 primary and secondary schools; hackathon for young girls and university students; job speed date, session of role modeling; digital empowerment; conference about gender stereotypes for teachers, parents and companies; events about the value of women in STEM careers and female leadership; the presence of women in politics; International opening event with prestigious female role model from science, military defense, institutions, leading companies in digital transformation. The project is relevant to **SDG4, SDG8**.



In **Jamaica**, **SheLeadsIT** is a Caribbean NGO led by co-founders Bridget Lewis and Nicole Pitter Patterson, operating in Switzerland, Canada and the Caribbean focussed on advancing development opportunities for economic and social empowerment and disrupting existing social norms and values that are inherently gender biased, to bring about transformational change for women. SheLeadsIT brings over 20 years of innovative and technical expertise, in the areas of training and skills development, business growth and development through business planning, access to funding the identification of lucrative markets for products and services. In the Caribbean, we are seeing a growing number of companies investing in the ICT sector. Businesses such as the Microsoft Innovation Centre provide technical services empowering people to become entrepreneurs, while a number of BPO companies, provide jobs to support the growing global tech markets. SheLeadsIT work focused on training and upskilling girls and young women with ICT skills responds to this opportunity for carving out value added jobs for Caribbean women in the ICT sector. The Hackathon target group is for girls and young women 13-21 in high school, college and university. The Hackathon is

organized with technical support teams, and is endorsed by governments across the region, tertiary institutions, regional donors, corporate sponsors as well as global tech leaders Google, Microsoft and Facebook to date. The project is relevant to **SDG5**.



In **Malaysia**, this project is to enhance **Women in ICT Workforce Readiness and Development Programme** in Malaysia. Over the next two decades, technological advances including automation and robotics, will significantly change jobs and enterprises in Malaysia. We estimate that 56% of employment face a risk of automation in Malaysia. Female are employed predominantly in jobs requiring low ICT skills, which are clearly at risk of automation. Women are 20% more likely than men to losing their job as a consequence of automation. To address these issues, and considering the national economic and social development priorities, we have identified the ICT sectors as highgrowth in Malaysia, presenting significant projected ICT-related skills gaps and opportunities for growth for women over the next decades. Female employment in these sectors is currently very low. To change this, the programme aims to improve women acquisition and adoption of critical soft and technical ICT-related skills, contribute to reduce the skills mismatches that are affecting workers' productivity and enterprises' competitiveness in this rapidly changing context. Objectives Successfully transition underprivileged female graduates into ICT-related employment with sustainable career prospects, and mid-skilled women in ICT fields into leadership positions. Results and Impact: Productivity is a key source of improved living standards for women and also a major contributor to economic growth. Therefore, to improve productivity and prevent women from losing their jobs as a consequence of automation, the programme seeks to strengthen linkages between private sectors, social partner institutions and vocational training centres to ensure greater opportunity through higher entry, retention and advancement of women workers in ICT-related positions. The project is relevant to **SDG4, SDG5**.

WSIS Prizes Contest 2020 Nominee

In **Malaysia**, **Malaysia Digital Economy Corporation (MDEC)** has introduced the eRezeki programme, a programme that was designed based on the Crowdsourcing / Sharing Economy models in 2015. The programme facilitates matching of individual participants with jobs or tasks offered by various marketplace platforms via comprehensive profiling, training and on-boarding process. The main target group of this programme are

individuals from lower-income households, unemployed and underemployed, pensioners, veterans as well as individuals with disabilities. The eRezeki programme has opened up wider opportunities for Malaysian to perform work in a flexible environment, leveraging on their idle time, underutilized physical assets, with their certain knowledge and skills. To date, more than 450,000 Malaysian citizens have registered in the programme and more than 100,000 has benefitted by earning additional income on digital platforms. The project is relevant to **SDG1, SDG4, SDG8, SDG9, SDG10, SDG11, SDG17**.



WSIS Prizes Contest 2020 Nominee

In **Malaysia**, Society has embraced the changing way of life affected by digital transformation, thus changed the way governments response to the need of digital economy, social inclusion and environmental preservation. Hence, governments explore the importance value of redesign public services ecosystem and value of information and data with vengeance. The strategic approach that the Malaysian government takes is to build enterprise-wide architecture through **Malaysian Government Enterprise Architecture (MyGovEA)** encompassing the whole-of-government, including data-driven public sector, digital services application and technology. The positive impact is on promoting evidenced policy-making, data-backed service design that embedding good governance values of integrity, openness and fairness in the policy cycle. MyGovEA approach in managing strategic and operational uncertainty, and respond to complex scenarios in transforming digital services is replicable in all services such as healthcare, education, welfare, eCommerce, international digital trade, digital quality assurance, security and transparency of digital government, open data and global partnership. To encourage the digital end-to-end services in the digital ecosystem, all players such as EA Architects, government agencies, civil society, academia or researcher and related government are consulted during the service redesign process as a sectoral champion, service provider or service consumer. Best practice of MyGovEA is supported by IASA. The project is relevant to **SDG16, SDG17**.

In **Malaysia**, launched in February 2016, the capacity building programme is tailored to build an eco-system or platform (**Malaysia ICT Volunteer**) that continuously interacts and empowers Malaysians on becoming effective digital citizens, promote sustainable digital literacy and offers continuous nurturing to support the digital initiatives in Malaysia. This programme is aimed to develop competent digital citizens who are capable of developing and producing ICT applications and services, create contents which are appropriate for communities and user groups that entail them to have control over all aspect of their life. MIV Programme's critical roles are in the following areas:

- Improving the “Digital Literacy”
- Developing “Digital Champions”
- Promoting “Digital Inclusion”
- Encouraging ICT volunteerism amongst the local communities
- Encouraging the adoption of ICT by the local communities to improve their quality of life
- Encouraging digital and media literate citizens to participate in spurring demand for communications and multimedia services MIV with Community programme organises a group of volunteers as a pool of resources to help various communities in identified localities in works that focuses on the utilisation of ICT tools and ICT development in the communities.

The project is relevant to **SDG1, SDG4, SDG16**.



WSIS Prizes Contest 2020 Nominee

In **Malaysia**, Malaysia Digital Economy Corporation (MDEC) is an agency under Ministry of Communications and Multimedia Malaysia. Since its establishment in 1996, MDEC has driven significant digital transformation and adoption across the public and private sectors in Malaysia. As the world moves rapidly into the Fourth Industrial Revolution (IR4.0), MDEC is ready and fully focused on leading Malaysia’s Digital Economy forward by accelerating: 1. Formulation of policies and coordination of agencies to enable success; 2. Development of future proof workforce to grow the Digital Economy ecosystem; 3. Creation of global champions to increase contribution from the Digital Economy to GDP. In future proofing our youth for the jobs of the future, MDEC, supported by Ministry of Education Malaysia (MoE) launched **#mydigitalmaker** movement in August 2016 with the aim to create a nation of digital innovators amongst school students via Public-Private-Academia partnership. 2 key strategies: 1. Formal Education: Supporting MoE to integrate Computational Thinking (CT) and Computer Science (CS) into national school curriculum; 2. Informal Education: Partnering with industry and academia to nurture and groom young Malaysians to become future digital innovators: Programs - Formal Education: 1. Integrating CT and CS in National School Curriculum: Teaching modules developed by MDEC and MoE to support the implementation of new KSSR & KSSM beginning with Year 1, Form 1, and Form 4 in 2017 ; 2. Continuous Professional Development (CPD) Centers: CPD centres are a group of public universities certified by MDEC to train educators in integrating CT and CS in teaching & learning; 3. Digital Competency Score (DCS): A gamified assessment tool to gauge the digital competency level of the youth towards preparing them for the future of workforce. The project is relevant to **SDG5, SDG16**.



In **Mexico**, The **Federal Institute of Telecommunications (IFT)** of Mexico is an autonomous entity, bestowed with its own legal personality and estate whose purpose is the efficient development of broadcasting and telecommunications. The IFT is responsible for the regulation, promotion and supervision of the use, development and exploitation of networks and the electromagnetic spectrum, and for the access to active and passive infrastructure. It also regulates broadcasting and telecommunication services, and is the legal agency in charge of antitrust enforcement within the telecommunications and broadcasting sectors. IFT has recognized that telecommunications and broadcasting services are important for the social, economic, political and cultural development of the country, due to their contribution to citizen participation, democratic consolidation and the promotion of knowledge and culture. These purposes of general interest, established in the Constitution, must include all possible visions, which leads us to recognize that the Institute must be an example in promoting affirmative action so that women have a significant place in the decision-making processes, deliberation and, in general, in the substantive institutional and sector activities. The project is relevant to **SDG4, SDG5, SDG9, SDG16, SDG17**.



In **Mexico**, The Women's Institute in Guadalupe, has 12 years working for the promotion of women's rights, and the objective is Guarantee every woman who lives in Guadalupe, the help she needs in a professional, social and personal growth, by having access to their rights, and help them achieve a life, free of violence. We make campaigns to fight VAW, (Violence against women) and to promote different courses and workshops for self employment, our target audience of our services, are women from 18 and up, and lately we are focusing our campaigns in Girls, to empower their lives through a professional growth and promote they study any STEM (science technology, engineering and mathematics) career. With our programs, like **"Mujer Emprendedora"**, the Women Institute, offers more

than 20 workshops in non/traditional and traditional themes in a very low cost. In each of every workshop, we provide the materials they need in every class, so they can elaborate their products. We also have entrepreneurship, advertising and sale conferences so the women can learn about different techniques to improve their economic income, with this services we motivate them to reach economic independence. We offer them places so they can sell their products in local markets, free of any cost with our help, they have a especial place to practice their skills of sales. And We motivate them to self-employment. The project is relevant to **SDG5, SDG16**.



In **Nigeria**, WELTI is a non-profit organization whose objective is to empower young women aged 14-30 to become competent leaders who will leverage technology for sustainable economic development. Through WELTI's programs which are centered on four pillars of Technology, Education, Leadership and Health, these young women are equipped to become CORE (Competent-Organizationally skilled-Responsible and Ethical). WELTI's activities are carried out through programs like Open data day held in March where the young women are taught how to work open and access data that can be used to improve their lives with focus on WELTI's pillars. International women's day organized in March also sees these young women learning from experts and mentors on how to apply critical thinking in what they do to achieve their aims/purpose in life and seminars being delivered on sexual abuse and how the young women can shun all forms of abuse be it gender based or otherwise. Non-profit organizations (NPO) conference in September to foster partnerships and creative leadership, International day of the girl child held in October to hinge on the young women becoming leaders and owning their craft regardless of the society being perceived as being male dominated. **Business meets Technology (BMT)** held in November brings together a cohort of young female businesses to leverage technology for their businesses to thrive. Several organizations are present and offer these businesses solutions they can use and apply to enable these businesses scale. The project is relevant to **SDG5, SDG16**.

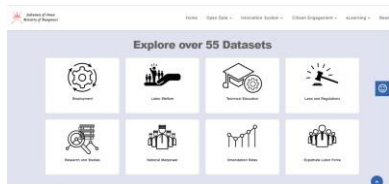


In **Nigeria**, **Fempower Initiative Africa** is a Pan African non-profit that works to put an end to gender inequality in high-tech industries and startups. We do that by educating and empowering women who are passionate about technology. As a result, we offer everything

from coding courses to bootcamps to hackathons and startup competitions no matter age or profession. It is our mission to support women with the access and community they need to succeed in tech. FIA was founded in 2017 and headquartered in Lagos Nigeria. The Fempower initiative Africa community is 5 chapters strong with an impact of more than 5000 members in 5 countries in Africa. As a result, events and programming in each chapter vary to fit the unique needs of each community. Target audience: Women (18-35 years old) We bring together the power of community and technology to network, share wisdom, make friends, and start businesses. Empowerment: We inspire women to innovate and use their voices to build the futures they want to see. Education: We facilitate learning and skillbuilding through programming for both beginner and advanced professionals. CSR and Internship opportunities: To the companies and startups, we provide a low cost high impact way to achieve their social impact goals, access to potential pool of female technical and non-technical talent for internships and recruitment. Access to Investments potentials: To the impact investors and venture capitalists, we provide them access to potential early stage women owned startup investment opportunities, access to pool of female founder talent for mentoring and investment. The project is relevant to **SDG5, SDG16**.



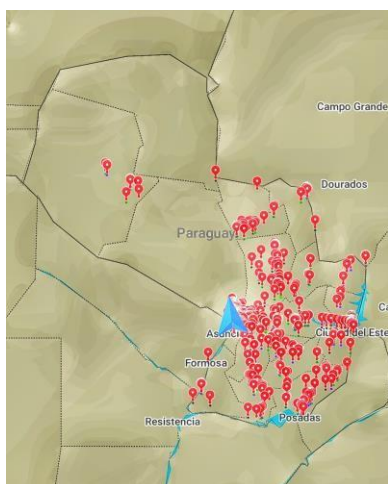
In **Oman**, The **Ministry of Manpower (MOMP) Open Data Innovation** portal, showcasing the Innovation Ecosystem, was launched in March 2017, within the context of Oman vision 2040. The goal was to transform the Sultanate of Oman into a knowledge and innovationbased sustainable economy by providing free and Open government data for people to create innovative solutions, and supporting their development into maturity. The Open Data Innovation is composed of four components: (1) the Open Data project, (2) the Innovation System Awards, (3) the Citizen Engagement window, and (4) E-Learning & Support The MOMP open data innovation purpose is to provide access to the data, which can be viewed and downloaded easily to make use of it in decision-making, improving productivity, facilitating services to the labor market and reducing governmental expense through the innovation based knowledge economy. The project is relevant to **SDG8, SDG9, SDG10, SDG16**.



WSIS Prizes Contest 2020 Nominee

In **Paraguay**, the improvement of the learning conditions through the incorporation of information and communication technologies (ICT) in educational establishments and educational management units, implementing data communication services within the

program promoted by the MEC (Ministry of Ministry Education and Worship) with the Data and Internet service provided by COPACO SA (Paraguayan Communications Company) through fiber optics in 962 Educational Institutions located throughout the Paraguayan territory (**Connected Schools in Paraguay**). Paraguay is a country located in South America with an area of 406,752 square kilometers, with its main river called the Paraguay River; which divides the country into two regions: to the west the Western or Chaco Region and to the east the Eastern region. Its geopolitical division is through 17 areas called Departments. The School Connectivity Project, with National coverage, in both regions of the country, the last mile link has been deployed of approximately 1,200 kilometers of fiber optic, with a range of 962 Educational Establishments representing 1,707 Educational Institutions (An Educational Institution is a Primary Education Center (for children from 6 to 12 years old) or Secondary (for young people from 13 to 18 years old). This venture is a project of National interest because it contributes to the training of Paraguayan students and teachers and gives them the opportunity to access ICTs in the farthest parts of Paraguay contributing to the reduction of the digital divide for many children, young people and teachers representing a high percentage of the Paraguayan population, as well as the social and technological incursion in the field of ICT. The project is relevant to **SDG4, SDG5, SDG17**.



In **Qatar**, Ministry of Transport and Communications has implemented the **QDGTP Program** which aims to build the information and communication technology (ICT) capability for ICT professionals in government in order to achieve improved service provision through efficiency, in line with the Qatar Digital Government 2020 Strategy. QDGTP objectives: • Support digital transformation of Government through building capability of ICT professionals • Create a new generation of e-Government ICT professionals across the state of Qatar that have high level of technical competencies in all matters relating to e-Government • Train at least 1,000 ICT professionals in the government sector every year • Create strategic partnerships with Information Technology providers QDGTP offer programs that aims to boost the professional capacity of government IT employees with specialized and accredited training. The QDG Training Program achieves annual targets every year, as since 2016 until Q3 of 2019 QDGTP provided training for more than

4,500 participants through more than 362 training. The project is relevant to **SDG4, SDG8, SDG17**.



In **Qatar**, **Qatar e-Government 2020** was launched in May 2014 offering a blueprint for moving forward. The strategy has three main objectives. The first is to better serve individuals and businesses by bringing 100 percent of government services online and ensuring users can complete e-services end-to-end online. The second is to create efficiency in government administration through automation of functions, state of the art applications, and a common ICT infrastructure that saves money, increases security, and enhances the user experience. And the third is to develop a more open government with enhanced participation of citizens and residents in their government and to offer greater access to data that will help spur innovation and help diversify our economy. Members of the public are able to access e-Government services that are simple, secure, and available anytime, anywhere. Businesses are finding it easier, simpler, and faster to register and operate a business. Government entities are providing better services to people and businesses, are more efficient, and are achieving better overall outcomes for the nation. In light of above, TASMU (SMART Qatar) program was launched in 2017 to address key national challenges across five sectors: Transportation, Logistics, Environment, Health care and Sports. The project is relevant to **SDG5, SDG16, SDG17**.



In **Saudi Arabia**, **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. The project is relevant to **SDG4, SDG5, SDG8**.



المملكة العربية السعودية
Ministry of Education, Kingdom of Saudi Arabia



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Induction day Saudi Enablement

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meet your great friends

Program Agenda:

Subject	Speaker	Timeframe
Registration		10 min
Introduction	Huda: research & planning specialist	10 Min
Career path	Maher: deputy program manager	30 min
Break		15 min
HC Role	Rabab: Human capital manager	35 min
Q&A	Team	10 min
Contract & Documents	Ahmed: Human capital coordinator	10 min

Sunday 13th Oct
Start at 11:00 am
 Alkaram city center 114363777
 NIG Building 5th floor

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WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, the **National Antimicrobial Resistance Surveillance Platform** was established. Objectives: 1- Build a national database to monitor infectious diseases in health facilities in Saudi Arabia by 2020. 2- Generate relevant, usable information in a timely manner. 3- Development of infectious disease diagnosis research. Results achieved: 1- Provide direct indicators and statistics of infectious diseases for data analysis, and reporting to decision-makers. 2- Provide electronic reports and share them with the World Health Organization (WHO). Impact generated: 1- Assist in monitoring the impact of efforts and interventions, to contain AMR. 2- Help in controlling infectious disease and develop advanced techniques for the production of therapeutic vaccines. The project is relevant to **SDG3**.

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WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, **Etimad** is the approved e-platform for the government financial services provided by the Ministry of Finance to various government entities and the private sector, in order to enable digital transformation, transparency and efficiency. The e-platform has 6 main services which are: Budget management, Procurement and bidding management, Contract and awarding management, payment management, employees' financial rights management and revenue management. The project is relevant to **SDG8**.



In **Saudi Arabia**, The **Universal Service Fund** program was launched in 2010 and completed in 2019 to provide voice and broadband internet services to all peripheral localities of outreach of telecommunication services. The plan achieved significant results in empowering rural communities impacted by the program: - Reached 4.8 million individuals (~18% of KSA population at the beginning of the program); - Connected 790K Households by US and UA services in 21K localities; - Unlocked significant improvement also through: 1) Social inclusion (e.g. access to information and social media), 2) Education (e.g. access to distance learning and online content), 3) Economic conditions (e.g. provision of critical timely information to farmers and others), 4) Financial services (e.g. access to digital payment facilities) The program targeted localities with a population of less than 5,000 that are provided with voice and broadband services through wireless communications, and specifically: - Localities with a population between 100 & 5,000 have been provided with Universal Service (voice and data to every household); - Localities with a population below 100 have been provided with (voice and data within a range of 10 km from each community) In all, an unprecedented improvement to reduce the digital and social divide of the country. The project is relevant to **SDG10**.



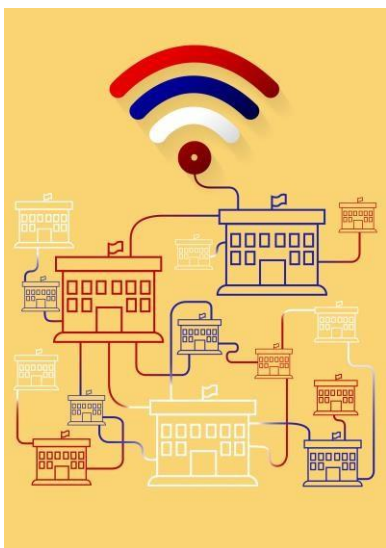
Saudi Arabia is undertaking the largest and most ambitious economic reform and transformation program in its history, which is Vision2030. Digitization is key enablers of these wide-ranging reforms where we are building tomorrow's digital foundation for connected and Innovative Saudi. The digital economy is no longer simply an enabler for development. It has transitioned into a primary driver of productivity, inclusive socioeconomic growth, and equalization of opportunity. Providing opportunities for all, and particularly women, sits at the heart of our plan for digitizing the Kingdom in line with our

plans to implement Vision 2030. To close the gender divide, we have launched an extensive program for **Women ICT inclusion**, which includes 5 main streams: 1. Digital Skills for Girls. MCIT has launched extensive training program to enhance the digital skills of the female workforce to align with market needs and future technology trends and to prepare new female graduates for ICT market. More than 4000 girls trained in emerging tech such as; AI, blockchain, Data science, IoT, and could to meet the changing demands of the workplace. In addition, more than 500K girls were trained in coding through country-wise initiative (Saudi Code). 2. Raising Women participation in ICT sector. We are working very closely with Ministry of labor and we have put specialized program to improve women participation in ICT sector. This has included needed policies, regulations, incentives as well as training programs. Through creative business modules to employee women we've seen a growth of the women percentage in the ICT sector from 11% (25k by Jan 2017) to 13.2%, (36K by end of Q1 2019). The project is relevant to **SDG4, SDG5, SDG8, SDG9, SDG16**.



WSIS Prizes Contest 2020 Nominee

In **Serbia, Connected Schools** is a project aimed at developing ICT infrastructure for educational institutions, by providing fast, stable and secure Internet access through the Academic Network of the Republic of Serbia (AMRES) to all users within the institutions. Hence, the project is aimed at connecting all elementary and secondary schools in the Republic of Serbia, i.e. providing wireless local area network for over 4000 base schools and detached school units, thus encompassing approximately 850,000 students of elementary and secondary schools in the Republic of Serbia. Currently approximately 1650 base schools are connected to Academic Network of the Republic of Serbia (AMRES) and by the end of 2020, all schools, including more than 2000 rural detached school units, will be connected to the Academic Network of the Republic of Serbia (AMRES). When it comes to the provision of wireless local area network and thus providing internet connection to each classroom in school, to date, the network has been built in approximately 400 schools, i.e. for more than 250,000 students. The plan is for the wireless local area network infrastructure to be built in an additional 500 schools by 1 September 2020, i.e. for more than 220,000 additional students, and by the end of 2021 wireless local area network will be provided in all schools in the Republic of Serbia, both in base and detached school units. The project is relevant to **SDG4, SDG8, SDG10**.



WSIS Prizes Contest 2020 Nominee

In **Singapore**, The **Digital Clinic** is a community initiative, led by corporate volunteers known as SG:D Friends, who contribute their time to give one-on-one assistance to anyone who has queries on how to use mobile devices. As Singapore transforms digitally, there is an urgent need to ensure that everyone is digitally ready and that no one is left behind. Although the percentage of Internet Users in Singapore is generally high at 87% , the percentage for seniors is significantly lower and one in two seniors 60 years old and above are not Internet Users . The key reason cited for not using the Internet is the lack of knowledge and skills. To encourage usage of technology, there is a need for greater support and customised learning for seniors who are digital non-natives. The Digital Clinic supports one of the strategies in the Digital Readiness Blueprint, focusing on providing one-on-one assistance to make it easy for Singaporeans to adopt technology so that non-digital natives can become more confident and comfortable in using technology to participate in digital activities. In collaboration with partners, IMDA identified libraries and community clubs to organise weekly Digital Clinics in the heartlands where there is a higher population of seniors. Private and public organisations are invited to volunteer for these Digital Clinics, which pops-up at each location for 3 to 8 hours, giving seniors easy access to nearby dedicated one-on-one concierge-type assistance on the use of smartphones. Some of the common questions asked at Digital Clinics include personalising phone settings, connecting to the internet, storage, online banking and more. Since its launch in Nov 2017 the number of participating organisations has grown from 8 to 37 with over 4,000 volunteers to benefit 10,000 seniors island-wide (<https://youtu.be/2p2-mMrdo6s>). The project is relevant to **SDG3, SDG4, SDG16**.



WSIS Prizes Contest 2020 Nominee

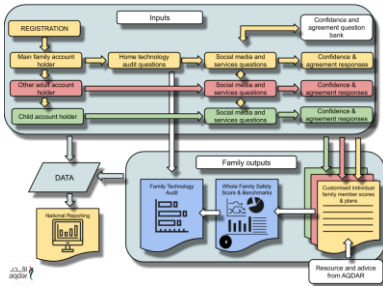
In **Singapore**, SMEs across various stages of the digital journey (**SMEs Go Digital**) are supported by: - Sector-specific Industry Digital Plans (IDPs) provide SMEs with a step-by-step guide on the digital solutions and training to adopt at different stages of their growth. IDPs for 10 ITM Sectors have been rolled out and more IDPs will be launched in due course. - Pre-approved solutions have been assessed to be market-proven, cost-effective and supported by reliable vendors. SMEs can go to Tech Depot (www.smeportal.sg) to browse the solutions and apply for the Productivity Solutions Grant through the Business Grants

Portal (www.businessgrants.gov.sg). - The Start Digital initiative was launched in January 2019 to help newly incorporated SMEs and those that have not adopted any digital solutions before, to get started. SMEs can take up any two foundational digital solutions: Accounting, Human Resource Management System (HRMS) & Payroll, Digital Marketing, Digital Transactions and Cybersecurity. Banking (DBS, Maybank, OCBC and UOB) and telecommunication (M1, Singtel and StarHub) partners offer the solutions at competitive prices. - To help SMEs seize growth opportunities in the digital economy, IMDA collaborates with industry partners, to pilot B2B and B2C marketplace platforms that enable large numbers of SMEs to come on-board and uplift a cluster or whole sector. - Established by IMDA and operated by the Association of Small and Medium Enterprises (ASME), SME Digital Tech Hub (www.digitaltechhub.sg) is a dedicated consultancy providing expert advice in data analytics, cybersecurity, artificial intelligence and Internet of Things. Consultants conduct educational seminars and free advisory clinics to connect SMEs to suitable solution providers and project managers. - For SMEs that lack the manpower or expertise for project implementation, they can tap on services provided by the Singapore Manufacturing Federation. Project managers can be engaged at subsidised fees to support for SMEs to realise the benefits of digitalisation. The project is relevant to **SDG1, SDG2, SDG3, SDG4, SDG5, SDG8, SDG9, SDG10, SDG11**.



In **United Arab Emirates**, through a series of engaging and insightful questions, **eSafeHome** would create a set of scores, allowing families to compare how well each of them use technology against other families in their Emirate and the UAE as a whole. Based on their data, ESafeHome would also produce a whole family digital plan and technology report for their household. Building on Aqdar's successful and award winning e-Safe

School Programme, eSafe Home is an online service for families that encourages them to explore and evaluate their family's use of technology. We ESafeHome as recognising and celebrating the online safeguards families have in place and giving them clear advice on how to improve and flourish online. It might also provide a unique insight for UAE Government to understand the issues UAE families face; their strengths and where best to target resources and initiatives to support its citizens. The project is relevant to **SDG3, SDG11, SDG16**.



In United Arab Emirates, The GeoTech Innovation Program is a joint initiative by the UAE Space Agency and Krypto Labs to accelerate the growth of two business start-ups and transform their innovative ideas into commercially viable and scalable market ready software applications. The winning start-ups received funding of AED 100,000 in cash and AED 500,000 in kind and the opportunity to benefit from a world-class business incubation program that allowed them to nurture and grow their ideas into viable business, and develop their application into a full marketable service. Participating entrepreneurs provided an idea that is within the mentioned three service areas to solve a problem, enhancing its surrounding environment, and to diversify the economy. The Geotech innovation Program was open to individual innovators and teams with a start-up idea. The program had four phases of incubation as follows: 1- Research & Build: Enables the startup to justify assumptions, prove market opportunity & viability and build a clear business concept & value proposition. Develops hypothesis to be validated & tested. 2- Model Validate & Acquire: Focuses on assisting the project finalizing & growing customer interest.

Product launch will be achieved in this phase & the mentors' networks used to arrange partnerships & sales opportunities. Validation of market potential. 3- Invest & Grow: Pull together all the elements & gets the startup investment ready. Lawyers, accountants & pitch trainers will all be brought in to ensure each team has the correct skills & materials to pitch for & receive investment. An Investment Demo Day will be held with Angels, Private Equity & Venture Capitalists. 4- Grow: Review experience & results of pitch day, look to future development & draft action plan. The program ended in September 2019 by crowning the success of two start-ups in a prestigious demo day: Farmin, and Ayn Astra. The event also showcased a panel discussion on entrepreneurship challenges in the space sector and the future opportunities. The project is relevant to **SDG8**.



WSIS Prizes Contest 2020 Nominee

In **United Arab Emirates**, according to His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE, “Our goal is to be one of the best countries in the world, which can only be achieved only by family cohesion. The Emirati family is the foundation of life in the society, the main tributary of human capital, and the continuation of the development process by preparing the sons and daughters to love the homeland and belonging. Dubai Police launched **smart awareness initiative** which aims to strength national identity, instill loyalty, building a conscious generation, stable family and self-immune generation and to raise the awareness of citizens and society, especially young people, about social issues in an interactive way. This includes creating awareness of unethical behaviours in using the internet, and to tackle potential risks. The initiative covered more than 200 public and private schools in Dubai, and served more than 200,000 students, parents and teachers. The project is relevant to **SDG3, SDG4, SDG5, SDG9, SDG11, SDG16**.



In **United States**, **Girl Gone International (GGI)** – a fast growing global organisation and community with 250,000 members with communities in over 160 cities and a magazine readership of over 100,000 and an organic social media reach of circa 8 million per month. GGI represents, connects and supports the new generation of women living abroad. The project is relevant to **SDG5**.



In **United States**, the **Center for Gender Equity in Science and Technology (CGEST)** is a HUB for Gender Equality research and innovation in Science Technology Engineering and Math (STEM) at ASU. The work began at a department level, and the Center officially opened in 2016 with the following core values: They fund and disseminate knowledge and understanding around the issues related to digital media/STEM and under-represented women and girls through traditional and non-traditional practices. More on Dr. Scott, the director, she was named in 2014 as a White House Champion of Change for STEM Access in the U.S.. The same year, the publication *Diverse Issues in Higher Education* identified Kimberly as one of the top 30 women in higher education. The project is relevant to **SDG4, SDG5, SDG16**.



WSIS Prizes Contest 2020 Nominee

In **Uruguay**, **Uruguay Digital** brings together the efforts of the public and private sectors, academia and civil society, and is set as country commitment. This has been an ongoing and evolving process, reflected in the four generations of the digital agenda. The effect of these actions has contributed to closing digital gaps and democratising services, turning digital development into a hallmark of Uruguay nationally and internationally. The process developed for the 2020 Agenda, integrates the different priority initiatives to advance in the country's digital transformation in an inclusive and sustainable manner, through the smart use of technologies. In these than ten years of Digital Government Uruguay has placed itself at the forefront as a regional and global reference in digital development. This is demonstrated by the indicators and also the experiences that have been taken as an example and model, such as the digital inclusion of children and older adults, livestock traceability, online State paperwork, Electronic Medical History National, the digital signature for the entire population, the the Public Administration whitout paper. This digital development of Uruguay has earned him the recognition of the countries that lead as global promoters of digital advancement, incorporating to the country in the group "Digital Nations". With its inclusion in the group "Digital Nations", Uruguay has been the first Latin American country to occupy a global decision space regarding the development of digital societies. The project is relevant to **SDG1, SDG3, SDG5, SDG10, SDG16, SDG17**.



Actionline: 2.0

In **Algeria**, application mobile for location of connection boxes (**PC and FAT**) is established. Fixing telephone lines and the internet is one of the most important things that Algeria Telecom focuses on, and the most important is fixing the faults in the shortest possible time. Due to the lack of address data and sometimes for other reasons, such as being a new worker in that area, workers face great difficulty in finding a contact box and wasting a lot of time. Sometimes, the time to find a connection box is up to 75% of the time of repairing the damage, so this application works to provide all data connection box add only a map, which makes it easier to find a connection box and thus gain time in repairing the damage, which benefits the customer and even the company to win the time and win the fuel by finding the shortest path to the connection box. The project is relevant to **SDG1, SDG9, SDG10, SDG16**.



In **Algeria**, Territorial planning represents all actions that consist of planning and coordinating land use by organizing the distribution of infrastructure and activities in the geographical area. The **geographic information system for territory planning** project aims to facilitate all these actions through ICT by collecting, exploiting and updating all the public asset (used case is telecommunication infrastructure). Therefore, the project will help the public sector in enhancing its efficiency and transparency. The asset management is improved by avoiding unneeded deployment, pinpointing the resource shortage, fair distributing among areas preserving them. The project shares the resource information between public (ministries) or private stockholders to improve planning, cooperation and resources mutualisation. The project is relevant to **SDG1**.



In **Algeria**, since 2018, **ATM Mobilis identified Internet of Things (IoT)** as one of its segments of growth and business diversification as well as one of the main component for verticals needed for the digitalisation of the Algerian economy and the modernisation of the infrastructure for the 4IR and the different economic sectors such as healthcare, transportation, asset management or smart cities. The project concerns the deployment and the adaptation of a Cloud IoT Platform for mobile network data gathering and analysis and

specification of a mobile App dedicated to real-time mobile network benchmarking. The solution must be able to support 20 million nodes communicating on the network for network data collection and analysis for the purpose of network benchmarking and multicast communication. Regarding the action lines defined in the WSIS-SDG Matrix, the present project is relevant to the C2. Information and communication infrastructure: an essential foundation for the Information Society and C7. ICT Applications: e-business. The project is relevant to **SDG1, SDG8, SDG9, SDG11**.



In **Algeria**, the project **Optimisation of relay nodes deployment for lte network internet** contributes to the enhancement of network coverage with the minimisation of the related CAPEX make use of relay nodes. This project concerns the development of an optimisation framework dedicated for relay placement optimisation under different constraints specified by the designer and related to geographical area, maximum number and power. The project is relevant to **SDG1, SDG8, SDG9**.

WSIS Prizes Contest 2020 Nominee

Algeria is a vast country in which the use of frequencies is an important tool for communication and reducing isolation of remote areas (e.g. the sahara desert), for this we need a central point for the management of the frequency allocation. This **Frequencies Authorization Management and Invoicing System** project aims to be central point that manages the allocation and monitoring of frequencies and wireless sensitive equipment, used by companies, government entities, farmers, oil wells, etc. The provided system will help ANF (Agence Nationale des Frequences – Algerian Frequencies management Agency) to manage the authorization process for the usage of frequency band allocation (recording, processing, monitoring, validation, control and historical data), and also to manage the licensing and invoicing process (customer management, automating the invoicing parameters, financial management, billing management). The project is relevant to **SDG9, SDG11**.



WSIS Prizes Contest 2020 Nominee

In **Angola**, the **SOUTH ATLANTIC CABLE SYSTEM (SACS)** went into commercial operation in September 2018. It was the first, high volume, ultra-low latency fibre optic cable to connect Africa to South America. SACS has been designed with 100Gbps coherent WDM technology on an end-to-end solution. With 4 fiber pairs it offers a total design capacity of 40 Tbit/s between Fortaleza (Brazil) and Luanda (Angola). Manufactured and powered by NEC Corporation, the SACS cable is one of the most advanced submarine telecommunications systems to go into commercial operation in the Southern Hemisphere. Given the onward connections to the Monet cable system and the West African Cable System (WACS) and the potential to expand the network Eastwards, SACS not only opens the door for Africa and Brazil to meaningfully participate in the growing global digital economy but has the potential to connect East to West through a more direct routing. For businesses to operate and for economies to flourish in the global digital economy, access to reliable connectivity and capacity is not just vital – it is essential. The project is relevant to **SDG2, SDG3, SDG4, SDG8, SDG9, SDG10, SDG11**.



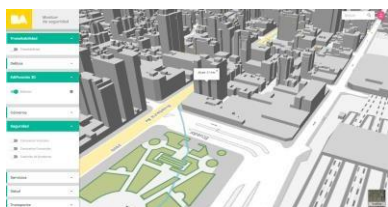
WSIS Prizes Contest 2020 Nominee

In **Argentina**, Colonia La Flor is located at 40 km from El Soberbio, in Misiones Province (Argentina) at the borderline with Brazil. This is the main virgin rainforest in the country where 800 families and four guaraníes communities live. The doorman of a school was looking for connectivity at home. For that reason, he invented a **wireless system**, since the only way to connect is via wireless, with equipments that require line of sight. The antennas are made of simple and affordable materials: metal pipes, wires and tensioners. Pipes are cut off every three metres and are welded until they get 25 metres tall. The antennas are held to the floor with wires and tensioners. They also include metal stairs to reach the top of the structure. The invention worked. The doorman, Ramon Cardozo, achieved his goal and connected his house. Then he now offers free connectivity to his neighbours from his house, including school children who avoid travelling for hours to get to the nearest cybercafe. It only took Ramon a short time to take internet to local homes. The State company, Marandú, helped with connectivity and materials. The YouTube tutorials were a key tool for Ramon to set up the equipments at homes. And with Google Earth and his knowledge about the rainforest he had the references to install his antennas. The antennas can be transported by

parts, in small motorbikes, by jungle trails, ground sinuous roads, where a car or a pick up cannot drive along. The project is relevant to **SDG4, SDG8, SDG9, SDG10, SDG15**.

WSIS Prizes Contest 2020 Nominee

In **Argentina**, Crime and security are one of the main topics in the agenda of Buenos Aires City, for a long time. To address the challenges facing the public sectors, regarding the safety of the citizens has been a great point of discussions and multidisciplinary work. In order to provide the Ministry of Justice and Security a tool that offers an integral vision of the information of the territory of the City available for decision-making policies, a Security Bureau was formed with members of different areas of the Government. One of the first needs that were covered, was the implementation and design of a **Security Map** generated with the information available in the General Directorate of Information Sciences database, alongside the areas that decided to collaborate in the first stages of the project. From this first installment of the Security Map project, we detected the need to develop a Predictive Crime Model, that will allow various analysis based on historical information, future trends in data in the territory and to generate indicators that allow areas within the city to be identified. The project is relevant to **SDG3, SDG10, SDG11**.



WSIS Prizes Contest 2020 Nominee

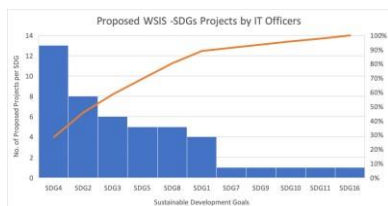
In **Bangladesh**, The Government of Bangladesh is actively adopting IT infrastructure in order to improve public services and also to ensure “Internet for All by 2021”. One of the important IT infrastructures of this government is “**Development of National ICT InfraNetwork for Bangladesh Government (Info-Sarker) Project.**” All ministries, government directorates/departments, all 64 districts and 488 Upazilas (sub-districts) and 18,130 government offices have connected and 25,000 tabs have been distributed to government officials for enhancing the use of ICT in public sector. 1600 police offices are under VPN connectivity and 800 video conferencing systems. 20,000 km optical fiber cable to 2600 rural administrative units (Union). 26,000 Government offices at union level are connected by high-speed broadband internet. At least 60% of the population amounting to 100 million have directly benefited from this project. The project has increased the number of fixed broadband connections from the existing 2.25% of household to more than 12% of the household and is expected to contribute 1% increase in GDP by 2021. It is empowering people to access e-government services, education, health and employment resources. The Info-Sarker project has been regarded as the highest priority project. The project is relevant to **SDG9**.



Schools Computerisation and Connectivity Project

WSIS Prizes Contest 2020 Nominee

In **Botswana**, the **computerisation and broadband connectivity to primary schools** in rural areas has been identified as a project of paramount importance in driving digital inclusion and promoting ICTs from grassroots. This is also in support of Sustainable Goal 4 on Quality Education. The first phase of the project covered schools in Ghanzi District, Kgalagadi District and Mabutsane Sub-District. The project covers: Construction of Local Area Network (LAN) in each identified Primary School; Provision of 5 Mbps dedicated broadband Internet to each Primary School; Provision of Wi-Fi enabled tablets and related peripherals such as printers to 68 Primary Schools; Augmentation of computers in 9 Junior Secondary Schools with 30 laptops per identified school; Employment of Information Technology (IT) officers at identified Primary Schools. The Fund has contracted 7 suppliers who have supplied 50 tablets, multifunction printer, networking equipment, laptop per IT Officer per primary schools. The Fund is proud to have employed 68 IT Officers to be our ICT Champions in rural areas. This is also in line with the Government's agenda of creating job opportunities for the youth. The schools' computerisation and connectivity project will go a long way in promoting digital literacy and bridging the gap between rural and urban schools. The UASF endeavours to promote an enabling environment for the use of ICT in rural areas. The project aims to: promote digital literacy to bridge the gap between rural and urban schools; promote ICT education from the grassroots level; promote an enabling environment for the use of ICT in rural areas; and encourage private sector participation in providing services in rural areas. The project is relevant to **SDG4, SDG9, SDG10**.



WSIS Prizes Contest 2020 Nominee

In **Botswana's** continued effort to bridge the digital divide, Orange Botswana in partnership with Botswana Communications Regulatory Authority (BOCRA), Ministry of Transport & Communications (MTC), Ministry of Basic Education (MoBE) and Ministry of Local Government and Rural Development (MLGRD) rolled-out the **Schools Connectivity Project**

and upgrades of base stations to 3G technology in 18 rural and underserved villages of Mabutsane, Morwamosu, Sekoma, Khonkhwa, Keng, Khakhea, Kokong, Kanaku, Mahotshwane, Itholoke, Kutuku, Mokhomma, Seherelela, Sese, Maokane, Samane, Lefhoko, and Betesankwe villages. The main objective of this project is to address the problem of lack of broadband Internet and low bandwidth capacity in government schools across the country. In addition, the project seeks to bridge the digital divide that exists between rural and urban centers, through providing basic computer skills to learners at grassroots level. This is over and above the assistance for the computerization and connection of broadband Internet in public schools in selected rural areas. As a result of this project, a population of over 5,000 learners from the aforementioned villages continue to benefit from the project, not only giving them access to Information & Communication Technologies, but also helping in standardization, which is one of the essential building blocks of the Information Society. The project would also enable them to participate effectively in the global economy and also change their lives. The project is relevant to **SDG4, SDG8**.

WSIS Prizes Contest 2020 Nominee

In **China**, back in year 2016, 4 million people in rural areas had little or no access to telecommunication services in Ghana. Start from 2017, Huawei started to innovate a rural telephony project instrumental in bridging the digital divide in Ghana. 400 rural sites with the low cost innovative solution which name is **RuralStar** have been deployed, RuralStar can help operators reduce the TCO by 50%+ and shorten the ROI from 10 to 3~5 years. Now, Ghana MTN is providing voice and data services for over 1,200,000 people, the digital life bring huge lives change to local village residents. Now, villagers can make calls easily and an abundant digital service such as mobile money, E-Commerce platform, E-education APP can be used in the rural village, which had a major impact on village security, education, medical care etc., recent business growth can also be attributed to the availability of network coverage through the deployment of RuralStar. Except Ghana, Huawei RuralStar Solution has also been deployed in some parts of rural areas in more than 50+ countries, including Kenya, Nigeria, Zambia, Namibia, Algeria, Thailand, Mexico, Peru etc., with the aim of deploying more sites and ushering in a fully connected world. The project is relevant to **SDG1, SDG3, SDG4, SDG5, SDG8, SDG9, SDG10, SDG16**.



In **China**, IoT has and will make a profound impact on society and people's lives. However, the low maturity of the industrial chain and the high cost of product development and promotion affect the development of the industry. China Telecom has built an **IoT Application Enabled Platform** according to the current market situation, which provides core capabilities such as thing model, terminal access & management, and IoT & cloud integration. As the IoT infrastructure, the platform aims to build a complete division of labor system of IoT, to promote the platform-based rapid adaption between application, terminal, scheme, marketing or ICT providers and demanders, and to achieve the cost reduction and efficiency increase of the development/implementation of IoT. The platform extends the capabilities of small entrepreneurial teams. It realizes the one-stop purchase of IoT application and development at a lower cost and threshold, such as terminal selection, application construction, cloud resource purchase, etc., which effectively reduces IoT venture risk and improves the employment rate. The platform also provides infrastructure services for smart cities, plays a role in the fields of environment, pension, medical care, education and people's livelihood, and thus promotes social sustainable development. The project is relevant to **SDG8, SDG9, SDG11**.



All kinds of intelligent devices in the campus, through connecting to the IoT Application Enabled Platform, can make centralized display and management and control in a unified way, can sense and integrate all kinds of data in time and effectively, complete the centralized analysis display and unified dispatching command of all kinds of information data, overall plan and optimize the park management and service, and promote the development of the campus towards innovation, ecology and intelligence.

WSIS Prizes Contest 2020 Nominee

In **China**, in order to achieve green and sustainable energy construction, smart grid operations emerge as the time requires. As its core technology, the **power wireless private network** can improve three major factor rates of automation business to 100% by

complementing with power optical fiber private network, and it provides an economical and effective means for multi-scale of business applications. We built a network system through the project, takes the city as the unit for standardized construction, which shortens the construction cycle and improves the construction efficiency. Through this method, the project can be easily transplanted in different environment and communities. The large-scale deployment of the project will further enable the popularization of the smart grid, reduce electricity prices, and enable more remote areas and poverty-stricken population to use electricity. The project helps reduce the occurrence and shorten the time of power outage accidents, effectively controls the power loss, improves the utilization rate of electricity, thus improves people's life and promotes the healthy development of economy, which can not only ensures the construction of a safe and resilient city, but also helps provide a model to access sustainable energy. The project is relevant to **SDG7, SDG11**.



In China, **Mount Tai Scenic Area 5G Application Project** makes great efforts in research and development of 5G technology application in scenic spot, in aspects of tourism resources development, online travel information acquisition, comprehensively improving the tourism experience, and meeting the demands of tourists personalized services, and so on. The project also develops and strengthens the ability of regional and broadband network infrastructure, including delivery by satellite and other systems, to help provide the capacity to match the needs of countries and their citizens and for the delivery of new ICT-based services. The impact of the project mainly generates in following aspects: maintain social equity and justice, save the material resources, promote cultural communication, accelerate economic sustainability. The live broadcast during pre-and post -visit stage may generate many new visitors that could gains sustainable economic growth. The model could be replicate in cultural spots, such as museums, scenic spots, zoo, parks, and so on, which has a great replicable ability. The project is relevant to **SDG8, SDG9, SDG11**.



In China, the **5G network sharing between China Unicom and China Telecom** project is focused on 5G RAN sharing (Multi-Operator Core Network) under the concept “Innovation,

Coordination, Green, Open, Sharing”. The sharing is based on RAN sharing and independent construction of core network, with sharing of frequency spectrum. It efficiently realizes 5G network coverage, rapidly forming service capabilities, to achieve universal implementation as soon as possible. It also realizes reduction in cost and provides more space for mobile operators to increase the speed with lower fee. The full cooperation between China Unicom and China Telecom in 5G would be the largest-scale RAN sharing in the world, and the cooperation will be lasted throughout the 5G life cycle, which set a model in terms of RAN sharing. The achievements of this project could efficiently lead the development of the technology as well as the industrial chain of RAN sharing. In addition, it provides reference for deployment of RAN sharing for other countries and hence produce global impacts. The project is relevant to **SDG3, SDG8, SDG9**.



In **China**, the project is a Suzhou smart Park project, which aims at building a low latency MEC business platform to realize a number of intelligent **applications in Suzhou Industrial Park based on 5G networks**. These kinds of applications include but not limited in smart meter collection, HD real-time monitoring, ability of information perception, acquisition, analysis, decision-making, execution, etc. The application of the project endows the traditional industrial manufacturing with efficient and accurate information acquisition and processing capabilities, which makes the traditional industrial manufacturing to develop in a sustainable way, and greatly improves the efficiency of cooperation among key systems and participation in the park, and realizes the improvement of production efficiency and the reduction of production cost. It from some extend provides a new business model which can better benefit the development of social economy and helps promote sustainable industrialization. The project takes the lead in realizing the application of 5G network in the field of industrial Internet, and provides replicable practical experience for 5G to promote industrial intelligent transformation. The project is relevant to **SDG8, SDG9**.



WSIS Prizes Contest 2020 Nominee

In China, The **NB-IoT Network Construction and Application Project** aims at providing Information infrastructure in the rural poverty-stricken area in Yunnan Province, China, promoting the poverty alleviation in these areas. Through this project, more than 3,800 LTE-800M NB-IoT base stations have been built in 3,500 poverty-stricken administrative villages in Yunnan, which initiate the large scale Internet connectivity for smart agriculture and smart tourism in poverty-stricken rural areas for the first time. After the deployment and utilization of the project, including the network and related applications, the agricultural production in rural areas effectively improved, and the user perception of the tourism industry enhanced, thus injecting new power for the long-term and sustainable development of agriculture and tourism industry which are two pillar industries in Yunnan. IoT network and informatization construction in poverty-stricken areas and related applications have strong reproducibility. Until now, this project has formed a large scale support capacity for the characteristic agriculture and tourism industries in the poverty-stricken areas of Yunnan, and helping benefit about 350,000 people. It is expected that with the evolution of new technologies, the model will be further improved, and then better promote the resource efficiency and boosts sustainable development. The project is relevant to **SDG1, SDG8, SDG9**.



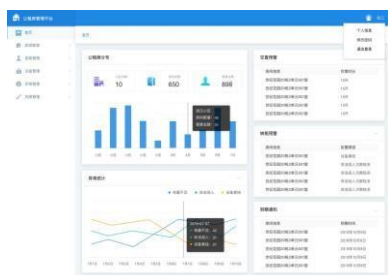
In China, the **"AND Guardian" emergency communication command system** project is committed to secure communication function and assist government to rescue the people under disasters when nature calamities or emergencies happened, it builds a security command center of communication which has the ability of finding calamities, information hinge, emergency management, commanding and dispatching, comprehensive display etc. This project has been involved in major natural disasters protection work 6 times, and offers the government with effective support. Meanwhile, the project is keeping introducing new technologies like NB-IoT, artificial intelligence, 5G to improve the abilities of commanding and dispatching, which can make the project sustainable. This project is developed independently, has independent intellectual property rights, and can be replicated easily. The project is relevant to **SDG9, SDG11**.



2000	2006	2012	2018
Digital port	automatic port	automatic port	Smart port



software side, the hardware upload data can be processed according to the actual business scenario, and the hardware control can be realized according to the business requirements and can be reused for various long-term rent or short-term rent management, such as Industry hotels, employees and student dormitory. The project is relevant to **SDG10, SDG11, SDG16**.



In **China**, Half the world's population is still not connected to the internet. One of the main barriers to entry is the affordability of devices; this is where **KaiOS** comes in. KaiOS is a mobile operating system for "smart feature phones." It brings the essential functionalities of a smartphone to the form-factor of affordable feature phones, allowing manufacturers and mobile operators to launch internet-enabled phones (3G/4G) at around USD20 or lower. KaiOS supports full internet browsing, a long battery life, and comes with a store for apps; the KaiStore offers international content—WhatsApp, Facebook, The Google Assistant—as well as local apps and services. The OS uses open web technologies like HTML5, making it easy for developers to create apps for KaiOS. KaiOS works with governments, mobile operators, banks, and others to facilitate mobile payment, digital identity, micro-credit, insurance, and other services. KaiOS is also launching a financing program that will bring the effective cost of a device down to USD10-USD14. KaiOS-enabled phones play an important role in bringing vulnerable groups online, for example, women, rural populations, the elderly, and illiterate users (through The Google Assistant). It's already deployed on over 110M devices in 100+ countries and should reach 150M shipments in 2020. The project is relevant to **SDG1, SDG4, SDG5, SDG8, SDG9, SDG10, SDG16**.



WSIS Prizes Contest 2020 Nominee

In **China, Tanzania** aims to construct an IP network and IDC at a national level. Through this project, it is expected to promote resources sharing. Investing about 90 million dollars, the project built an IP backbone with coverage of 22 Regions of Tanzania to provide IPbased countrywide services, by expanding the DWDM system and constructing national IDC: 4 core nodes, 22 backbone nodes, 2 IGW, IDC with 3000 m2 for more than 300 racks and supporting system. The project will make the country an ICT hub in EAC. The project is

closely related to SDGs 9, 17, 1, 4 and 10. Utilizing the concessional loan from China, Tanzania constructed magnificent infrastructure to bridge digital gap, which will promote the development of e-learning in rural area. The model can be copied similarly. Selecting a truly suitable technical solution within the range of affordable debt is an important topic for all developing countries. Within 20 years, the infrastructure like fiber will continuously play a critical role in ICT relevant industries such as e-commerce. The project is relevant to **SDG1, SDG4, SDG9, SDG10, SDG17**.

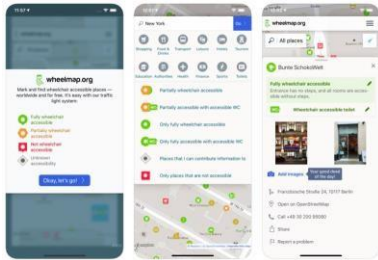


In **France**, a person losing sight is exposed to a strong and rapid decline of his/her psychosocio capabilities, leading to social seclusion, cognitive decline, and a restriction of mobility. In this context, the access to a digital environnement is nothing but an extraordinary compensation tool, enabling to remain active both cognitively and socially thanks to writing, reading, and the access to communication and information. The **Universally Accessible Personnal Computer (U.A.P.C)** encompasses a full set of assistive technologies for visualimpaired people, regardless their age or their limitations: - an all-inclusive low-vision software suite, enabling to customize colors, themes, type and size of character fonts, contrasts, pointer, zoom *24 etc.; - a screenreader available in 12 langages with highquality voices and customizable for each and every sight and age; - a reading machine to make the computer read each and every printed document thanks to a scan or a miniscanner; - a « Tactos » solution to give access to maps, ² lines, geometrical shapes, thanks to a tactile perception - a braille transcriptor to enable each and every blind user to have a live transcription of every content (music, math or text) The project is relevant to **SDG4, SDG9, SDG16**.



In **Germany**, **Wheelmap**'s front-end is a web-application optimized for mobile devices and native iOS and Android applications. The back-end is a server which can be also used by others through a REST-API. The code is published under an open source licence. The backend not only ingests data from other databases and APIs, but also from Internet-of-Things devices such a hardware sensors. One example is an elevator sensor which measures an elevator's movement to detect whether the elevator is in operation or out of service. This is critical information for people who rely on elevators, such as wheelchair users. In a separate project we explore how machine learning can help decide whether an elevator that does not move for a while needs servicing or is just not being used. The data format of the

back-end has been developed under the consideration of dozens of other formats describing the accessibility of physical places (such as restaurants, museums, etc). This new format is about to go into a standardisation process for everyone to use. The project is relevant to **SDG9, SDG16**.



In **Germany**, **EVE** is a cloud-based service that recognizes speech with artificial intelligence and automatically generates live subtitles, live translations and transcripts of videos, events, trainings and lectures. This new digital service makes events accessible to everyone. Artificial intelligence does a lot of work for us today. Algorithms recognize language, faces and are learning every day - without eyes or ears. EVE analyses every single word. First, the algorithm optimizes the signal, and tries to filter out interfering noises, and optimizes the volume of parts that are too quiet or too loud. After that a waveform is generated, which represents the audio signal as an image. EVE compares this image with a huge database of audio signals and searches for similar entries. Each hit is evaluated, but at the end EVE chooses the most likely one. However, EVE does not add data to the database, because of data protection reasons. The database is not the same size for every language. As there are more completed training hours for the English database than the Italian one, EVE's recognition is stronger in some languages than in others. We can measure this accuracy in extensive tests. We translate a test text into the desired language, then a professional speaker speaks the text at normal speed and EVE listens. After that, we correct the result and compare it with the source text. Every mistake in spelling, every wrong word and every wrong punctuation are counting as errors. From this number of mistakes we calculate the error rate for the corresponding language. EVE has for example an accuracy of 97% for Japanese. EVE is running currently on Microsoft Azure with a server in Western Europe. The project is relevant to **SDG9, SDG16**.

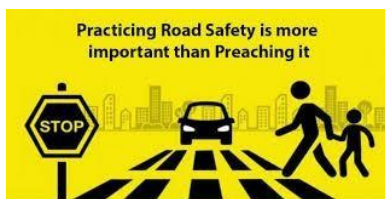
WSIS Prizes Contest 2020 Nominee

In **India**, Satellite Communication can play a big role in India's ambition to transform itself into a country empowered by digital technologies. In India, Satellite technology is especially suited for far flung and difficult terrain areas like North Eastern States, Leh, Ladakh, Andaman & Nicobar Islands, Lakshadweep, etc. It would be extremely useful in areas where laying optical fiber cables or installing mobile towers are difficult and next to impossible. With the recent development of High-Speed Satellite (HTS) technology in Ku & Ka band, the bandwidth available for communication need has increased many folds and cost of bandwidth has reduced tremendously. With this background, merging of both Wi-Fi for access and Satellite technology for backhaul makes most sense to provide digital connectivity in our country. **C-DOT C-Sat-Fi** is designed as an autonomous infrastructure

which can be deployed easily at rural areas. The complete solution comprises of C-DOT BBWT system, VSAT or SmartLNB terminal, Solar panel for powering through renewable solar energy and Charge control unit with inbuilt battery having the provision of dual power feed i.e. Grid power and Solar power designed and developed on the single pole architecture. The complete system can be easily installed on the rooftop of any type of building and on the ground level. The project is relevant to **SDG1, SDG2, SDG3, SDG4, SDG5, SDG6, SDG7, SDG8, SDG9, SDG10, SDG11, SDG12, SDG13, SDG14, SDG15, SDG16, SDG17.**

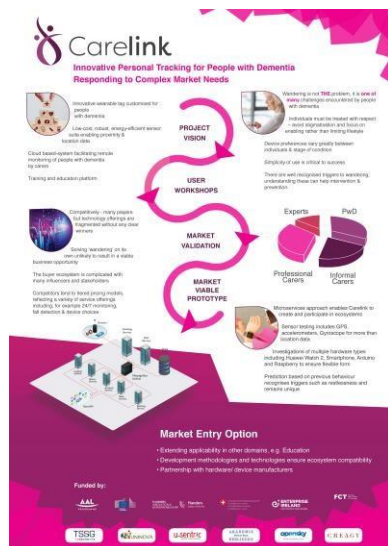


In **India**, Enhancement of traffic management system at intersections and convey possible free flow of traffic for prioritized emergency service domain vehicles using simple hassle free, software component that has immense effect on increasing safety of general public and road users. **Geofence** represents a geographical region. They can be monitored by a geofencer service. When the user crosses the boundary of a geofence, an alert will be generated. 1. Geofences can be created dynamically; 2. Geofence can either be a rectangle or a circle with appropriate range. 3. It is very much accurate and efficient. The project is relevant to **SDG9, SDG11, SDG16.**



In **Ireland**, the **Carelink** platform is designed from the ground up to be secure, extensible, and performant long into the future. To achieve this, we have adopted the increasingly recognised microservices approach, where logically distinct pieces of application code are

developed and deployed separately. These services communicate with each other using a combination of REST and messaging. This allows services to be improved continuously, and new services deployed at will. "The purpose of Carelink is to safely and positively manage wandering behaviour in people with dementia. Carers can track their loved one's location, dynamically set safe or unsafe zones and receive alerts, with location details, if their loved one wanders into a designated unsafe zone, or out of a marked safe zone. The application can also determine behaviour that may be indicative of an imminent wandering event allowing early intervention and can predict location in the unlikely event of loss of communication. The project is relevant to **SDG16**.



In **Israel**, the **RightHear** solution can turn any public space (indoors and outdoors) into an accessible environment for people who are blind, visually impaired or with other orientation challenges. We are proud to work with big companies in almost any sector - from Shopping malls and Hospitals to Government buildings and even airports. There are over 1,000 locations that had already installed our solution and by doing that, allowed our users to navigate and visit there independently and privately. RightHear solution is very easy to install (no electricity, internet or GPS is required) and once done, it helps the venue to be more compliant with the regulations, expanding its market and in a relatively low cost. The project is relevant to **SDG9, SDG16**.



In **Israel**, people with disabilities make up 15.6%* of the world's population. Investment in Accessibility paves their way towards an equal, independent, and respectful integration into society. **A-Check**, (@Tamar Negishut) is a business-oriented solution created to enable a standard tool that compares the actual accessibility level in an establishment with the regulatory demand. It allows business owners to fully understand the specific accessibility requirements necessary, in order to create an equal, and barrier-free participation of all people in all daily aspects of life. It also provides a standardized tool for accessibility

engineers, to verify regulations in a computerized, efficient, and quick way. Why A-Check is needed? Surveying existing establishments is an important activity. The project is relevant to **SDG9, SDG16**.



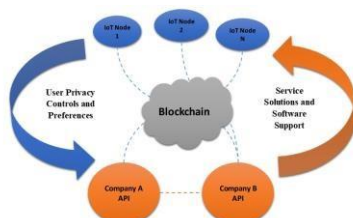
In **Israel**, **Tunefork** has developed what we believe is the most accurate self-hearing test in the world. With sophisticated algorithms (backed by patents) we allow users to take a short test and obtain clinically accurate results of their hearing condition. With the results Tunefork calculates and makes a unique FIR filter that changes any audio content and adjusts it to answer the user's needs. We are using the benefits of Big Data to capture and analyze hearing test results from thousands of users to improving our technology, by smart analysis and deep R&D process. In addition, we have a data bank of the audio specifications of thousands of devices, headphones, speaker systems and other audio equipment, which we use to help match Audio Profiles to optimum levels. Tunefork invites the user to use our app to conduct a simple hearing test which characterizes the user's specific hearing condition. The hearing test is at a professional, clinically accurate standard. It generates a personal Audio Profile, the results of which are calibrated to account for the hardware gain and frequency response, and then used to tailor a high-order FIR filter to compensate for the user's hearing loss. The project is relevant to **SDG9, SDG16**.



WSIS Prizes Contest 2020 Nominee

In **Malaysia**, **MyGov*Net** is a centrally managed Government Integrated Telecommunications Network to support the Government's delivery service system. MyGov*Net provides a network platform to enable access to Electronic Government Applications, Agencies Internal Applications or Intranet Applications and Access to the Internet. The MyGov*Net service is available to the Ministries, Department or Federal Government Agencies and Federal Statutory Bodies under the Ministry's remuneration. MyGov*Net played a significant role as the catalyst in realising the Government's objective and prioritising the needs to provide the best service for the citizen. Hence, with MyGov*Net, the Government has successfully delivered the best, efficient and systematic services, where the productivity of the Government sectors has increased in all sectors thus enhance the users' experience. The project is relevant to **SDG9**.

In **Malaysia**, a **Blockchain-Based Standard for IoT Sensing and Authentication** was established. Standardisation in smart city applications is restricted by the competitive pressures of proprietary innovation and technological compartmentalisation. Interoperability across networks, databases, and APIs is essential to achieving the SMART objectives of technology-supported urban environments. Acknowledging a gradual shift towards decentralised, unified protocols for data management and exchange, the current model proposes a revised, standardised middle layer based upon blockchain technology that is capable of negotiating transactions across the Internet-of-Things (IoT). Through autonomous, immutable, and non-repudiated transactions, the blockchain intermediary function will resolve critical gaps in the existing, distributed IoT standard, drawing connections between nodes, users, and service providers that enable. This project proposes a working infinite loop model for establishing a standardised, intermediary cloud-based blockchain solution for IoT networking and securitisation throughout the emergent smart city ecosystem to protect both commercial (proprietary APIs) and user (privacy, security, autonomy) interests in a distributed, smart city ecosystem. The project is relevant to **SDG9**, **SDG11**.



In **Mexico**, The **Mobile Devices Comparator** is an online tool that aims to provide the user with current, accurate, timely and comparable information on the devices offered by the different concessionaires in the prepaid and postpaid mode, allowing the user to compare devices by price, operating system, internal memory, screen size and camera. It also allows to identify the specifications of each device, linking the device of the user's choice with the prepaid and postpaid plans offer. The tool is constantly updated and is the only one of its kind created by a government institution in Mexico. The project is relevant to **SDG9**.

WSIS Prizes Contest 2020 Nominee

In **Mexico**, the **Digital Inclusion-Free WiFi** was constructed. The objectives established by the current of Mexico City government (years 2019-2024), are related to the implementation of policies in technology, data management fields, openness, and connectivity for optimising digital governance and strengthening citizen rights. Toward those ends, two projects have been implemented, "Ciudad Segura," and "Ciudad Digital". They aim to optimize available resources and public spending, to enforce the principles of the protection of human rights, progressive rights, interaction, and digital and technological inclusion, openness, and freedom of access to ICTs. In this context, the Mexico City Government is providing free wireless internet access at sites already hosting infrastructure through 14,588 Technology Video Surveillance systems (TVS), as well as 96 public sites (internet at a speed of 200 MB) and 150 points of Innovation, Freedom, Art, Education and Knowledge (PILARES, for its acronym in Spanish). These are distributed across the 16 boroughs in Mexico City and broadcast the WiFi signal that allows citizens to access the

Internet for free. At this moment, some 10,709 Wi-Fi access points have been enabled through TVSs. Likewise the 96 public sites are working and 84 PILARES are enabled. In addition, the Government is collaborating in developing and guaranteeing digital inclusion for the entire population. The project is relevant to **SDG8, SDG9, SDG11**.



In **Mexico**, The **Federal Institute of Telecommunications (IFT)** of Mexico is an autonomous entity, bestowed with its own legal personality and estate whose purpose is the efficient development of broadcasting and telecommunications. The IFT is responsible for the regulation, promotion and supervision of the use, development and exploitation of networks and the electromagnetic spectrum, and for the access to active and passive infrastructure. It also regulates broadcasting and telecommunication services, and is the legal agency in charge of antitrust enforcement within the telecommunications and broadcasting sectors. Some of the core values of the institution are social responsibility, inclusion, diversity and gender equality. IFT has been promoting equal rights for its workers. The main policies addressing diversity and advancement of women are, among others, the establishment of a Declaration of Principles and a mandatory Code of Conduct, which define that that all its public servants must be daily guided by the principle of equality, and must address everyone with everyone with justice, professionalism, equality and respect, observing their dignity, diversity and equity, in order to promote a culture of inclusion and non-discrimination. Additionally, an Ethics and Inclusion Committee was established as an advisory body for all matters related to the Declaration of Principles and the Code of Conduct. Also, the Gender Equality, Diversity and Inclusion Area is in charge of the implementation of the gender equality principles throughout the professional activities and the elimination of any form of discrimination within the Institute. The project is relevant to **SDG1, SDG4, SDG5, SDG16**.



In **Mexico**, **Marcalyc** is a tool developed by Redalyc to tag scientific content in XML language, aligned with JATS standards. With this tool, available for any journal indexed by Redalyc, enriched reading formats resulting from the tagging process are generated: intelligent viewer, mobile viewer, HTML, ePUB and PDF. With Marcalyc, Redalyc seeks to

preserve scientific contents in a digital format. Besides, meta elements are recognised at an article level, and visibility in the web as well as reading in various devices is enhanced. The project is relevant to **SDG4**.



In **Pakistan**, virtual reality is an ever-growing market that provides an immersive and interactive experience. In this paper, we modified existing VR based version of Intrusive Sprint with additional feature of **multiplayer** game. With the predicted growth of this market, we wanted to meet future demands by creating a multiplayer. The main objective of this project was to create a framework for other game developer that facilitates the simple creation of a multiplayer virtual reality environment. On the hardware side, we implemented WIFI module instead of Bluetooth module due to failure of java script for unity 3d. For networking of multiplayer, we connected the players with game through servers. We had done most of our interfacing between hardware and software through the Arduino. We enhanced the hardware equipment's by assembling them with accurate sensors. All these changes increased the user experience. We developed a virtual reality multiplayer game that involves player-to-player interaction. The project is relevant to **SDG9**.



In **Pakistan**, Founded by Sadaffe Abid, **CIRCLE** works towards women's economic empowerment, particularly through technology. Based on the belief that investing in women is the smartest economic venture of today, CIRCLE aims to: - Advocate for gender diversity & inclusion - Bridge the digital gender divide by bringing tech to youth especially young women from underserved communities. Thus, building a pipeline of women in tech in Pakistan. Key Initiatives: CIRCLE launched Elevate — our flagship initiative to achieve SDG 5, 8 and 17. Elevate brings women from different sectors to provide tools to exercise leadership, build allies and connect with mentors. The Elevate Champions are CEOs from companies like Engro Corp, Standard Chartered, Unilever among several others to advance women in leadership, build a culture that supports diversity, and make collective progress on this complex challenge. Pakistan is ranked as the second worst country in terms of gender parity according to the Global Gender Gap Index 2018 report. Females are undervalued and underpaid at workplaces. To collectively address this challenge, CIRCLE holds quarterly DI Strategic Meet ups with various partners like Reckitt Benckiser, English Biscuit Manufactures, Ernst Young, Bank Alfalah with the aim to encourage sharing of good practices bring ideas to other cities. Concurrently, CIRCLE has initiated an innovative project: Tech Karo — a coding, web development and life skills program for youth particularly women, designed for the underserved communities of Karachi. Technology is the fastest growing industry globally and in Pakistan too, promising to create an employment pool of about 2 million jobs over the next two years. To leverage technology, CIRCLE launched this initiative ultimately aiming to foster inclusive growth and women's upward social mobility. It also addresses SDG 5, 8 and 10. The first batch of 50 students with 62% female graduates, has progressed into a second cohort of 150 students with 77% women. The project is relevant to **SDG5, SDG8, SDG17**.

In **Pakistan**, the **Campus Security using Visual/Face Recognition** project is a security system which will let University security staff to prevent the entry of unauthorized persons to University Premises. Cameras will be installed on all university gates to monitor all entrants and these cameras will detect every single person entering university from any gate. After detecting all entrants, their faces will be detected and matched with the faces in database of university where pictures of all university student/employees will be stored. If that entrant will have his picture in data base then he will be good to go otherwise guards will be given an alert signal and they will check his identity rather than checking identity proof of all students manually which hectic and inefficient way to check as well is. The project is relevant to **SDG11**.



In **Pakistan**, as we know that Technology is increasing day by day. In the Technology world, **Autonomous car** is becoming the future of technology. It will help the people to travel who

can't drive to get around easily like disabled people. It will reduce the traffic and also traffic accidents. With the reduced traffic, and better driving habits of the AI fuel economy will be much better. People who waste their time in traffic by driving car, they can do their work by using self-driving car option. As the Autonomous Car will follow the rules of traffic and will work using Artificial Intelligence so there will be less chances of traffic accidents and it will reduce the traffic. As we know that Technology is increasing day by day. In the Technology world, Autonomous car is becoming the future of technology. Autonomous car is a car which is operated by the most important Internet of Things and Artificial intelligence.

Autonomous car detects different hurdles and obstacles using camera and different sensors and solve or operate these hurdles using Arduino, Raspberry Pi or stm32. This project will attempt to build a remote-control car which is also operated using Auto-drive button.

Autonomous car will detect obstacles like car ahead, stop signs and signal lights using camera, RADAR sensor and SONAR sensor. Features of the project: - It will be totally selfdrive. It will reach on the location that we will specify or locate using map in our mobile application. It will detect the road using sensors on which it will run. - It will detect the signals (when there will be red signal on the road it will automatically stop on the signal and when there will be green signal it will cross the signal by detecting it). - It can read the sign boards. - It will be time saving (for those people who want to do something else during driving like reading the newspaper, using cell phones etc.). - It will reduce traffic accidents. - There will be an accident alert system in the car. The project is relevant to **SDG3, SDG9, SDG12**.



In **Pakistan**, the **E-Guard** project is about security consensus that are becoming unsecured as the technology is progressing. We can see in our surroundings many of the system can be breached easily. So securing up our places is our first priority and with the help of face recognition process we will allow our system to detect the face of the once present at our doorstep. And then if he/she lies in the registered persons then the door will be automatically open otherwise a notification will be generated to the owner of house with his/her snap and then owner have right to open the door, to contact him and send a message that will be shown to him through a smart screen. If the owner is not at house and someone comes to his location after the output from owner the stranger have the facility to develop him using the system. All of the transmission is done by using a special Wi-Fi module device. The system is composed of a special type of feature that will monitor the unusual actions of the stranger if he is surrounding in our premises it will monitor that person and then after monitoring it for a while the system will inform the owner by showing him his actions and then the owner have right to take action against it or not. It will have the following features: 1) Home security problems. 2) Their are technological devices that can easily disable the systems and unauthorized people are breaching systems so easily day by day. 3) The unusual activities in our premises. So it should be captured and

monitored. 4) Guard assistance facility should be provided through system .So the system can easily interact with the concerned once. 5) Minimum consumption of energy. The project is relevant to **SDG3, SDG8, SDG11**.



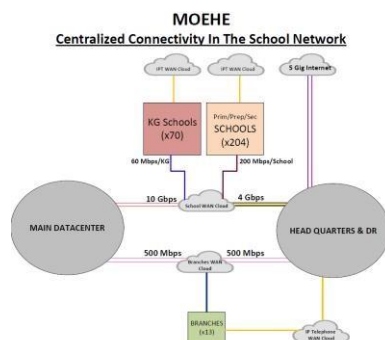
In **Philippines**, **QBO Innovation Hub** is the first and only public-private partnership supporting technology entrepreneurs in the Philippines. According to the 2017 Philippine Startup Report, women only account for 18% of the Philippine startup founders. In light of these statistics, which suggested that women are greatly underrepresented, QBO saw a need to help women entrepreneurs overcome difficulties present in a male-dominated ecosystem. This is why, in 2018, QBO launched Startup Pinay. Pinay means Philippine woman in Tagalog. The program seeks to identify, assess and support women-led Filipino technology startup founders through international exposure, market expansion, exhibition opportunities, training, education, extensive exposure opportunities and mentorship among other things. Startup Pinay's efforts towards reducing the gender gap in the startup ecosystem are done in two different ways: 1. By creating initiatives and programs that cater exclusively to female founders. 2. By using a gender lens when coming up with QBO programs. The project is relevant to **SDG4, SDG5, SDG8**.



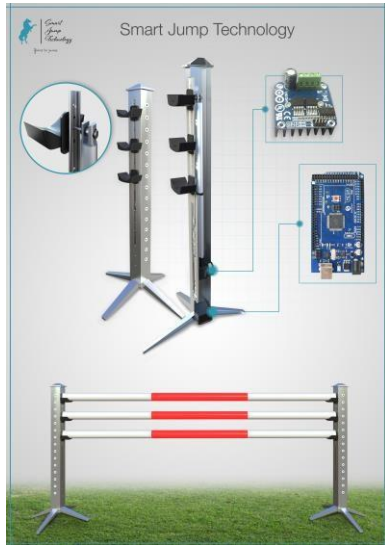
WSIS Prizes Contest 2020 Nominee

In **Qatar**, Ministry of Education and Higher Education of Qatar had undergone a significant transformation in the recent years, with massive investments in Education Facilities, Services, Technologies, Security and Infrastructure Transformation to ensure the education need of the nation's fast-growing population. MOEHE had implemented a most coveted

project, The **Centralized Connectivity In The Schools Network (CCSN)** which enable Ministry of Education & Higher Education to have a high speed centralized, monitored, secure, reliable, scalable internet infrastructure for all the Government Schools & Kindergartens nationwide by restructuring the current scattered independent internet and MPLS line to a robust, integrated, secure, cost-effective and performance-based architecture with 200 Mbps per School and 60 Mbps per Kindergarten with Centralized Internet solution. Stakeholders that are benefiting from this strategic project are about 200 Schools + 70 Kindergartens accommodating over 151,000 users (Students/ Teachers / Staff). It is an Isolated zone created to serve Only Govt Schools & Kindergartens with ease of migrating of this zone anywhere in Qatar without much dependency on other services. Single policy, Single blacklist and patch deployment for all the Entities mentioned above and deployed with State-Of-The-Art multi-vendor technology which is also scalable for the next couple of years. The project is relevant to **SDG1, SDG3, SDG4, SDG9**.



In **Saudi Arabia, SJT delivers Smart Hardware Products** Implemented with Machine Learning and Software to Ensure Safety & Health for Athletes and Horses, and Efficiency and Effectiveness in Practicing and Competition Environment Smart Jump Technology aims to embark the era of technology in the equestrian industry, changing the current manual system of processing in all the field aspects to E-Sport In the equestrian world, riders during practice must always get off their horse to change the height of the jump poles manually This can lead to interruptions during the practice, leading to inefficiency in their time management and occasionally can lead to physical injury due to the heavy weight of the poles The Smart Jump Technology is a tool created to solve such problems and enhance effectiveness and efficiency of horse riding training in the equestrian world practice rings The project is relevant to **SDG3, SDG8, SDG12, SDG13, SDG17**.



In **Saudi Arabia**, telecom is Critical for national resiliency preparedness and response, Mobily being the second largest telecom player in the Kingdom of Saudi Arabia has been categorized as critical infrastructure service provider. The additional objective was to enhance telecom coverage as well as quality of service in rural and remote locations. In fulfillment of this responsibility, **Mobily** initiated 360-degree enhancement in its technical infrastructure. Mobily also adapted international standards and best practices in the filed of Enterprise Resiliency, Business Continuity, Crisis management, Information Security, Quality Management and IT Service Quality Management. The objective of these initiatives was to achieve 99.99% availability of Mobily services and enhanced assurance to all stakeholders. Accordingly, enhancement in the following domains were achieved:

Transport Network: Mobily enhanced its transportation network covering each and every corner of the kingdom of Saudi Arabia. A total of 12,599 KMs of SNFN (National Network) and 43,868 KMs of Metro (within the city) of fiber network was laid in ring formation thereby further enhancing transport network resiliency. In addition, the deployment of WSON and ASON further enhanced transport network availability and quality of services. Fiber Optic Connector (FOC) and Cell on Wheels (COWs) and Remote Maintenance Center were deployed at strategic locations. Core Network: CS (Voice) & PS (Data) infrastructure Pooling, Intelligent Network (IN) node diversity, International Gateway (IGW) infrastructure diversity, Multiple routes with different service providers for Submarine cables were deployed to enhance core network coverage, availability and resiliency. Access Network: Signaling diversity were achieved through deployment of BSC/ RNC rehomeing, MSC and MME in pool, diverting technology connectivity, Mesh topology and multiple path back hauling. This resulted in achievement of end-to-end network availability of 99.926% resulting in enhanced customer satisfaction. The project is relevant to **SDG9**.



WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, The **Fibre to the Home National Broadband Plan** aims to connect 60% of Saudi households with FTTH from a baseline of 25% at the time of the launch of the program in 2017. The flagship government initiative for the National Broadband Plan (NPB) was the offering of subsidy funding to participating operators to incentivize the deployment of fibre. The initiative entailed offering operators a yearly connection target to meet that would result in 2.1 million additional urban households being connected to fibre broadband by 2020. As of today (2019), 1.5 million connections have been achieved with measurable impact on GDP, jobs, income, services, digital skills and improvement in quality of life. In addition to offering subsidies and assigning scope, MCIT has played a critical role in the support, mediation and facilitation across all the main phases of the FTTH roll-out, including: - Supervising Survey and design: Site survey of the planned roll-out area and preparation of (PIP); - Support NBP permits: Application for permits from municipal authorities by operators; - Civil works: Execution of the PIP (civil works and installation of equipment); - Acceptance: Through Monitoring project 3rd party random test; - Funding: Subsidy funding is released by MCIT/ Ministry of Finance The project is relevant to **SDG9**.

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, **Wireless Broadband (WBB)** is a 3-year flagship initiative of Saudi Telecom Company (STC), done in partnership with Saudi Ministry of Communications and Information Technology (MCIT) to serve rural and remote areas in the Kingdom of Saudi Arabia, breaking the digital divide and enabling inclusion, and future prosperity to those communities. WBB started in late 2018. It offers ICT services with an average internet access speed of 10 Mbps per each rural household, regardless of its location within the targeted areas. WBB will ensure to cover 70% of rural homes in remote villages and hamlets by 2020. The project is well under way; STC will ultimately achieve to deliver broadband access to close to 3000 remote localities, covering more than 450k households and 2.57 million inhabitants. The overall purpose is to make sure that residents in the

remote areas can participate in and benefit from today's growing knowledge and information society, improve quality of local education and foster talent development and training needs. This ensures their inclusion into the new digital era, in synergy with other parts of Saudi society. Moreover, WBB project will also facilitate development of local small business initiatives, contributing thereby to the overall long-term sustainability of the communities in the remote areas in Saudi Arabia. The project is relevant to **SDG1, SDG3, SDG4, SDG5, SDG8, SDG9, SDG12, SDG13, SDG15, SDG16, SDG17**.

In **Saudi Arabia**, Saudi Telecommunication Company (STC) offers a donation service through **Computers Donation Program** to safely deliver old STC's computers. All data is removed from computers before donation. Community Relations will match available donated computers with local organizations who have a need. (**SDG6, SDG7, SDG11, SDG12, SDG15, SDG17**)

In **Saudi Arabia**, **Manufacturing Operation Management Intelligence System** is a concept to digitize, automate and optimize the manufacturing companies work process in an innovative and advanced manner using the latest technologies like IR.40 technologies (Artificial Intelligence (AI), Augmented Reality, Big data, Robotics, Drones ...etc.) to reduce human errors, reduces operation cost, increase productivity, increase efficacy, increase safety and security, reduce emission and waste and ensure compliance with government regulations. (**SDG9**)

In **Saudi Arabia**, the **Corporate Data Center CDC Power Upgrade Program** recently completed a major expansion to meet the projected increase in corporate computing demand. The expansion increases the CDC uninterruptible power supplies (UPS) power capacity from 2.4 megawatts (MW) to 6.3 MW. This expansion included the addition of major facility components such as UPS systems, batteries, power distribution units, switchgears, low voltage, and diesel generators. During this expansion, a total of 125 kilometers of electrical and instrumentation cables were laid. The uniqueness and complexity of this project was its implementation, as the CDC can remain operational without interruption to Saudi Aramco IT business and upstream operations — and with zero safety incidents, despite the exposure to high electrical voltage and power systems. (**SDG9**)



In **Saudi Arabia**, Saudi Aramco IT has launched an initiative **Preventive Maintenance Effectiveness and Efficiency Enhancement** to introduce maintenance mobility application for field workers and enhance preventive maintenance practices by adopting multiple approaches such as Multi-discipline work force. The initiative will result in improving IT infrastructure equipment operational efficiency, providing historical records for IT equipment, increasing information integrity and promoting paperless and green environment by avoiding printing more than 200,000 pages for preventive maintenance activities annually. **(SDG9, SDG15)**

In **Saudi Arabia**, Saudi Aramco has implemented **Mission-Critical Radio Communications Network** serving more than 95% of the company's facilities scattered all over the Kingdom of Saudi Arabia ,onshore and offshore, to support the company's Oil & Gas operations in upstream and downstream. It also supports emergency & security response for all of the company's facilities. Saudi Aramco operates and maintains TETRA (Terrestrial Trunked Radio) network as the main mission-critical radio communication network that provides high available and reliable mean of communications during emergencies. **(SDG9)**

In **Saudi Arabia**, **IT Flat Network Segmentation** is a cybersecurity project to protect Saudi Aramco against cyber-attacks and spreading of viruses. The Flat Network Segmentation initiative was launched in 2016, consisting of two foundational projects: Core Network Segmentation (User-side) and Data Center Network Segmentation (Server-side). The Core Network hosting 60,000+ workstations was segmented into multiple zones whereby all end-user workstations within each zone are allowed to intercommunicate but inter-zone communication is forbidden unless absolutely required. Legitimate and approved interzone communication traffic is forced through centralized next-generation firewalls for proper security checks and controls. On the server-side, micro-segmentation was introduced into the Corporate Data Center Network through the implementation of Software Defined Network (SDN) technology. Through SDN, multiple zones are implemented with security controls to limit access to only legitimate and authorized requests. The new Data Center SDN architecture also increases the availability of all critical applications hosted within the Data Center while providing stringent security measures to mitigate the impact of cybersecurity threats and the spread of viruses. **(SDG9)**

In **Saudi Arabia**, there were multiple **End-to-End Integration for Operation Automation** tools that got introduced to the IT infrastructure and became critical components of its operation. Each tool is designed towards providing optimized operational tasks for a certain software or a technology. In any mature IT environment, there are many software components with strong dependencies between them. For example, operating systems maintenance affects the application availability which in turn affects the business processes. Due to these dependencies , automation efforts still face obstacles to reduce business

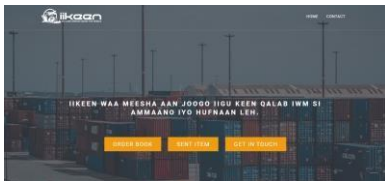
outages, administrative tasks and avoid implementation delays. For example, although there are automation tools to patch operating systems, OS administrators still require application support involvement to prepare the applications in order to move with the operational task. The involvement of both parties are needed to reduce impact on business processes and facilitate the implementation of such infrastructure change. The coordination between both IT entities through communication channels e.g. emails introduces a lot of delays and efforts that deviates the focus of the IT infrastructure teams from the core operational tasks. In addition, this prolongs business outages. In order to overcome the aforementioned challenges, a medium of communication must be created in order to achieve the desired functionalities in an efficient manner. An interface (API) is established with the proper authorization controls and communication mechanisms to achieve the required integration. Moreover, the business process dependency requirements is instilled in this solution. (SDG9)

In **Saudi Arabia**, the enterprise **Cloud journey** started with Saudi Aramco's establishment of a full Private Cloud with capabilities and services that brought agility, scalability, and efficiency to the business. Some services provided on premise outmatch services offered by well-known International Cloud service providers. Saudi Aramco's Cloud implementation was recognized by the Cloud software vendor as being the best implementation in the Middle East and Northern Africa. This implementation has positioned the company to rapidly advance in the Digital Transformation and to have the required IT Infrastructure readiness for the upcoming IPO. The deployed technologies and processes also enabled Aramco to reach and maintain a 100% security patching compliance across thousands of servers at all times, while Gartner reports that the global average is 65-70%. IT developed its own solution with Artificial Intelligence to scan critical systems for incompliance to more than 140,000 check-points taken from baselines, best practices, and powered with autoremediation for common deviations. (SDG9)

In **Senegal**, NegaWatt, an NGO of energy experts, is measuring and denouncing the link between electricity waste and global warming through the project **Centralized Network Management Platform for Connected Objects**. Turning off electrical equipment after using an eco-gesture may seem simple but is not necessarily acquired by Senegalese. Leaving electrical equipment on can be considered wasteful, with economic, environmental and social repercussions. The project is based on ICT, which helps accelerate the SDGs to help state structures and even households to better manage their various electrical equipment and their energy consumption. It has set up a central management system that handles remote electrical objects. (SDG1, SDG7, SDG9, SDG11)



In **Somalia**, **iikeen.com** provides delivery service for Somalis who could not purchase goods online due to restrictions on the use of credit cards. Initially started with books and now expanded to other items, this project enriches people's buying options by using mobile money facility and access to global e-business. (SDG9, SDG10)



In **Spain**, **ShowMeText system** implemented in RTVE (Radio Televisión Española, the largest public broadcaster in Spain) addresses the need to simultaneously subtitle 11 regional news programs. Due to compliance with legal obligations, it has become increasingly common to include automatically - generated Subtitling in the process of signal distribution. Although there are encoders that allow for automatic generation of good quality subtitles, it is necessary to use fully cloud-based systems that allow for an increase in subtitles quality through automatic learning techniques. The impossibility of bringing together 11 stenotypists or 11 re-speakers simultaneously to do manual subtitling for these live news programs led RTVE to use the proposed cloud-based live subtitling system. (SDG9, SDG16)

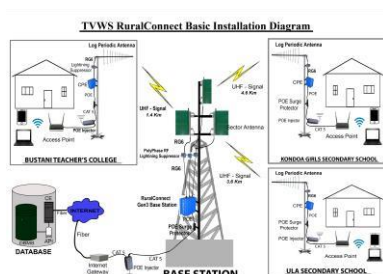


In **Sweden**, **imagiLabs** makes coding fun for teenage girls. This project wants girls to have equal opportunities in the future, and if technology is the future then girls need to be equipped with the skills to help shape technology and therefore the future! The product offering of this project consists of a mobile platform, programmable accessories, and a community to teach programming. The mobile application pairs with the programmable accessories and introduces users to coding in a fun, tangible and engaging way, removing a large barrier to entry. The app allows sharing and collaboration to retain users' interest through a community platform where users can see what others create with code and can

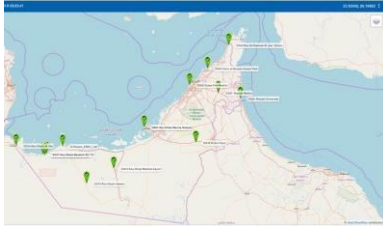
help each other. It also provides access to coding tutorials in the form of games. Girls learn a real programming language and apply it to change the color of the LEDs embedded in their accessory. imagiLabs creates a unique solution for engaging girls between 12-16 with technology. (SDG4, SDG5, SDG9, SDG16)



In **Tanzania**, the program **Piloting the use of TV White Space Technology for Community Network in Rural Tanzania** deploys a community-based network in rural Tanzania using TV White Space technology, which offers advantages in terms of coverage and spectrum availability. The community-based network has proved to be the feasible bottom-up approach to connect the unconnected population in rural Tanzania where commercial Internet Service Providers and Mobile Network Operators do not see value in investing because the return on investment is not realized within short-time of the period. The project has connected four education institutions in Kondoa, Tanzania and offered access to high-speed Internet. (SDG9)



In **United Arab Emirates**, **FANR** maintains a set of radiation detectors located in various areas throughout the United Arab Emirates, including detectors around the Barakah Nuclear Power Plant. This set of radiation detectors is referred here as the gamma monitoring network. The gamma monitoring network consists of fixed stations that are designed to run continuously and provide real-time measurements of background radioactivity in the United Arab Emirates. The gamma monitoring network also provides early warning in the event of radiological and nuclear incidents. The gamma monitoring network also provides critical information regarding protective actions to take in the event of an emergency. (SDG3, SDG11)



In **United Kingdom**, **Innovation Factory** has developed a solution which is capable of detecting a wide range of sounds (both indoor and outdoor) such as smoke alarms, doorbells, babies crying, car horns and more. These sounds are then pushed as easily understood notifications through a smart device and vibration bracelet. Unique algorithm for smartphones, which detects a wide range of sounds such as smoke alarms, doorbells, baby crying, car horns and more. The App is connected with the Pebble Watch and Android Wear to get better alerts. (**SDG9**, **SDG16**)



In **United Kingdom**, **Goshawk Speech Intelligibility Platform** is a telephony environment co-located with a mobile core with offering a responsive web based UI for end user self administration. The user interacts with the website, which controls the call and audio prompts to deliver an assessment of how the user hears with their phone. This is then converted into a tailored enhancement for the user. Once a user has completed setup, they use the service with just their mobile (any mobile) and only need to revisit the web UI if they wish to tailor service again. (**SDG9**, **SDG16**)



In **United Kingdom**, **Waymap's wayfinding and navigation** offering is designed from the group up specifically to deliver to the ITU F921 standard. For the end user, it is an App on their phone that guides them around. For the venue, it is a platform that serves their maps and live facility data feeds securely and supports services such as emergency response, guided tours and post visit analysis. Waymap is based on a breakthrough in indoor location

technology that reduces the need for bluetooth infrastructure whilst at the same time, increasing the accuracy of location to meet the ITU standard. No bluetooth only solution is accurate enough to do this in public spaces, especially large open areas busy with people. Typically, Waymap sees a 10 to 30-fold reduction in the number of bluetooth beacons required. The technology is also high resilient and continues to provide good guidance even when the installed infrastructure fails (vandalism, theft and poor maintenance are common). (SDG9, SDG16)

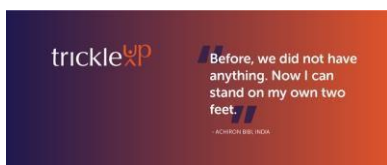


In **United Kingdom**, **GiveVision** works on wearables that can enhance people's remaining vision as well as enabling them to do more daily living static activities. Its first device is formed of a headset, a phone that acts as a screen and a remote control to operate the device. The kit is registered as a class 1 medical device. They have developed an augmented reality application in-house which uses image processing techniques to alter the image people look at in order to help them see better. The main functions are the control over the zoom, the contrasts, and the light exposure. (SDG9, SDG16)



GIVE VISION

In **United States**, **M-Powered** is a product of TATA Communications' vision to empower 25,000 women with access to information - part of a greater vision to ultimately reach 100 million women across the globe. The M-Powered project aims to make significant and replicable contributions towards the eradication of extreme poverty by providing extremely poor women with appropriate mobile technologies in order to improve their access to critical information and services, subsequently enhancing their livelihoods. In addition, the data generated by the program aims to enable large-scale governmental anti-poverty programs to be more efficient, effective, and responsive to the needs of these women and their households. (SDG2, SDG4, SDG5)



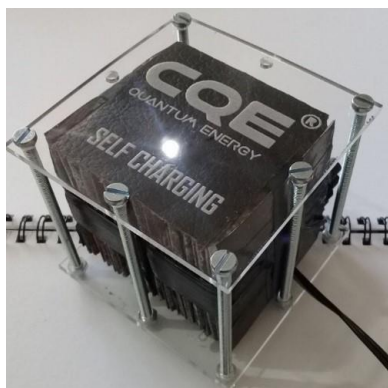
In **United States**, with the goal to provide improved access to education and communication services and resources, a **Community Intranet Pilot** was launched in 2018 on the island of San Cristobal. This community network introduced a variety of servers for sharing educational resources between the five schools on the island. The Community Intranet Pilot was implemented using a client-server model over a combination of fiber optic network backbone and wireless communications for the last mile. Workshops to educate and empower end-users on the use of the system have been enthusiastically embraced with the goals of closing the digital divide, enhancing collaboration, and encourage the sharing of resources. (SDG4)



In **United States**, **Leading Cyber Ladies NYC** community aims to create an empowering, safe and friendly environment for women in the cybersecurity industry and for those who want to join the industry. women make up only 20% of the cybersecurity industry and our main goal is to create more women role models and increase the community. we offer meetups which take place every tow month and include informative & educational talks, technical workshops, mentors and mentees program and more. (SDG8)



In **Zimbabwe**, the **CQE energy cube** is a self-charging solid state battery that uses moisture in the environment to produce power. The Technology exploits the energy released when Hydrogen combines with Oxygen to form water. The energy generated creates an electric current that can be used to power different devices and can also be used for domestic and industrial purposes. This new source of power can be used to create sustainable energy generation systems to augment and reduce the cost existing power generation for small appliances. (SDG3, SDG7, SDG8, SDG9, SDG10, SDG13)



Actionline: 3.0

In **Argentina**, the site **www.glosarioit.com** a non-profit project. It is a computer glossary, where there are thousands and thousands of terms, always related to computer science and technology. In addition, you will find much more content (such as: ephemeris, heroes and personalities, acronym list, a set of questions, curiosities and more). The idea and objective of the project, always was and is, to disseminate knowledge to each user and in every corner of the planet. The impact that can be seen is the number of users who connect to the site (and from distant parts of the world) and clear their doubts by reading some definition, or strengthening their knowledge. **(SDG4)**



In **Argentina**, **+ Simple** is an application for mobile devices that aims to improve the experience of older people when browsing their smartphones. This app offers them the opportunity to read the newspaper, perform online procedures, communicate with family and friends, share moments, use the web and social networks, meet other neighbors, attend events or create their own activities and configure alerts in case of emergencies. The application was first published in August 2019 and since then new versions with continuous improvements have been released. Currently, the application continues to be updated with

cutting-edge technologies and we are currently working on a new improvement to increase citizen satisfaction and experience. **(SDG10)**



In **Argentina**, **Credex** is a project which accompanies teachers in the process of development and pedagogical documentation regarding relevant educational experiences involved in the Digital Education. Each Credex experience is accompanied by the INTEC team of experts and document during the whole development by the teachers leading the process. Every pedagogical documentation of the experiences includes audiovisual material, planifications, students' productions, didactic resources- among others- with the purpose of socializing valuable assets which can be used by other teachers, contributing different meanings and perspectives according to their daily dynamic context. In this way, this initiative seeks to encourage and inspire teachers to re think, enhance and produce outbreaking proposals using digital technologies. **(SDG4)**

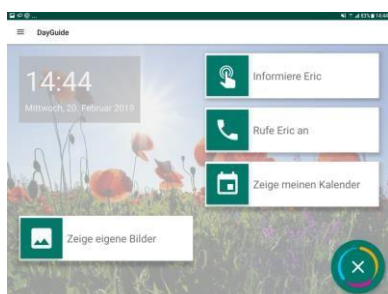


In **Argentina**, **Program.AR Initiative** is currently partnering with the IT chamber for developing a new research focused on ways to encourage high school girls to choose IT degrees. **(SDG4, SDG5)**

In **Argentina, Las de Sistemas** is a community of (volunteers) girls in tech that focus on giving support to women, lesbians, non-binary people (target audience) generating a safe space. Especially the ones that have just started working in tech or have been working in tech for many years. In Argentina there are many communities and programs for connecting girls with technology but not for giving support to the ones that are already in the Industry. The project uses technology to fight for our rights, programming open source solutions related to the legalization of abortion and period Equity. (SDG5, SDG8, SDG16)



In **Austria**, **DayGuide** introduces a novel, ICT-based system supporting older adults suffering from MCI and early dementia in their daily life. Persons with cognitive impairment experience various domestic challenges, depriving them from the pursuit of an independent, self-organized life at home. The project directly responds to these challenges through technology allowing people to live as independent as possible for as long as possible. (**SDG4, SDG9, SDG16**)



In **Bangladesh**, in this competitive global context, the demand for the English language becomes increasingly high due to the expansion of business, job, and education and in professional sectors. The traditional education system and curriculum of secondary levels do not keep pace with this ever-increasing demand, particularly for youth learners in rural areas. To address this, the government is committed to minimize the gaps and materialize the vision 2021 through digital Bangladesh and has provided the license to 32 initiators for establishing community radio stations. As a result, now 18 community radio stations are operating in rural areas. These Radio stations are one of the best educational platforms for the larger audience at hard to reach communities in Bangladesh. Effective programs on English Language learning through Community and Social Media in Rural Bangladesh are now addressing the perspective and contribute to improving the English language skills of the wider radio audiences. Broadcasting success stories on development issues are inspiring the rural people and give strength to fight against poverty and other struggles of their lives. These programs are uploading in Facebook and Website to connect the youths who are using mobile phones for listening to radio programs. (**SDG4**)



In **Belgium**, the **CuARDian Angel II (CARA II)** consortium strongly believes that keeping Europe's ageing population mobile, active and independent is important for a sustainable society. Elderly mobility is paramount for their health, social networks and independent social engagement. Furthermore, prolonging elderly independence reduces societal costs and potentially raises personal prosperity. The first CARA project (CARA I) identified relevant needs that are experienced by ageing drivers as well as possible gains and wishes for primary, secondary and tertiary end-users. Through large-scale surveys, in-depth interviews and end-user workshops, valuable insights were gained. With age, driving experience increases, but 'fitness-to-drive' tends to deteriorate, as motoric, sensory and cognitive skills decline. And though so-called Advanced Driver Assistance Systems (ADAS) can offer a mitigating solution, they may also make driving more complex if they are not designed with aging users in mind. (SDG9, SDG16)



In **Brazil**, **Livox** is an alternative communication software available for Android tablets. Besides enabling non-verbal people with disabilities to communicate, it is also being extensively used in schools to help not only people with disabilities but also people with learning impairments to learn how to read, write and learn complex concepts at school. Livox has advanced algorithms that make it adjust to a wide range of disabilities. Livox also crowdsources the creation of educational contents and provides tools for teachers and professionals to evaluate the user's improvement over time. (SDG4, SDG9, SDG16)



In **Canada**, **Build a Dream** is a not-for-profit that delivers specialized programs to attract, encourage and empower young women (grades 9-12) to pursue careers that fall under five pillars: skilled trades, STEM (Science, Technology, Engineering and Mathematics), emergency response, entrepreneurship, and advancing women in society. In 2004, the

organization brought industry and education together with parents to create an all-encompassing career expo that allowed families to make informed career decisions. From that small beginning, Build a Dream grew into a movement and today welcomes an average of 1,000 attendees per expo. (SDG4, SDG5, SDG8, SDG16)



Promoting equal access to ICTs for women and girls

In **Cuba**, The Project "**Promoting equal access to ICTs for women and girls**" offers the possibility of acquiring knowledge and life skills, for example, in undergraduate training with the creation of safe and gender-responsive teaching-learning environments, in postgraduate training with the Master of Software Quality, as well as the Doctorate in Computer Science of the UCI. As far as university extension is concerned, it contributes to gender equality in the "I Programmer" project, to begin the insertion of women from an early age in careers related to Computer Science; the extensionist project "Motivation and Professional Orientation Actions (Amop)" makes it possible to motivate the study by the career of Computer Science Engineering of the students of high school, high school and polytechnic and labor, as well as the "Small City" project that works with children who live with their parents in the university community. (SDG3, SDG4, SDG5, SDG9)



In **France**, **Rogervoice** is an all-in-one telecommunications platform and mobile application that integrates state-of-the-art accessibility solutions. The platform follows norms recommended by ITU-T T.140 for telecommunications accessibility. It also follows the norms recommended within ETSI and specifically ES 202 975 for relay services. Rogervoice goes beyond this by using voice recognition technology that is augmented by human editors, in real-time, thereby combining the speed (>1000 wpm) with the accuracy (going from 95% to 98%). (SDG4, SDG9, SDG16)



In **France**, **Open Ecosystem Network** (OpEN for short) is a free to use open, cloud based, co-creation environment initiated by Nokia. Open Ecosystem Network empowers individuals to become the next generation of co-creators. Open Ecosystem Network is the place to connect, to discover a world of new opportunities and ideas from the world's leading brands, to collaborate seamlessly with experts from different industries who offer a wide range of skill-sets and perspectives and to build, and to develop and test your idea with your new team using the tools you know and love. (SDG1, SDG3, SDG4, SDG5, SDG7, SDG8, SDG9, SDG10, SDG11, SDG12, SDG13, SDG17)



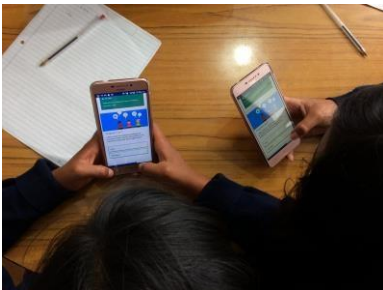
In **Germany**, **Audiopedia** is tackling the challenge of educating marginalized population. Audiopedia is a global online project combining relevant and localized SBCC audio contents with easily usable hard- and software. The web site Audiopedia.io was designed to provide access to open knowledge to both CBOs/NGOs and individuals. CBOs/NGOs can benefit by using it as part of their SBCC strategy, as it enables them to search, download, embed and share audio files in several languages. Audiopedia does also provide several technological solutions to make contents accessible to both literate and illiterate audiences. Solar powered audio players have been used to provide health education in several projects in East and Western Africa. Mobile web applications in combination with ad hoc Wifi networks can stream Audiopedia contents without the need of any internet connection and independently from the electric grid. Audiopedia was designed as an open ecosystem, allowing CBOs and NGOs to include their own audio contents, which can be communicated using QR codes or Audiopedia's own link shortening service "mp3.fyi". The goal of Audiopedia is to promote and ease the use of digital audio in SBCC campaigns by providing a coherent infrastructure of contents, technologies and case studies. The community platform Audiopedia.org reflects this claim. (SDG1, SDG2, SDG3, SDG4, SDG5)



In **Germany**, **Smart Service Power** helps elderly and disabled people to live autonomously in their own homes as long as possible based on an IoT-System with heavy usage of AI. "The digital eHealth assistant ""Smart Service Power"" (SSP) is a new approach in elderly and disabled care integrating sensors, devices, services, and data. People can live independently in their own homes for as long as possible with the safety of a nursing home. The system gives the relatives, who might live far away, freedom of mind – they get information concerning the progression of the state of health, about emergencies and measures taken. (SDG4, SDG9, SDG16)



In **Guatemala**, **Tigo Guatemala** and **SHEVA** created "**Conectadas**" to empower low-income girls and women between 15 to 40 years old by equipping them with the skills and knowledge to use mobile technology. Every year our goal has been to train at least 10,000 low-income girls and women around Guatemala with a face-to-face training plus access to an educative platform where they can have deeper learning. So far, through Conectadas, SHEVA and Tigo Guatemala have delivered mobile internet skills training to more than 31,000 women in Guatemala. (SDG4, SDG5)



In **India**, **MeraApp** is a project-based mobile application which focuses on reducing inequalities by imparting information, citizen services and government welfare schemes to the people living in marginalized areas of India. Since its launch in 2016, MeraApp has spread its roots in 11 states and 13 districts of India. (SDG10)



In **India**, **MeroApp** helps people to search and find good food, hospital. So that, they can grow their capacity to survive. (SDG3)



In **India**, **mHS CITY LAB India** was founded in 2013 as an interdisciplinary social enterprise to facilitate safe, resilient and affordable housing for the urban poor. Majority of the poor live and build their homes in informal settlements, adopting a process of incremental construction. These homes are non-engineered as communities lack access to technical construction assistance (CTA). mHS has developed an innovative digital platform - NEEV powered by architectural and engineering data to bridge this gap in technical knowhow. The interactive platform provides accurate estimates, bill of quantities and offer customized construction manuals. (SDG11)



In **Indonesia**, **Relawan TIK Goes to Society (REGOS)** is one of project of Relawan TIK Indonesia (Indonesia ICT Volunteer) that has objective to make everyone in Indonesia, no matter young or old, male or female have the necessary skills to benefit fully from the Information Society. The project believes that capacity building and ICT literacy are essential for the society. (SDG17)

In **Indonesia**, **City Wide Mapping for Disaster Management Project** is a joint program with the Pacific Disaster Center (PDC), Indonesia National Disaster Management Agency (BNPB) and Humanitarian OpenStreetMap Team (HOT) Indonesia to support disaster management tools and data for Indonesia by providing an accurate up-to-date map of key lifeline infrastructures and associated attributes in OpenStreetMap, an open and free whole map and can be used for any disaster management sector by National Government (BNPB) and Local Disaster Management Agency (BPBD) using InAWARE, a disaster management tool to improve overall risk assessment, early-warning, and disaster-management decision making in Indonesia. The mapping activity was carried out for 2 years from 2016 to 2018 and has completely mapped 3 major cities in Indonesia, namely Surabaya, DKI Jakarta and Semarang including public facilities, critical facilities, road networks, and administrative boundaries in each city. This mapping activity was executed by Indonesia's HOT with support from the local government such as the city government and the Regional Disaster Management Agency (BPBD) in each city. **(SDG9, SDG11)**



In **Indonesia**, **PETANI Application** Provides guidance on when to plant certain crops, such as rice, maize and soybean, for extension workers and farmers in every sub-district (34 provinces, 514 districts/cities, 7042 sub-districts) throughout Indonesia with the Integrated Cropping Calendar Information System. In the next process, the dynamic Cropping Calendar will be completed into an integrated Cropping Calendar and integrated with PT 8 villages Indonesia's PETANI application. **(SDG17)**

In **Iran** (Islamic Republic of), the **Business Consulting Center (YAAVAR) system** has been implemented and utilized in all provinces of Iran since 2017. The system offers quick, clear and free of charge advices on businesses, provided by committed and experienced consultants in 26 main fields (for example, financial Affairs, customs, insurance, etc.) and 160 subfields (for example in tax field: property tax, corporate tax, inheritance tax, etc.). This is done through ICT tools in the form of an online and integrated system. Other goals of this project include the reliability of advices (regarding the possibility of registering and tracking consultations) and conducting knowledge management at all stages of the task. Moreover, another significant achievement of this project is providing applicants from remote and deprived areas with the ability to accessing professional consultancy services that are made available by means of IT tools, as well as, ranking government agencies based on ratings given by the users in accuracy and usefulness of received advices. This project currently has been launched in all provinces of the country and the relevant authorities are obliged to respond to all registered consultation requests within 5 working days (as it is specified in the relevant regulations). **(SDG4, SDG5, SDG16)**



In Ireland, **Mobility Mojo Accessibility Vetting Tool** combines the most trusted platforms in the world. Google's Firebase platform ensures robustness, security, and scalability of the Mobility Mojo Progressive Web App. We utilize firebase for our hotel vetting process. The project uses Salesforce, the world's number 1 CRM to allow us to control all aspects of the customer journey and optimise customer service and operational efficiency. And the project also uses Microsoft Azure to ensure all data is backed up safely and securely in order to protect our customers and systems at all times. (SDG9, SDG16)



In Ireland, **Access Earth** aggregates, distributes and curates the world's accessibility information for those living with any form accessibility need. Presently, the Access Earth database can be made use of and contributed to by using the web and mobile application available in the App Store and Google Play Store. Data is currently gathered manually with users, partners and organisations ensuring that accurate accessibility information is updated and clearly portrayed on the Access Earth map. Users can see the rating of a given location - a pub, restaurant, hotel, etc. - and if it has already been rated can use that information to plan their trip. Users may also 'Agree' or 'Disagree' with such information if they believe it to be out of date or inaccurate. An algorithm is used to ensure that each users opinion contributes to the review but does not override it completely without verified user backings. If a venue is not rated, users may simply answer a series of 'Yes' or 'No' questions to easily provide that information back to other users of the app. The data gathered this way is analysed and leased out to organisations and government bodies so they can better communicate to their respective constituents and make improvements based on the analytics provided. Access Earth provide this information as a dashboard to paying organisations - sports stadiums, large MNCs, local governments, etc. - so they can better accommodate and include the 15% of people in the world living with a disability. Accessibility information is gathered across the world in multiple different ways using multiple different formats. (SDG9, SDG16)



In **Israel**, **Accessttavors.org** provides easy channel to book accessible for disabled rooms in hotels, without having to contact a hotel. It collects reviews about accessibility of accommodations, attractions and tours. Only This platform has the system of local guides with disabilities that can provide advice to travelers with disabilities. This solution is multilingual, currently in English and Russian. (**SDG9, SDG16**)



In **Israel**, **Carmel 6000** is an Israeli program that empowers young women to solve social problems through high tech. Its mission is three-fold. First, raise, train, inspire and empower a new generation of women social tech entrepreneurs. Second, use technology to help disadvantaged populations and people with disabilities by working with non-profits and innovating technologies to help them. Third, establish Israel as a world leader in social impact entrepreneurship. A key program goal is to narrow the gender gap, which sees women, underrepresented as coders, engineers, and entrepreneurs. The program focuses on women, who take part in Israel's national civilian service rather than the military. Carmel gives girls the opportunity to further develop their technical abilities while bettering Israeli society by helping the most disadvantaged populations. The project focuses on professional and personal empowerment for religious young women. (**SDG4, SDG5**)



In **Italy**, **PickMeApp** is the intelligent, collective and door-to-door urban transport solution designed for dependent citizens, such as children and young people, the elderly and the disabled. The IT platform includes a user app, a driver app, back-end management software and a smart route optimisation system; the "PickMeApp Mobility" mobile app allows users to book and pay for the service and track passengers on board the vehicle; the smart algorithm processes the various bookings received, producing a shared itinerary and

allowing the application of a reduced single fare. The itinerary, planned according to the bookings received and the routes processed by the optimisation system, is then available on the management software and on the driver app; thus, each single booking is handled by the driver on a timely door-to-door basis. The target of end users of the PickMeApp solution is made up of children, teenagers, the elderly and the disabled people. PickMeApp first of all satisfies their need for mobility and social inclusion. **(SDG4, SDG9, SDG16)**



In **Italy**, **Nostalgia Bits** is a web portal aimed at allowing elderly users to upload personal stories. In this part the functions of the portal are structured according to the hierarchy of user types, in expanding circles of available functions from narrow to wide. Back office administrative functions are detailed separately from portal functions. The objective of the Nostalgia Bits project was to develop an innovative social network solution to increase social interaction between elderly people and their families, as well as to improve intergenerational communication. **(SDG4, SDG9, SDG16)**



In **Italy**, **Nostalgia Bits** is a web portal aimed at allowing elderly users to upload personal stories. In this part the functions of the portal are structured according to the hierarchy of user types, in expanding circles of available functions from narrow to wide. Back office administrative functions are detailed separately from portal functions. The primary targeted users of the portal are the elderly age groups. Keeping the usability of the portal easy and simple is a basic principle of design. Default settings are universally reduced to basic functions, with advanced functions available, but hidden. Accessing advanced functions is a user decision. UI labels are easy to customize or translate during the deployment process. Every type of user is considered to be a Visitor before login and after logout. Registered members are preferable to unregistered Visitors in using the portal. To

foster registration to NoBits, all the functions of the portal are displayed to every user. Members can use all the functions properly. Visitors can use many functions properly. If an unregistered Visitor attempts to use a function that requires registration, Visitor is prompted to log in or register. **(SDG4, SDG9, SDG16)**



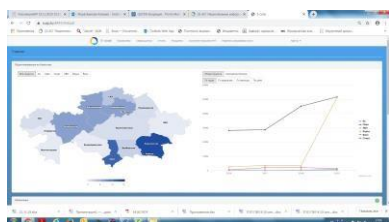
In **Italy**, **Be My Eyes** is a software application developed for iOS and Android devices. Be My Eyes utilizes the blind or low-vision user's rear-facing camera to initiate a video call with either a volunteer or a company representative. The video call technology is integrated into a simple interface that is easy to navigate and is fully accessible with all accessibility features. The video connection is made through the WebRTC standard using an internet connection, either Wi-Fi or mobile data. Through the Specialized Help feature, blind and low-vision users can connect to company agents at our partner companies. The call in itself works like a call to a volunteer, but will be picked up by an agent at a call center. A desk-top version for company agents is in development. **(SDG9, SDG16)**



In **Italy**, **Pedius** is a communication service that allows the Deaf and Hard of Hearing to make phone calls, without a third-party intermediary, 24/7. The mission of the project is to make calling and basic communication more accessible and inclusive for Deaf people. Users type or speak their message into their device and Pedius sends it to the contact they choose, using either the user's own voice or an artificial voice. In real-time the user reads the written translation of the recipient's answer, thanks to Pedius' advanced voice recognition and speech synthesis technologies. Pedius has also developed relationships with large companies that want accessible services for all clients, as well as, work inclusion services for Deaf employees. Most recently, Pedius has launched its subtitling service especially used for events, meetings, and lessons or mandatory courses. With this technology, Deaf, Hard of Hearing, and other individuals with any hearing difficulties are able to follow along in real-time as the transcribed text of the speaker appears on a large screen. **(SDG8, SDG10)**



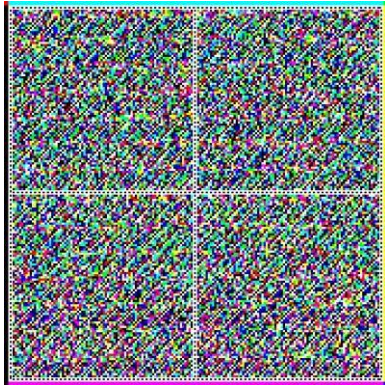
In **Kazakhstan**, **“E-Sapa” information system** for registration of ethyl alcohol and alcoholic products (hereinafter: SRAP) is intended to provide State Revenue Committee under Ministry of Finance of the Republic of Kazakhstan and its local branches with effective tools to control and monitor ethyl alcohol and alcoholic products production online. The major goal of the project is reduction of high sales level of low-quality counterfeit alcoholic products. (SDG9, SDG12)



In Kenya, **Whiz Kids Africa** equips children with Digital Literacy Skills to enable them to harness technology, use it safely, optimally and effectively. It enables children to code with AI, Robotics and Content Development and also advocates for children with Neurological Disability, specifically Autism. (SDG4, SDG5)



In Malaysia, This project **Development of High Capacity Colour Code System** describes the development of high capacity colour code. The main objective is to develop a code that has three times higher data capacity than the current QR code by using same amount of data modules. This project allows the code to encrypt images without internet access. According to the experimental result, it is able to achieve 100% decoding accuracy as contributed to the developed image processing techniques. (SDG4)



In **Malaysia**, the **APPRECIATE** project is a compilation of several sub-projects since 2014 that focuses on APPRECIATing people-in-need, i.e. rural and urban poor community, single mothers, indigenous community, elderly and students with special needs (Autism), and school students, providing them access to information and knowledge. The project objectives are to provide services (training), and ICT infrastructure in which the establishment of telecentre has been setup for the identified community. Subsequent efforts were in-place to ensure sustainability of this program so that the ICT equipment are optimized in terms of usage via frequent visits and observing log history files of personal computers. Apart from that this project also imparting knowledge and skills focusing "Content", "Space" and "Support" for targeted community. **(SDG1, SDG4, SDG8)**

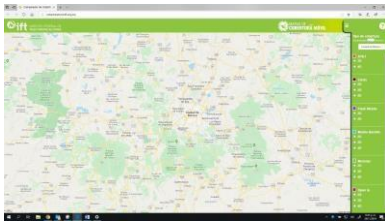


In **Mexico**, The Federal Telecommunications Institute has launched a website called “**Somos Audiencias**” in which children, parents, teachers and general public will find information about their rights as media content consumers. The website also contains a wide collection of studies about media consumption, events, forums and regulations related to broadcast services and media contents in Mexico. **(SDG4, SDG10, SDG16)**



In **Mexico**, The Federal Telecommunications Institute designed the “**Mobile Coverage Comparator**” tool that aims to inform and offer users a mechanism of consultation region

or geographical areas of coverage where each mobile operator to provide its services, so, users will have the ability to know which mobile company adapts to their needs and check coverage offered between the various companies. (SDG4, SDG10, SDG16)



Mobile Data Consumption Simulator

In Mexico, The Federal Telecommunications Institute (IFT) designed a mechanism called **Mobile Data Consumption Simulator**, which allows the user to calculate the quantity Mb consumed monthly, depositing their habits of use of the services and applications from their mobile. As soon as the user provides their monthly consumption, the data consumer simulator identifies the plans offered in the market that are closer to their consumption. (SDG4, SDG10, SDG16)



Centre for citizen collaboration through collection, publication, analysis and fiscalization of government generated data.

In **Mexico**, **The Honest Government Centre**, is the central point of the open government strategy of Mexico City Government, that focuses on the creation and development of open data resources, tools and programs to enable access and action around information generated by the government. Its intention is engage the public in decision making, ensure freedom of public information, and to build a base of citizens involved in public decision making and fiscalization. Its strategy has three lines of action, budget transparency, open data and citizen participation. (SDG10, SDG11, SDG16)



In **Morocco**, **www.m33an.com** is a platform for exploring opportunities for young people around the world, which aims primarily at empowering young Moroccans to develop and enhance their abilities. The platform participates in different categories of opportunities

including scholarships, training, exchange programs, workshops, conferences, competitions, In addition to spreading awareness, inspiration and knowledge, encouraging the creation of initiatives, innovation and hope, and thus combating all forms of hate speech and extremism, by providing content that enhances the roles of youth and their position in social life. (SDG4)



In **Netherlands**, the **FindMyApps** tool is a web application installed on tablets, consists of a library of 180 apps in the domains of self-management and meaningful activities which are assessed as dementia-friendly apps. This was based on a set of important app criteria with regard to interaction, feedback, aesthetic design, app design, customization, obstacles, and age appropriateness. Usable apps are selected by matching personal preferences of people with dementia (i.e. the user profile) with features of apps, and by matching their needs and wishes with the different types of apps. (SDG4, SDG9)



In **Netherlands**, the objective of the program **From Cloud, to Crowd, to Crop, to Corner** is to recruit stakeholders to engage in the local food supply chain through recruiting and supporting agripreneurs, matching them with the empty space, materials, education, financing and management to grow local, sustainable food. The program has been organising 150 volunteers, 700 Agtech companies and EU Erasmus programs to transform empty spaces into AgTech AgLabs where they can better grasp the challenges, opportunities and importance of conserving time, space, energy, water to feed their community and the world at large. (SDG2)

Menstrual Hygiene Management education and reusable sanitary pad making

In **Nigeria**, the program **Menstrual Hygiene Management Education and Reusable Sanitary Pad Making** has successfully empowered 3450 girls from various rural secondary schools in Enugu State with menstrual hygiene management education and provision of sanitary packs. Also empowered 35 girls and 5 males in hard to reach villages on how to make reusable sanitary pads themselves with free provision of start-up materials. This initiative has helped to keep girls in school, end/delay child marriage, eliminate Female genital mutilation, dispel long-held patriarchy and taboos surrounding menstruation, end girl's exchange of sex for sanitary pads, teenage pregnancies, and also helped in improving girls' self-esteem about sexual reproductive health rights. (SDG5)

In **Nigeria**, "**Connecting Marginalized Women To Technology and Development**" was launched in 2017. The project aims to give marginalized and underserved women aged between 18-35 including unemployed graduates, single-mothers, out-of-school youths, survivors of gender-based violence (GBV) and women living with HIV access to technology and digital skills training to enable them to gain knowledge and build their capacity to earn a sustainable income through ICT. The program empowers marginalized women living in disadvantaged communities who do not have access to technology and who do not have a reliable source of income with adequate knowledge and skills to improve their lives by starting income-generating activities using ICT. (SDG5)



In **Pakistan**, the content-based Facebook & Instagram page, **Maazrat**, has been created and is owned by females only. The channel addresses social issues and society taboos with a humorous and sarcastic take on the problems. The emphasis and main content segment types are based on issues which women in Pakistan face every day, regardless of their level in the society. The goal of this project is to address social issues that are suppressed or are not talked about in regular households. (SDG5, SDG16)



In **Pakistan**, **Pakistani Women in Computing (PWIC)** is a global community of women in technology fields and their allies hailing from Pakistan, with the aim of collaborating, growing, inspiring, celebrating, mentoring and creating opportunities for each other. The community's goals are to build a strong network of Pakistan female technologists and their allies across the globe to promote Pakistani women in tech, increase their global reach and visibility, to foster growth and retention in STEM fields for the Pakistani community. (SDG5, SDG10)



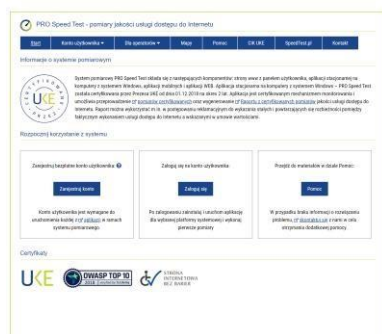
In **Pakistan**, **hypersalon.pk tech** is a women exclusive economic initiative. Pakistan has 10,000s of women who are presently working for below the national minimum wage (below sustenance i.e. USD 50-80/month). The intent is to bring these women into financial regulation on revenue share and build their capacity and move them to higher income levels. (SDG5, SDG8, SDG16)

In **Palestine**, “**Pal-STAR**” (**Palestine Smart Tourist Augmented Reality**) is an innovative solution which targets the tourists and assists them to make a trip inside the church, by means of an augmented reality using a virtual tourist guide, reflecting the real world of the church while explaining the historical information of the place in a smart, easy, effective, and simple way. The Application was tested by different tourists inside the church and received very good feedback. (SDG4, SDG16)



Certify to verify – Internet service quality tool's certification

In **Poland**, The Office of Electronic Communications (UKE) launched a program called **Certify to verify – Internet service quality tool's certification**, which aims to ensure that all the consumers can equally benefit from services provided and their rights are fully protected. UKE decided to equip them with a certified tool that would facilitate verification of the Internet access quality. After the selection procedure, President of UKE chose the best tool and certified it for a period of two years (as of 1st December 2018). Available on pro.speedtest.pl, the tool enables users to check the actual speed of connection and compare it with a contract. Moreover, it also generates a report with test results which can be used in court proceedings, if needed. (SDG8, SDG9, SDG11)



In **Portugal**, **silverskills** allows the elderly to volunteer their skills and time to perform work on a set of areas. People looking for support can then consult the platform for volunteer elderly that match the sought needs, and the platform puts both parties in contact. Their research indicates that most elderly prefer not to move to day care centres and institutions of that kind, suggesting that providing them with activities that can keep them active will be well received by them and have a significant impact in their well-being. The platform serves as a starting point for self-confidence in the use of ICT tools using perception of knowledge and experience transfer become visible in local communities, boosting elderly acceptance and perceived value of ICT solutions. **(SDG4, SDG9, SDG16)**



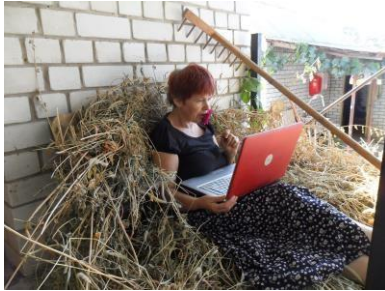
In **Qatar**, established by the Ministry of Transportation and Communication in 2010, **Mada Qatar Assistive Technology Center** facilitates the growth of digital inclusion to empower persons with disabilities (PWDs) and the elderly to meet their ICT Accessibility needs through Mada Innovation Program and Accreditation Service. Mada supports the development of innovative Arabic Assistive Technology and Accessibility solutions and thus, expanding the limited range of technologies available to support the ICT needs of PWD and elderly in Qatar and the Arabic language speaking region. Furthermore, Mada contributes towards expanding the accessible digital landscape by accrediting digital platforms (e.g. Websites, e-Kiosk, ATMs, etc.). To date Mada has successfully supported the localization of over 30 solutions through the Mada Innovation Program, and reviewed over 100 digital platforms as part of its Accreditation program. At the national level, Mada has achieved a digital accessibility rate of 94% amongst government websites which has facilitated Qatar to be ranked fifth globally on the Digital Accessibility Right Evaluation Index (DARE). **(SDG1, SDG3, SDG4, SDG5, SDG8, SDG9, SDG10, SDG11, SDG12, SDG16, SDG17)**



In **Russian Federation**, the purpose of **ROST project** is to drastically enhance and create equal opportunities for children who were left without parental care, or living in institutions for children or foster families, located in remote places, by providing internet access for them and teaching them Internet features and how to use its resources, and to improve in the first place education level, digital services, and by providing holistic information. Currently, over 50 organizations for orphans in 25 Russian regions have been covered by the project. (SDG1, SDG4, SDG5, SDG8, SDG10)



In **Russian Federation**, the **ABC of the Internet program** helps to solve a number of social problems including improvement of the quality of life through acquiring computer skills and Internet experience, facilitating access of pensioners to government electronic services through the Internet, elimination of digital barriers and ensuring availability of digital solutions for all citizens of the Russian Federation, regardless of the age, place of residence, income, social status, etc. The project has regional partners – Sberbank and the Russian Railways. The training takes place in 74 regions of the Russian Federation. More than 250 thousand people have already completed a training course of the ABC of the Internet program. (SDG3, SDG4, SDG8, SDG9, SDG10, SDG11)



In **Russian Federation, Moscow Longevity** project was launched on March 1, 2018. This is a new lifestyle for Moscow pensioners, who, thanks to the Moscow Longevity project (hereinafter referred to as the Project), have discovered new talents, made new friends, and gained new opportunities for creativity and self-realization. The project objectives include involving older citizens and their socialization, fighting against loneliness, maintaining psychological and physical health. The program of the Moscow Longevity project is structured in such a way that all areas of the basic package of classes are available in every district of Moscow, within walking distance for senior citizens. Over 2 years, more than 300 thousand citizens took part in the Project. Currently, more than 181 thousand participants are participating on an ongoing basis. **(SDG3, SDG4, SDG11)**



SheCanCODE

In **Rwanda, Igire Rwanda Organization (IRO)** started an initiative which close the gender divide in the ICT sector and SheCanCODE was formed. SheCanCODE committed to promoting women empowerment by providing young women in Rwanda with digital skills and professional skills training. Through experienced facilitators, mentors, blended learning model and the market outcome is driven curriculum. The IRO has placed approximately 70% of SheCanCODE graduates into leading tech companies in Rwanda. The target of the organization is to train 1 million young women in Rwanda by 2025 and creating job placement for more than 70. **(SDG5, SDG16)**



In **Saudi Arabia, Saudi Digital Library** is the largest academic digital source of information resources in the Middle East, including more than (200 million) scientific materials covering all academic disciplines and more than 174 Arab and foreign databases. The mission of the platform is to provide and organize local and international digital information sources for the institutions of higher education, scientific research, and both governmental and private entities in the Kingdom of Saudi Arabia. **(SDG4, SDG5, SDG8, SDG9, SDG12, SDG16,**

SDG17)



Crowdfunding

In **Saudi Arabia**, the **Objective** is a national project aiming to engage the community (individuals/ organizations) by giving a hand to housing support through online portal that achieves transparency, truthfulness, and professionalism in the provision of support. That will contribute to the upgrade of family stability and social solidarity through activating the social responsibility of pioneering corporations, reduce the number of legal cases claiming unpaid residential rents and to boost the credibility of support applications by provision of credible information. (SDG3, SDG16, SDG17)

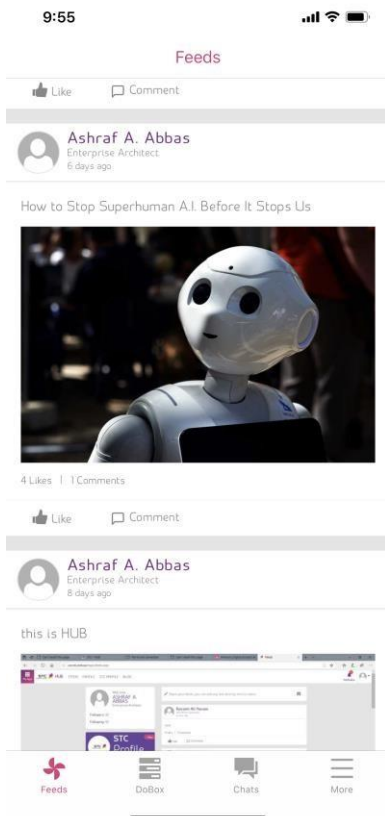


In **Saudi Arabia**, the Saudi Commission for Tourism and National Heritage has recently established and launched **the National Tourism Monitoring Platform (NTMP)**. It is in line with the country's digital transformation program, a key part of the Saudi Vision 2030, and is aimed at boosting competitiveness and efficiency in the sector by providing easy and quick access to information. NTMP is an effective and integrated e-platform designed to monitor the hotel accommodations' activities in the Kingdom and to conduct a comprehensive and accurate assessment of the movement of tourism across Saudi Arabia through the necessary resource management mechanisms and measures. By providing upto-date business intelligence and instant statistics about tourist facilities, the system will significantly improve quality and services. (SDG1, SDG8, SDG9, SDG11, SDG17)



In **Saudi Arabia, STC Hub** supports the collaboration of STC employees by providing a unified, secured platform to manage work projects, tasks and efficiently communicate with fellow employees to resolve work issues using chat & calls. It also provides social collaboration using feeds, wikis & blogs. The task management component allows users to create tasks and assign to employees to aid the tracking of projects. The user can add attachments, create custom boards be alerted when a task is completed. The chat features provide users the ability to search for STC employees, create groups, send voice notes and attachments. HUB also provides the capability of browsing Employees profiles to preview their skills and past experience, which supports in identifying companies experts and SME's. HUB provides micro-blogging functionalities to enrich the communication platform and push employees to collaborate and share their experiences with their friends and colleagues.

(SDG9)



In **Saudi Arabia**, **Business Intelligence** is launched by the Ministry of Civil Service to provide tools for business intelligence systems and build data warehouses that achieve the

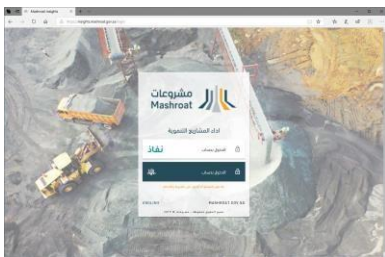
objectives of sustainable development through participation in raising economic efficiency and achieving social inclusion. (SDG5, SDG8, SDG11, SDG16, SDG17)



In **Saudi Arabia**, **CFO Digital Boardroom** puts focus on operational efficiency, use of innovative technologies and solutions, and safe operations. The Corporate Applications Department is currently in the process of building modern innovative dashboard for CFO to provide overview of key financial and operational metrics in an easy to consume intuitive way. This is a key initiative of Saudi Aramco's Digital Transformation journey. (SDG9)



In **Saudi Arabia**, **National Infrastructure Projects Performance Insights** (Mashroat Insights) is a platform to monitor the construction, safety, spending, and progress performance of all government infrastructure projects and highlight key performance indicators to Saudi Royal Court, ministers, province governors and key decision makers in government sectors to enhance project management, process control, transparency and reduce delay impacts. The platform was successfully launched in September 2019 and enabled the tracking of about 9,566 government infrastructure projects. This achievement provided the needed visibility to steer major delayed projects in the right direction. (SDG3, SDG4, SDG6, SDG7, SDG8, SDG9, SDG11, SDG12, SDG13)



In **Spain**, **IRISGO** is the new generation of eye-tracking technology that allows the user to control a device (with a high level of precision) using an embedded webcam of the device (mobile, tablet, PC or laptop), without the need for any additional hardware such as expensive infrared lights. IRISBOND's advanced software algorithms interpret the eye gaze of the user in order to provide intuitive and hands-free access to information and control over a screen. The current IRISGO version works on PC Windows (from Vista onwards) and

has been designed to function on a multiplatform used on Mac, iOS and Android. (SDG9, SDG16)

IRISBOND

African Sports Network

In **Spain**, the **African Sports Network** is a youth enterprise which aims to provide a platform to strengthen and encourage the engagement in sports enterprise and support the creation of ideas and to motivate and facilitate their conversations to become realities which will impact the African continent by increasing engagement and awareness in the business of sports. The project believes in the power, innovation and creation of ideas by young people that will challenge the way we think of Sports. And is committed to contributing towards reduced inequalities, and increasing decent work and economic growth in Africa. (SDG5, SDG9, SDG16)



In **Sudan**, the National Center for Vital and spatial (NCVS) developed the **Sudan Geoportal** as the first national map browser that's easy-to-use, which provides features not available in any other map browser such as measuring distances and areas. The responsive feature allows it to work on computers, tablets and mobile phones effectively. The geoportal currently contains web maps of Sudan, states and localities with its existing obtained data. The North Kurdofoan, River Nile and Khartoum states went far by providing oriented maps for services and wealth and there're plans for the remained states. Sudan Geoportal is integrated with the Sudan Geospatial Data Center (SGDC) which is customized version of GeoNode. So far there're 50+ user accounts by students, officials and GIS researchers. (SDG1, SDG2, SDG3, SDG4, SDG5, SDG6, SDG7, SDG10, SDG11, SDG12, SDG13, SDG16)

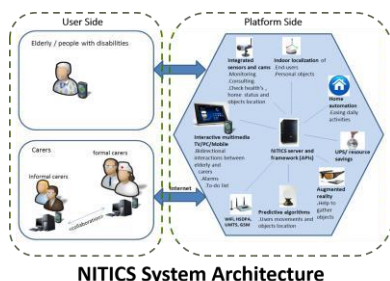


The Humanitarian Encyclopedia

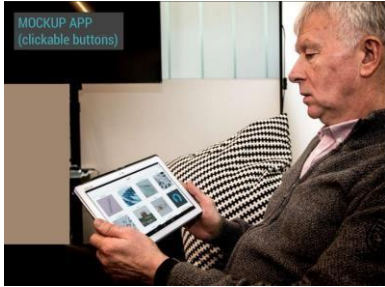
In Switzerland, the Humanitarian Encyclopedia project, through its online platform bridging academia and humanitarian (and nexus) sectors, will address three types of gaps in knowledge. First, lack of common understanding on key humanitarian concepts, and fragmentation of knowledge. Second, lack of knowledge and mutual understanding from the local up, and vice versa. And third, lack of spaces for knowledge exchange with each other across disciplines and levels. The HE project addresses challenges brought by the diversity in the humanitarian sector. The collaboration between the academia and humanitarian sectors, through knowledge co-creation and preservation, will contribute to greater coherence and effectiveness of humanitarian action. **(SDG4, SDG17)**



In Switzerland, Networked InfrasTructure for Innovative home Care Solutions builds upon existing, widely used, technologies to develop a dedicated platform that needs to integrate a variety of sensors and advanced algorithms. The NITICS project designed and built a holistic platform that is expandable and offers advanced ICT services including monitoring and navigational support for the mobility of elderly and disabled persons in their home during their daily activities. Furthermore, it also brought suitable services for elderly and people with diseases or disabilities (mobility handicaps, cognitive disabilities and mental diseases) that can keep their cognitive capability (at both physical and mental levels) intact. (SDG4, SDG9)



In **Switzerland, Vizier AAL Project** is launched. The core hardware components include a tablet through which the user can interact with the system manually, and a raspberry pi model 3B equipped with a MATRIX creator through which the user can interact with the system by voice. There are several peripheral hardware components as well. The user home is equipped with sensors which detect the state of doors or windows (open/closed), temperature sensors, a doorbell camera, and wearables (ex. fitbit). There is also a backend server which contains the database, API methods to interact with the database, monitoring logic for the sensors, and the dialogue manager to facilitate natural speech interaction. **(SDG4, SDG9, SDG16)**



In **Switzerland, the Vet Futurist** Team strives to provide context about technology in the Veterinary Field and Animal Sector. They focus on providing a broad view to help veterinarians, companies and policy makers to achieve the most out of digital innovation. To achieve its goal it publishes articles and share with our followers the latest news on technological developments. Moreover, it maintains a community of more than 2000 followers across social media that engage actively and discuss these subjects. It envisions integration of innovative solutions and technological development of the veterinary and conservation sector, as well as stronger connection, collaborations and communication between institutions and stakeholders across the globe. **(SDG3)**



In **Tanzania, Sheria Kiganjani** is an online legal digital solution that allows a user to access legal services via their mobile phones. The solution is available via website and a mobile application, and it is in swahili language to ensure that majority of Tanzanians can easily access and use it. Users are able to locate the nearest lawyer to them, talk and chat with a lawyer 24/7, access a number of legal documents (customizable drafts), access to over 5000+ legal questions and answers, access a number of informative legal articles and news, access to an e-library for legal students and practitioners. The main objective of Sheria Kiganjani is to increase access to legal services especially to those who cannot access these services due to financial constraints. **(SDG5)**



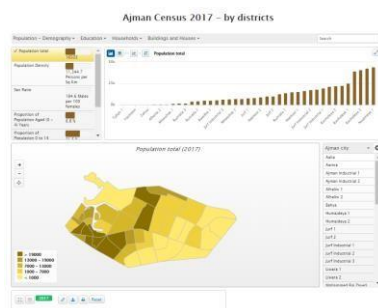
Sheria Kiganjani

In **Uganda, the Women's Technology Empowerment Centre (W.TEC)** is a Nigerian nonprofit organisation committed to building a more inclusive technology ecosystem, with the next generation of women technology creators, entrepreneurs and leaders. The

programmes encourage more girls to pursue technology careers and support women (entrepreneurs and in civil society) to use technology confidently to increase their economic power and ability to speak about issues affecting their lives. Over the last year and a half, The work the center has expanded to explore how technology can improve learning outcomes and better integrate other under-represented groups, with a focus on girls with developmental disabilities and special needs, such as Autism and Down's syndrome. (SDG1, SDG5, SDG16)



In **United Arab Emirates**, Ajman Statistics and Competitiveness Centre (ASCC) have developed many **Ajman Interactive Data tools** to facilitate accessibility and presentation of Ajman information interactively, allowing various user segments to explore Ajman data as per their needs and interests, supported with multiple online reports, graphs and thematic maps instead of using Excel and text. These tools provide data in an interactive manner using various indicators, spatial data and tables to meet the needs and requirements of users. User segments includes various decision makers, researchers and individuals from government entities, business and other community groups. (SDG3, SDG5, SDG8, SDG11)



SHERIA KIGANJANI

WSIS Prizes Contest 2020 Nominee

In **Tanzania**, **Sheria Kiganjani** is a swahili word that translates to "Law on your Palm", it is an online legal digital solution that allows a user to access legal services via their mobile phones. The solution is available via website and a mobile application, and it is in swahili language to ensure that majority of Tanzanians can easily access and use it. Users are able to locate the nearest lawyer to them, talk and chat with a lawyer 24/7, access a number of legal documents (customizable drafts), access to over 5000+ legal questions and answers, access a number of informative legal articles and news, access to an e-library for legal students and practitioners. The main objective of Sheria Kiganjani is to increase access to legal services especially to those who cannot access these services due to financial constraints. The major activities of Sheria Kiganjanji includes easen of access to legal services via the services available in our platform, awareness raising through participation in social events, hosting awareness raising seminars and partnering with civil society

organizations to ensure that majority of people are aware about and can access our services easily. The project is relevant to **SDG5**.



Sheria Kiganjani

Women's Technology Empowerment Centre

WSIS Prizes Contest 2020 Nominee

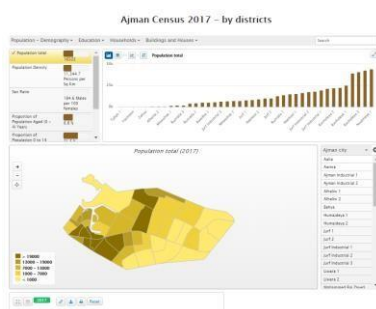
In **Uganda**, **The Women's Technology Empowerment Centre (W.TEC)** is a Nigerian nonprofit organisation committed to building a more inclusive technology ecosystem, with the next generation of women technology creators, entrepreneurs and leaders. Our programmes encourage more girls to pursue technology careers and support women (entrepreneurs and in civil society) to use technology confidently to increase their economic power and ability to speak about issues affecting their lives. Over the last year and a half, our work has expanded to explore how technology can improve learning outcomes and better integrate other under-represented groups, with a focus on girls with developmental disabilities and special needs, such as Autism and Down's syndrome. We have six core programmes targeted at girls from the ages of 5 to 25, which include technology trainings, mentoring and work placement. We also provide technology training for women entrepreneurs and our programmes are implemented in partnership with local and international NGOs, educational and research organizations. W.TEC's programmes include: Early Innovators Camp: A 2-week camp open to both girls and boys aged 5 to 9 years old, which teaches technology in a fun way and utilizes a hands-on and project-based methodology. She Creates Technology Camp: An immersive and rigorous programme for girls aged 13 to 17 years, where they learn via hands-on classes to create useful technologies for everyday living through programming, mobile application development, graphics designing, film-making and digital animation programming. They also participate in career talks and excursions to leading technology companies. The project is relevant to **SDG1, SDG5, SDG16**.



Ajman Interactive Data tools

In **United Arab Emirates**, Ajman Statistics and Competitiveness Centre (ASCC) have developed many tools to facilitate accessibility and presentation of Ajman information interactively, allowing various user segments to explore Ajman data as per their needs and interests, supported with multiple online reports, graphs and thematic maps instead of using Excel and text. These tools provide data in an interactive manner using various indicators, spatial data and tables to meet the needs and requirements of users. User segments includes various decision makers, researchers and individuals from government entities, business and other community groups. These interactive tools help users through:

1. Interactive maps: These tools display the spatial data and statistical indicators interactively in the form of graphs and thematic maps (classified by subject) customizable to suit the different needs of the user. These indicators are presented at the level of different geographical areas of the Emirate of Ajman as regions, sectors and whole Emirate. For example, user can view the population density of certain area within the selected city from Census indicators.
2. Dashboards: These tools display statistical indicators interactively graphically on dashboards with filters for choices such as nationality, gender and region in chart format.
3. Interactive Reports (Table Builder): These tools enable the end user to create his own reports (tables) according to his needs from the available data and download as Excel file. All tools are available in both Arabic and English languages for viewing and extracting data. There are also control of user authorizations, where certain data is displayed to certain users without appearing to other users as per dissemination policy. The project is relevant to **SDG3, SDG5, SDG8, SDG11**.



My Rights and Duties

In **United Arab Emirates**, According to His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE, “Our goal is to be one of the best countries in the world, which can be achieved only by family cohesion. The Emirati family is the foundation of life in the society, the main tributary of human capital, and the continuation of the development process by preparing the sons and daughters to love the homeland and belonging. Dubai Police has developed a plan to aware the community through various means, one of which is the means of electronic games, where the development of the application of **My Rights and Duties** as a means to raise the awareness of citizens and society, especially young people, about social issues in an interactive way. My Rights and Duties aims to contribute in raising awareness among children according to their needs. The game is one of the games that represents importance of educating future youth in the best way and aim to raise children's awareness of personal rights and duties towards their family and society. Promoting positive behavior in an interactive manner that

allows the child to realize his / her rights to enjoy and measures the child's ability to assimilate his or her rights guaranteed by law. The game contains four types of interesting games and three worlds with more than 100 fun stages. Games are available in PCs and iPads in most schools in UAE. Students with limited budget were provided free iPads. The game ranked no.1 in 74 countries in the world in the Educational category. The project is relevant to **SDG3, SDG4, SDG11, SDG16**.



UAE Infrastructure Geo-Spatial Platform

WSIS Prizes Contest 2020 Nominee

In United Arab Emirates, **UAE Infrastructure Geospatial Platform** is A “one-stop shop” to deliver trusted, nationally consistent geospatial data and services. It provides a suite of well-managed, highly available, and trusted geospatial data, services, and applications for use by the governments agencies and citizens. THE MAJOR PURPOSES OF the platform ARE TO 1. Enable Federal agencies and their partners to publish and catalog interoperable web services for all geospatial data, including data identified as “nationally significant” 2. Enable Federal agencies and their partners to develop and share geospatial services and applications through the use of shared application hosting infrastructure and source code sharing capabilities; 3. Offer a mechanism through which Federal agencies can access and/or procure commercially licensed geospatial data and tools by leveraging shared infrastructure and common procurement mechanisms; and 4. Empower a new generation of geospatial collaboration by enabling users of all types to develop and share maps and services with data from trusted content along with user-contributed data. To enable these different capabilities fully in the site, a range of user accounts with varying privileges and access rights will be implemented. Additionally, policies and procedures to support the provisioning and use of these accounts should be established and implemented. The project is relevant to **SDG9, SDG11, SDG13, SDG17**.



Signly browser extension

In **United Kingdom**, **Sign Language as a Service (SLaaS) Signly browser extension** adds functionality to the Chrome web browser. The extension is free to the user. For translation of online content, organisations and companies can subscribe to the Signly web service. The Signly browser extension gives users the option of clicking an interactive logo to be shown a BSL interpretation of the material currently on their screen. If a signed version of a specific page is not already available, users can then select 'Request Signed Content'. This message is immediately forwarded to the service provider, who can approve the request. The Signly team will then create and upload the content, and the user will receive a notification when the new content can be viewed. Signly hope that SLaaS will be rolled into the W3C standard in due course. The project is relevant to **SDG9, SDG16**.



Little Window by CHAYN

In **United Kingdom**, **Chayn** uses everything from GIFs to catchy graphics, podcasts, op-eds and even Snapchat to support women facing abuse in multiple languages. To combat gender-based violence worldwide, we have built a set of free & open-source resources that solve the critical information gaps that put women facing violence at risk globally. We help women find information to answer questions such as, "How do I get divorced?" "What are my rights under the child custody laws in my country?" "Do I have anxiety?" "Do I have PTSD?" To questions like "How can I build up my CV?" we address a range of issues. Chayn is structured in the following way: (a) How to guide that are crowdsourced in multiple languages, (b) country-specific information through 'chapters', and (c) digital services which offer interactive support to women. We are 100% volunteer driven, with a majority of our volunteers being victims and survivors of abuse. This means we practise 'survivor-led design', shaking the power dynamics of the women's sector and delivering simple, critical information in an accessible manner. Our guides are written in a way that makes them applicable internationally. Survivors and experts from different parts of the world are consulted to make this possible. Examples of these include "Getting Better & Moving On", "How to build your own domestic violence case without a lawyer", "Manipulation is abuse" and "Do It Yourself Online Safety". The project is relevant to **SDG5, SDG16**.



Chapterthon 2019 - Connecting the Unconnected

WSIS Prizes Contest 2020 Nominee

In **United States**, **The Chapterthon** is a global Internet Society Chapters marathon, where all Internet Society Chapters participate by developing a project within a timeline and budget to achieve a common goal for the development of the Internet. For 2019, thirty-two Chapters all over the world participated in the challenge and developed local projects to help Connect the Unconnected in their regions. The Internet Society replicates this project every year changing the theme. All projects are replicable in other countries or region since every project is documented by detailed reports and a 3-minutes video. The project is relevant to **SDG4, SDG5, SDG8, SDG10**.



Arab Women in Computing

In **United States**, ore than 2500 Arab Women in Technology are benefiting from the various initiatives that this organization provides, including conference, mentoring, access to various resources, networking with international organizations, and scholarships to attend international conferences. The project is relevant to **SDG5**.



Actionline: 4.0

Ada ITW

In **Argentina**, **Ada ITW** is a non-profit organization that capacitate women from all spectrum of life in programming, to connect them to the IT industry after graduation. The tangible results of the Ada ITW initiative, a bootcamp for women only, can be seen in the impact that we had in our graduates from our program over the past two years. So far, 300 women passed or study in our academy. 80% of them find a job. The average salary increase has been 250% post our program formation. 90% of the women that start our program, complete it. 50% of our graduates have their first formal work in their lifetime, thanks to our program formation and network of hiring companies. Companies from the highest tech level in region, have been hiring our graduates, due to their quality, among them are: MercadoLibre, Despegar, Globant, Accenture, IBM, Wolox. The project is relevant to **SDG4, SDG5**.

Moneda PAR

In **Argentina**, **Moneda PAR** is a mutual credit system by means of which users (mostly financially excluded producers) can get the resources they need to carry out their production and exchanges of goods and services. Moneda PAR has three salient features. First, the collateral for the granted credits is given by the producers' own production - there is no need to freeze a previously saved amount of money (or any other asset) to enter the system. Second, credits bear no interest rate. Finally, the system is governed by the users themselves, thereby making it more democratic and oriented to their needs. In particular, Moneda PAR promotes gender equality (SDG 5) since most of its users are women that, through the usage of this system, increase their autonomy and independence. As a whole, Moneda PAR is a project targeted at increasing financial inclusion in a country where only 49% of its inhabitants have access to a bank account. The whole system is built on Blockchain to ensure that all transactions are secure, transparent, traceable and unfalsifiable. Moneda PAR was launched in 2017 and is currently being used in eight different cities of Argentina, with approximately 1,500 users. As a result of the results obtained along the way some local governments have decided to launch their own credit systems using the software developed in Moneda PAR. At the moment of sending this application we are advancing negotiations with three municipalities and one province in the creation of their own credit systems. Moneda PAR's broad approach to the problem of financial exclusion makes it work among the lines of six of the sustainable development goals. The project is relevant to **SDG1, SDG2, SDG5, SDG8, SDG10, SDG12, SDG17**.



Digital Chess

In **Argentina**, In July 2018, the University of La Punta with its “**Digital Chess**” proposal, manages to massify the practice of school chess through online platforms, implementing the use of TICs as a technology literacy strategy, reaching in 15 months a number of 20,210

participants, impacting equally way in urban and rural areas, thanks to the digital inclusion that allows students to access from their classmate or tablets, both provided by the government in every corner of the province. Our proposal is to promote the practice and study of chess, through two platforms: ChessKid and Lichess. Chesskid It is a tool that empowers children to learn how to play and compete in chess with motivational tools, enhancing their skills which they will implement throughout life: discipline, concentration, interaction, strategy, tactics, creativity, perseverance, assumption of calculated risks. Since the beginning of year 2019, San Luis has 5,106 users of the platform that proposes problems to solve, chess competitions in real time against robots and permanent interaction with children and young people from all over the planet. As a corollary of the 2019 activities, students who acquired the greatest amount of knowledge had the opportunity to participate in the “Guinness ChessKid 2019 Record” challenge, where 1,120 people from San Luis obtained their certificate and more than 40 managed to reach the international final competition, being a girl the best one in 52nd place, among 800. The “Lichess” open source platform has been used by the Chess Program since July 2018, for the realization of massive competitions called “Chess marathons.” These competitions are held from Monday to Friday from 3 to 4 pm and from 7 to 8 pm, in addition to the traditional one we do on Saturdays from 6 to 7 pm. In this platform, specific competitions are also carried out on certain dates, such as the semifinal instances of the Interschool Tournaments, The Evita Games, the Puntano Digital Circuit, workshops and summer promotions. The project is relevant to **SDG3, SDG4.**



Instituto Tecnológico de Buenos Aires

WSIS Prizes Contest 2020 Nominee

In **Argentina**, **Robotito** is a course for children from 8 to 10 years. It lasts 4 Saturdays, 2 hours each day, where children learn how to program robots. The target is girls and boys, and we try to do a 50% girls and 50% boys attendance, so they work together creating technology and performing doing challenges in a ludic class, where they learn what is a robot and how to program one. Out of 350 pupils, there were 35% girls in the attendance, something that is really unusual in robotic classes where the attendance is less than 5%. There are 4 tables in each course, and we try to join 2 girls and 2 boys so they can interact together. The project is relevant to **SDG5, SDG16.**



Women And Code - programming study groups for women*

In **Austria**, **Women And Code** is an initiative to bring women* into programming in Austria. We offer different events such as a JavaScript, a Web Dev, and a Python study group for beginners which takes place every second week in Vienna. We also offer intensive workshops and Hackathons to complement our bi-weekly events. Our Mission It is important to inspire women to excel in technology. Diversity is very important for healthy networks, work relationships and our society in general. As positive role models we want to inspire other women to join the field of software engineering. We want to have an impact on our city. A new non-profit feminist network and meetup/event-series brings more women into tech and encourages women to help other women. We want to empower women through solidarity, ideas, impulses, network, support, coaching, and sharing knowledge, time and space. Teaching a women-only class is in many aspects different to teaching mixed classes, especially when teaching programming. On the one hand you could have gender bias from a male instructor and on the other hand having even just one male student in class changes the whole group dynamic in the classroom. Some women suddenly don't dare to ask questions. With Women And Code we want to offer an open, inclusive, and nonthreatening environment for women to learn. The project is relevant to **SDG4, SDG5**.



TECH TEENS ORGANIZATION

In **Bahamas**, **TECH TEENS ORGANIZATION** allowed young girls in grades 7-9 to be exposed to tech tools and skills. The main objective is assisting girls in developing an interest in computers and other information technology, an interest that Tech Teens believes will academically, financially and socially empower Bahamian girls. Successfully completing tech exams will allow young ladies to be placed in the country magnet programs. In the Bahamas, there are not many programs that teach young ladies about STEM careers and create a TECH career path for them. The innovative thing about this program is, the consultation that the young girls receive and then they are given a career road map to help them decide on TECH careers. The project is relevant to **SDG5, SDG16**.



Clever Girls Club

WSIS Prizes Contest 2020 Nominee

In **Bahrain**, Education for the future has a new code: STEAM. It is in this spirit that **Clever Play** was founded. It is Bahrain's first specialized STEAM education service provider. To encourage young students to explore and embrace the possibility of pursuing a career in STEM, we lend our stimulating and supportive environment right from early childhood. Clever Play was built on the need to spark, inspire and nurture kids' interest in STEAM in order to build a pipeline of talent. It answers the call for generational sustainability of skills through child-friendly training in the FUNDamentals of the 21st Century economy. The advent of the Fourth Industrial Revolution is inviting critical need to update skills and competencies to adapt to the swiftly evolving technologies and work landscape of the Digital Age. Imperative to this action is the promotion of the necessary training in STEM subjects beginning in early education to arrest youth unemployment due to outdated skills. In 2017, only 20% of Bahrainis are pursuing degrees in STEM. Most children are bored with classroom science even though they are naturally curious about bubbles and rockets. We are injecting a shift in paradigm for STEM with Arts to grow in the hearts of children. Education is the key to sustainable development. It is here that we strive every day to serve best. The project is relevant to **SDG5, SDG16**.



Digital Leadership Institute

In **Belgium**, **The Digital Leadership Institute** has a unique mission to promote “inclusive digital transformation” by increasing participation of girls and women in ESTEAM* studies, careers and leadership around the world. The following are DLI-led initiatives in these areas: AdaAwards.com – Global awards recognising outstanding girls and women in digital studies and careers and the people and organisations supporting them, with the Ada Award

Ceremony annual flagship event held in a different country every year. inQube – Global network promoting women-led startups in digitally-driven and digitally-enabled enterprises with flagship “Move It Forward” female digital starter weekends carried out on topics disproportionately impacting girls and women in different cities around the world. Digital Bruxelles – Europe’s first female tech incubator. With support from the Digital Belgium Skills Fund, launched in October 2017 in Brussels, Belgium, the heart of inclusive digital transformation. DigitalMuse.org – Global network promoting ESTEAM* skills to girls through creative endeavor, in order to increase the quantity and quality of stories by, for and about girls and women in digital media, with flagship initiative “Girl Tech Fest.” CYPRO – Cyber professional training and career placement program for women with work experience, focused on increasing the number of women IT professionals in strategic areas including cybersecurity, cloud computing, data science, artificial intelligence, etc. *entrepreneurship, science, technology, engineering, arts and mathematics The project is relevant to **SDG4, SDG5**.



Eskills4Girls

In **Botswana**, **The Clicking Generation** is a computer school in Botswana providing ICT skills to kids and teens mostly girls aged between 5 years and 18 years. We concentrate on equipping young girls with the relevant knowledge on computer science through a fun and interactive learning that make them appreciate computing concepts as well as STEM subjects. It started its operation in 2013 with two branches in Maun and Gaborone. Our Modules are: Computer Basics Programming, Networking, Software Development, Applications training (word, excel, PowerPoint, publisher) . The project is relevant to **SDG5, SDG16**.



The Clicking Generation

WSIS Prizes Contest 2020 Nominee

In **Botswana**, **The Clicking Generation** is an ICT Academy for kids and teens; a social enterprise that offers computing and technology curriculum to underprivileged kids and teens in both urban and rural areas of Botswana. The approved curriculum offers STEM and technology related exploration to learners who are future technology creators of socially relevant ICT solutions. Early child technology education is key if young innovators are going to become global player in the digital economy. We explore digital concepts through a comprehensive curriculum to include: computer coding, design thinking, career guidance and age appropriate creative process learning. The Clicking Generation digital literacy training is a core service that we offer to participants. We conduct classes, create lesson plans through utilizing the comprehensive STEM curriculum. Our services are offered to kids and teens (with special focus on women and girls) between the ages 6yrs-18yrs and facilitated by our experience staff and volunteers. Our marketing is made to appeal to parents and guardians who are key in authorizing enrollment for the after-school programs. The beneficiaries are spread out in many rural structures of Botswana. The Clicking Generation is the SDG-Generation! We embody the spirit of leave-noone-behind. The project is relevant to **SDG5, SDG16**.



Sisters of Code

WSIS Prizes Contest 2020 Nominee

In **Cambodia**, IT Academy STEP Cambodia, a branch of the international training centre, specializing in digital skills development, in 2019 launched a social initiative: "**Sisters of Code**" - the first Cambodian female coding club, that aims to encourage female students to try programming skills and develop their confidence, as well as empower for successful digital future. We want to grow a community of game changers – creating a safe and supportive environment, that through the digital education would empower confidence and skills development. "Sisters of Code" is an educational project that runs free and fully funded coding clubs for female students. The club aims to teach practical coding skills applying project-based learning methodology for free and in a fun way! Cambodian female students from 10 to 18 y.o. are invited to join the "Sisters of Code". During the 3 courses students will learn: Basics of visual programming with Code.org curriculum, Game development with Scratch Curriculum, Web development applying HTML/CSS3 and WIX. Since the establishment, the Sisters of Code has established strong cooperation with the Ministry of Education, Youth and Sport of Cambodia, thus opening after school coding clubs for female students in 2 public schools, as well as run general students enrolment and now provides coding education to 68 students. The project is relevant to **SDG5, SDG16**.



Web Development Bootcamp for Girls and Young Women

In **Cameroon**, looking at the rise towards digitalization and the lack of IT skills among girls, GirlsTEK Global' project: **Web Development Bootcamp** is designed to reduce the gender divide in the tech sector, by giving young girls hands on experience in Graphic Design and Web development thereby preparing them for the future job market. Web Development Bootcamp is an intensive skill acquisition career development program designed to reduce the gender divide in the tech sector by giving young girls hands on experience in Graphic design and web development, allowing girls to acquire these skills in a fun, relaxed, secure and interactive environment by this means preparing them for the future job market. WDB activities merge technology and entrepreneurship projects to spark the imaginations of each girls endowing them with creative confidence and the zeal to pursue STEAM fields with no fear. WDB builds the capacity of young girls giving the hands-on experience in industry standard programs like Adobe Photoshop, HTML, CSS, JavaScript and Materialize Framework. The concept behind WDB started early in 2017 and is the core of GirlsTEK as it is designed to inspire, encourage and empower girls with 21st century IT skills and the power to code. GirlsTEK Global achieved great results as we have empowered young girls in the towns of Buea and Ngaoundere in Cameroon training girls to technological innovators. The project is relevant to **SDG4, SDG5, SDG8**.



AfriStack

In **Cameroon**, **AfriStack** is a non-profit organization providing hands-on training in STEM (Science, Technology, Engineering, and Mathematics) and Entrepreneurship to women and vulnerable communities. Their main goal is to empower underserved populations with technological and entrepreneurial skills so they can be chances to build their career or to be able to create their own enterprises. The vision is to empower by innovation. The project is relevant to **SDG4, SDG5, SDG8, SDG14**.



Girls Can DIGI

In **China**, **Girls Can DIGI (果敢 DIGI)**, is a Chinese organization dedicated to unlocking young women's potential in ICT and empowering them in the Digital Age by taking sustainable actions around Media and Information Literacy. With the aim of equipping girls with stronger digital skills, we engaged young women to draw on their knowledge and skills in coding, data analysis and social media management already acquired in ICT so they can help each other in workshops and online webinars (peer education). We also encourage girls to collect and make ethical use of information to produce and share media content about women's success in the field of ICT to break gender stereotypes and inspire each other to fearlessly pursue their dreams. The project is relevant to **SDG4, SDG5**.



Coding for kids

In **Colombia**, **The IT Industry Development Department** has a systemic character where the human talent dimension occupies a leading role because it guarantees the mobilization of the sector with the creativity and potential of girls, boys and young people, which forms the basis for the long-term digital transformation of the country and the reduction of poverty, therefore, if there is an adequate and sufficient trained human resource, it contributes to the sustainability of the industry and the country. Its objective is in the development of talent, and the promotion of competences in technology, such as programming, increasingly considered the new literacy for the actors of the digital ecosystem in order to contribute to close the human talent gap and support the development of the national IT industry and all productive sectors, since information technologies are involved in all processes of product and service generation. The impact is reflected in the training of more than 760 public school teachers in the country and 15,600 students in 2019. The project is relevant to **SDG4, SDG5, SDG10**.



Labor@ Enterprises

WSIS Prizes Contest 2020 Nominee

In **Costa Rica**, **Labor@ Enterprises (Labor@)** is an educational program aimed at young secondary school students in Costa Rica's public education system. Through an ICT-based simulation process, young students create and manage a company, and acquire skills that enable them to generate start-ups, or successfully join the labor force. In Labor@, young people develop entrepreneurship capacities, acquire business management knowledge, make productive use of digital technologies, and develop interpersonal skills for life and work related to collaborative work. Students are taught business planning, negotiation and construction of agreements, communication, leadership, conflict resolution, business ethics, and develop the ability to construct innovative business ideas. To develop their businesses, students must use digital technologies available at their high schools. In some cases, there is an specific Labor@ classroom and in others, they use the computer laboratories, to facilitate their entrepreneurial work. Since its creation in 2004, this program has trained 5,470 teachers and 93,540 students through the Labor@ Enterprises coursework. Labor@ is fully embedded into the educational curriculum of 138 technical-vocational secondary schools and 11 academic secondary schools across the Costa Rican territory. The project is relevant to **SDG4, SDG8**.

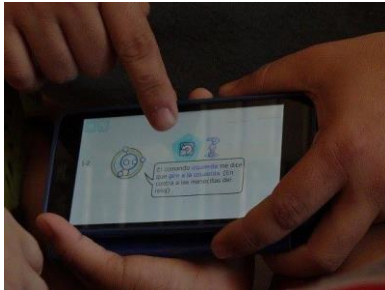


"I Want to Program"

In **Cuba**, **The Universidad de las Ciencias Informáticas (UCI)** begins its academic activities on September 23rd, 2002. The UCI's mission is: To educate professionals committed to their homeland, highly qualified in the field of computing, and to produce application and computer services following the teaching–research–production link as an educational model to support the Cuban software industry. Teaching, production, research and service activities are carried out by more than 2,000 workers distributed within different areas, each with specific functions to ensure the success of our mission and social object. The UCI is a member of important international associations of recognized prestige in the academic field and in the field of Information Technologies and Communications: International Telecommunication Union (ITU), Latin American Conference on Computer Studies (CLEI), Ibero-American Association of Higher Distance Education (AISAD),

University Association Iberoamericana de Postgrado (AUIP) and Group of Ibero-American Universities La Rábida. The UCI's campus is a modern technological city spread over 268 hectares, with a powerful data network and an extensive infrastructure that guarantees the completion of all the University's substantive processes. More info at:

<https://www.uci.cu/en/university/uci-at-glance> The project is relevant to **SDG4, SDG9, SDG16**.



MUJERES TICS RD

WSIS Prizes Contest 2020 Nominee

In **Dominican Rep., Work We** are a community of women passionate about technology, professionals in different areas of ICT that seek to inspire, motivate, involve and educate more women in their professional growth in order to become technological leaders and for this we do not seek to exclude ourselves but to create a platform from which good ideas and innovative projects can be promoted. We believe that change is everyone's responsibility and we rely on men who firmly believe in the potential of women and in synergy that can exist between both sexes to execute actions and projects that change the future. We work both in metropolitan areas and in our outside towns, bringing technology to everyone.

Target audience 1. Teenagers: We work with schools, colleges and polytechnics, so that girls who are about to go to university, know what ICTs are, can know the Role Models (You cannot be what you cannot see) and understand why it is important that More girl learn technology, in any area. 2. University students: We work hand in hand with the main Dominican universities, so that girls who sometimes feel lonely when they do not have other girls classmates, know all the girls that are in other universities, and are encouraged not to leave the university, and we make contracts with technology companies , so that they can use the girls who have taken our workshops, courses and trainings, allowing to secure a job once the university is finished and even before. 3. Professional Women: They are the role models to the youngest, we seek to create a network of professionals, who may be more than users but creators of new technologies, and who know that like other women work for a better country, to be technological exporters. The project is relevant to **SDG5, SDG16**.



The National Academy of Information Technology for Persons with Disabilities

In Egypt, The National Academy of Information Technology for persons with disabilities (NAID) was established in July 2018, as a presidential initiative from Mr. Abdul Fattah al-Sisi - President of Egypt, to enable persons with disabilities to develop their skills and to take advantage of their inherent and exceptional abilities in achieving the goals of economic and social development in Egypt. NAID represents one station to provide training and capacity-building opportunities for PwDs by providing special content from lectures and training courses, which are tailored to the different types and degrees of disability and in collaboration with reputable institutions. The academy is specialized in providing all high-quality training programs using assistive technologies. The Academy also specializes in the development and incubation of innovators, whether with disabilities or others who create programs that serve and facilitate the life of Persons with disabilities. Believing in the continental role played by Egypt and the role of the Academy in training and capacitybuilding for PwDs, NAID is providing its services not only on the level of the Arab Republic of Egypt but also on the regional level. The academy has more than 1,500 graduates in Egypt and more than 150 graduates from different African Countries. The project is relevant to **SDG4, SDG5, SDG8, SDG10**.

Mujeres Madre

WSIS Prizes Contest 2020 Nominee

In Germany, Digital platform for the training of mothers, focused on issues of economic security; entrepreneurial skills; home administration; formation of citizen children and politics for mothers; network of services to companies from the home. The project is relevant to **SDG4, SDG5**.



ICT Skills for Entrepreneurial and Women Empowerment

In Ghana, The **ICT Skills for Entrepreneurial and Women Empowerment programme** is an initiative commissioned by GIFEC in partnership with UNESCO to assist the disadvantaged girls and women (hairdressers, seamstress, traders etc) by way of increasing their direct access to information, education and services. This project seeks to rely on the established Community ICT Centres (CICs), largely set up to bring ICTs within reach of rural areas and other privileged groups, as a potential vehicle to assist train the disadvantaged girls and women to acquire literacy skills, numeracy skills, entrepreneurial skills and more importantly help the unemployed start and build their own businesses. Project Objectives: The ultimate goal of this initiative is to expand the digital capabilities and benefits of ICTs to the disadvantaged women and girls through capacity building, education, and awareness. Specific objectives are 1. Strengthen the capacity of current and potential women entrepreneurs on utilizing Information and Communication Technologies (ICTs); 2. To equip disadvantaged women and girls with the requisite ICT skills; 3. To increase women participation in the digital economy; 4. To increase awareness on the use and importance of the CIC. Expected Outcome: 1. Improved employment opportunities for women in ICT; 2. Increased access to information; 3. Improved ICT skill of women; 4. Improved access to IT enabled services. The project is relevant to **SDG4, SDG5, SDG8, SDG10**.



Bridging the Digital Gender Divide for Future Jobs in Africa

In **Ghana, Kumasi Hive**, based in Ghana, one of the sub Saharan Africa regions is an innovation hub which provides the platform rapid prototyping of ideas, supporting local Innovations and impact start-up and promoting entrepreneurship. Currently, about 4000 people have been trained, 240 innovative projects developed and 90 innovative startups formed (including Dext, Invent Electronics, KLAKS 3D etc) have been seeded from the program. Our audience are youth both unemployed and employed, Children, educational and industrial partners, the non formal groups such as artisans, Investors/grant makers both local and international, Governmental and Non governmental organisation, the local community and Regulators. Our major activities are the following: 1. Digital Skills Training in (Internet of Things, Robotics, Graphic Design, Web Development, Augmented Reality, Digital Fabriacation, Mobile App Development); 2. Makerspace for Prototyping of Ideas; 3. Information Technology and Product Consultancy; 4. Business Incubation and Accelerator Support; 5. Affordable Space Rental and Devices Services. Through our subsidiaries and initiatives we together stand for these objectives: 1. Bridging the Digital Gender Divide for Future Jobs in Africa (shortened as “Bridge the Gap”) –this initiative seeks to bridge the existing Digital Gender Divide between females and males in the technological ecosystem.

Hence empower women/girls through training in Digital Skills and Entrepreneurship to prepare them for the future of jobs as well as promote female led startups in Africa. 2. Prac science - A low cost lab for basic schools to make the study of science easy through Experiments and also promote STEM education in Africa. 3. Digital Skills Training - this initiative promotes training in Digital Skills (listed above). 5. Kidsmakers - Training kids in how to program/code at early stages of school. The project is relevant to **SDG1, SDG5**.



Young Women in Programming

In **Ghana, Young Women in Programming (YWIP)** provides standard and dynamic software development training to young girls of varying talent and capability. The company also maintains a base of corporate and institutional clients that seek the expertise of our team to help in IT related services. Services that we provide include, but are not limited to: Programming languages like JavaScript, Python and Android App development, Microsoft office portfolios. The project is relevant to **SDG4, SDG5, SDG8**.



Youth Empowerment through Education and Technology

In **Guyana**, we are involved in projects to train under-privileged children mostly teenager (high school) girls from orphanages, poor households and single parent homes, in the field of Robotics, Coding, Cyber Security, Computer Repairs, web site design and Networking. These training are totally Free of cost to them. The reason why we started this is because too many children we feel are robbed of an education simply because of lack of finance to further their studies after high school, which many retire to wash bays or getting onto the wrong side of the law, not getting to realize their full potential, we also feel that bright minds are everywhere and all that they need is an opportunity and some mentoring. Last year we have concluded a code camp for girls and boys of the Save our Children orphanage and a Computer literacy four (4) month course for the youths in vreed-en-Hoop community, with the Ministry of Public Telecommunication in region three (3), the same was done during the summer holiday (2018) in region two (2) for the children in the Mainstay community in Essequibo. We are also involved in community health outreach programs, where we partnered with the Guyana Cancer foundation to provide Free breast cancer examination, blood sugar testing, blood pressure testing, HIV testing and prostate examinations. Which the residence of the Vreed-En-Hoop and outlying communities, benefited from all test being free of cost. Some who were positively identified as cancer cases are seeking further help with the Guyana Cancer Foundation. The project is relevant to **SDG5, SDG16**.



ICT Innovations Bootcamp for University student projects in Tanzania

WSIS Prizes Contest 2020 Nominee

In **Hungary**, Entrepreneurial mindset and skills are required for a financially independent, self-defined and strong middle-class. Entrepreneurs are also keen innovators as they challenge existing solutions, processes and products as they make their way into the global market place. **CEU ILab** developed the Bootcamp with the aim to identify new sources of innovations - with a focus on cutting edge technology such as AI, and their application in

sectors such as Fintech, Foodtech, Edutech - and entrepreneurial initiatives, increase the number of new initiatives and contribute to the entrepreneurial ecosystem. This course is highly interactive, and provides the participants with the basic principles of entrepreneurial management as well as an overview of recent technologies and their application in developing new solutions. Essential element of this intense course is to assess technology, a business opportunity and a business development process. Using CEU ILab technology startup case studies give participants an opportunity to analyze real business cases, understand and assess business ideas, entrepreneurial teams, and real life business situations. Course format: The Bootcamp consists of 10 working days. The course consists of 4 sections: (1) overview and application of latest technologies - 3 days, subject covered include: Banking and Fintech, Bank to the Future, Digital Strategy, Digital Transformation; (2) Finance - 2 days lectures and workshops will provide basics knowledge of entrepreneurial finance for ITC companies; (3) ICT solution startup idea generation, business planning and fundraising – 3 days of workshops and lectures, project work; (4) market strategies and brand positioning (including design thinking workshop) – 2 days covering the basics of customer insight and segmentation, introducing a branding toolkit, learning how to craft marketing and communications plans and how to devise and implement a customer-focused strategy. The project is relevant to **SDG4**.

BANKING CORRESPONDENT SAKHI

In India, **Jharkhand State Livelihood Promotion Society (JSLPS)** is an autonomous entity established by and functions under the Rural Development Department of Government of Jharkhand. JSLPS is a nodal agency that works for promotion and implementation of livelihood activities in the state. Moreover, as the State Rural Livelihood Mission, it is solely responsible for proper execution of DeenDayal Antyodaya Yojana-National Rural Livelihood Mission (DAY-NRLM), GoI's flagship anti-poverty programme. JSLPS's target audience is the rural poor family with women being the main beneficiary. In fact, women Self Help Group (commonly referred to as the 'Sakhi Mandal' in Jharkhand) are the principal actors who execute all the projects on the ground. In other words, the rural women are both the beneficiaries as well as the change makers. Some of the major objectives of JSLPS are listed below: To alleviate poverty in the state, especially among the disadvantaged groups. To evolve strategies and approaches for the empowerment of the poor through social mobilization and institution building. To promote strong self-managed grass root institutions and support investments for the poor groups. To bring in convergence amongst various poverty reduction programmes/schemes. To build support and service structures for providing social and technical guidance to the poor in their overall social progress and livelihood development. To facilitate knowledge and experience sharing among stakeholders including the government departments, technical institutions, relevant autonomous government agencies, civil society organizations, NGOs, private sectors, community-based organization and research organizations. To strengthen and form farmer producer cooperatives/groups/companies around key agro commodities besides non-farm products and services so as to provide better market access to the poor farmers and improve their income. The project is relevant to **SDG1, SDG4, SDG5, SDG8, SDG16**.



Girls in ICT

In **India**, Dr. Kamal Peter has organized the **International Girls in ICT Day** year after year since 2014. Though not mandated by the MNC where she is employed, her motivation won her support from colleagues and managers at workplace to plan innovative sessions and reach girls with key and critical messages of dynamic digital world. Observing the International Girls in ICT day in India on the fourth Thursday of April comes with the challenge of most educational institutions closed for a summer vacation or engaged in examinations. Unmindful of that odd she was busy enrolling speakers, deciding on themes, drafting invitation mails, identifying venues to host the sessions, have project approvals and other logistics in place. The Target audience are girls and faculty. Heterogeneous age group: (1) K-12 Segment - Secondary and Senior Secondary School beginning Grade 8 upward in age group 12 to 16; (2) Engineering stream, Master of Computer Applications (MCA), Bachelors of Computer Applications (BCA), Bachelors in Science (B.Sc) , Masters in Science (M.Sc) -16 years and above; (3) Freshers at workplace looking for career advancement. Types of Educational Institutions; (4) Secondary and Senior Secondary Schools- Government, Private in Urban and semi-urban setting; (5) Colleges- Tier 2, 3 where not many companies go for campus placement. Interaction Format; (6) Online - Real time Virtual using platform like Cisco -webex; (7) F-2-F Activities, Technology and Knowledge sessions, Career preparation sessions introduction to Coding using software like Alice ,Tech Games and Quiz. The project is relevant to **SDG1, SDG5**.



Invest in Intellect to Nurture and Embrace Human Capacity Building

In **India**, Advancement in technology in every sector and especially in Industry 4 Era need to be embraced by deployment of exciting technologies like Artificial Intelligence, Machine Learning and Blockchain. To deploy Artificial Intelligence, Machine Learning and

Blockchain, we at TCIS act as innovation coaches and conduct human capacity building facilitation trainings at national and international levels. We at TCIS have pledged towards facilitating intellectual human capacity in every individual to gain real life experiences as to HOW ONE is able to channelise and harvest energy to be that energy harvester of their own life. In last 18 months, we have conducted several technology based workshops in association with Indian government, academia and ITU in different capacities. After training, the participants are absorbed in technology companies as skilled professionals. To increase GDP of India we are collaborating with different academic institutions to work on a pilot project under the brand "WeTrinity" to achieve the mission of circular economy. The learning curve for the whole team and the participants has been enriching and their intellect has been fortified to switch their own DNA by facilitating the thought process of being brand YOU. Different modules are deployed in the thought process and results have been very impactful as in the whole process "intellectual property assets" have been generated for which patents and other IPRs generated have been filed before the Indian Patent Office. We believe that Intellectual assets are the biggest assets for any country to achieve circular economy. We believe implementation of this model on a global level will be impactful to achieve different SDGs. LinkedIn profile for review: <https://in.linkedin.com/in/patentindiaiplawpritykhastgir> The project is relevant to **SDG5, SDG8, SDG10, SDG17**.



Siberkreasi (Indonesia's National Movement for Digital Literacy)

WSIS Prizes Contest 2020 Nominee

In **Indonesia**, **Siberkreasi** aims to enhance and strengthen positive impact of technology. We are supported by a group of people with a common heart and vision to promote digital literacy for a better Internet for all. We pursue our objectives with these 4Cs that are manifested in our groundbreaking programs: (1) Curriculum development - We initiate Pandu Digital (<http://pandudigital.id/>) or Digital Scout, which is designed to pave the way for digital literacy education. We also initiate School of Influencer which aims to encourage youths in order to make and spread positive contents. (2) Collaborative engagement - We bring together various groups who have contributed to the sustainability of digital literacy campaign. For example, we establish a website called StopHoax.id (<http://stophoax.id>); to combat the spread of hoaxes and to clarify false information circulated on the Internet. (3) Community empowerment - We develop a batik-producing village called Desa Mandhing, near Yogyakarta (<http://batiksiberkreasi.id>). The community is taught to use technology for selling their craft and to use batik as a medium for digital literacy campaign. (4) Cyber Governance - We took a substantial part in the national ID-IGF this November. Since those

programs' initiation in October 2017 until October 2019, we have achieved: - 442 locations that have been reached out for digital literacy programs; - 3137 Digital Scouts that have been sworn in to be digital literacy volunteer; - 180.000 active participant that have joined digital literacy workshop by Siberkreasi; - 180.000 downloads on 73 book of Digital Literacy series that are available free for public; - 75 millions of Indonesian populations have been disseminated through mainstream media and social media. For the last 2 years, we have generated more than 700 content creators (beginner & intermediate level). Moreover, from the post-event-survey, more than 30% respondents believe that they comprehend digitalization better. The project is relevant to **SDG4**.



ACEH SMARTCITY, COMMUNITY DRIVEN TO PURSUE SMART SOCIETY

In **Indonesia**, **Aceh Smartcity** is the local (Aceh Province of Indonesia) initiative envisioned by several of youth communities in Aceh to scale up action and impact on Agenda for Sustainable Development. This platform led by ICT Volunteers is a hub for catalysing partnerships, collaboration and coordinated action grounded in evidence-based strategies towards smartcity standing on civil society as key driven. Vision statement : Youth as Civil Society Core Driven Towards Smartcity, that is why we are exist. Mission Statement, what we do? 1. Individual Improvement - Preparing all member of the communities for the future of work in the economy respected to digital skill and digital literacy. These are personal capacity that lead to specific outputs or complementary skills that are needed to perform jobs in the digital economy. 2. Communal Endorsement - We identify and promote effective, innovative and evidence-based strategies and interventions to tackle the sociocultural issue. We advocate for high-level commitments from stakeholders locally and national wide. By leveraging knowledge, partnerships and resources, we maximize the value of ICT investments, scale up action and increase impact at local, national and regional level. In Aceh, governmental roles & private sector plays a key role as the dominant enabler of smartcity. The Coffeeshop (representing as private sector) as a workplace learning is crucial to enhance the long-term prospects of young women and men. Close cooperation and involvement of each enablers of smartcity based on social dialogue and tripartite is a key success factor. The project is relevant to **SDG8**.



Teen-Turn

WSIS Prizes Contest 2020 Nominee

In **Ireland**, **Teen-Turn** aims to influence course decision-making processes, inform participants on education and career options, and combat stereotypes by strategically changing how disadvantaged girls identify with technology career environments through mentored summer work placements, after school activities and alumnae programming. Programming begins with a work placement in the summer after Junior Cert, during which participants are exposed to projects, introduced to role models and begin to blog about their time so that we can evaluate the effect of the experiences. From there, the girls have the option to join after school activities which include science projects for BTYSE/SciFest, the creation of a social enterprise and app development for Technovation, homework/grinds clubs, or related events like Coder Dojos at company partners. Once participants have completed secondary school, they enter into our alumnae network--which offers numerous opportunities to meet with fellow Teen-Turn participants, mentors who are women working in STEM roles, and career advisors all there to help with qualification completion and to build a professional network. Surveys are taken prior to the work placements and after school programs. As mentioned, blogs are written by every participant, using the approach of a learning journal to create greater impact of experience and to provide better insight into the perspective and change of perspective evident during the process. Group sessions with mentors are conducted and, through an online survey, results, progress and activities are tracked, with further participation encouraged be it for after school programs, skills sessions, or more work experience. The project is relevant to **SDG5**.



Digital Literacy for Employability and Entrepreneurship (DLEEP)

In **Kenya**, **DLEEP** equips young people in rural Kenya with digital, employability and entrepreneurship skills to unlock and expand their educational and economic opportunities. It enrolls young people (15-18yrs) in rural schools and introduces them to Basic Digital Skills through school-based ICT clubs. This ensures collaboration with schools and

incorporates Digital skills training in school activities. Schools contribute teachers, computers, classrooms, and chairs towards the project. Secondly, the project offers afterschool programs on Advanced Tech Skills and Non-tech skills to enable beneficiaries gain deeper understanding of computers and the internet, and enhance their employability and entrepreneurial initiative, through application of the skills learnt. Finally, beneficiaries are attached in TAP Africa's Digital Center as part of a paid internship program to gain desirable job skills. On the other hand, they are equipped with complementary skills e.g. life skills, leadership skills, resume writing & interview skills, customer service skills, financial literacy skills, among others. Results: More than 22 young people, including 9 girls have been trained with basic digital skills and are on course to being enrolled in advanced tech skills courses like coding, beginning January 2020, when they resume school. 3 girls have been sponsored to attend our Lluna Leadership Camp in Nairobi to acquire useful complementary skills. 22 young people have received mentorship from women in tech. 3 computers and 4 laptops, and a coding robot acquired. 1 school, 2 teachers, 1 young female trainer engaged. 4 partner organisations on board. Impact: 35 students touched and learnt to use a computer for the very first time in their lives. 22 adequately trained on basic ICT skills. 9 young people, including 3 girls, graduated and received certificates after passing their final test. Goal: Train 2000 young people, 70% girls. The project is relevant to **SDG1, SDG4, SDG5, SDG8**.



SisTech

In **Kenya**, NairoBits Trust through **the SisTech project**, targets out of school girls and women aged 17 to 24 years residing within the informal settlements. NairoBits partners with community based organizations to host training centers within the informal settlements in Nairobi. Currently NairoBits has 10 training centers spread across 7 slums. The main objective is to empower the women and girls with ICT skills such as creative design and coding. By equipping them with employability skills we hope to address unemployment among women and girls and the gender divide in STEM. The main goal is to achieve sustainable livelihoods through addressing unemployment among women in marginalized communities by providing market relevant skills and knowledge in ICT leading to decent and gainful employment. The girls are also equipped with entrepreneurship skills, photography skills, life skills, as well as sexual and reproductive health and rights knowledge, all integrated as part of the training program. Each of the project beneficiary is placed in an internship host institution for three months to undertake their practicum. The girls also participate in boot camps to equip them with leadership skills. They participate in quarterly company visits where they visit tech companies to learn

more about the industry. Each beneficiary is paired up with a mentor and they participate in guest mentorship sessions where professionals from diverse fields give talks and share their experiences and good practices. Once the girls graduate, they become project ambassadors and conduct in school mentorship and outreach activities to encourage more girls to pursue STEM related careers. The project is relevant to **SDG1, SDG4, SDG5, SDG16**.



codeHive

In Kenya, **AkiraChix** aims at expanding participation and access of IT by young women, in Kenya, thus contributing to increasing their socio-economic ability. The project specifically targets vulnerable young women from low socioeconomic backgrounds in order to promote their economic and financial independence. **codeHive** is one year fully funded hands-on technical training program that provides education and economic opportunity to young women between the age of 19-24 from socio-economically disadvantaged backgrounds. These young women are those that have completed high school but due to financial constraints are unable to further their education. Essentially, this program aims to develop their capacity and skills in computer literacy, software development (for both mobile and web applications), hardware & product design, graphic design, entrepreneurship, life skills, communication skills, and professional development. Through codeHive, we envision changing the narrative for young women in the following ways: (1) Train 50 young women in technology-based knowledge and skills to prepare them to take up tech-based jobs. (2) Connect ~30% (up from 20% last year) more young women to job opportunities to advance their career trajectories in the technology sector. (3) Enable project beneficiaries to improve their economic situation by 4 times to be able to support themselves and their families. (4) Increase and/or significantly improve the perception of technology for women particularly in institutions of learning as well as in the communities that targeted beneficiaries come from. The project is relevant to **SDG1, SDG5, SDG8, SDG16**.



EntTech consultancy, Google Digital Skills

In Kenya, I am a Google Digital Skills trainer from Emobilis Mobile Technology Institute. I started training in 2017 and this has helped me achieve my social entrepreneurship goals of

helping youths, women and underrepresented groups in the society. **Google Digital Skills** aims at training people in Entrepreneurship and the digital platforms. After one year in the program I came up with an idea of starting a small company where I aim at empowering women in tech and entrepreneurship. I started **EntTech consultancy** to offer mentorship, consultancy and training to women in tech and how they can link with the jobs available. I have been able to connect with different groups like W4 voices of hope in Kajiado where I offer mentorship, Nakuru Muslim Women, I volunteer with GDG and WomenTechMakers Eldoret community to see that girls get the skills they need in ICT, I took part in organizing a very successful Girls'in ICT event this year at Safary Alpha and I do full time mentorship to Mobigalz in Westlands. Our target is girls from highschool to people who are employed. Our objectives is to impact, empower and engage. The project is relevant to **SDG5, SDG8**.



g.co/digitalskills

GirlsWhoCodeLesotho

In **Lesotho**, **BasaliTech** aims to bridge the gender gap and increase female participation in STEM through science and technology training and mentorship and to improve science and technology education for all children, male and female by innovative and exciting projects to get them started at a young age and give them access to science and technology resources. Our target audience is young girls in STEM courses in Lesotho universities and colleges, young girls about to transition into universities, young girls(14–18) and children(6-13). We aim to train 10000 young girls and children by 2030. To increase the number of women in STEM and help them occupy some of the 261 000 jobs posted in 2018 (<https://cyberstates.org>). To help them become valuable community leaders by exposing them to technology and mentoring. Why girls and children? • Our focus is on girls so that our sisters, nieces and aunties who grew up thinking that science and technology is for boys/men to learn that they can take part too, as their intellect can too impact society and the nation for the better. And to break the vicious cycle for females who are intimidated by the current already low participation. • introducing science and technology to children at a young age, will spark an interest in both girls and boys which may lead to a balance between the males and females that will participate in STEM in the future, as the stereotype will have been broken while they are still young and curious. The project is relevant to **SDG5, SDG9, SDG16**.



E-scouts initiative implementing the project CONNECTED LITHUANIA

In **Lithuania**, “**Langas į ateitį**” (**Window to the Future**) is a knowledge society development initiative launched by private business companies in 2002. The mission of the Langas į ateitį alliance is to promote the use of Internet and e-services in Lithuania and hereby stimulate the growth of the standard of living, as well as Lithuania's competitiveness among European and other countries of the world. Target audience: People living in rural areas, lower-income individuals, less educated, elderly, disabled, unemployed and individuals that are not using the Internet or lack the digital skills. Activities: • Langas į ateitį initiated the establishment of the Free Public Internet Access Points (PIAP) in 2002. As a result of united forces of private and public sector there is a net of 1200 PIAP in public libraries today in Lithuania. • Free digital literacy skills training - over 160 000 ICT training participants. • Promotion of safe e-services usage. • National Digital Coalition coordinator since 2013. • Online learning website for Lithuanian residents - www.epilietis.eu. The aim of which is to encourage public and private e-services usage in the country. • In April 2018 a 3-year European regional development fund ERDF funded project. The project is relevant to **SDG4, SDG8**.



ICT Village Education and Development Initiative

In **Malawi**, **Youth Business Movement** a leading youth community-based organization under Chiponde Business Group working for the capacity development of youths and women that turns job seekers to job creators. It was also established in order to create a resourceful networking database for those with a strong interest in entrepreneurship and introducing business startup, Innovation and Good Governance in the capacity of youth in Malawi for developing positive leadership skills and to espouse an honest work ethic. Youth

business Movement Initiative was established in 2016 serving vulnerable Youths and women affected by education and promoting youth and women entrepreneurship and enterprises through the provision of business incubation services and innovation programs. Broadly, the empowering youths for improved employability in decent work and sustainable entrepreneurship in Malawi project is designed to offer youths development service in the area of entrepreneurship and enterprises through provision of business incubation services in the key focus areas of agriculture, innovation, interior designing and ICT. Our vision is to improve youth, student's achievement by using ICT in new and creative ways, encouraging variety in the way the curriculum is delivered to inspire wonder and awe in our students. We hope to provide a curriculum which prepares students for the demands of the technological world of the future. We want to use ICT in innovative ways to enhance attainment in our students and to support the development of a more tailored and diverse curriculum which enhances students' creativity and exploits opportunities to inspire wonder and awe within them. We want to use ICT to engage students in the concept of the global village and challenge how they see themselves within this world. We want to be open to experimentation with new technological developments and working styles which could enhance the service we provide. The project is relevant to **SDG5, SDG16**.



Digital Literacy Program: Know Your Rights

In **Mexico**, it is a program of information and training aimed at users of telecommunications services, that englobes conducting training courses, provision of information materials, counseling and support concerning the solution of disagreements and attention to specific doubts that users have. The program empowers users, enabling them to make informed decisions, enforce their rights, and proper use of services and telecommunications equipment. It also allows to publicize the work of the Institute and promote the use of digital tools developed for users. Conducting courses where in a practical and simple way, users learn in detail their rights and how to enforce them, how to file dissents to the IFT and use tools such as comparison of Telecommunications Services and Maps Mobile Coverage. As well, oversees the installation of information stands, in order to provide useful information material, answering specific questions and assisting in mediating dissents. During 2019, the program has had more than 40 sessions, training about 2,500 people in states like Mexico City, Michoacán, Baja California Sur, Tlaxcala, Zacatecas, Sinaloa, Durango, Campeche, Colima and Nayarit, among others. The project is relevant to **SDG4, SDG10**.



Leadership in Tech

In **Mexico, Movimiento STEM (Science, technology, engineering and mathematics)** is a non-profit association that seeks to promote in Mexico and Latin America, STEM education, future jobs and innovation, with social and inclusive vision. We are the leader of the STEM Ecosystem in Mexico, an initiative endorsed by Global STEM Alliance and STEM Learning Ecosystems, and at the moment the only initiative endorsed in Latin America. STEM is a global trend that promotes the teaching of science, technology, engineering and mathematics as pillars for sustainable development and social welfare. STEM is beyond grouping these subjects. It is a movement that develops in a deep way the scientific and mathematical thought. The project is relevant to **SDG1, SDG4, SDG5**.



Comprehensive Training Strategy 2019

In **Mexico, The CTS** is an update and training Programme on government budget, monitoring of public spending, evaluation of the performance of public policies and the promotion of budgetary transparency. Through this strategy, the Ministry of Finance of Mexico achieved two main objectives. The first achievement is that federal and local public servants as well as the general public in Mexico and worldwide can access without any fee to understandable tools and practical methodologies which empower a suitable use of the public resources exercised by the governmental institutions. The second is the promotion of a citizen participation culture and public value creation that in long term will contribute to an honest and efficient exercise of public spending. The CTS has a structured learning and a non-formal training schemes. The first one is conformed by two certification programmes, one on evaluation of public policies and programmes and the other on Results Based Budgeting. In both cases the graduate participants receive an official probative document which empowers their career on governmental issues. The second are complementary tools which are permanently available on the Budget Transparency Portal and on its official YouTube channel. These tools are didactical consulting documents, video tutorials and webinars. Since the CTS was implemented, the coverage has dramatically increased. Annually, more than 50,000 people across the globe participate on the structured learning scheme while MONTHLY, more than 50,000 people consult the non-formal training material provided by the Ministry. The Certification on Public Policies and Programmes Evaluation has been a blockbuster since about 70 % of the active participants have obtain their Diploma, while the national and international rates on specialized online training courses

are 26% and 5 % respectively. Additionally, this project has already won a national award for contributing to the democratization of the evaluation culture using a digital environment. The project is relevant to **SDG4**.



The Code To Change Pakistan

In **Netherlands**, the project is starting their trainings in **Pakistan** and will initially train 75 young women in digital skills to re-integrate into the workforce. Yes. **The Code To Change** has been successfully running in Netherlands (with focus on migrant and refugee communities). They worked in Northern Pakistan with 50 women and now plan to train 75 more women in Punjab, Pakistan. **The Code To Change, Pakistan**, will work to minimize the digital skills gap and bridge the digital gender divide in the technology sector. Through boot camps, mentoring, events and meetups, the initiative encourages women to build their own technology products, become entrepreneurs and sustain their livelihoods in the technology sector. The initiative provides a safe space for collaboration, support and communication for women working in the digital sector. The project is relevant to **SDG5**, **SDG16**.



VHTO and PlatformDIT

In **Netherlands**, "VHTO: more girls and women in science, technology and IT" in the Netherlands is committed to increasing the participation of girls and women in science, technology and IT. Dutch girls opt less for education and professions in science, technology or IT than boys. Even though girls often have talent for science / technology subjects and they generally perform just as well on this as boys do. Causes are: • - (gender-stereotyping) influences from the environment: parents, teachers etc; • - a limited view of science and technology training and professions and unfamiliarity with the social innovations that technology makes possible; • - the lack of role models (female professionals in science, technology or ICT); • - limited self-confidence in their own talent. As a result, perhaps surprisingly, girls in the Netherlands often do not fulfill their full potential in these fields. VHTO focuses on the entire chain from primary education, secondary education, secondary vocational education and higher education up to and including the labor market. Parents and the media are also involved in the activities. VHTO carries out activities to increase the participation of girls and women in science, technology and ICT in the Netherlands. Only by encouraging more girls / women in science, technology and ICT can the Netherlands maintain and strengthen its position as a knowledge country in the field of science and

technology. This is where PlatformDIT are essential, this is a collaboration between major ICT companies in the region to specifically address engaging more girls in the ICT space.

VHTO is an advisor and founding partner of PlatformDIT. Partnerships: VHTO is an advisor and collaboration partner of the government, of educational and research institutions, companies, sector organizations and intermediary organizations in the Netherlands with regard to the theme of girls / women and science, technology and ICT. The project is relevant to **SDG5**.



Girls in Robotistics

In **Nicaragua**, **Plan International** is an independent development and humanitarian organisation that advances children's rights and equality for girls. We strive for a just world, working together with children, young people, our supporters and partners. To fulfil the promise of the 2030 Global Goals, our 5-year Global Strategy is designed to deliver significant change for girls and boys, putting a special emphasis on gender equality. We see clear links between fulfilling children's rights, achieving gender equality and ending child poverty. Every girl and boy has the right to be healthy, educated, protected, valued and respected in their own community and beyond. We support these rights from when children are born to when they reach adulthood. We work to ensure that girls and boys know their rights, and have the skills, knowledge and confidence to fulfil them. This approach inspires and empowers children and communities to create long-lasting change. Girls have the power to change the world. Our ambition is to work beside them and together we take action so 100 million girls learn, lead, decide and thrive. Plan International has been working in Nicaragua since 1994, contributing to the promotion of rights in health, education, protection, and economic security for girls, boys, adolescents, and young people. Plan promotes the participation of families and communities in their own development. The project is relevant to **SDG4, SDG5**.



Digital Balance for Better

In **Nigeria**, the mission of **Girls Education Mission International** is to support girls and women in reaching their potentials focused on defending, protecting and promoting their right to education. Girls Education Mission International reaches out to and advances the circumstances of girls who are deprived of education and training opportunities to reach potentials and attain a better life. Our specific objectives are: 1. Improve access to education. 2. Support reproductive health and well-being. 3. Identify and support girls and women who have suffered discrimination, violence and abuse. The project is relevant to **SDG5**.



Light up

In **Nigeria**, **Magvoile Vocational Center** is a capacity building institute located in Kaduna, aimed at addressing youth/women unemployment and poverty by providing technical training, community development programs to individuals so as to improve their economic independence with sell-able hand-on skills. At Magvoile Vocational Center we do believe that the development of vocational skills is critical not just to the growth and development of individuals alone but to the nation at large. We offer our trainees quality practical and theoretical skill training programs, preparing them to meet the challenges and needs of the Nigerian market by inculcating in them skills that meet global standards. We run the widest selection of creative vocational and entrepreneurial courses using NBTE curriculum, our instructors and resource persons are professionals in various skills and teaches with utmost professionalism and deep passion not compromising standards. Furthermore, at Magvoile Vocational Center we are also consultancy services and community development initiative, with our subsidiary company Ronex Consult. The project is relevant to **SDG5, SDG9, SDG16**.



AEF SCHOLAR PROGRAM

In **Nigeria**, **Aniwura Enhancement Foundation** is a non-profit social enterprise that develops and provide mentoring, financial and business support for the Nigerian youths with focus on Technology. They have designed several year round social entrepreneurship

and technology innovation programs that will enable the Nigerian youths to form and transform their ideas into impactful interventions by harnessing the power of technology. They have organized different programs vary from AEF Scholar program, the upcoming AEF Community Interest Technology and Entrepreneurship Fellowship Program. They have a continuous weekend free training programs in different areas of tech. They have trained over 700 young boys and girls for free in different skills and still counting. They also have residency for youths whose income will not be sufficient for logistics like transportation. They feed well over 20 youths at every point who are undergoing training at their training centre. This are youths whose parents cannot afford the cost of transportation etc. The project is relevant to **SDG5, SDG16**.



Blue Sands Academy's Girls for Tech initiative

WSIS Prizes Contest 2020 Nominee

In **Nigeria**, it's important to develop women's expertise in technology in Nigeria because it's been an area that for too long has been neglected. If we are going to move forward as strongly as we would like and keep in step with other developing countries, then it just makes good sense to develop women in digital skills. **Blue Sands Academy** decided to train Nigerian girls in leadership in technology. My organization is passionate about developing technology skills among women. I am worried that Nigerian females are not exposed to technology training like their male counterparts. The ratio of male to female studying and practicing engineering and other technology related courses in the country is widening daily. Blue Sands Academy which is an intervention educational center in Kaduna state Nigeria provides top notch digitized education to young girls and women. This organization also train female teachers in the community on how to be a 21st century digital teacher, we also deliver STEM education to young girls and also build the future female Tech entrepreneurs by developing Apps to solve problems in their communities. Blue Sands Academy targets young girls and women in Kaduna and also girls that have dropped out of school. Our major objectives are to create a free tech space for girls in Nigeria that will become the tech Icons of tomorrow through technology for education and innovative teachers and processes. We pride herself over innovative learning processes and a safe environment for young girls and women to explore all their technological potentials. We also aim to build the 21st Century girl child through digital learning in enabling a shift from trans-missive pedagogies (old way of teaching) to trans-formative pedagogies (21st century

teaching methods) which then translate into a technological enabling environment for young girls and women who are denied access to information technology space due to gender reasons. The project is relevant to **SDG4, SDG5, SDG8, SDG16**.



Girls' STEM Education nonprofit

In **Nigeria**, **The Visiola Foundation** is committed to nurturing, mentoring, and educating high-potential girls and young women in the STEM fields to build a pipeline of leaders and innovators who will help to transform African countries. The Foundation trains, educates, and mentors girls and young women from underserved communities to build their technical skills, analytical ability, and leadership acumen. We recognize the importance of bridging the gender gap in STEM; while enabling the marginalized to exercise their agency for the common good. Our after-school STEM Clubs for Girls are customized around the core foundational literacies, competencies, and character qualities required for success in the 21st century. The content of our programs is designed to complement the academic instruction taught at schools, with emphasis on Science, Technology, Engineering, Math and English. The program has been expanded in 2019 to train 1,000 girls attending 20 government secondary schools. It is teaching girls Full Stack Web Development, Mobile App Development, leadership, and entrepreneurship. Our STEM Camps for Teenage Girls teach students valuable skills in critical thinking, problem solving, and teamwork, as they are taught to view the world through the lens of the STEM subjects. Students learn to build and program robots, electronics, and mechanical structures. Our Coding Boot Camps for Girls teach young women aged 17 – 25 how to code as a foundation for future careers in software development, programming, and tech entrepreneurship. The project is relevant to **SDG4, SDG5, SDG8, SDG16**.



Dufuna-Fem

In **Nigeria**, **Dufuna-Fem** (a 6-month intensive training programme) aims to increase the number of women in tech (only 30% of people in tech are women in Sub-Saharan Africa) by equipping ladies with economic-empowering knowledge & skills required to get them into Software Development, Data Science and Product Development jobs. During this programme, scholars go through 5 months of classroom and online training taught by industry professionals, participates in group hackathons and individual projects. The project is relevant to **SDG4, SDG5, SDG8**.



SkillsFirst-Digital Skills Bootcamp

WSIS Prizes Contest 2020 Nominee

In **Pakistan**, **SkillsFirst** is a brand of DEMO that empowers youth to learn digital skills for a better future. We have successfully executed 8 **Digital Skills Bootcamps** which is our flagship training program that empowered more than 300 candidates with digital skills. These bootcamps are carefully designed with an objective to empower the youth of Pakistan to learn digital tools and skills to expedite their pathway to employment. Our unique teaching methodology ensures that the participants not only master the digital tools skills but also develop digital leadership on how they are going to use the skills and tools to build new and effective systems. The project is relevant to **SDG5, SDG16**.



Raaji

In **Pakistan**, unhygienic menstrual health practices and period misconceptions among girls and women are widespread in Pakistan. Adolescent girls in Pakistan lack the knowledge, resources, and support they need to deal with the problems of menstrual hygiene. In most communities across Pakistan, girls aren't allowed to discuss sexual health, menstruation and contraception, are shamed for their curiosity, or given answers that are unhelpful and incorrect. Lack of knowledge and unhygienic materials/practices are significant factors for menstruating girls not going to school, gender inequality and poor sexual health. Recent studies/polls on menstrual health management in Pakistan conclude that: 49% had no knowledge of menstruation prior to their first period 79% of Pakistani women are not properly managing menstrual hygiene. 1 out of 3 girls miss school days every month during their period. 50% of girls lacked an understanding of the origin of menstrual blood. Our solution is an AI-powered chatbot called **Raaji** to help equip young girls across Pakistan with the knowledge they need to understand the facts about menstruation, learn how they can manage their periods using healthy practices and be more empowered to stay in school. The project is relevant to **SDG5, SDG16**.



GO_PRO! - Regional Programming Centers

WSIS Prizes Contest 2020 Nominee

In **Poland**, Idea of **GO_PRO! Network** was positively recognized by WSIS (Zurich 2015), It was nominated, as one of 30 best ICT capacity building initiatives. In Poland the project was nominated to a prize: New Technologies Locally 2015, which is annually granted by Polish – American Cooperation Foundation. It was described as one of ten best initiatives of 2014. Network was supported also by Reading and Writing Foundation – Public Libraries 2020 initiative, as one of 6 best initiatives involving libraries. Within this call we submit first international edition of GO_PRO! project. Project was implemented within Erasmus+ capacity building in the field of Youth Program. We collaborated with organizations from Croatia, Spain, Kenya, Indonesia, Thailand, Vietnam, Peru to develop international Regional Programming Centers network. Within the project we built the capacity of partner organizations to develop ICT skills and support digital and social inclusion of Youth in local communities. We created space (non formal education centers) for developing ICT and programming skills. The basic idea is to use the existing infrastructure, only reconfigure it. To create previous GO_PRO! Centers we cooperated with partner organizations – school, libraries, NGOs. Partners organized interesting IT lessons, but also allowed (during so called Coder Clubs) youth to develop programming skills during their free time. Coder Clubs are

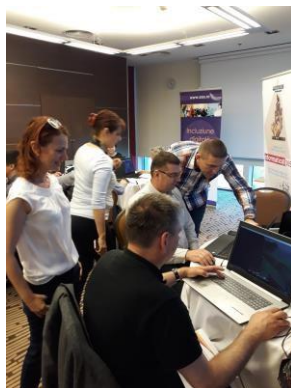
based on challenges. Each week there is a new problem, new challenge, which Club has to solve together! The project included 2 mobilities for Youth Workers (in Thailand and in Poland) each of them helped them to be better trainers of ICT competences in their communities. Partner organization received grant to buy proper equipment (laptops, Lego Mindstorms), to lead innovative and interesting ICT workshops in their areas. During the Coders Week (X of 2017 and 2018) we organized collaborative awareness rising actions in order to promote network. We also developed training materials, which are available on project webpage. The project is relevant to **SDG4, SDG10**.



Informatica365

WSIS Prizes Contest 2020 Nominee

In **Romania, The Infomatica365 project** implemented by EOS has delivered a national Computer Science teacher training to gymnasium teachers who are teaching the compulsory Informatica and TIC subject. With an extraordinary reach of over 50% of the total Computer Science and Information Technology teachers nationally, the project included events and in-depth courses focused on using Minecraft/MakeCode and Intro to Micro:bits to help teachers introduce the basics of coding to 11-14 year olds. In Romania, which ranks last in EU in terms of Digital Skills on the EU DESI, the opportunity is huge considering the context: Computer Science was introduced as a discipline in school year 2017-2018 and EOS in partnership with MoE and Microsoft stepped in fast to help the teacher community ramp up for the new study object. The project offered ICT training to over 3000 teachers and has reached through them over 100.000 students. The projects and the innovative partnership around it has been recognised by the European Commission through the Coalition for Digital Skills and Jobs. The project is relevant to **SDG4, SDG5, SDG10**.



BM investments Ltd

In **Rwanda**, to be the leading service providers of building management systems in Africa, and training fresh Engineers from institutions practical skill with this strategy, we target to improve security, increase profits and empower young engineers with practical skills. This will enable them to secure great job opportunities within construction companies especially majoring in Mechanical, Electrical and Plumbing, to enable people realize the beauty of a digital and smart solutions. We are targeting 1000 great companies minimally. The project is relevant to **SDG5, SDG9**.



GoGeek

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, **GoGeek**, is a project that aims to empower and offer Saudi youth the technical skills needed in today's world by creating continues initiatives, regardless of their age and gender. The Go Geek initiatives targets talents and works towards strengthening skills and potentials. In attracting talents, the initiatives target individuals from different backgrounds and ages, and provides them with high quality trainings and bootcamps in various field of technology, so far, we have created four sustainable initiatives in this area. The IO Boot Camp for computer programming, is an annual summer bootcamp that was first established in 2018. After two seasons the Boot Camp has successfully trained 60 individuals and secured the establishment of 11 start-up enterprises signed to the Bader Incubator, a partner in the IO Bootcamp. The Women in Cybersecurity initiative, a recent initiative adopted by the Go Geek project, is an awareness and empowerment initiative aimed to increase the number of women in the field of Cyber security. The initiative consists of two stages: an awareness stage, where more than 400 females were introduced and educated on the concepts of cyber security and a training stage, to prepare, mentor and train females in Cyber security. The project is relevant to **SDG4, SDG5, SDG8, SDG9, SDG10**.



Localization of ICT Sector

In **Saudi Arabia**, localization agency at MLSD focuses on increasing the participation of nationals and in the private sector. One of the major activities revolves around bridging the skill gaps between private market demand and national graduates and job seekers in order to elevate their skills and prepare them to join the private sector. Additionally, one of the focus areas is to improve the chances for female nationals through the introduction of new platforms such as remote work and freelance. The project is relevant to **SDG1, SDG5, SDG8, SDG16**.



Festic

In **Senegal**, **Festic** has enabled a platform where women in the IT and telecom ecosystem meet, network and lobby for the leadership of women in the public and private sector. Members have found themselves promoted to leadership role in their organization. Through this organization women have gained access to financing programs for their projects. Festic has encouraged the government to nominate women in strategic positions in the media and IT sector and on top of that a woman at the ministry of post and communications. Festic has organized networking events where many organizations in the IT and media, and the ICT ministry have joined. Festic has a mentoring program for girls. They have created opportunities for the girls in ITC, most of them IT programming, to meet

the President and access financing programs. Festic has provided trainings in leadership and Technology (how to use tech) for adult and young persons. Members are invited on behalf of Festic to major events national and international. The project is relevant to **SDG5**.



Code for Cape Town

WSIS Prizes Contest 2020 Nominee

In **South Africa**, **Code for Cape Town** introduces high school girls to coding and creative problem solving with the purpose of encouraging young women to enter STEM-related career and study paths. It's CodeSpace's technology that enables a learning environment that's radically different to traditional classrooms: our online learning portal provides an adaptive learning experience, directing students to the content required to meet project requirements, while our blended learning approach shifts lecturers from content delivery to learning facilitators – reducing the cost of education while improving the quality of outcomes. We've developed a tool for identifying talent and this allows us to direct learners into the best-suited study and career paths. As a provider of high-quality tech education with the vision of enabling young South Africans to leverage technology to drive innovation, CodeSpace powers Code4CT. On a practical level, this means training young people to enter the ICT industry – from introducing learners to coding and robotics at high school level to offering full-time programmes in web development enabling young professionals to become industry-ready, innovative thinkers. CodeSpace scales the impact of these programmes by working with partner organisations to enable them to be able to integrate coding into their existing educational services, and through a uniquely scaleable model can reach an unprecedentedly wide audience. The project is relevant to **SDG4, SDG5**.



GirlCode

In **South Africa**, **GirlCode** is a non-profit organisation aimed at empowering young girls and women to have the confidence to pursue a career in software engineering through their various initiatives. GirlCode has been operating for the last 5 years where they have hosted successful hackathons every women's month with varsity/college level female students who have then received job opportunities from the hackathon sponsors. Some of the other activities include monthly workshops for females who have no background in coding but are keen to learn the basics, as well as weekend coding clubs for high school girls. The project is relevant to **SDG5, SDG16**.



Time to Shine ICT (#TTOS-ICT)

WSIS Prizes Contest 2020 Nominee

In **South Sudan**, The **#TTOSICT project** empowers women and girls in STEAM (Science, Technology, Engineering, Arts and Mathematics) courses. The first of its kind in South Sudan, a country that has been affected with conflict and the issue of girls and women education is still a great challenge especially in Technology related professions that are looked at as a male thing. The #TTOSICT project is not a novel idea but it is an innovation that is tailored to suit the context of South Sudan; aimed to encourage girls to stay in school through creative problem solving using technology for like programming with SCRATCH; and through the ICT challenges that come with prizes like school fees that supports the girls' education especially those who might have dropped out as a result of poverty. The Time To Shine ICT #TTOSICT project is supported by UNDP South Sudan. The project is relevant to **SDG5, SDG16**.



GIRLS CERTIFICATED IN MICROSOFT OFFICE SPECIALIST

In **Spain**, **Albaydar Centro Educativo** targets vocational school women students from 16 – 45, and aims for the following objectives: (1) enrich the professional profile of the women; (2) broaden their job opportunities; and (3) improve their digital competences. It holds the following activities: (1) digital competences assessment; (2) motivational TIC talks; (3) onsite class and/or online course; (4) tests to evaluate their digital knowledge; (5) Official Certification of Microsoft Office Specialist; and (6) take part in National and International MOS Championships. The project is relevant to **SDG4, SDG5**.



Power to Code

In **Spain**, **Power to code** is a nonprofit organization in Spain, founded in 2016. Their goal is to reduce the gender gap in technology and empower women to become leaders in technology by promoting STEM vocations, especially focusing on programming, technology and entrepreneurship. Power To Code run Technovation Challenge Madrid. Technovation Challenge is the world's largest global tech entrepreneurship program for girls. In teams guided by mentors, they create mobile apps to solve social problems in their communities and participate in a global competition with more than 120 countries. The program itself consists of a 12-week educational curriculum, which is worked in groups between January and April. The main objective of the project is the dissemination of the different STEM disciplines and, in particular, of technology, among school-age young people and their families. For this purpose, concepts that are not yet prevalent in the school curriculum are addressed, such as the programming of mobile applications, in a practical way, since at the end of the program the participants have a fully functional application, made by themselves. The second objective of the Technovation program is to reduce the gender gap in technology at a time close to the choice of educational itinerary in the fourth year of secondary school, showing them the technological option, usually not considered by adolescents, due to the lack of references in this field. Through the program, not only do they meet women who work in all fields of technology, but in the final event they have the opportunity to interact with hundreds of girls and young participants, thus normalizing their involvement. The project is relevant to **SDG4, SDG5, SDG9, SDG16**.



Girls in ICT by Inicio

In **Sweden**, **Inicio** is a non-profit organisation empowering teenage students (13-19 years old) to develop their dreams and talents with the help of technology. Our goal is for teenage students to get the guidance they need to choose the educational and career path that fits them best. We do this by a mentoring approach and hands-on activities for students and teachers in schools. Our goal is to awaken curiosity and interest in future careers that involve technology. Inicio collaborates with schools, libraries, youth and community centres to organise hands-on workshops. At our workshops the participants can build electronics, 3D print, practice coding etc and see the connection between technology and other subject

areas like art, fashion and music. Our workshops are designed to align with the existing school curriculum and meet the digitalisation requirements set by the Swedish National Agency for Education. Inicio is passionate about inclusive education and access to technology to prepare the next generation for the smart and digital societies of the future. Since 2016 Inicio has celebrated the international day of Girls in ICT in Stockholm. Every year we invite girls from different schools to take part, with the help of mentors from universities, in hands on activities and case studies provided by the ICT industry. This way we provide a network for teenage girls in the ICT sector and empower them to pursue education and careers in tech. All the activities are free of charge and designed to meet the requirements set by the Swedish National Agency for Education. The project is relevant to **SDG5, SDG9, SDG16**.



AZUNI Initiative

In **Switzerland**, **The AZUNI Initiative** is aimed at strengthening the role and resilience of youth in this age of significant societal change, and help build a generation ready to meet the challenges and opportunities brought by the Fourth Industrial Revolution. This is because the full societal implications of the Fourth Industrial Revolution remain largely unknown, and are often either over-hyped or under-estimated, especially among the actors of tomorrow, i.e young people. Indeed, the Initiative has at its core the primary goal of awakening youth and build their capacity in not only understanding these implications, but also be proactive and take a front line position in building the future digitalised society. The Initiative, since its inception, has attracted a growing number of participants, that have gone from passive receivers, to curious learners, to advocates, by formulating the Youth Opinions on the Future of Society, in consultation with key actors in the fields of data protection, cybersecurity, and legaltech, just to name a few. The project is relevant to **SDG4, SDG10, SDG17**.

ADAPTATION OF RENEWABLE ENERGY BEST PRACTICES IN CHAMNDINDI MODEL VILLAGE

In **Tanzania**, the renewable energy project aimed at: (1) Enhanced capacity of communities on Renewable Energy; (2) Access to renewable energies; (3) Information on Renewable Energy documented and shared. The adoption of alternatives sources of energy was high, the following were achieved: • Biogas interventions minimized the use of firewood, fuel for lighting and provide employment to youth of constructing, maintenance and repair of biogas. • Improved Cooking Stoves (ICS) reduced women workload of consuming more time looking for firewood, students spent most time for studies, health of women and children are improved because smoke is going outside through chimney. • Solar installation and electrification reduced the cost of buying fuel for lamp, it helps student to spent 2-3 hours

for private studies, security have improved because of lighting. • Employment creation: through Renewable Energy intervention, youth employed as barbershop, technician and solar shops also women employed in entrepreneurship activities. • Networking: Increased networking and collaboration between TAGRODE, local Authority and RE companies. The project is relevant to **SDG7**.

Apps and Girls

WSIS Prizes Contest 2020 Nominee

In **Tanzania**, **Apps and Girls** is a Tanzanian social enterprise that empowers girls to create the world they want to live in by using technology. At Apps & Girls, we give girls the skills and a platform to become effective tech-entrepreneurs, including high-quality software and hardware programming. We focus on girls and young women from underprivileged backgrounds, in secondary school, university, or out-of-school, as our mission is to reduce the gender gap in ICT and empower more change makers in Tanzania and across Africa. Apps and Girls' overarching objective is to invest in young women as potential tech entrepreneurs, tech creators, tech role models, and leaders, in Tanzania and across SubSaharan Africa. The project is relevant to **SDG5, SDG8, SDG16**.



IoT 4 youth

In **Tunisia**, **MentorNations** is a community of Volunteer who believe digital literacy is a human right. Every summer we launch a coding camp that bring undeserved youth from all around the country to learn about computer skills, coding and entrepreneurship. In summer 2017 we teach 35 students (age 15 to 19) about game dev for one-month coding. In summer 2018 we teach 35 student age 15 to 19 about IoT for one month. This year we are thinking to launch a coworking space that help student to build new skills. As we mention we had to big coding camp 2017 and 2018, our students are well motivated and they are working on their project; we promise them to help to create their own startups and we have 4 startups already created and they are doing amazing things. The project is relevant to **SDG5, SDG16**.



Uganda Computer Aid

In **Uganda**, **Uganda Computer Aid** is an amazing initiative implemented by Musabe Foundation. Uganda Computer Aid is active in the field of Information & Communication Technology in the remote, disadvantageous region of the Rwenzori Mountains bordering the Rain forests of Democratic Republic of Congo. Uganda being one of the world's developing countries, it has limited technology, a high rate of digital illiteracy, Gender Technology Inequality, Technology discrimination of disabled children (Blind and Deaf). Uganda Computer Aid saw the need to impart (I.C.T) modern technology skills into all the Ugandans, the major target groups of this project were girls, women, disabled people and children with disabilities (the blind and the deaf) in the remote, disadvantageous region of the Rwenzori Mountains bordering the Rain forests of Democratic Republic of Congo. The project is relevant to **SDG1, SDG4, SDG5**.

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Fundi Girls program

In **Uganda**, **Fundi Girls** program is one of the popular programs at Fundi Bots established in 2017, which aims at increasing the number of girls accessing our STEM program. On this program, the girls are empowered to become champions of their own learning through the robotics science tool. They learn to build robots and practical projects using the tool; they acquire skills required for learning science in school, working and managing teams, become critical thinkers and innovative towards solving problems now and in the future as well as confidence in choosing careers in science and technology fields. The program particularly

targets girls in rural areas within the country and the region as well as female science teachers. The project is relevant to **SDG4, SDG5, SDG9, SDG16**.



Startup Factory

In **Uganda**, **The Startup Factory** is an innovation hub and a skills training center currently operating in Uganda and Ethiopia, targeting marginalized youth between the ages of 17 and 26. It offers young people free-of-charge 4-month long training programmes, which includes classes in topics such as computer skills, coding, fashion design, entrepreneurship, photography, arts and crafts, and more. The content is largely driven by the youth and their interests, and the youth also take charge of facilitating many of the classes and become mentors for new Startup Factory students. The project pays particular attention to empowering girls and women and bridging the gender gap, and aims to reach the most marginalized and vulnerable youth in the communities it serves. The project started in 2016 in Kampala, Uganda, and it has since expanded to 7 hubs in Uganda and 2 hubs in Ethiopia. In Uganda over 5000 and in Ethiopia over 1000 youth have graduated from the training programme. Over 60% of the participating youth are young women. Around 1000 businesses/community initiatives have been started as a result of the Startup Factory programme. The project is relevant to **SDG1, SDG2, SDG4, SDG5, SDG8, SDG9, SDG10, SDG13, SDG17**.

Ananke's Digital Internship Program

In **United Arab Emirates**, **Ananke's** vision is to enable women's economic empowerment by ensuring equal participation in the digital technology revolution. In 2016, Ananke launched its groundbreaking digital internship program which is a home-based and self-paced initiative. Our target is women and girls aged 18-45 years and the program focuses on four key areas: (1) Access: The platform offers a digital space where girls engage in meaningful dialogue on issues with a gender lens and learn the importance of diversity and inclusion. Participating interns get trained and learn in real-world scenarios in real-time and are equipped with 21st century skills, critical thinking, practical use of technology and inclusive teamwork. We work with multi-tiered approach with seamless engagement and trainings across multiple platforms including (but not limited to) Facebook Groups (for live sessions and mentoring), Skype, Botim, WhatsApp, Email and ASANA. (2) Research: Our interns not only have access to our large database of in-depth stories, articles, research work and interviews on gender, the SDGs, leveraging tech for good & more; they also get an opportunity to be trained digitally in areas of online advocacy, digital communication, research using tech tools. (3) Skills: Selected participants work in a diversified virtual environment and are assigned team - or individual-based projects pertaining to digital media, women's issues, gender equality, journalism, ICTs and much more. Mentorship is another key part of the internship program where field experts guide, school and mentor participants. (4) Leadership: Through Ananke's digital internship program, women and girls

are given an opportunity to hone their skills such as critical thinking, use of digital technologies, 21st century skills, capacity and confidence building, peer mentoring, working as teams and much more. The result is creating a talent pool of women who are ready to equally participate in creative economy with confidence and honed skills. The project is relevant to **SDG5, SDG16**.

Tech4Girls

In **United Kingdom**, The **GSMA's Tech4Girls programme** offers underserved girls technical skills as well as exposure to role models and mentors in the mobile sector. It is part of GSMA's Women4Tech programme, which focuses on addressing and reducing the persistent gender gap in the mobile industry. Tech4Girls provides technical workshops for elementary, middle school and high school girls to inspire careers in Science, Technology, Engineering and Arts and Design and Math (STEAM) studies. Participants from local schools and underserved communities learn new skills such as coding and programming from industry professionals and have a chance to hear from women in STEAM careers and see live demos from the latest technologies. The Tech4Girls programme connects professionals from established companies to foster mentorship opportunities. GSMA works with its member operators and organizations to ensure that the workshop offers girls unique experiences in office settings, where girls get a chance to engage with female leaders on their career journeys. Activities for girls take place across the world and throughout the year, including Girls in ICT Day. According to the World Economic Forum report "The Future of Jobs" (2016), only 19 per cent of people employed in the mobile sector are women. To change this, it is necessary not only to ensure the development of technical skills, but also to change the perception of technology as a male preserve, and make women and girls feel welcome in the industry. Tech4Girls launched in March 2018 in GSMA North America. To date, approximately 300 girls have participated in workshops and activities held in Atlanta, Buenos Aires, Guyana, Trinidad and Tobago, Barcelona, Beijing, Brussels, Dubai, Hong Kong, London, and Nairobi. Participants have developed a wide array of technologies including an artificial intelligence tool such as Google Home, a Kano Computer, a mobile app, and a mobile ring tone, to name a few. The project is relevant to **SDG1, SDG4, SDG5, SDG16**.



Smart Schools, education and technology project

In **United Kingdom**, **Plan International** works to ensure free, equal access to quality education for all children, especially girls – from early learning to secondary education. We

work with children, their families, communities, wider society and governments, and advocate at both local and international levels, so that all children are able to get a quality education. In Central America, Plan has partnered with Samsung Electronics Latinoamérica, with the aim of leveraging technology to this end. Children from less privileged families in the target countries primarily attend public schools. These schools however lack resources to incorporate technology into their curricula, meaning their students are less likely to be taught digital skills essential for the future. Girls in these schools are further disadvantaged, as social norms and stereotypes favour boys in the context of technology. This project was developed by Plan and Samsung in primary and secondary public schools focusing on integrating technology into education. The aim was to bridge digital divides both due to privilege as well as gender by developing model “classrooms of the future”, where technology is leveraged both to enable learning and as the subject of learning. The programme’s target was both students and teachers in 18 public urban and rural schools. The objective was to teach digital skills to children, especially girls, attending underprivileged, public schools, as they are otherwise unable to acquire these skills, which form a crucial basis for future employability. In addition, the objective was to sensitize teachers to the fact that girls and boys are equally suited for careers in STEM, and give teachers access to modern, tech-based pedagogical tools. A key focus was on ensuring these tools were open source to enhance sustainability and replicability. The project is relevant to **SDG1, SDG4, SDG5, SDG16**.



#techmums & #techmumsClubs

WSIS Prizes Contest 2020 Nominee

In **United Kingdom**, **#techmums** was relaunched in 2018 by Tech Evangelist Dr Sue Black. **#techmums** was created as direct response to the noticeable lack of female representation in the Technology Industry, which still only sits at 17% in 2017. **#techmums** trains women in key areas including: Tech Skills, The Cloud, Digital Safety and Coding to allow them to enter a new career path and gain confidence regarding returning to employment or setting up their own businesses. Our two flagship programs are **#techmumsClubs** and **#techmumsTV**: **#techmumsClubs** - we developed in-person, 10-week clubs run by our partner organisations across the UK. We are in the process of working with new international partners to take the program global. The course covers a range of topics starting with basic digital skills, staying safe online, managing household finances through

technology, to web design, app design, and an introduction to coding. **#techmumsTV** - sponsored by Facebook and supported through the MumsConnected project, a collaboration with Home-Start UK (HSUK) funded by the Nominet Trust. **#techmums** ran Season 1 of **#techmumsTV**- a live-streamed series of episodes targeting mothers with content and discussions that help mums become more tech-savvy. We reached over 300,000 views and are in planning for our next Season.

<https://www.forbes.com/sites/kittyknowles/2018/03/08/international-womens-day-coding-sue-black-techmumstv-facebook/#7f2beb525d9b>

The project is relevant to **SDG5, SDG8**.

Girls & Women empowerment through technology training (Bridging the gender digital divide)

In **United States, Vijay Computer Academy (VCA)** is a global IT Education & Training institute since 1990. Target audience – Girls, Women, Kids, Youth, Adults & Disables. Major objectives: Work dedicatedly toward sustainable development goals (SDG – 5,8). 1. Bridging the gender digital divide. 2. Reducing gender gap in IT & Computing, Increasing digital gender equality. 3. Reducing the skills gap in IT & Computing, Generate workforce development & economic empowerment. 4. Reaching the unreached. 5. Digital inclusion. 6. CS for All Activities: (1) STEM education for girls; (2) Women empowerment through technology training; (3) Career & Workforce development & Economic empowerment through latest industry demanded IT education & training; (4) Digital literacy & workforceoriented IT skills training to socially & economically under privileged girls & women in rural & urban areas; (5) IT training for women with disabilities; (6) Tech re-entry programs for women after break; (7) Technology training for children, adults & Sr. citizens; (8) Career counseling – individual , seminars ,webinars; (9) Career services – soft skills, resume writing, how to face interviews, employment/self-employment/work from home assistance The project is relevant to **SDG5**.

Lucknow Girls Peer Mentoring & Education Project

In **United States, The Lucknow Girls Peer Mentoring & Education Project** addresses vulnerabilities of individuals living in slums of Lucknow, India, with a focus on adolescent girls. By implementing our innovative concept of SoCCs - a virtual currency that leverages the collective good of underserved communities, we incentivize participants to earn social capital credits by doing social good that can be redeemed for vocational training or access to healthcare. Initially started with 500 girls only, our project has then been scaled up to serve 1200 girls through the creation of 13 Girls Resource Centers (GRCs) that enhance health, education, and skill empowerment. Our girls have earned SoCCs for tutoring and mentoring three children 3 or more years younger than them. In turn, they have redeemed SoCCs earned for classes in computer skills and spoken English, as well as reusable, antimicrobial, menstrual hygiene kits, and gained employable skills for their career prospects and their families. We have also established 5 new community resource centers that have provided access to a small library, sports equipment and computers. Workshops about reproductive healthcare, career planning and scholarships have also been included to create a stronger link between students and employment opportunities, and strengthen the relationship we

have built with local governments and employers. The project is relevant to **SDG1, SDG3, SDG4, SDG5, SDG6, SDG8, SDG10, SDG11, SDG17**.



Outreachy

WSIS Prizes Contest 2020 Nominee

In **United States**, **Outreachy** provides paid, remote, mentored internships to work in Free and Open Source Software (FOSS) to anyone who faces under-representation, systemic bias, or discrimination in the technology industry of their country. Outreachy was founded in response to the underrepresentation of women in FOSS development, as reinforced by the already low number of women studying Computer Science in colleges around the world. A 2017 study by GitHub showed that participation of women in FOSS is still extremely low at 3%. In addition, research in 2016 by North Carolina State University showed that although open source software code written by women was in fact more likely to be approved by their peers than code written by men, this only held true as long as those peers didn't realise the code had been written by a woman. Outreachy aims to change these and other problematic trends by actively welcoming and encouraging people who are subject to under-representation or discrimination to participate (and lead) in open source projects by offering dedicated, paid internships where interns can demonstrate their skills & talents, and receive the direct welcome and endorsement of project leaders. Twice a year, Outreachy provides a introduction to FOSS for a diverse set of intern candidates of all ages, not just students. Each term, Outreachy organizers work to get the word out via universities, women in tech organizations, open source communities, and the media. Applicants then review the organizations available for a given term and those organizations' project ideas. Applicants then contact mentors who quickly orient them to the open source community and guide them through making their first open source contribution -- from coding to documentation to marketing to graphic design. Mentors get to know applicants and their unique skills & talents, and finally select the intern that will work on a given project during each term of the program. Those selected interns work remotely with that same mentor during the three month internship. The project is relevant to **SDG4, SDG5, SDG8**.



Women's Startup Lab Global Female Founder Tech Accelerator

In **United States**, "**Women's Startup Lab** has established an innovative global accelerator for female founders of technology startups. It is the only accelerator that brings together early stage founders from around the world for an immersive experience in the heart of innovation, Silicon Valley. Women's Startup Lab's accelerator is uniquely founder focused. It is inspired by the Japanese character for human, Hito, made up of two sides supporting each other. It is this community based approach that has allowed Women's Startup Lab to provide inspiration and opportunity for founders from across the world. Women's Startup Lab uniquely combines deep personal development, a sharp focus on key company building blocks required to enable rapid scaling, story development so that founders may confidently share their innovations, and connects female founders from across the world to major Silicon Valley influencers." The project is relevant to **SDG5, SDG16**.



GEMS (Girls Excelling in Math and Science)

In **United States**, **GEMS** is a network of STEM clubs for girls with a 25-year history of successfully serving thousands of girls internationally. Teaching robotics, computer programming, and general STEM, GEMS clubs encourage students in grades K-12 to experience and explore through solution-oriented activities and experiments. As part of the effort to improve opportunities for girls, GEMS was featured in the AAUW video Tech-Savvy Girls. We are members of NCWIT's K-12 initiative and participated in the Clinton Global Initiative in 2011. GEMS started as one after-school club in 1994 by me in northern Virginia to encourage her fifth-grade daughter and her friends to take high-level math and science classes in high school and expand their college and career options. At that time, Virginia high school graduation requirements were low, requiring only two classes each of math and science. That club has now proliferated into multiple clubs throughout Northern Virginia as well as hundreds across the country and worldwide. GEMS has expanded its mission to encourage girls to pursue education and careers in all STEM fields, including technology, engineering, making and related high-paying, entrepreneurial enterprises. Taking the name from a local AAUW conference for middle school girls, the GEMS clubs and network have

developed a model that works for girls worldwide. Resources, research, and guidance are available at no charge on the GEMS website (<https://gems.education.purdue.edu>) and Facebook pages. Interested adults create clubs to meet the needs of the girls in their area. GEMS focuses on hands-on activities and connections to further education and careers in a risk-free environment. The free downloadable GEMS Toolkit gives interested adults the information and direction needed to start GEMS clubs for their communities, building capacity in volunteers and education professionals alike. We expose girls to programming and robotics and other forms of technology. The project is relevant to **SDG4**.

WECREATE Program

In **Zambia, WECREATE | ZAMBIA** serves as an entrepreneurial community center for women interested in starting or expanding an existing business. The Center provides mentoring, business connections, specialized training, connections to the community, media attention, access to markets and capital along with the technical tools and resources necessary for taking any business to the next level. Since inception, the Centre's interventions have resulted in creating more than 2,743 jobs directly and indirectly. Achievements include: Over 8,700 new and existing businesses reached; 870 new businesses grown; 2,743 jobs created; 187 linked to business networks and other resource; 104 mentors trained and certified; 56 linked to sources of finance; 11 savings groups and 3 co-operatives affiliated to WECREATE. The project is relevant to **SDG5, SDG16**.



Asikana Network

In **Zambia, Asikana Network** seeks to increase the number of females working in STEM related careers with a particular focus on Technology. They aim to do this through capacity building and utilization of a network where women can connect and learn from each other. Their target audience include learners in primary & secondary schools, College & University students, teachers from primary & secondary schools, Govt, private sector, other non profit organisations globally. Their major objectives include building interest in Technology among girls in school by encouraging peer to peer learning, helping more women harness the skills they learn to earn an income for themselves. Some of the major activities they undertake include basic computer usage training for primary and secondary learners, income generation activities such as web and mobile app development projects for the women who train with us, outreach programs to various schools country wide. The project is relevant to **SDG4, SDG5**.



Actionline: 5.0

ELIT security awareness

In **Algeria**, company that manages very sensitive and critical information can be a target of attackers. ELIT is consecrated as one of the security measures that the company must implement to protect its data. **ELIT Automated Security Awareness Platform** takes a new approach to online educational programs. The Platform is an online tool that builds strong, practical cyber-hygiene skills for employees throughout the year. Launching and managing the Platform doesn't require special resources or arrangements, and it provides the organization with built-in help at every step of the journey towards a safe corporate cyber-environment. The Platform is well thought-out, structured content- Interactive lessons, constant reinforcement, tests, simulated phishing attacks to ensure skills will be applied. The project is relevant to **SDG3, SDG16**.



Algerian Information Security Guideline

WSIS Prizes Contest 2020 Nominee

In **Algeria**, the Algerian Ministry of Post, Telecommunication, Information technology and Digitalization (MPTTN) developed **the National Information Security Guideline** (Fr: Référentiel National de la Sécurité de l'Information - RNSI) in 2016, which was the first document grouping together the guidelines and good practices of information systems security. It covers several areas of information security to ensure adequate protection for the informational assets of the government sector and public enterprises. However, with the diversification of cybernetic threats as well as the requirements of Algerian legislation and regulations in force regarding information security, it was important to update the RNSI version 2016 that covers new risks to provide the required assurance levels to the digital transformation efforts initiated by several key government sectors (transition to egovernment). The guideline contains 20 security domains in which the governance

controls were considered in details compare to 2016 version. Those controls comply with the Algerian legal and regulatory requirements such as the Algerian Personal data protection regulation of 2018 (Fr : Protection des données à caractère personnel) as well as international standards and frameworks. A toolkit of essential controls will be developed to help on the adoption of the framework and provide organizations with compliance tool that will monitor their maturity. The project is relevant to **SDG3, SDG9, SDG10, SDG11**.



Blockchain technology based shared DLS (Distribute Ledger System) platform for citizen/e-services

WSIS Prizes Contest 2020 Nominee

In **Bangladesh**, Digital Bangladesh: vision 2021 comprises ensuring people's democracy and human rights, transparency, accountability, establishing justice and ensuring delivery of government services to the citizens of Bangladesh through maximum use of technology. From the last few years, Blockchain Technology has received a lot of attention from both industry and academia due to its decentralized, persistency, anonymity and auditability properties. **BCC's Blockchain Platform** is such an initiative that possesses these attributes. This is a private DLS system intended to provide service to govt agencies only. We are terming it as a platform as the same DLS infrastructure is being used by multiple services/ application systems to store its critical data/info. Results achieved: Currently BCC DLS platform is being used by 4 govt applications: 1) recruitment management system, 2) Bangladesh Korea Institute of Information & Communication Technology (BKIICT) Training Management System, 3) Digital Service Book & ePension system for Primary School Teachers, 4) Foodgrain Procurement Systems. BCC's Blockchain activity was selected as FINALIST in Enterprise Blockchain Transformation Award 2019 by Blockchain Revolution Global. BCC, in collaboration with IBM India, has established a Center of Excellence lab to harness it's accomplishment regarding Blockchain/DLS and Industry 4.0 activities. Impact: Blockchain Platform is helping BKIICT and BCC to protect fraudulent practices related to certificates, admit cards etc by unscrupulous persons. Employer organizations are now able to verify authenticity of training certificates instantly. Previously, it took days to get certificate verification result from BCC/BKIICT. Blockchain Powered Digital Service book system will enable Department of Primary Education to ensure transparency and trustworthiness in the system. Teacher will rely on the service delivery of primary education. Farmers will feel confidence in getting payments as per approved WQSC without any intervention of middleman. The project is relevant to **SDG8, SDG10**.



"Wing Shield" Malicious Android Application Detection System

In **China**, due to the openness of the Android system and its extensive market share, the Android platform has become the “hardest hit” for malicious applications. In order to protect users from the threat of malicious applications in the process of using Android applications, Shanghai Research Institutes of China Telecom Corporation Limited developed the **"Wing Shield" malicious Android application detection system for Android applications**, by extracting suitable static features and dynamic features, the traditional feature code matching and artificial intelligence are used to quickly detect the known malicious application. This system has 100% coverage of the current malicious sample type, and it has equipped with the ability to detect unknown malicious applications through selflearning, the detection accuracy can reach 96.8%. This project can escort users to use android applications safely and has a high promotion value. With the advancement of technology, in the near future, the accuracy of detection may reach 100%, which makes the project sustainable and valuable in the long term. Moreover, the project is a great practice in protecting users from malicious applications, which shapes a model in building confidence of using ICT under current circumstances. The project is relevant to **SDG11, SDG16**.



Chinese Children Online Protection System

WSIS Prizes Contest 2020 Nominee

In **China**, the country attaches great importance to online protection of children. In this project, the China Academy of Information and Communications Technology (CAICT) supports relevant government departments in formulating and revising laws and regulations such as the Law on the Protection of Minors, Regulations on the Protection of Minors' Online Information, and Regulations on the Protection of Children's Personal

Information Online, so as to strengthen the legal safeguard of children's online protection. CAICT cooperates with and guides Internet enterprises to promote the "Online Antiaddiction System for Teenagers" to improve the cultivation of network literacy. CAICT has made full use of China Mobile's network and user resources to carry out bad information management, to create a safe and healthy online environment, and to build a multi-party network security protection system for Chinese Children, by which positive results have been achieved. The project is relevant to **SDG3, SDG11, SDG16**.



WSIS Prizes Contest 2020 Nominee

In **China**, With the deepening of APP services to users, the personal privacy information stored in smart terminals and applications becomes increasingly rich, and the disclosure of user privacy becomes increasingly serious [**The Cloud-Linked Privacy Security Protection System and Public Welfare Services**]. Illegal use of personal information is very prominent. Due to the weak awareness of network security and the difficulty in understanding high technology, the vulnerable groups such as middle-aged and elderly people and students can easily become the target of criminals. Based on the typical security demands of network security, terminal security, application security and business security, China Mobile has developed the "Watchman" terminal security toolbox to provide users with one-stop technical capability support for information security and build a privacy protection system for mobile Internet users. The toolbox based on the cloud security ability of China Mobile, innovate the privacy protection system of "static permissions detection + dynamic behavior characteristics+ DPI intelligent network analysis" , the toolbox helps 900 million safe pre-installed APP, and 300 million users at ease use. The toolbox has rich application scenarios and security protection value, which can improve the network security consciousness of ordinary people, and has obtained the good social benefit. The project is relevant to **SDG12**.



WSIS Prizes Contest 2020 Nominee

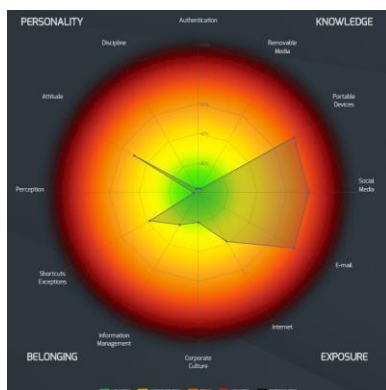
In **Cuba**, With the increasing development of computer applications in Cuba, dependence on automated services has increased, which are threatened by the action of computer viruses

that can cause economic and social damage. Reason for which and with the increasingly increasing access to the internet, a native protection service became necessary. The **Segurmática antivirus** product is a solution created for the Cuban national network that includes protection for Android devices. This package consumes few system resources, is efficient and the cost in relation to the average salary of the country is very low. It has a friendly and simple graphic interface; In addition to being designed to remain active as a process. This 100% national solution aims to contribute to the process of secure computerization of Cuban society. The project is relevant to **SDG8**.



WSIS Prizes Contest 2020 Nominee

In **Estonia**, CybExer Technologies and the Estonian Information System Authority have developed a novel e-learning tool for advancing cyber hygiene among public servants and public service providers of Estonia. It provides a training environment for lifelong learning on cyber threats for public sector employees. Moreover, it is an invaluable mechanism for increasing trust and effectiveness of public institutions by enabling a secure and inclusive digital transformation of all types of public services. The project **DigiTest** was launched as a three-year pilot. The first iteration was published in 2017 with updated versions in 2018 and 2019. The updates reflect changes in the threat landscape. The e-learning tool is used to develop capacities within ministries, government agencies and health workers. For the pilot, 50 000 licences were prepared for the Information System Authority to manage the cyber hygiene course on behalf of the public sector. This accounts for around 50% of the entire government workforce. The impact of the project on individual and organisational capability has led to a continuation of the course beyond the pilot. DigiTest's success instils great confidence in its ability to deliver results globally. Interest has already been shown by governments across Eastern Europe, CIS countries and the Middle East. The project is relevant to **SDG4, SDG16**.



WSIS Prizes Contest 2020 Nominee

In **Indonesia**, **TAKE BACK OUR PRIVACY** is the Indonesian multi-stakeholder initiative for building public confidence and awareness about privacy and personal data protection. Currently in Indonesia there is no Personal Data Protection Law yet that comprehensively protects the rights of citizens or individual. Meanwhile, Indonesian Internet users' understanding level of privacy and personal data protection still need to be improved. A number of cases related to misuse of personal data, such as for financial fraud and persecution attempts, are rife in Indonesia. For this reason, the TAKE BACK OUR PRIVACY project was initiated by ICT Watch together with multi-stakeholder partners in the context of three (3) objectives: - 1. encouraging policy makers (government and parliament) to comprehensively formulate and provide adequate regulations related to the protection of personal data, - 2. building public awareness about the need to maintain privacy to protect oneself and family from the negative effects of misuse of personal data, - 3. strengthening the capacity and role of the public to actively participate in urging policy makers to immediately provide the Personal Data Protection Law. This TAKE BACK OUR PRIVACY project uses two (2) fundamental approaches: - 1. Onsite activities: facilitating seminars, workshops, exhibitions and movie screenings. Throughout 2019 a total of about 22 activities will be carried out in various regions in Indonesia, with a total number of participants reaching more than 1500 participants (47% are women). - 2. Online activities: providing an Indonesian knowledge and resources online repository on our program website, privasi.id / privacy.id. The website contains information about children's privacy, educational videos, digital references, merchandises and agenda. During 2019 the site has been visited more than 3400 session with 13,800 pageviews. This online activity also strengthened by our social media account: Twitter (851K follower), Facebook (70K follower) and Instagram (3.7K follower). The project is relevant to **SDG3, SDG5, SDG17**.



WSIS Prizes Contest 2020 Nominee

In **Iran (Islamic Republic of)**, One of the **OpenSesame**'s objectives was to provide a secure environment for banks without the need to access their private keys, and the objective was met. Another goal in bank content delivery networks was to increase the speed and quality of content loading and maintain the information security against cyber-attacks. Using this solution, intact traffics can be distinguished from attacks and delivered after filtration to the bank datacenter. Therefore, we can achieve these targets as well. The results also point to improved security in banking systems and increased customer confidence. The project is relevant to **SDG9**.



WSIS Prizes Contest 2020 Nominee

In **Kazakhstan**, The Internet Society Kazakhstan Almaty Chapter has a solution. Their **“Women in Cybersecurity”** is a training course designed to increase the number of women in the field of cybersecurity, encouraging them to expand their potential and create role models for future cybersecurity professionals. The project will provide eight training sessions conducted by experienced female teachers with high quality educational programs such as TRANSITS-I course developed by GEANT Association, CompTIA Security+, and CCNA Cybersecurity Operations. At the moment 45 women have been trained By the end of the course, students have learned: principles of confidentiality, integrity, and availability as they relate to data and cybersecurity countermeasures; techniques and procedures of criminals and professionals in the cybersecurity field; strategies used by cybersecurity professionals to defend all components of the network; and laws related to cybersecurity. The project is relevant to **SDG4, SDG5, SDG8**.



WSIS Prizes Contest 2020 Nominee

In **Kenya**, Our objective is to deliver a technology solution to cross-border transfers into and within sub-Saharan Africa, this will result in more financial inclusion in Africa as well as eradication of poverty and allowing the positive contribution to the African Economy[**Cross-border remittances**]. Through our Application, money is sent securely through our mobile and web application and money delivered to recipients straight to their phones or bank account for P2P Cases and straight into Mobile Wallets and Bank accounts belonging to our partners for C2B Models The project is relevant to **SDG1, SDG2, SDG3, SDG4, SDG5, SDG8, SDG9, SDG10, SDG11**.



WSIS Prizes Contest 2020 Nominee

In **Malaysia**, The **Global ACE Scheme** defines the holistic competencies expected of skilled personnel in the cybersecurity area. It describes the knowledge, skills and attitudes needed to perform in a particular occupation with emphasis on enhancing related skillsets. The

Scheme is developed in tandem with ISO/IEC17024, ISO/IEC27001 and ISO/IEC9000 standards. Global ACE Scheme CoE is a primary deliverable under the Global ACE Scheme project. It establishes a single converging platform for cybersecurity capacity building and lifelong learning within the region that allows individuals to develop capabilities at their own pace and permit continual enhancement through the lifelong learning pathways. The Global ACE Scheme CoE empowers professionals to share knowledge, expertise and skillsets, instil the ability to continually identify up-to-date cyber threats and mitigation methods. The Global ACE Scheme CoE infuses cybersecurity capabilities from members of participating countries, engaging them and stimulate shareable cognitive actions. Objectives are to support the continuous development of individuals in mitigating cyberrelated threats, build effective cyber defenders within their social-economic sphere and establish inclusive and equitable quality programs for all. In Malaysia, the Scheme is utilised to certify cybersecurity professionals at the national level. Personnel certified by the Scheme is recognised by MBOT through the Malaysia ACT 768 as a Professional Technologist or Certified Technician that carries the prefix of Ts. or Tc. before their name. The Department of Skills Malaysia through the Malaysia Act 652 has incorporated the Scheme's syllabuses for the NOSS development. About 60% of public universities have started aligning cybersecurity academic modules with the Scheme to incorporate professional credentials. Internationally, 13 countries have shown interest in the project. They are Azerbaijan, Oman, Indonesia, Iran, Brunei, Nigeria, Egypt, UAE, Kazakhstan, Bangladesh, Pakistan, Sudan and Turkmenistan. The project is relevant to **SDG4, SDG10**.



In Malaysia, ISGRiC (Information Security Governance, Risk and Compliance Health Check Assessment Tool) is a project that involved a production of a web application developed using researches that are based on reputable information security journals, news on information security trends, references on relevant international standards and global best practices. This questionnaire-based, self assessment application is intended to help organisations find out their current information security posture, preparedness and readiness in their respective organisations. As such, information security management will be more organized, and will further reduce information security incident. A total of 13 organizations were piloted. They were from various sectors; education, telecommunication, automotive, real estate, government and small and medium-sized enterprises (SMEs). They agreed that ISGRiC help their organization in determining the current level of information security Governance, Risk Management and Compliance (GRC). They also unanimously agreed that the results obtained help to measure the level of readiness and initiatives in

information security GRC in their organisation. In addition, they also agreed that ISGRiC helps their organisation in planning activities required for improvements of information security GRC. The impact of ISGRiC to the pilot users was they were able to know the current level of information security within their organization, thus helping the management to structure the reinforcement plan. The project is relevant to **SDG8, SDG9**.



In **Malaysia**, The **Malaysian Public Key Infrastructure (MyGPKI)** Project is a PKI technology-based security service provided centrally by MAMPU as the lead entity for the public sector agencies. The project, which was initiated in 2002 was embarked to ensure that security objectives namely confidentiality, integrity and availability is fulfilled while preserving the safety of government ICT applications used by civil servants in performing variety of daily transactions. It provides the identity authentications and verifications, data encryption and decryption as well as digital signature (to ensure non-repudiation) through the issuance of digital certificates which consists of user and server digital certificates (Secure Sockets Layer – SSL). In addition, the MyGPKI service also offers advisory and consultancy services to the MyGPKI users from government agencies regarding the management of the digital certificates embedded through mediums such as physical security tokens, software and roaming certificates. ; After 17 years of implementation, MyGPKI has successfully elevated the level of confidence of more than 100,000 current users in using online application systems by an increase of 600% and the number of transactions trifold from 300 to 1300 per day. Thus, it can be concluded that GPKI has built a secure ICT foundation for a sustainable growth of a country's economy, which aligned with one of the sustainable development goals of WSIS (Goal no. 9). The project is relevant to **SDG9**.



In **Maldives**, **Women In Tech Maldives (WomenInTechMV)** is a non-profit organisation working to inspire, empower and celebrate women in Science and Technology. We aim to accelerate the growth of women in science and technology by creating opportunities that foster innovation and build the community. Maldivian Tech industry is largely dominated by men. It is our aim to change this and maintain a gender balance in the STEM industry. In order to attain these objectives WomenInTechMV has already conducted various workshops and sessions. Some of them are detailed below: **50 Coders Initiative:** It is the aim of WomenInTechMV to train 50 women coders in the year 2019 in various development technologies. In order to attain this goal, we identify interested parties and offer them courses in the area at discounted rates or free depending on the opportunities available. **WIFI Security Sessions:** These sessions are planned in two phases. Basic and Advanced. We

have successfully concluded two basic WIFI security sessions where participants were introduced to Kali Linux and taught the vulnerabilities in the WIFI systems. Advanced sessions are planned to be held later in the year. Security Awareness Sessions: These sessions are aimed at educating the general public, with minimum knowledge in computers on best practices to follow while accessing social media and parental control for applications such as youtube. Police Reform Symposium: The opportunity was opened for the various industries and organizations to present papers for the Maldivian Police Reform. WomenInTechMV took the opportunity to present a Tech Paper where we discussed about making Policing more effective and approachable (community policing, preventive policing) and Open Data Initiatives. The project is relevant to **SDG5, SDG16**.



WSIS Prizes Contest 2020 Nominee

In **Oman**, **Oman National PKI(Public Key Infrastructure)** provided excellent solutions to the complicated challenges that eGovernments always face; physical existence for identification (KYC) and signing documents. Oman National PKI is a security architecture that augmented the eGovernment (eOman) with trust services and increased the level of confidence to use the electronic services. PKI provided a secure authentication (multifactor) mechanism, legal-binding electronic signature, and electronic stamp. It enabled Oman government to identify and authenticate their clients electronically and securely without using user names and passwords but using the digital identity (Oman National eID). It also enabled electronic signature for documents and online transactions with nonrepudiation feature. The eID and Digital Signature are provided in three Medias; the National ID Card, the mobile phones (using PKI enabled SIM card) and the corporate tokens. The PKI in the ID card and mobile phone are provided for the public (citizens and residents) and the PKI token is provided for the official employees to authenticate to the internal systems, sign official documents and encrypt data. Oman became a worldwide success story, with huge utilization of PKI services with 77 electronic systems integrated to the national PKI. Those systems have performed 24 million successful electronic transactions since July 2013. The project is relevant to **SDG9, SDG16**.



WSIS Prizes Contest 2020 Nominee

In **Pakistan**, Digital Rights Foundation's **Cyber Harassment Helpline** is Pakistan's first dedicated, toll-free Helpline for victims of online harassment and violence. The Helpline will provide a free, safe and confidential service. The Helpline aims to provide legal advice, digital security support, psychological counseling and a referral system to victims of online harassment. The Helpline will provide a judgment-free, private and gender-sensitive environment for all its callers. The helpline team periodically conducts awareness sessions in schools, colleges, and universities regarding cyber harassment through a gender lens and safe practices needed to remain secure online. The project is relevant to **SDG5**.

WSIS Prizes Contest 2020 Nominee

In **Qatar**, **SafeSpace** is a cyber-safety awareness website and the hub for several initiatives under the cyber-safety section in MOTC. It is built on three fundamental principles: prevention, protection, and empowerment. Its goal is to guide the community of Qatar and the Arab region towards safe use of Information and Communication Technologies. We were able to deliver cyber safety awareness workshops for more 400+ governmental and international schools within Qatar with over 30,000+ people taking direct workshops. SafeSpace can be used in other countries as the main values being developed are accepted in Arab and international communities as well. these values created our Code of Ethics that is the main reference for Safespace website content, we raise Values such as Respect, Honesty, and Responsibilities are values that shall be used while being online not just in real life. Now Our vision is to be the ultimate reference for anything related to cyber safety and to be the source for good netizens in Qatar and the Arab world. and this involved collaboration with several stakeholders like ministry of education and ministry of development and other governmental entities, also collaborating with private and big organization like Microsoft and Vodafone to achieve our mission. The project is relevant to **SDG3, SDG17**.



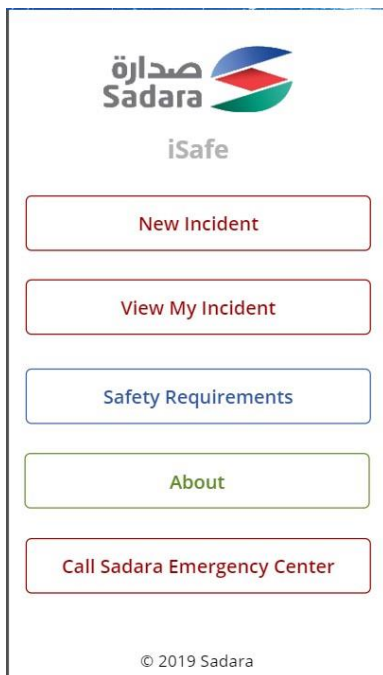
WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, To outpace the impact of current and evolving threats facing the nation, the Kingdom of Saudi Arabia recognized the need to establish a robust **National Cybersecurity Program**. The Kingdom's economic transformation, digitalization and modernization, and emergence as a G20 country has created an acute need to reduce risks, while finding novel and innovative ways to accelerate diverse forms of economic growth. These needs, coupled with rapid evolution in the sophistication and capability of cyber threat actors, highlight the great urgency in further development of the Kingdom's cybersecurity capability. The Kingdom's unique global role means we must harness and protect our cyberspace. Serving the holiest sites of Islam, ensuring global energy flows,

creating a destination for foreign investment, and contributing to overall global resilience and security depends on a resilient, secure, and trusted cyberspace. The Kingdom has taken important and positive steps to strengthen cybersecurity for more than a decade. The National Cybersecurity Program reemphasizes and deepens the Kingdom's commitment to a secure, prosperous, and vibrant digital Saudi Arabia. This program – rooted in global best practices but custom-built for the Kingdom's unique needs – aims to reduce the Kingdom's cybersecurity risk and enable economic growth. Fundamentally, the National Cybersecurity Authority (NCA) fortifies the Kingdom's cybersecurity by protecting its vital interests, critical infrastructure, industry sectors, and government activities, and enabling public awareness. The project is relevant to **SDG4, SDG5, SDG6, SDG7, SDG8, SDG9, SDG11, SDG17**.



In **Saudi Arabia**, The objective of the **iSafe Project** is to develop a mobile application that is capable to increase the level of safety engagement and awareness when it comes to reporting safety incidents and near misses. The solution will allow direct access to report environmental, health and safety incidents. Such as, Injuries, Illness, Near Miss, or any safety observations through mobile. It also, provide direct access to safety requirements and emergency contacts. Furthermore, users will be able to view what they reported through the application. The project is relevant to **SDG3, SDG11**.



WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, At present, Saudi Aramco plants are secured against intrusions from the corporate network by preventing traffic flow via a security device that enforces one-way communication. This device “**data-diode**” is currently procured and supported from a foreign based company. The majority of commercially offered solutions did not initially suit Saudi Aramco purposes, where an extended effort was provided to develop a working solution with these select vendors. These solutions are currently used as standard offering to other companies for a paid license while its software development cost were covered by Saudi Aramco during the initial development life cycle of the product. With the emergence of the fourth industrial revolution it is expected to develop more applications on the data diodes which will be a cost to the company while it could be a profit generator. Yet, more importantly, this development will localize a niche technology that is required for the security of many critical infrastructures, therefore the ownership of the hardware and software development becomes a pivotal matter and with importance to the national interest. Manufacturing this appliance will add to the Saudi local content in a niche market with no regional manufacturers. Saudi Aramco IT will engage with its experts in the field of cybersecurity engineering to design and manufacture the data diodes and domain solutions to international standards and best practices by applying security in the early stages of the product development life cycle to support national cybersecurity interests. This development has contributed the following, but not limited to: • Produce the first nationally manufactured data diode appliance. • An addition to the local content of the economy in a niche market in the cyber security arena that could lead to many potential opportunities in the future. • Knowledge enrichment, lesson learned and/or even joint patents associated with the manufacturing improvement opportunities. The project is relevant to **SDG9**.



In **Saudi Arabia**, Saudi Aramco IT has implemented a complete end-to-end solution and the best practices of processes to manage different instrument types of Debt to meet the company’s unprecedented inorganic expansion [**Bonds Issuance Program System Implementation**]. The solution implemented will enable to manage the creation, maintenance and payments for four different financial instruments types, namely, Bonds, Commercial Papers (CP), Inter-company Loans, and Credit Facilities with the international partner bank the Citibank Group. This include end to end key process steps which are , the creation of financial transactions, automate confirmations, process payments, transfer values to general ledger, adjust interest rates, calculate and post realized profit and loss, monitor and report on positions and financial transactions, and integration via the SWIFT with the Citibank Group. The project is relevant to **SDG17**.



In **Saudi Arabia**, Industrial Plants require high levels of cybersecurity protection and thus strong isolation between the plant network and the rest of the corporate network must be enforced [**Towards Sustainable and Secure Industrial Facilities via a locally designed and manufactured industrial cybersecurity platform**]. This is best achieved via a device, known as “data diode/cross-domain solution” that enforces one-way communication at the hardware level. Saudi Aramco IT took the initiative to develop an in-house data diode in order to localize this critical industrial cybersecurity platform and to customize it so as to be on par with the demands of the new era of digital transformation and the 4th Industrial Revolution (IR4.0). National interest is served best when ownership and control of this highly specialized cybersecurity technology is localized, in addition to being a contribution to economic diversification. Saudi Aramco IT ventures with this initiative into the field of cybersecurity engineering, where a next generation, cross domain, data diode is designed, and locally manufactured employing international standards and best practices, where security is applied in the early stages of the product development life cycle in order to support national cybersecurity interests. The main features of the next generation data diode are: 1. The solution is capable of changing the mode from one-way data diode to two-ways cross domain solution via two secure mechanisms: physical and software-based. This architecture is filed for patent under Saudi Aramco. 2. The one-way solution provides an innovative design to support high availability. This design is filed for patent under Saudi Aramco. 3. This diode supports up to 1Gbps throughput and is capable of supporting multiple applications, making it superior to most solutions on the market. Moreover, this development has contributed the following achievements: • Two patents for the cybersecurity solution were filed, adding to the Intellectual Property of the corporate. • Produced the first nationally manufactured data diode appliance. The project is relevant to **SDG9, SDG11**.



In **Senegal**, **Prov-IT** is a platform which provides the authentication and security of documents on the Blockchain, a storage technology and an information transmission, transparent, secured, and working without a central control organ. The first use case that we are addressing our solution is the education by providing security and confidence between institutions or e-learning platform, students and recruiters. The product will be

introduced in the form of a web platform and application for the users who will be the students and will be integrated into the management software of schools like Univers Edu of Kiwi and the institutions' databases. The project is relevant to **SDG4, SDG10**.



WSIS Prizes Contest 2020 Nominee

In **Singapore**, GovTech's Cyber Security Group developed **Jaga PRRP (Jaga Phishing Reporting and Response Platform)** to combat spam and phishing attempts targeted at the Singapore government. "Jaga" is a Malay word colloquially used to mean "watchman". The streamlined plug-in, reporting, and assessment functions of Jaga PRRP help Singapore's civil and public servants to highlight and escalate suspected phishing attempts, thereby hardening the government's cyber infrastructure against social engineering attacks. Public and civil servants who receive suspicious emails are able and encouraged to report them through a plug-in. A mix of trained responders and Artificial Intelligence (AI) then assess the reported emails for malicious intent and content. The assessors then communicate their findings to the original reporters; depending on the presence of malware and/or malicious intent, the reporters are advised either to delete the email or to proceed with caution. Jaga's newest feature leverages on AI to automatically assess and flag out emails that are identical or highly similar to previously identified and classified emails. The project is relevant to **SDG8, SDG9, SDG11**.



WSIS Prizes Contest 2020 Nominee

In **Sri Lanka**, **NextGen Girls** aims upscaled ISOC 25 Under 25 Award winner "Respect Girls on Internet", project by developing a network of University and high school girls studying IoT. The goal of the project is developing females to pursue emerging IoT security careers to help build safer and secure IoT environment at homes, workplaces and in their communities. The emergence of pocket sized computing devices, capable of electronic switching, sensing, controlling equipment, video and audio has created a new paradigm

shift in home automation, business, agriculture, transport , environment technologies. The IoT systems used in internet core. Unsecured uses of IoT, specially at homes endanger safety and breach privacy of individuals and families. Women are the most vulnerable as IoT have been misused to invade women privacy for sex revenge, harassment, data breach and other scams. Obtaining support from male experts in the event of IoT breach is a risk says women safety activists. The solution is develop IoT and security skills among women to safe guard homes, workplaces and community from IoT breaches. Women becoming IoT security experts immensely contributes to gender equality, diversity and growth in female IoT economy. Shilpa Sayura Partnered with Dialog Ideamart supported by AlgoHack community and ISOC Sri Lanka to implement the initiative. The activities included creating IoT and Security Curriculum with Internet governance, Privacy, IPV6, IoT,, Networking, Information Security and web technologies trained 80 University students to become Internet Security Educators. They trained 200 of their peers and made awareness to 800 school girls and teachers in IoT safety. 6 workshops and 24 live online training sessions conducted , two IoT and Security hackathon conducted with over 60% girls participation; developed a sustainable women led university community network specializing in IoT and security, advocating IoT safety and providing training and support for victims increasing women in IoT and Security field. The project is relevant to **SDG4, SDG5, SDG8, SDG17**.



WSIS Prizes Contest 2020 Nominee

In **United Kingdom**, Founded in 2018 by Stephanie Itimi, **Seidea** is a social enterprise that exists to close the cybersecurity gender gap faced by Black, Asian and Minority Ethnic (BAME) women. We offer cybersecurity e-learning lectures and webinars from industry experts for a membership fee of £14.99 per month and reinvest 35% of our profits on our community initiatives: Sei-Code, Sei-Policy and Seipod. Membership Benefits: - Exclusive access to recruitment events and roundtable discussions. - Discounted career coaching and CV reviews. - Discounted certification training with our partners - A series of cybersecurity e-learning lectures and live webinars from industry experts. Community Projects: SeiCode: an empowerment project sponsored which teaches BAME girls aged 9-16 how to code and build up their confidence through animated storytelling. Using Scratch, Google CS-First, the coding club introduces students to programming through fun video game development. Sei-Policy: Birthed out of UN Women #16DaysOfActivism, Sei-Policy is an annual survey which aims to fill in the data gap on cyber violence against women. Focusing on BAME women in the UK and Women in Nigeria. Seipod, a monthly podcast focused on empowering BAME women with the knowledge needed to be secure online The project is relevant to **SDG5, SDG8**.



Actionline: 6.0

WSIS Prizes Contest 2020 Nominee

In **Algeria**, The digitalisation of Telecom operators' networks is based on **SDN framework**. SDN, that stands for Software Defined Network, consists of a set of technologies covering: 1) Centralised Network Resources Controller 2) Centralised Orchestrator 3) Physical resources virtualisation. The aim of **SDN** is to bring more agility in network management by reproducing the technologies of the Cloud Computing. One of the straightforward usecase concerns the provisioning of a secure WAN connectivity, named **SD-WAN**, for Software Defined Wide Area Network. This project concerns the specification, the development based on open source frameworks and open standards, the deployment and the performance evaluation of a Secure **SDN/SD-WAN** for ATM-Mobilis. The project is part of the digitalization roadmap of the operator within the 2020 Global Roadmap in order to enhance and ensure the operator's Network readiness for 4G++ and 5G evolution allowing the operator to design a fully agile network supporting the economy digitalization with the support of the different verticals such as government services, industry, education or any service slicing and B2B verticals. The project is relevant to **SDG8, SDG9, SDG10, SDG11**.



WSIS Prizes Contest 2020 Nominee

In **Argentina**, **ChicasTIC** is a group of professional women, from the ICT Sector, that came together to have visibility, to network and to help other women to be self-confident and promoted. We are engineers, lawyers, accountants, internationalists, journalists, etc. From public and private sector, and civil society. We get together at least once a month, both to meet and to discuss on a given topic, related to the sector/career. We've started as group of a few friends and now we are more than 300 women connected through different digital tools in Argentina and Latin America. The aim of the group (project) is to meet physically, at least once a month, to discuss on a special topic, related to the ICT Sector, proposed and selected by all of us, and to getting together and networking. We've realized that, due to our "other" responsibilities as women (house, children, pets, and even because we "have" to be

nice and pretty) women do not dedicate enough time to get together and network, as men do. And we've also realized these is the only way to be visible, known and promoted in our career. After only some months we've achieved: - a group on LinkedIn, WhatsApp and Twitter with more than 300 members from Latin America, and friends from other Regions. - participation and visibility in several events in the Region (CLT2019, CITEL, ITU Seminars, Futurecom, etc.) - being Knowledge Partners at CLT2019 - being known through publications in the region - organizing physical meetings in other countries than Argentina, in the occasion of regional and/or international meetings taking place there Now we are focusing on developing our own tools, in a more formal way, this is a webpage were to have all relevant information published, and a communication strategy to share our experience with women from other countries and regions. We are looking forward to becoming more and more professional women who are recognized in their jobs, and who are equally promoted to leading roles and equally paid. The project is relevant to **SDG4, SDG5, SDG8, SDG16, SDG17**.



WSIS Prizes Contest 2020 Nominee

In **Argentina**, The ULP Arturo Rodríguez Jurado Open Campus has, since September 2018, its own biomechanics laboratory, whose purpose is the constant and continuous evaluation of athletes belonging to the institution and to the different federations of the province [**Technology applied to sport**]. It has national and international equipment that allows the execution of comprehensive and high quality protocols, aimed at improving the health and performance of medium and high performance athletes. They can be evaluated and increase their performance, without the need to move hundreds of kilometers or pay high costs for the execution of tests of similar characteristics. This sports complex located within the University of the Punta has to develop their projects and that they can be executed optimally, with high-speed Internet connection that allows taking measurements, process information and share it quickly and efficiently. Also noteworthy is the inclusion policy carried out by this institution, allowing more than 920 athletes of different ages and both genders to have carried out first level evaluations free of charge. The project is relevant to **SDG5, SDG9, SDG10**.



WSIS Prizes Contest 2020 Nominee

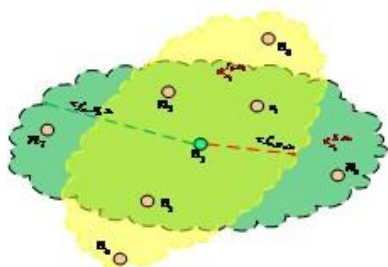
In **Cameroon**, The **Green Girls** Organisation is into a Pan-African infiltration of renewable energy in African rural communities. The Green Girls Organization exclusively trains women and girls in African rural communities on how to generate energy from the sun and waste using a unique scoring model (MNKB92). The main objectives of the Green Girls Organization are to provide clean energy to Women and girls in African rural communities so that these women and girls no longer have to cut down trees for firewood, use bush lamps for lighting and also get sensitized about the SDG's (Sustainable Development Goals) with particular focus on SDG 5 (Gender Equality) and SDG 7 (Access to clean and affordable energy). The main activities of the Green Girls Organization are carried out under the Green Girls Training platform which consist of activities such as: - Construction and maintainance of a bio digester - Collection and packaging of organic fertilizer which is a biproduct from the bio digester - Installation and maintainance of solar panels - Capacity building workshops about renewable energy and the SDG's -Assembling of portable quality solar reading lamps The project is relevant to **SDG5, SDG16**.



WSIS Prizes Contest 2020 Nominee

In **China**, High frequency (HF) is an important approach for the widely applied intermediate/long-range radio services, for which the deteriorating HF electromagnetic environment (HF EME) has become a pressing global issue (**The Global Governance Principles and Methods for High Frequency Electromagnetic Environment**). The objective of this project is to explore the causes of the deterioration and to seek solutions. The project has made a significant contribution to the improvement of HF EME for all HF services, which access environmental data and related services to impact sustainable development positively. The project also revealed the formative theory of the HF EME deterioration and proposes the principles and methods for global governance. Its implementation will benefit HF users worldwide by connecting the world with affordable

cost and making great contributions to energy saving and emission reduction. Furthermore, this project contributes to the achievements of SDG 9, 16, and 17. The results can be replicated to other spectrum bands for better utilization of the spectrum resource. Through solving the deterioration problem of HF EME, this project can promote the sustainability and development of the HF services. The project is relevant to **SDG9, SDG16, SDG17**.

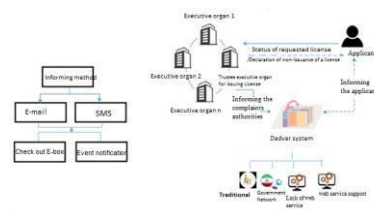


WSIS Prizes Contest 2020 Nominee

In Iran (Islamic Republic of), "**The System of Receiving, Pursuing, Handling and Responding to the Complaints about Business Licenses (DADVAR)**" is a supervisory responsibility system which began in late 2016 and currently is implemented and utilized in all provinces of the country. This web-based system provides business licenses applicants with the ability of filing and pursuing complaints. By the means of 14000 dashboards designed dedicatedly for senior executives and regulatory agencies, they are able to monitor the performance and response times of authorities issuing licenses, as well as, public feedbacks about status of license issuance processes. It can be employed for investigating and handling the problems of people in this area. The goals of this system are:

- Creating an effective and reliable communication between people and the government.
- Identifying and supporting micro and macro businesses and female-headed households
- Eliminating the challenges of economic activists including educated people, artists, entrepreneurs and especially low-income groups.

Moreover, through streamlining the processes, this project leads to improving the business environment specially for small and medium businesses, as well as, promoting economic growth of low-income households. Hence, full implementation of the project will be the key to the country's economic development. The system is able to cover related court cases without any restriction in the number of cases. According to relevant regulations, the related authorities are obligated to handle the complaint or refer it to a higher authority (for more investigation) within 7 working days. The project is relevant to **SDG4, SDG5, SDG8, SDG9, SDG10, SDG16**.



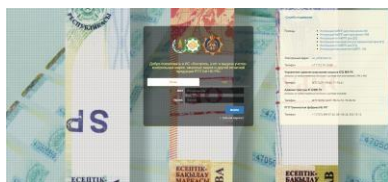
In **Kazakhstan**, Information system called “**Control, issuance and record of monitoring stamps, excise stamps and other printed materials of Banknote Factory of the National Bank of the RoK**” (CIPM IS) is intended for enhancement of control and record methods in the field of alcoholic products turnover and acceleration of printed materials production through application of state-of-the-art information technologies. Key objective of CIPM IS project is to improve administering functions and control over production and turnover of excisable products. Enhancement of the project resulted in the development of the following:

1. API service to check monitoring stamps. The service provides access to open data on the published monitoring stamps to the concerned parties;
2. e-Sapa mobile app. The application for consumers and employees of State Revenue Committee under Ministry of Finance of the RoK that enables identifying counterfeit products;
3. Inspector’s Account. The service that enables State Revenue Committee under Ministry of Finance of the RoK employees to perform control over alcoholic products turnover due to interaction with data on monitoring stamps scanned via e-Sapa mobile app.

The following indicators have been reached for the period of CIPM IS operation:

1. Manufacturers and importers of alcoholic and tobacco products obtained 812 863 812 excise stamps;
2. Lawfulness of alcoholic products was checked 3 833 946 times;
3. Actual time of stamps production and issuance was reduced twofold;
4. Counterfeit products identified: 1 398 520 bottles.

The project is relevant to **SDG12**.



WSIS Prizes Contest 2020 Nominee

In **Malaysia**, **Digital Document Management System (DDMS)** is an electronic records management system, a national initiative under digital government project to improve operational efficiency and user productivity in government administration. DDMS supports entire lifecycle management of public records from creation, maintenance, dissemination

and disposition of electronic records in compliance to Malaysian Standards International Organization for Standardization (MS ISO 16175-2: 2012) and National Archive Act of Malaysia 2003. DDMS is a web based system which can be accessed from anywhere, anytime and on any devices (including smartphones and tablets) in a secure manner. DDMS is running in a secured government data centre and private cloud offered to various government agencies on a Software-as-a-Service (SaaS) to lower the total cost of ownership for individual agencies. DDMS is one-of-a-kind multi-tenants centralized records management system for multiple government agencies. DDMS implementation started in 2016. Until now, the system has been rolled out to 135 government agencies with a roadmap to on-board approximately 225 agencies by the end of 2020. For these 135 agencies that implemented records management with DDMS, total of records captured is reaching to 4.4 million with 40 thousand registered users. DDMS creates substantial values for both government and citizen. It creates value for increasing government productivity and forming transparency as well as accountability in record management environment. It also became a government decision making tool as all records captured in a central respository and can easily be retrieved. DDMS brings enhancement of public service delivery, improves efficiency and creates trustworthy towards government administration. The project is relevant to **SDG8**.

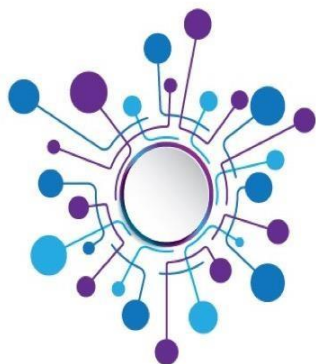


WSIS Prizes Contest 2020 Nominee

In **Mauritius**, One of the key measures of the Budget Speech 2019 – 2020 and the Digital Government Transformation Strategy 2018 – 2022 calls for improved cooperation among government institutions to ensure that businesses and individuals have to communicate their data only once to public institutions and that in consequence government will no longer make multiple requests for the same information when they can re-use the information they already have. The main objective of the **once-only principle** is to reduce the administrative burden of citizens and businesses by re-organizing public sector internal processes. It is based on the fact that collecting information is more expensive and burdensome than sharing already collected information. Hence this principle proposes to collect information only once and then share this information, respecting other constraints, such as regulations. Additionally, this new principle has provided the following benefits:

- Improving the work processes and business operations of public institutions;
- Improving administrative efficiency and quality of service delivery;
- Reducing administrative burden on citizens and businesses;
- Increasing customer satisfaction and better image of public authorities;
- Better functioning digital economy of the country; ● More efficient and lower-cost government administration; ● Fraud prevention.

The project is relevant to **SDG3, SDG4, SDG8, SDG9**.



WSIS Prizes Contest 2020 Nominee

In **Mexico**, Created in January 2019, **the Digital Agency for Public Innovation** is a team of less than 200 government civil servants whose job is focused on three main axes: acceding, empowering, and serving. First, we are guaranteeing everybody's access to the internet by progressively providing free Wifi connectivity; second, we are developing digital tools that empower citizens so that they can better exercise and claim their rights; and third, we are creating digital instruments that allow the government to serve better and be more efficient. In sum, the Agency's work is aimed at innovating so everybody's rights are guaranteed in the city. Since its establishment, the Agency has delivered over 150 in-house platforms, some of which have been recognized nationally and internationally. Some of our most significant projects have been: An Open Data Portal (datos.cdmx.gob.mx, our new open data website, awarded first place in our national Innovation in Transparency Award), a Wellbeing Information System, Sistema de Información para el Bienestar (tubienestar.cdmx.gob.mx, our social policy system, awarded with the IADB's "Eduardo Campos" Award), a Budgetary Transparency Portal, Portal de Transparencia Presupuestaria (tudinero.cdmx.gob.mx, our open fiscal data site, accredited with a special mention at the I+T Gob Awards), a Digital Marketplace, Tianguis Digital (tianguisdigital.cdmx.gob.mx, our public contracting system), and a Unified System for Citizen Demands - SUAC (atencionciudadana.cdmx.gob.mx, our digital tool for attending citizen's demands). The project is relevant to **SDG3, SDG4, SDG5, SDG8, SDG9, SDG10, SDG11, SDG16, SDG17**.



In **Myanmar**, We observed that bio oils production from heavy tar which is organic phase of pyrolysis oil using CoMo/Al₂O₃ catalyst in the bench scale hydrogenation process [**Liquid fuel production from Biomass Tar by Hydrogenation**]. The experiments were carried out at varying temperatures 300,400 and 500°C in hydrogenation reactor. The effect of reaction temperature, retention time, feed rate, space velocity (SV), hydrogen concentration, and catalyst loading factor on bio-oil yield, carbon content, and carbon

recovery of heavy tar by catalytic conversion was investigated. The six variables ranged from 300 to 500 °C for temperature, 0-140 min for retention time, 1, 2, and 3.3 g-tar/min for feed rate, 0.1, 0.2, and 0.4 s-1 for SV, 25, 50, and 75 v% for hydrogen concentration, and 1.3, 2.7 and 4.4 mg-tar /min/g-cat for catalyst loading factor. The product oils analyzed using Karl Fischer moisture titrating analyzer, Total organic carbon (TOC) analyzer, GC – 14A gas chromatography, Agilent 3000 micro gas chromatography and elemental analysis. It was found that maximum bio-oil yield of 29wt% was obtained at 400°C, 60-140 min, 2 g-tar/min feed rate, 0.2 s-1 SV, 50 v% hydrogen concentration and 2.7 mg-tar /min/g-cat catalyst loading. In this study, it was able to produce a high quality liquid fuel with minimum water content 0.3wt% in oil phase and maximum level of HHV (39.8MJ/kg). The oil was also observed to have an abundant amount of aromatic compounds. It was possible to produce multi-component fuels through the hydrogenation of bio-oils from heavy tar. The main objectives of this research are; a. To understand biomass hydrogenation liquefaction process b. To know presulfurization condition for hydrogenation catalyst c. To determine the yield of liquid fuel in various reaction conditions. Finally, we concluded that the characteristics of product oil were very close to those of gasoline and that the product oil has the potential to be used as a transportation fuel. The project is relevant to **SDG7**.



Mind the sign - UKE for deaf and hearing impaired

WSIS Prizes Contest 2020 Nominee

In **Poland**, The Office of Electronic Communications (**UKE**) has developed an innovative Accessibility Policy that addresses persons with special needs. The Policy applies to five areas of our activities: customer, communication, services, human resources, and management. Within each of these we do our best to meet requirements of persons with special needs. UKE, as the National Regulatory Authority aims at creation of genuine digital inclusion. It means that each and every citizen is able to fully use all the facilities available and benefit from emerging new technologies. One of our target groups are deaf and hearing impaired customers. It is our responsibility as well as privilege to provide them with the highest quality of service, at each step of their contact with UKE. Therefore, we assist them in all the possible ways - making our website accessible (translation of main articles and

documents in the Polish Sign Language), providing a Polish Sign Language translator when required (either in person or online), enabling deaf and hearing impaired persons to equally participate in recruitment process, etc. The deaf and hearing impaired persons are one of our target groups that are included in the Accessibility Policy. The Policy addresses all persons with special needs and is an innovative solution that proves our Office to be accessible to every customer. The project is relevant to **SDG9**.



WSIS Prizes Contest 2020 Nominee

In **Qatar**, In compliance and alignment with Qatar Vision 2030 and QDG strategy 2020, MOTC took the initiative to launch **NDP**. The project seeks to facilitate the digital transformation of the government sector in Qatar by digitizing active and legacy physical documents. The project provides a catalogue of diversified digitization and Record Management services. Key aspects of the program are: 1- Digitization of physical documents 2- Enterprise Content Management (ECM) 3- Storing physical documents in purpose-built, highly secured stores 4- Secure records destruction 5- Data Tape Management 6 - Secure and safe destruction of media storages. This resulted into the following benefits: 1- Easy access to these documents. Using few keywords and in a minimal time a user can retrieve the required document. 2- Multiple access to same documents at same time 3- Saving time by eliminating filing, retrieval and refiling. 4- Documents can be shared across different government entities. 5- Minimize the use of papers and stay green. 6- Minimize the cost of storing physical documents. 7- Eliminate the risk of official documents being lost or ruined accidentally 8- Control and Track access to sensitive information. The project is relevant to **SDG9, SDG11, SDG15, SDG17**.



In **Russian Federation**, This new service is offered to new parents, who can plant a tree in a park in honor of their newborn [**Our Tree**]. Using an interactive map on the Moscow government portal, they are able to select an area within a woodland park and the type of tree they want to plant. Information on the availability of parkland and saplings is displayed online. You also need to provide details about yourself and your child, together with your home address. Information on the date, time and place of planting of the family tree, together with an invitation to the ceremonial event, will be sent to the parent's online account in the portal 10 working days before the date of planting. A reminder will be sent

three calendar days before the event. As trees offered within this program are 10-years seedlings and are quite big, they will be planted by specialists using special equipment. However, the parents can help them. Parents can choose from nine different types of tree. They will also receive an electronic certificate of planting of personal named tree showing its exact GSP coordinates. The project is relevant to **SDG11, SDG15, SDG16**.



WSIS Prizes Contest 2020 Nominee

In **Russian Federation, My District** is a complex program for creating unified standards of life quality and city environment in all city districts. Its main task is to create comfortable environment all over Moscow. All districts shall have high quality schools and clinics, libraries and parks, conditions for sports and recreation. My District is a live constantly changing project, which shall unify a large amount of city beautification programs, healthcare and education initiatives, work conditions and recreation into one system. It is one of key projects aimed at equal access to the city services and resources. Every district is unique. The project is aimed at preserving the historical image of Moscow districts, while at the same time creating a new level of comfort and increasing. The project is relevant to **SDG11**.



WSIS Prizes Contest 2020 Nominee

In **Rwanda**, The project came up following a research conducted by LAF completed in 2017 on citizen perception of justice and legal services in Rwanda [**Using ICT to Provide Legal Aid to Rwandan Population**]. The study found that the distance Rwandans have to travel to reach legal aid providers represent an access problem. Rwandans can dial 845 and listen to free information on their legal rights and are also given the option to access a legal aid hotline for a personal consultation, staffed by call center operators from the Legal Aid Forum. One of the callers to the Service was 23-year-old Sarah (Name has been changed to protect privacy). When she was just 15, she was sexually assaulted by a neighbor, who later got a life sentence in prison. Several years later, the father of the offender physically assaulted her, stabbing her several times. She reported this to the court, and he too received a life sentence in prison. Later, within the same year, the mother and the brother-in-law of the offender attacked her again, stabbing her several times as well. They too received life sentences. Subsequently, Sarah's family wanted to claim for victim compensation, however, they were unable to do so, as they had spent all their money on filing the previous cases.

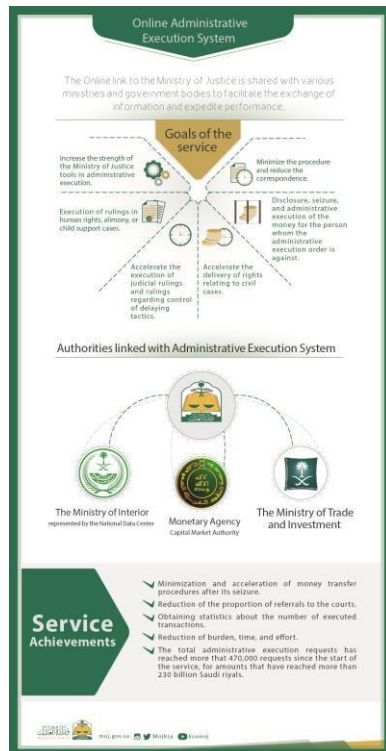
She dialed 845 and requested to be called back by a Legal Aid Forum call center operator. A few days later, she received a call from a Legal Aid Forum operator. Through the Legal Aid Forum, she was provided with a lawyer to pursue her victim compensation claim – free of charge. Since the content was launched on our 8-4-5 Service in Rwanda in September 2018, over 1,200,000 calls have been placed to access the legal aid information and over 120,000 people have requested a call back from a lawyer. So far, over 35,000 call-backs have been made by the Legal Aid Forum hotline call center, with lawyers providing more information, referring callers to different justice handlers, and offering free legal representation. So far, 58 beneficiaries have been given lawyers to assist them in court free of charge. The project is relevant to **SDG16**.



WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, **TANFEETH** is a system that serves those involved in the enforcement courts To deliver financial rights – which is more than 200 billion annually - and nonfinancial rights. In cooperation with the security, financial, community authorities and others.

The project is relevant to **SDG16**.



WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, The **Judicial Command Center** project is the result of processing data for ministry of justice, in this project we have more than 11 sub-room to support decision maker to take overview look before taking action to any KPI or any issues inside MOJ The JCC also can help beneficiary by monitoring and controlling any action done to CRM tickets and check for customer satisfaction on any closed ticket

The project is relevant to **SDG10, SDG11, SDG16**.

Information Technology Energy Efficiency Program

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, To be aligned with the Saudi Aramco Operational excellence program, and promote safety, Saudi Aramco IT completed the implementation of the **IT Energy Efficiency Program** that aimed to reduce the energy consumption in IT facilities complying with the corporate energy management program as energy is a significant operating cost parameter for Saudi Aramco, Under IT Energy Efficiency Program, IT achieved \$914,000 annual cost saving by completing the all milestones of the project. Twenty two (22) Energy Conservation Measures were implemented in IT facilities as part of the program that resulted in an energy saving of around 11.425 GWH/year with a corresponding CO2 emissions reduction of 8,500 metric tons annually. The implemented measures are related to lighting, cooling, air movement and IT systems. In addition, 114 energy smart meters were installed to enable instantaneous readings of power consumption and remotely

monitor the energy utilization at IT communications buildings Kingdom wide. The meters will help in future reduction and enhancing the energy use in IT facilities. The project is relevant to **SDG9**.



In **Saudi Arabia**, **Taradhi** is an online mediation service that enable the “disputing parties” to resolve legal cases online using mutual consent and conciliation without the need to visit the conciliation offices in the courts; it works when the online claim got submit, then a an online mediation proposal will show instantly; then if the claimer agree then the case will be assigned automatically to an online mediator then the mediation session will be conducted (notification to all parties is there) The session will be conducted online on the website and through official phones if needed. Then a binding enforcement letter will issued once the mediation session got ended successfully and the claim will be closed (ABSHER government service is being used before and also used here in order to identify the parties) The service is available 24/7, and it’s provide an opportunity to all parties to reach fast settlement using conciliation rather than judicial proceedings. The project is relevant to **SDG16**.



WSIS Prizes Contest 2020 Nominee

In **Singapore**, Singapore’s **National Digital Identity (NDI)** platform serves as a digital infrastructure and trust platform that enables seamless data flows as well as interoperability between private and public services. As a Smart Nation strategic national project, the NDI ecosystem seeks to bring convenience to the everyday lives of citizens,

catalyse industry in developing value-added services, and increase opportunities for government-citizen co-creation. As a universally trusted and secure key that enables personal and business data exchange through the explicit consent of individuals. NDI provides convenience to the everyday lives of citizens by removing the need for multiple online identities, passwords and physical tokens, while at the same time providing stronger security, confidentiality, and integrity. This will support digitisation and transformation of existing processes, which today still require physical presence or human-in-the-middle handling. NDI, the multi form-factor trust platform is a fundamental enabler behind Singapore's digitalisation efforts and the new essential digital utility for Singapore current and future needs. The project is relevant to **SDG8, SDG9, SDG10, SDG11, SDG17**.



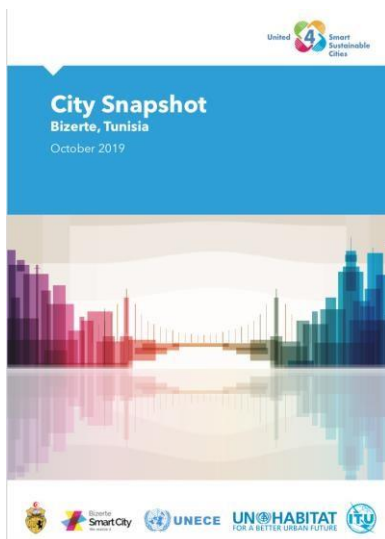
WSIS Prizes Contest 2020 Nominee

In **Tunisia, STARTUP TUNISIA** is an incentive framework for the creation and development of Startups based, in particular, on creativity, innovation and the use of new technologies. The main objective of STARTUP TUNISIA is to enable the emergence of more than 1,000 startups within 5 years, of which at least one Tunisian Unicorn. The program is composed of 4 main components: (1) the improvement of the legal framework which is dematerialized by the Startup Act, (2) the Fund of Funds which will be the instrument of support and financing of the ecosystem of startups, (3) the training and support of young people talents, and (4) the integration of different Tunisian regions in this process. The Startup Act is materialized mainly by: (i) Law No. 2018-20 of 17 April 2018 on Startups; (ii) Decree No. 2018-840 of 11 October 2018 laying down the conditions, procedures and deadlines for granting and withdrawing the start-up label and the benefits for Startups and the organizations, the operating procedures of the labeling committee; and (iii) Circulars of the Central Bank of Tunisia N ° 2019-01 and 2019-02. The Startup Act is structured around a Label of Merit and a series of measures for the benefits of Entrepreneurs, Investors and Startups. This framework is designed to facilitate the creation and the growth of Startups in Tunisia. So far, the ministry of communication and digital economy has granted for about 130 Labels for the benefit of startups. The project is relevant to **SDG5, SDG8, SDG9, SDG16, SDG17**.



WSIS Prizes Contest 2020 Nominee

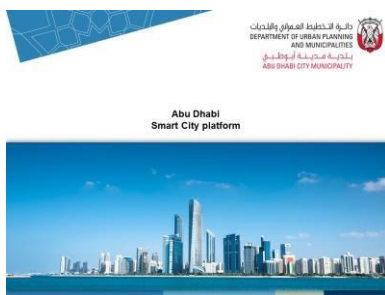
In **Tunisia**, Digitalization and rapid urbanization are global trends that demand responses. In 2018, Bizerte reached out to the **U4SSC** and expressed its interest in piloting the Key Performance Indicators for Smart Sustainable Cities. The objectives of this project were: 1) assess the impacts of ICTs in the city; and 2) measure its progress in reaching the SDGs. The U4SSC KPIs measure the role of ICTs in the three key dimensions of a city; environment; economic; and society and culture. Each indicator is uniquely connected to one or multiple SDG targets, allowing the city to determine which targets it has or has not achieved. The U4SSC KPIs are powerful benchmarking tools that have allowed the city planners to analyze the ways in which ICTs have improved the city according to the parameters set in the 2030 Agenda. The results are comparable and measurable data that have assisted Bizerte in adjusting its priorities and informed the city's policymakers to make better environmental and sustainability decisions. The project is relevant to **SDG11**.



WSIS Prizes Contest 2020 Nominee

In **United Arab Emirates**, The Abu Dhabi City Municipality, developed a number of key objectives, notably the implementation of projects aimed at establishing modern infrastructure for the city including bridges, drainage systems, road networks, modern means of transportation, consolidation of comprehensive development projects [**Zayed smart city project**]. In line with the policies of the government which aim at making Abu Dhabi a modern capital city, it is The Abu Dhabi City Municipality's priority to create an ideal living environment for city residents, with unmatched quality of life and modern

amenities. zayed smart city project started on a small are in abu dhabi wit implementation 10 IOT use : water quality , air quality ,parking availability ,SOS functionality ,palm trees desese detection , ... After zayed smart city Pilot project in 2018 ,ADM team came out of 4 initiatives in in collaboration with health , safety and inspections :City Infrastructure ,Enterprise Collaboration,Services Enhancement and Urban Planning . this lead to start a new use case related to public health of the city . One of the major roles of Abu Dhabi municipality is (city inspections).one part of this function is to inspect the water tanks of the citizen buildings in the city, making sure that these tanks are following the standards of water quality already defined by health department in the municipality. This results a serious inspection challenge on the municipality, since the number of buildings that surveyed and inspected on a regular biases are 130,000 buildings, this number raise many challenges such as (human resource needed, quality of inspection process, and the cost of the inspection process).An IoT platform can solve this challenge by providing IoT enabled water quality sensors in each building water tank that will monitor (on daily basis) the water storage tanks in – 130,000 buildings in the city of Abu Dhabi. The sensors will use 4G/5G technology to send data to a cloud communing platform that stores and visualizes the harnessed data. The project is relevant to **SDG2, SDG3, SDG11**.



Actionline: 7.0

Actionline: 7-AGR

SHUFOLA

WSIS Prizes Contest 2020 Nominee

In **Bangladesh**, Due to the greater degree of dependency on weather conditions, weathershocks can put smallholder farmers' food security and livelihood in danger at any time. Typical weather forecasts are usually at a regional scale. Often these forecasts do not come true for farmers' specific locations. Moreover, farmers fail to translate the weather forecast for their circumstance e.g. how an adverse weather condition may affect their crops. They need to know what they have to do in their cornfields because of this high temperature. Even when they understand the effect of weather on their crop, it does not always help because their knowledge of best management practices in response to an adverse weather condition is limited. Moreover, many of their traditional knowledge of weather patterns are no more effective because of changing the climate. To address this

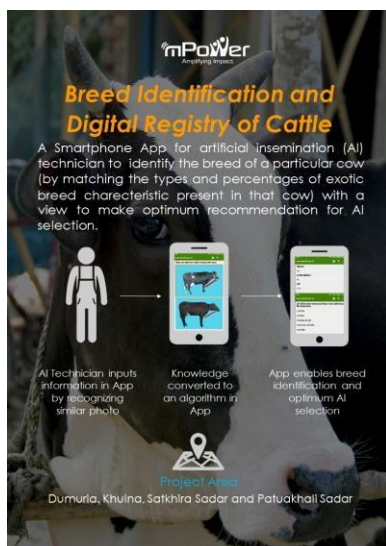
problem mPower developed **SHUFOLA** that combines localized weather forecasts with specific crop management practices to generate highly customized agricultural advisory in the form of actionable advice for individual smallholder farmers. For this, mPower closely collaborated with agronomic experts to identify thresholds of adverse weather conditions for specific crops and climate-smart management practices to reduce or eliminate the effect of them.

The weather forecasts for specific Upazila level is generated by downscaling data from Weather Research & Forecast (WRF) model to 4KMx4KM grid for specific weather parameters like temperature, humidity, rainfall, solar radiation that are critical for crops. The adverse weather parameters with specific threshold values were converted into algorithms. Our farmer profiling with specific information ensures that farmers get personalized advice. All these data are aggregated in our integrated IT platform that triggers farmer specific crop management advice. These alert messages are delivered 2 to 3 days ahead of an unfavorable weather condition to allow a farmer sufficient time to act. The project is relevant to **SDG2, SDG13**.



Breed Identification and Digital Registry of Cattle

In **Bangladesh**, the cattle in Bangladesh is characterized by very low productivity. Years of artificial insemination have failed to improve the genetic material of cattle breeds up to the mark. On the contrary, indiscriminate breeding has led to severe genetic erosion and poor heterosis. In some cases, indiscriminate artificial insemination led to progeny having higher exotic genetic makeup (>75%). Currently, AI is done based on guesswork and the experience of individual AI technicians, whose experience and skill levels vary greatly. This wide margin of error has huge business implications for farmers and AI marketing companies alike. To solve this problem, mPower has developed a mobile app devoted to **Breed Identification and Digital Registry of Cattle** to identify the breed of cattle and to maintain a digital cattle registry. The app determines the types and percentages of exotic blood present in cattle based on external features that are presented as pictures. Upon identifying the breed, the app will also make specific recommendations for artificial insemination for improving the breed. For instance, the algorithm determined the target cow has 50% Holstein Friesian blood (exotic). The automated recommendation will be to use semen of 75% Holstein Friesian so that its next progeny will have 62.5% Holstein Friesian blood. Each time a livestock's breed is identified, the farmer will be notified via SMS. These data are visible through a dashboard for decision-makers. The project is relevant to **SDG2, SDG8**.



RKB Mobile Apps

In Bangladesh, **Rice Knowledge Bank (RKB)** is a dynamic mobile application and also mobile base knowledge bank. RKB application has been developed with the information of BRRI released rice varieties, modern rice cultivation and agricultural machinery technologies. RKB is an interactive tool for farmers, extension workers, scientist/researches, teachers, students and other users who want to learn and control insect & disease, and other problems that can occur in rice, and how to manage them. Rice Knowledge Bank (RKB) is one of the members of national apps Bangladesh. Everyone can free download it from “ Google Play Store “. It is an auto update application. Anyone one can free distribute the apps using SHAREit without internet connection. The project is relevant to **SDG1**.



Test of the Overall Process in Unmanned Agriculture & Establishment of open unmanned farm

WSIS Prizes Contest 2020 Nominee

In **China**, with the support from Chinese government, TIAA and Xinghua City organized 25 unmanned agricultural machinery groups which composed of 104 companies and institutes to start unmanned agricultural work in plowing, seeding, transplanting, harvest from 2018.

The test of the Overall Process in Unmanned Agriculture & Establishment of open unmanned farm aims to solve the rural labor shortage and low-quality and inefficient production in China. At present, four seasonal agricultural operations have been completed, and unmanned agricultural products like rice and wheat have been harvested. The operation efficiency of the unmanned machines is better than normal machines. 377 intelligent agricultural machines have been sold. Nearly 300 million people in China have watched the test. The test will cover 14 crops and one-third of Chinese provinces. The project is relevant to **SDG1, SDG2, SDG8, SDG9**.



Artificial Intelligence in Soil Analysis

WSIS Prizes Contest 2020 Nominee

In **Colombia**, The Ministry of Information and Communications Technologies and AGROSAVIA joined together to integrate Artificial Intelligence into the soil analysis process. The project consists of strengthening ICT for use in the agricultural sector, which includes, among others, the acquisition of a system for information management in the laboratory, the use of Artificial Intelligence for the realization of fertilization plans, among others. **The analysis of soil with Artificial Intelligence** represents greater efficiency in the times for the analysis of soil fertility requested by farmers in the country, facilitates access to analyzes by farmers, through the portal where they can access the status of their samples, their Results and their recommendations. It also allows the laboratory to improve the traceability aspects of the laboratory and the automation of the data, by integrating the measuring instruments into the software for the automatic passage of data, the use of Excel and paper in the laboratory analysis process is reduced, and enhance the appropriation of digital tools by Colombian farmers. The project is relevant to **SDG2, SDG12**.



Technology Transformation Model: Life improvement for Coffee Growers

WSIS Prizes Contest 2020 Nominee

In **Colombia**, The objective of **Technology Transformation Model: Life improvement for Coffee Growers** is to promote ICT adoption in the coffee sector in order to improve productivity and market access. The absence of connectivity in rural areas, showed the need for the installation and adaptation of technology to give Internet access to farms and schools in the area. Broadband wireless access was delivered using an Inside-Out TV White Space. So far, 5 farms and 2 schools were connected. Digital skills and training are presented for coffee growers families and teachers in schools. Through the ICT activities and tools developed in the training cycles, the project seeks to positively impact the processes and activities of coffee growers such as: - Quantity and quality of production - Risk of weather conditions - Environmental impact - Quality control - Competitiveness - Offer and market access

The scope of the project is:

- 1 app/tool designed, developed and deployed, that coffee growers in Meta use to track information about market prices, weather, health, sustainable practices, among others.
- 5 farms implement IoT devices and produce real time useful information related to coffee value chain.
- 100 farms use the app/tool to acquire real time and relevant information to improve their crops.
- 6 innovation labs linked to the coffee value chain, where new solutions to local problems are created, with the leadership of youth.
- 100 coffee growers and their families trained in ICT, adapted to their needs.
- 30 youth engaged in the Innovation Labs
- 30 women trained in ICT and empowered, with a gender focus.

The project is relevant to **SDG2**.



HackWeakEnd Social Impact Project

In **Gambia**, As a youth led, social impact, tech for good initiative with focus on women and girls, HackWeakEnd follows the premise of women as home makers to solve issues affecting our society using technology. Target is everyone with focus on girls and women in technology. Our objective of **HackWeakEnd Social Impact Project** is to drive real world solutions for real world problems. The HackWeakEnd technology event yearly features a hackathon to solve issues affecting sectors and software development training. The first edition was won by an almost all women team, also the 2nd edition saw the 3rd position being women. Also the software development training gives more focus to girls and women we plan to start their software development journeys. The project is relevant to **SDG5, SDG9, SDG15, SDG16**.



eSAP: Electronic Solutions against Agricultural Pests

WSIS Prizes Contest 2020 Nominee

In **India**, The product, called '**Electronic Solutions against Agricultural Pests (eSAP)**', is an ICT solution in the field of plant protection. It is a dedicated system that effectively integrates Mobile communications and Cloud solutions to bring different players of the agricultural ecosystem including farmers, agricultural universities and policy makers to interact on a single platform in real time enabling two-way dissemination of real time information strengthening the agricultural sector of a nation. The eSAP uniquely addresses plant health management issue structured with multimedia-based presentation of information in the field devices transcending language and literacy barriers. It is the first solution to enable on-field identification and quantification of pest problem along with instant solutions. It also generates and synthesizes real time data of pest situations of a region (country) and makes it available over its web solution to other players in the agriculture sector. The product also contributes to rural employment and entrepreneurship in local youth. With the integration of over 40 agriculture and horticulture crop information related to plant protection, eSAP has now adopted by state government of Karnataka. Over 3500 officers of the agriculture and horticulture department are using eSAP application and supporting farmers in providing real time advisories to problems related to pests, diseases,

nutrition disorders and weeds. Over 100,000 farmers across the state are benefitted through eSAP. Further, several pest problems are identified for the first time opening up an opportunity to scientists/ researchers to initiate studies. The project is relevant to **SDG2, SDG3, SDG8**.



IPPC ePhyto Solution

In **Italy**, Exporting countries use Phytosanitary certification to attest that consignments of plants and plant products meet phytosanitary requirements of the importing country. **The IPPC ePhyto Solution** project is a global initiative to facilitate electronic exchange of phytosanitary certificates between various trading partners in a digital form. The UNICC was contracted to build the global Hub for the IPPC as the leading provider of ICT services within the United Nations. The UNICC developed the GeNS software to minimise costs by maximising economies of scale. It will also host the Hub and the GeNS for the IPPC and participating countries.

The IPPC ePhyto Solution is composed of the following:

- The Hub: a central exchange system that can be used by all countries to which it is linked.
- The GeNS: a centralized web-based system that allows countries without their own national electronic certification system to produce, send and receive ePhytos through the Hub.
- Harmonization: a harmonized and standardized approach to format, structure and codes in the certificate exchange process. This project facilitates the safe, global trade of plants, plant products and other regulated articles by providing internationally agreed certification and related procedures. An ePhyto exchange via the global Hub will reduce the need for complex and costly bilateral agreements required to undertake an exchange therefore simplifying and streamlining the international trade processes. Benefits of ePhyto relate to efficiencies in border operations and trade movement by the reduction in documentation work and trade costs. The project will directly promote the national interests of participating economies by contributing to sustainable economic growth,

infrastructure development and investment, ease of doing business and e-commerce. The project is relevant to **SDG2, SDG5, SDG8, SDG10, SDG15, SDG17**.

Digital platform for business QOLDAU

WSIS Prizes Contest 2020 Nominee

In **Kazakhstan**, Mission and main objective: Sustainable development of agriculture and rural territories through the formation of an accessible and multi-service digital ecosystem. **QOLDAU** (from Kazakh language translated as support) is a unified digital platform for business. There are over 172,000 users registered in QOLDAU, which include all key market participants: financial institutions, suppliers of seeds, chemicals, fuels and lubricants, elevators, traders, government agencies, etc. Applied information services with a high level of format-logical control are integrated with government databases, space information depositories and payment systems; Multi-format services: B2F (business to farmer) G2F (Government to farmer), F2G (Farmer to Government) Services provided by Qoldau: EGrain - registration of operations with e-grain receipts; AGROMONITOR - geoportal: land identification, zoning by land (fields / pastures, etc.), space monitoring; AGROSCOUTING - phytosanitary inspection service - database of phytosanitary monitoring results; AGROWEATHER - service for receiving weather data from a weather station and forecasts; SUBSIDIES - electronic submission of applications for subsidies, their processing and payment; FUEL - online quotas / deals / payment of preferential diesel fuel; QAZCHAIN - storage of databases using distributed registry technology; AGROINSURANCE - online insurance service; AGROCREDIT - online credit service; AGROANALYTICS - analytics service based on the platform data. The project is relevant to **SDG2, SDG5, SDG9, SDG13, SDG17**.



The Nomadic Livestock Management Project

WSIS Prizes Contest 2020 Nominee

In **Korea (Rep. of)**, **The Nomadic Livestock Management Project** started with the aim to develop ICT solutions for the Kazakh nomadic farmers who have been left behind from the benefits of ICT development. These farmers still use their old ways to take care of livestock even if it's time-consuming and labor intensive. They spend an average of 4.7 hours per day searching for their wandering livestock in the open pastures; if livestock are lost, the searching time extends to days or even weeks. Our main objectives were developing a technology that fits their need and their living environment and helping them who are not used to using the ICT technology to use it. With the help of Samsung, we have developed Livestock Wearable Device (LWD) that works in rural areas of poor communication and power infrastructure to help easily track their livestock. We donated 700 devices to the local nomadic farmers and ran a pilot project for two months. The average searching hours were reduced from 4.7 to 1.6 hours, potential livestock loss and theft were prevented throughout the pilot period, and the farmers gained confidence in utilizing ICT in their daily works and lives. The project is relevant to **SDG1, SDG8, SDG11**.



Digital Technology Adoption in the Agriculture Sector

WSIS Prizes Contest 2020 Nominee

In **Malaysia**, **Digital Technology Adoption in the Agriculture Sector** was designed to transform traditional farming into High Income Digital Economy Farming Profession by infusing digital technology, i.e. Internet of Things (IoT), Big Data Analytics (BDA) and Artificial Intelligence (AI) into farming for technology validation via pilot projects and digital labs. The programme complement many efforts by ministries and agencies in transforming the image of agriculture to become exciting and lucrative income generation field, especially to the new generation, through usage of digital technology and application of digital economy solutions. This programme targeted new and existing farmers which will be facilitated to adopt the latest technology such as IOT, BDA in agricultural practices. They will also be trained on application of digital economy business model. This programme is expected to improve in crop yield and quality, as well as reduction of overall farm operational cost and thus, will result in increment in overall farmers' income. The project is relevant to **SDG2, SDG4, SDG8, SDG9, SDG10, SDG12, SDG15**.



MOKARO mobile app for Farmers

WSIS Prizes Contest 2020 Nominee

In **Mauritius**, **The MOKARO system**, whose name literally means “My Field” in Mauritian Creole, is an initiative by the Mauritian Government to tackle the difficulties encountered by

the small (& often vulnerable) farmers in Mauritius. Indeed, due to climate change & increased competition from big corporations, Mauritian farmers need to improve the efficiency of their farming strategies in order to guarantee their livelihood. The MOKARO app serves mainly as a decision support system for farmers. By using Mokaro, a planter will be able to understand the actual market for their produce. Based on the plant type, region, period of the year and statistical/historical data, a recommendation is generated for the user through the use of simple graphical easy-to-understand icons. Farmers also receive advice based on meteorological data that is fed daily into the system. The system automatically analyses this data and generates advice on irrigation and spraying of crops. The model used for this calculation considers the meteorological data, water stress (based on the variety of the crop), wind direction (to determine loss rate of pesticide droplets) amongst others. Thirdly, the MOKARO app fosters local micro-economies by connecting individuals, cooperatives and small business which offer services linked with agriculture (e.g. renting of a truck, de-rocking services, seedling suppliers etc). The system uses the geolocation of the user and displays a list of the relevant services nearest to him/her. It should be noted that the system supports registration/validation (through SMS and manual account activation by Govt. Officers) for service providers so as to prevent abuse. Farmers do not need to register to use the system. Finally, the planned calendar of activities and events informs planters on activities of stakeholders where they may be invited to participate. Finally, in case of critical disasters (e.g. crop diseases, insect plague etc), the system also supports warnings/alerts to all users. The project is relevant to **SDG2, SDG8, SDG12, SDG15**.

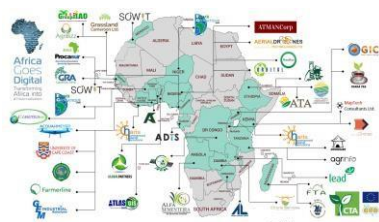


Eyes in the Sky, Smart Techs on the Ground

WSIS Prizes Contest 2020 Nominee

In **Netherlands**, By embodying components like scientific research, proof of concept initiatives, capacity building, support to investment, enterprise development, networking, experience capitalisation & communication, this project has started transforming Africa's agriculture into a high-tech industry, with decisions being based on real-time gathering and processing of data, productivity & yields. The establishment of 38 rapidly expanding, youth-led enterprises offering drone-based services in 21 African countries, represents a significant development for the continent & a milestone for the building of the African Information Society. Started at the end of 2016, **Eyes in the Sky, Smart Techs on the**

Ground caught the attention of young entrepreneurs who were selected via a competitive processes, trained, & technically & financially supported in offering drone-based services to farmers' organisations, agribusinesses, government, international development agencies & other parties. A June 2019 survey confirmed that the enterprises have been recruiting staff, investing in new equipment, increasing their turnover and client portfolio. An industry association (Africa Goes Digital Inc) as been established to support further growth of the enterprises and enable members to group, offer diverse services & be more competitive. The project played an important role in establishing an enabling environment for the technology. It supported the African Union's appointed High Level African Panel on Emerging Techs in selecting "drones for precision agriculture" as one of the most promising technologies which would foster Africa's development. In Jan 2018 the AU Executive Council recommended that all Member States harness the opportunities offered by drones for agriculture. A full report entitled "Drones on the horizon: Transforming Africa's Agriculture" was launched at the Africa Innovation Summit in Kigali (6/6/18). Project implementers co-authored the report & have been advising national civil aviation authorities in developing regulations for the responsible use of drones. The project is relevant to **SDG2, SDG8, SDG13**.



WOMEN AGRICULTURAL EXTENSION SERVICES(WAGES) MOBILE

WSIS Prizes Contest 2020 Nominee

In **Nigeria**, In today's increasingly connected world, women are being left behind. A significant gender gap in mobile phone ownership and usage in low-and middle-income countries is hindering growth for the mobile industry and means women are missing out. **Women Agricultural Extension Services (WAGES) MOBILE** is an ICT based mobile platform – which brings all agric offerings for small farmers under one roof. It connects small farmers to their various needs – Seeds, fertilizers, equipment, crop advisory & market linkage of agric produce. Our mission is to support our women farmers to increase food security and increase financial inclusion.

Our objectives are:

- Bring together proven e-agriculture solutions that will benefit women;
- Share knowledge on successful e-agriculture solutions and identifying ways of scaling up implementations at national level and Strengthen Community e-agriculture solutions with women farmers. So far reaching over 20,000 smallholder farmers across in Nigeria over the last 3 years with relevant information has improved the entrepreneurial success. The project is relevant to **SDG1, SDG2, SDG3, SDG4, SDG5, SDG7, SDG8**.



Ababeel

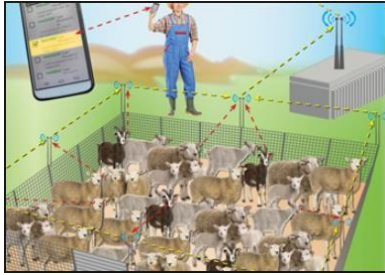
In **Pakistan**, The evolving technology of drone and its integration with IoT has made the UAVs (unarmed aerial vehicles) as one of the major requirements of 21st century World is shifting onto the procedure of planting trees with the help of drones as it is a most useful technique for reforestation used today which has higher chances of success. In some cases where access to a particular area is difficult and seeds cannot be planted according to traditional techniques, in those areas there is need for an alternative solution. Therefore, planting seeds with the help of autonomous vehicles is chosen as a feasible solution to restore fertility of land. **Ababeel** is to get an insight into the working of these UAVs in restoring the forests, monitoring the fertility content of soil, in tourism and in monitoring the remote areas. The project is relevant to **SDG15**.



Dunger Care Smart System

WSIS Prizes Contest 2020 Nominee

In **Pakistan**, Farming plays a significant role in today's world. It requires proper environmental and diet care. Therefore, there is a need of a system which can be operate and monitor farm animals remotely. **Dunger Care Smart System** is aimed to propose a smart farming system in order to help farmers to monitor their animals which requires his attention most. Keeping the needs of a farmer in mind a system should be designed which can store important data regarding to animals name/tag-number and health care to animals. As well as, tracking and monitoring of animals. This type of system can be designed cost effectively by using electronic devices. It will be like virtual assistant to a farmer to assist him/her in taking care of their animals. The project is relevant to **SDG15**.



Climate Change impacts and alternative solutions

In **Pakistan**, The organization which I am serving the Hussaini Organization for Local Development (HOLD), a regional organization working in the Gilgit-Baltistan region of Pakistan, successfully resolved a decade's long water crisis in the Gojal Valley by utilizing the available limited resources. So far the organization has successfully executed two major water projects both for irrigation and drinking purpose to provide **Climate Change impacts and alternative solutions**. The residents of this valley have lost several lives while many others are disabled during struggles for water on different glaciers in the valley. The project is relevant to **SDG2**.



Crop Detection App

WSIS Prizes Contest 2020 Nominee

In **Pakistan**, **Crop Detection App** basically revolves around the growth and a look after concept regarding crops. Crops here are being selected according to national percentage usage and gardening, simply the crops those are a big part of national economy i.e. rice, sugar cane and wheat. Main concept of this mobile application is to analyze and predict average outcome per acre, deficiencies (diseases), height and basic details i.e. name, color, climate etc. To cater all these problems we have to give an input to our system directly through mobile camera (picture, video) and the technology used here would be Digital image processing to analyze, Moving ahead there would be a database at backend holding details and prediction records that would analyze and predict average outcome, deficiencies (diseases) and basic info regarding the crop that is being captured through camera and this concept mainly falls under Machine learning. As there is huge problem among farmers not having accurate facts and figures or feasibility analysis and this results in economic loss in farming from root to top level (national economy). So now an app available on farmer's mobile phones will help them identify pests and diseases and suggests remedies and as well as the age, size, health, condition and the name with all information of the crop. All he has to

do is click a picture of the crop and he have all the required information of the crop like how long before it is cultivated, its size like its growing same the way it has to be and where are the areas are best to cultivate this type of crops and the estimated outcome from the crop.

These are the basic features: • Crop detection • Crop Information • Growth Rate • Disease Detection • Solution • Precautions • Estimated Outcome

The project is relevant to **SDG2, SDG8**.



Tree Tracking Drone

WSIS Prizes Contest 2020 Nominee

In **Pakistan**, Increase in population and expansion of industries, we need more area for housing, mining and agriculture, moreover, increase in demand for firewood and illegal logging are the reasons for cutting down forests. 6.5 billion Trees are lost each year as a result of human activities and natural disasters. According to some surveys, the rate of deforestation is estimated 35,000 to 42,000 hectares or between 2 to 3 percent every year. To reduce deforestation new trees are planted in northern areas of Pakistan but calculating number of trees , estimating yield and maintaining tree health in Pakistan is a crucial task. Pakistan has started a massive reforestation project – named the Billion Tree Tsunami – in an effort to restore the province’s depleted forests and fight the effects of climate change. That is why we are making **TESTREE** to keep an eye on tree production issues. The system that is going to help us in providing best results for counting, yield estimation and tree health. In developing countries like Pakistan, there is a massive deforestation taking place. As in areas where we have massive tree canopies and it is difficult to resolve tree production issues. An efficient reforestation system is needed, which will only be possible if we have a reliable forestation technique. A drone will be used in our application. The aim of TESTREE is that the drone used will have the following features:

- The drone will fly autonomously
- The drone will capture images of trees
- Stitch the images that were captured
- Calculate the number of trees
- Match the colour of leaves

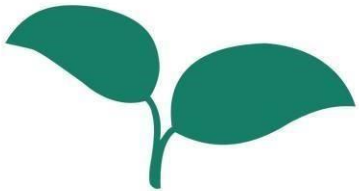
- Estimate the yield by interpreting the images.

The project is relevant to **SDG13, SDG15**.



Online small farmer and buyer connection

In **Rwanda**, Many small farmers usually sell their produce at giving away prices due to lack of market information. The middlemen often take advantage of this to buy produce at low prices even when the prevailing market prices are higher. This has affected farmers' morale leading to low productivity and a decline in household income. However, this could soon be history, is why I need to create **a platform that can connect farmers and buyers** that will also link farmers and other players within the agricultural value chain, easing management and communication of market data, including prices. The project is relevant to **SDG2, SDG5, SDG8, SDG16**.



Subsidization Of Small Livestock Keepers Application

In **Saudi Arabia**, **Subsidization Of Small Livestock Keepers Application** is coming under the electronic services initiative that focuses on the general directorate of livestock services providing an application to help the beneficiaries wishing to receive subsidization to get their act of requests in less time and good quality from the ministry. In addition, this project scope is to enable the ministry to track, manage and improve the beneficiaries experience and enhance the contribution of sustainable rural agricultural development also to raise the rate of food security according to comparative advantage of each region in Saudi Arabia. The project is relevant to **SDG2, SDG8, SDG12, SDG14**.



Livestock Services System “INAAM Plus”

WSIS Prizes Contest 2020 Nominee

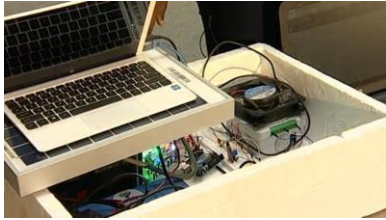
In **Saudi Arabia**, Livestock Services System “**INAAM Plus**” is coming under the digital transformation initiative that focuses on the general directorate of livestock services providing a platform to help the beneficiaries wishing to apply for services whether it involves importation or the clinical requests get their act on it in less time and good quality. This project aims to enrich the sustainability of vital resources, indulge in raising the efficiency of the agricultural sector, and direct subsidies to beneficiaries. The main scope of the Livestock Services System (Inaam Plus) is a system aimed at receiving services for importation of livestock resources and general veterinary services from citizens and foreigners of import requests with linkage with the Customs Authority. The project is relevant to **SDG2, SDG3, SDG8, SDG10, SDG12**.



The Smart Granary

WSIS Prizes Contest 2020 Nominee

In **Senegal**, a year ago I met Ibrahima a 72-year-old farmer father of 17 kids, 3 boys and 14 girls. He was tired and frustrated because he had just lost all his crop of potatoes that had rotten in the open air. This story is not unique to Ibrahima because according to FAO the majority of African farmers lose up to 70% of their stocks due to lack of preservation system. What frustrates me is that Africa is hungry even though it is the largest producer in the world. It would be enough to solve the problem of preservation so that Africa is satiated. As a young african woman I get involved to find a solution to this scourge the solution is TSG (**The Smart Granary**) is a smart attic made from recycled plastics that will ventilate and water fruits and vegetables automatically to convert heat into freshness thanks to new technologies and all is powered with energy solar. And that will allow farmers to keep their stocks much longer in order to save time for selling their products (fruits and vegetables). I have already tested with a farmer who grows mangoes and he was able save 70% of his crops while he was making a yield of 33 % . Next steps we want to add triggers pesticides natural and deploy this system with 30 farmers in 6 months. The project is relevant to **SDG2**.



Dairy farm management system

WSIS Prizes Contest 2020 Nominee

In **Thailand**, The Bureau of biotechnology in livestock production has developed the dairy database system for more than 30 years to use for the Tropical Holstein breeding evaluation. Since 2015, this program has been established in a new transformation on the internet to have accessibility from all sectors in the dairy industry called **Dairy farm management system** or 3i. The 3i consists of iFarmer, iService, and iDairy which can help farmers, officers, veterinarians, dairy cooperatives and other stakeholders to get some awareness from their realtime data and reports. Farmers who regularly use this technology can earn higher incomes by optimizing feed, improving the cow reproductive program and performance, often checking the milking system and getting closer to a veterinary officer. These well-round management tools can predict and increase the productivity from breeding programs and can benefit to the domestic economy. The project is relevant to **SDG2**.

Interregional Smart Agriculture Forum

WSIS Prizes Contest 2020 Nominee

In **Tunisia**, Worldwide, Agriculture is always deemed as the most powerful tool to end poverty and to provide job opportunities. Many research analyses have found that over 65% of poor working adults in rural areas derive their livelihoods from agriculture, and predict that it has a big potential for enhancing economic growth. However, Agriculture is facing globally and especially in the Arab and African regions too many Constraint issues and challenges such as climate change, water crises and shortages with a heavy negative impact on food safety & security in many countries (20,7% of the Arab region population is suffering from severe food shortage) in spite of their efforts of many enablers to achieve the sustainable agricultural development. As ICT is known as a strategic tool for socio-economic development all over the world, the Arab ICT Organization has launched the ISAF initiative: **“Interregional Smart agriculture Forum”**. ISAF is a multi-stakeholder annually event, aiming to provide a platform for an interregional dialogue about the new technology trends and Smart Agriculture. It gathers high-level personalities from the two regions with common visions to come up with orientations to design the sustainable future of the Agricultural sector within the two regions through the usage of ICT. Thus, to participate in the setting up of effective mechanisms to develop a regional agenda for Smart Agriculture. Many activities are scheduled: International exhibition and conference, B2B meetings, workshops, and awards. the first edition of ISAF was held in 2018 and was concluded by a declaration to support the adoption of Smart Agriculture in the two regions to increase

productivity and achieve food security while preserving natural resources and the environment. The project is relevant to **SDG1, SDG2, SDG8, SDG17**.

SMART LOGGER

WSIS Prizes Contest 2020 Nominee

In **Tunisia**, The world is changing rapidly and the use of new technologies has become a necessity to ensure sustainable development. Our company **SMART LOGGER** aims to promote solutions based on IOT technology mainly serving agriculture, industry, health and the environment. Our solutions consist mainly of two packages. A first part Hardware, contains our electronic card and sensors allowing to convert physical quantities into Datas. Through the internet the information collected via the electronic system will be transmitted to the database. The second part Software analyzes this information and communicates it to the users in the form of Datas Cloud accessible via a WEB and mobile platform. The client invested in the hardware component with a very reasonable price and benefit from an annual subscription for the hardware part including the after-sales service and updates deemed necessary. In summary, our project presents innovative technological tools enabling clients to improve the management of their project. This thanks to traceability, real-time feedback, artificial intelligence and the possibility of remote control. The project is relevant to **SDG1, SDG2, SDG3, SDG5, SDG6, SDG8, SDG9, SDG11, SDG17**.



Wireless Solutions for Fishery in Senegal

WSIS Prizes Contest 2020 Nominee

In **United States, Fishery** employs 17% of Senegal's workforce and provides 70% of the nation's animal-based protein. About 90% of the country's fish are caught by "artisanal" fishers, who rely on traditional methods. Their earnings depend on weather patterns, market prices, access to capital and consumer demand. The initiative aimed to improve fish catch and fish processing capacity by addressing these challenges. Functionalities of the WISE digital platform include: alert fishers when they cross restricted zones or international borderline; enable fishers to communicate GPS locations with coastguard if stranded on the ocean; provide navigational information and weather forecasts; provide virtual marketplace to negotiate best prices for fresh and processed fish; chart safe courses to and from fishing zones; access digital financial services including affordable loans; and

provide fish processing best practices and hygiene education. Users interact with the mobile app via a visual interface, voice commands, or artificial intelligence-powered chatbot. Senegal's Food Security Commission shares market prices collected by WISE with seven West African countries and uses it for assessing food security situation and develop a national preparedness action plan for minimizing food shortages. The WISE platform is deployed in Senegal's three major fish landing and processing sites (Mbour, Joal, and Dakar). The fish catch in Mbour alone is around 165,000 tons representing 41% of the total production of Senegalese artisanal fisheries. Fish processors achieved a ten-fold increase in their business, from 100kg to 1,000kg of fish/person/month; and fishermen increased their income by as much as \$550/year. The national scale-up plan of the platform is being prepared through the leadership of Senegal's Ministry of Telecommunication and Digital Economy. The project is relevant to **SDG2, SDG5, SDG14**.



Actionline: 7-BUS

Open SDN/NFV for the support vCPE, vEPC and vIMS

In **Algeria**, The project concerns the specification, the deployment and the performance evaluation of an **open SDN/NFV** architecture for the digitalisation of a mobile Telecom operator network with the validation of the vCPE, vEPC and vIMS services for lte network. ATM Mobilis strategy for 2019-2023 is to build a fully virtualised network able to support in addition to its own operator network, new instances representing emerging business opportunities such IoT, SD-WAN or any other network ranging from mvNO to network dedicated to mission critical communication as the industry 4.0 is hoping for. The ultimate objective is to prepare the operator's network to support the digitalisation of the different sectors of the Algeria economy. The new digitalised network will be able to support any virtualised service, as IT- Service (OSS, BSS, VAS) or Virtualised Network Function (vNF), as for instance vCPE, Virtualised Core, etc. This project is part of the transformation program of ATM-Mobilis, named UNIMOB, for Unified Networking Infrastructure for Mobilis network. The project is relevant to **SDG1, SDG8, SDG9**.



Digitalization Of Technical Control Acts

In **Algeria**, **The RCTC project** it's an exclusive application specific to the technical control of construction, developed by CTC team. It ensures that all the structural elements to be controlled in a construction are taken care of and that the appropriate rules and regulations are met. Exists in two parts, "for checking drawings" and "for checking site construction", it supports the edition of the various deliverables. Used by more than 700 controller engineers. It is a methodological tool that relies on a regulatory and normative reference system and makes it possible to systematically and exhaustively determine all the points to be addressed during the various phases of technical control of a construction operation. All regulatory and normative reference are attached to the application using technical sheets (more than 730 sheets) illustrating the points which need to be identified in the control process. This is a tree review canvas whose frame is generated by a succession of modules. It reassures public authorities and citizens about the construction act in Algeria. It makes it possible to communicate the information to the actors of the act of building. The project is relevant to **SDG1, SDG3, SDG16**.



Aman@tic: Home delivery for e-commerce products

In **Algeria**, **Aman@TIC** is a new E-commerce product, in the delivery of postal services, in addition to ordinary delivery. Through the product Amanatic, Algeria Post aims more to achieve the following objectives: - Improved quality of service by providing customers a way to home delivery and in any post office. - Diversification of postal products and services by integrating innovative and modern technological means and channels. - Boost ecommerce in Algeria by integrating online payment through the electronic banking card of Algeria "Edahabia" post. - Offer SMS notification service and real-time tracking. - Use of PDAs by delivery agents for payment and electronic signature upon delivery. - Product for the particulars and suppliers. - Give the possibility of online payment or the payment on delivery. - Creation of sorting and distribution centers throughout the national territory, dedicated to the Aman@ TIC product. - Redesign of the plan for the delivery and distribution of parcels The project is relevant to **SDG1, SDG3**.



Pasión en Contenidos

In **Argentina**, **Pasión en Contenidos** is a social enterprise that promotes technological inclusion of small entrepreneurs transforming digital opportunities into growth. We use social media (Facebook, Twitter, LinkedIn) as professional tools. In 6 six years of experience, we impacted small enterprises, baby boomers and entrepreneurs through technological inclusion, digital services and trainings creating value and supporting their economic growth. The project is relevant to **SDG8, SDG9**.



Manual - your individual menu

In **Austria**, **The Manual App** simplifies the selection of food and beverages, makes a visit to a restaurant more efficient, and digitizes and thus optimizes the business processes of the catering industry. Restaurant guests do not have to wait long, but can, immediately after entering the restaurant, inform themselves about the offer or even get automatically the food recommended to the taste, the preferences and the nutrition of the user. Manual acts as a personal recommendation or nutrition coach, who knows exactly what the user tastes, what he should eat and drink and, above all, what he is allowed to eat and drink based on the current location. Users can fully rely on the underlying algorithms and the artificial intelligence of the Manual recommendation system. Difficult decisions are eliminated and orders can be placed quickly, easily, securely and with a clear conscience. Another unique feature of Manual is its accessibility. The complete app is developed in such a way that it can also be used by people with visual impairments. This is reflected not only in the UI layout of

the smartphone application, but also in its UX implementation. The project is relevant to **SDG9, SDG16**.

Manual

POSTAL CASH CARD – RENDERING DIGITAL FINANCIAL SERVICES FOR THE UNBANKED POPULATION THROUGH ENSURING FINANCIAL INCLUSION

WSIS Prizes Contest 2020 Nominee

In **Bangladesh**, Bangladesh Post is a service oriented government organization working under Posts and Telecommunications Division, Ministry of Posts, Telecommunications and Information Technology of Bangladesh. **POSTAL CASH CARD – RENDERING DIGITAL FINANCIAL SERVICES FOR THE UNBANKED POPULATION THROUGH ENSURING FINANCIAL INCLUSION** is committed to provide a speedy & reliable postal service to people of all walks of life at a reasonable cost. It has been playing an important role in enhancing access to financial services in rural and remote areas of Bangladesh. In an ambitious drive to develop and provide innovative digital financial services, it launched Postal Cash Card. This service was inaugurated by the Honorable Prime Minister Sheikh Hasina on 26 March 2010. It targeted at the unbanked population in rural and remote areas and has already gained considerable success. It is a prepaid card allowing customers to deposit, withdraw and transfer money (Card to Card), make purchases and utility bill payments. In 2012, Bangladesh Post started to establish Co-Branded ATM booths with collaboration of Sonali Bank Limited. 18,000 Point of Sale (PoS) has already been installed and another 32,000 PoS would be installed. Postal Cash Card is relentlessly playing a crucial role in achieving Goal 1 and Goal 8 of TRANSFORMING OUR WORLD: THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT. The project is relevant to **SDG1, SDG8**.



Digital Financial Service

WSIS Prizes Contest 2020 Nominee

In **Bangladesh**, Nagad is a **Digital Financial Service (DFS)** that is working to maximize revenue for its partners by marketing digital financial & other associated services to mass population while ensuring compliance & better customer experience thus contributing to the financial inclusivity & socio- economic development of the country. Nagad has already began its journey to etch a glorious niche for itself by emerging innovations serving a large number of unbanked people who are need of reliable service to assist their financial needs. With a host of essential services such as Digital Customer Acquisition , cash in/out, P2P, P2B, B2P, B2B, B2G, G2B, money transfer, mobile top-ups, etc. The project is relevant to **SDG5, SDG8, SDG10, SDG16, SDG17**.



ekShop

WSIS Prizes Contest 2020 Nominee

In **Bangladesh**, With around 80 million internet users, the Bangladeshi eCommerce industry has grown by 200% over the last few years. However, the marginal producers and consumers from rural areas often get deprived of experiencing the country's rising eCommerce industry due to a lack of eCommerce literacy and eCommerce infrastructure to rural areas. The “**ekShop**” initiative offers a platform for rural producers and sellers to sell their products through the integrated eCommerce companies and logistics providers. Through ekShop's platform, marginal and rural producers have been able to spread their goods - with the standard price - to the last mile and urban consumer. This has facilitated a nation-wide supply chain, wherein products made by the rural population are circulating all over the country; products from urban communities are also reaching them. The platform connects all the top eCommerce companies, logistic providers, payment gateways to unions, districts, sub-districts, and divisions, utilizing the 5293 digital centers. With the assistance of 10,000 entrepreneurs and 500 micro-merchants, it has directly become a marketplace of over 1 million goods. ekShop is gradually reducing the digital divide and increase their income. ekShop has crossed international borders to Nepal, Malaysia, and Singapore to reach the NRBs there. The project is relevant to **SDG5, SDG8, SDG9**.



Automation of Service History & Pension Approval activities for Primary School Teachers of Bangladesh

In **Bangladesh, Digital Servicebook & e-Pension System** is a web based application which was initiated under “Bangladesh National Digital Architecture and e-Government Interoperability Framework (e-GIF)” project of BCC. DPE (Directorate of Primary Education) is owner of the service. The core functionalities of the system are: Similar chronological view of physical servicebook, Online teachers’ profile verification, Real-time fingerprint capture of teacher, Complex workflows of servicebook like pay-fixation, promotion, transfer, leave, audit, leave, miscellaneous, punishment etc. are simplified. There is a fullfledged android and iOS app for teacher to view all the event of servicebook. Automatic calculation of pension, lump grant, leave etc. in PRL/pension procedure. Objectives: The main objective is to achieve a digital version of manual servicebook of all primary teachers and to simplify & faster the process of pension system of primary school teachers. This proceeds Bangladesh one step ahead to build Digital Bangladesh. Results achieved: Pilot phase is now completed. It was inaugurated by DG of DPE, under Tangail and Manikganj Sadar upazila . Out of 2000 servicebooks in two upazilas, 1650 books are done and rest will be entered in the system within shortly. it will be rolled out country wide from 2020. DPE invited BCC to showcase and demonstrate the solutions at Innovation fair 2018 and 2019. Honorable Minister (MOPME) visited our stall and appreciated a lot for this initiative Prior to this, we had arranged a training session in those two upazilas where officers and teachers participated. Also the feedback from the teachers is highly enthusiastic. Impact: The system has a great positive impact on both administrative officers and teachers. There will be more transparency in administrative works. Teacher don’t need to pay unsolicited money to get information related to servicebook and pension scheme. Most importantly, teachers will get instant information from their mobile apps from anywhere, anytime The project is relevant to **SDG4, SDG8, SDG16**.



Sudokkho

In **Bangladesh**, Due to the severe scarcity and expense of trained veterinarians, LSPs or para-vets are a critical node for service delivery for small-holder farmers, with upto 90% of the health issues of their cattle being handled by LSPs. Therefore, for optimal health and productivity of cattle, it is critical that the LSPs are able to provide their services timely and efficiently. However, a critical bottleneck is the workload of LSPs – typically, each LSP has to provide services to upto 500 farmers, making it impossible for him to keep track of treatment and service schedules for each of those farmers. These LSPs are mostly reactive, taking action when they get a call from farmers. This severely hampers the well-being of the cattle, since a delayed vaccine, deworming, pregnancy diagnosis or certain treatments that requires follow-ups at regular intervals can have potentially severe health and productivity consequences. To solve this problem, mPower has developed a smartphone-based easy to use, offline customer-relationship-management (CRM) application for LSPs called **Sudokkho**, where LSP can Record individual farmer and their cattle information and make schedules of upcoming individual farmer HH visits based on needs through an intuitive calendar. An LSP can record the services delivered and treatment/ medicines provided and easy viewing of upcoming services. In addition, he or she can keep a record of individual farmer credit information and the App can generate automated alerts on missed LSP visits or services. Based on the information that LSPs have entered into the CRM App, we have developed a web-based solution for livestock input companies a decision-making dashboard that will allow livestock input and pharma companies to see geographical trends of health issues, disease patterns, treatments and medicines given. The companies are sending targeted messages and product advertisement to LSPs. The project is relevant to **SDG8**.

The digitization platform of Shenzhen International Convention and Exhibition Center

In **China**, Shenzhen international convention and exhibition center is the largest digital venue in the world. **The digitization platform of Shenzhen International Convention**

and Exhibition Center is aimed using Internet technology to modify traditional exhibition economy, encourage online interaction and innovation in the exhibition economy transition, making the "Internet +" become a new driving force for the development of the exhibition industry innovation by constructing the digital platform where intelligent tools can be applied and the exhibition venues can generate additional system application business. The project uses new technologies to help transform exhibitors flow into business flow, extend the single pavilion green fees revenue model to the platform economic model. The project also utilizes big data analysis with matching and push functions to help accurately push high-quality exhibition projects to exhibitors and to support online booking of exhibition booths, air tickets, hotels and other supporting services; innovates marketing methods like QR code check-in and large-screen interaction to enable the organizers, exhibitors and spectators to participate in exhibitions, transactions and dissemination, realizing the closed loop of excellent experience from the exhibition exposure to the scene, and creating a trinity full-time exhibition business of online-mobile-offline. The operation strategy is integrated with the exhibition industry to build a development model with the characteristics of exhibition economy that can be copied and promoted, which can not only enhance the brand effect of Shenzhen city, but also drives the innovative development of the industry and the region. The project is relevant to **SDG8, SDG9, SDG12**.



High-speed Rail New City Comprehensive Information Management Platform

In **China**, Under the background of “high-speed rail economy”, **the high-speed rail new city comprehensive information management platform** was constructed, which systematically integrate regional city-level comprehensive operational management information and business service resource information, and realize large-screen and lightweight mobile terminal application. The platform has following characteristics: efficient acquisition, display and inquiry of information, which helps the public to more conveniently and efficiently use various commercial and living services in the urban areas, as well as help operators improve their operational management and service levels. The platform helps promote the high-speed rail new city to become an information gathering place for people flow, logistics, capital flow, and business flow, build a sustainable consumption and production model for the region, form a regional economic development engine with unique characteristics and complementary advantages, and enhance the overall competitiveness of the region. Based on the platform: the urban comprehensive service app, urban integrated management app, and large-screen integrated information display system can be quickly replicated in other cities, regions and countries of the world. The project is relevant to **SDG8, SDG9, SDG11, SDG12**.



The “Poverty Alleviation Marketplace” :an e-commerce and charity Platform of China Mobile

WSIS Prizes Contest 2020 Nominee

In **China**, It is the social responsibility of government and enterprises to reduce and eliminate poverty through changing the social environment. **The “Poverty Alleviation Marketplace”** is designed to be an e-commerce and charity platform that offers wide variety of products provided by sellers from poverty areas. It established links between poverty-stricken areas and the roughly half-billion Chinese mobile users in more developed urban centers. In addition, the marketplace will provide tools and distribution channels to promote outbound sales of goods from low income areas, offer higher value chain products in poverty-stricken areas, and help these low income areas form long-term, stable income as it changes the online and offline economic environment. Through various engagement vectors like text message, E-mail and the branded China Mobile APP, the Marketplace aids rural communities to expand business quickly and thereby promotes stable long-term income. The platform also established direct links between independent poverty alleviation efforts, along with those by the government and those supported by public/private enterprises. China Mobile's extensive strategic alliances which include those in the banking, insurance, and transportation sectors can be leveraged to provide additional tools. Moreover, with the help of 5G network technology and applications like AR/HD video, an organic network can be established by connecting providers and customers in both impoverished and developed regions. By engaging strategies which utilizes the internet and e-commerce platforms to create a new model of “Network + Poverty Eradication”, sales of agricultural products have successfully reached RMB 40 million Yuan in over a hundred counties. This phenomenal result effectively drove meaningful progress in poverty reduction in terms of network, capital, talent, education, health, livelihood, industry, consumption, employment and etc. The project is relevant to **SDG1, SDG2, SDG3, SDG4, SDG8, SDG10, SDG11, SDG12, SDG16, SDG17**.



Goods for Good

WSIS Prizes Contest 2020 Nominee

In **China**, Objective "**Goods for Good**" aims to link buyers, sellers, and public welfare organizations and establishes a sustainable public welfare participation mode through a ebusiness approach. Problem In China there are more than 2,000 organizations asking for donations every day. People are left with the hard choice of who to help. Most will end up giving one lump sum to an organization when in reality there organizations need a steady stream of income. Alibaba has established the digital platform of "Goods for Good". Public welfare organizations register their projects on the platform while sellers choose their interested ones and then add a digital label of "Goods for Good" to the products listed at their e-stores. After a consumer buys a product with a "Goods for Good" label, the seller automatically donates a tiny proportion of sales (approximately CNY 0.02 per deal) to a public welfare organization through the digital platform. Impact "Goods for Good" is not only about donation, but also creates a sustainable e-business model which nurtures the habit of philanthropy in the society. On the one hand, consumers actually pays zero extra cost. However, their choice for "Goods for Good" rewards seller's philanthropy efforts. On the other hand, the program asks businesses to donate as little as they can, so little it will barely register on their P/Ls. Because Alibaba is the world's largest eCommerce platform, with nearly 10 million merchants and 700 million of consumers making millions of transactions every day, now those 0.02 RMB soon adds up to millions before anyone knows about it. In 2018, over 2 million sellers on the Alibaba platform donated a total of RMB 266 million through "Goods for Good" and their public welfare actions were supported by 360 million buyers, equivalent to 25% of the Chinese population. The donations were sent to 31 provinces, municipalities, and autonomous regions in China as well as Myanmar, Ethiopia, Sudan, and other countries and regions. The project is relevant to **SDG1, SDG3, SDG5, SDG8, SDG10, SDG12, SDG16**.



Business Digital Transformation Centers

WSIS Prizes Contest 2020 Nominee

In **Colombia**, **The Digital Business Transformation Centers (CTDE)** are a strategy of the ICT Ministry and iNNpulsa Colombia in partnership with the main Chambers of Commerce and Guilds of the country, which aims to accompany MSMEs in the digital transformation of the processes of the chain of value of the company, through the tactical appropriation of technologies and cultural change, as a long-term strategy, which will allow them to improve their productivity and competitiveness. CTDEs are the places where MSMEs find the necessary technical assistance and advice that will allow them to develop a successful

transformation route. The process begins with a diagnosis of the digital state of the business, where the degree of technological adoption and the organizational capacity to manage the transformation are measured, and the process that has the greatest impact on the business is identified. From this diagnosis, a transformation route is formulated and implemented to improve this process, which articulates actions associated with the development of organizational enabling capacities, as well as the implementation of technological tools that enhance the business structure. The entrepreneur receives permanent support and advice throughout the year that the route implementation lasts. The project is relevant to **SDG4, SDG5, SDG8, SDG10, SDG12**.



ecoins

In **Costa Rica**, **ecoins®** is the first virtual eco-currency that encourages consumers to recycle their waste and dispose of it in a clean, dry and separate manner. The ecoins® or points are awarded in exchange of recoverable waste taken to authorized reception centers. The points awarded are deposited into a virtual wallet that offers the user the possibility of exchanging them by discount coupons for products and services provided by sustainable and environmentally responsible companies. The waste collected is later reintroduce into the production cycle as raw material. This current model of production which incorporates the consumer, waste managers, recyclers and the industry, favors a system of participation and generation of value that involves multiple actors who are changing the linear model of economy from a consumption-waste economy into a circular and integrated model that allows solid waste management. Our approach changes the traditional way of understanding recycling and transforms it from an environmental problem to an economic opportunity. Our proposal includes the use of technology, strategic communication and citizen participation. From this point of view, garbage is a design problem with scattered resources in the wrong place. For this reason, our proposal integrates economic, social and environmental components. ecoins® makes recycling a sustainable model with the consumer as the main actor in the process and it provides the rest of social actors with options that allow the co-creation of processes and the speeding up of results. ecoins® works as a loyalty program capable of summoning all actors on a single platform and integrating familiar concepts such as discounts, loyalty, digital marketing and gamification in a new circular economy perspective. The project is relevant to **SDG8, SDG12, SDG17**.

Minapolitan Pasaran Digital Island

In **Indonesia**, the market island is an island located on the outer side of the city of Lampung city. This island already has internet infrastructure using optical fiber - **Minapolitan**

Pasaran Digital Island. The city of Bandar Lampung city, through the Communication and Information Technology Office (KOMINFO Bandar Lampung) in cooperation with Telkom has built infrastructure and applications for the sale of anchovy online. As for the purpose of using this application, fishermen can sell anchovy obtained from the sea and directly marketed so fishermen get a good price. Previously, the sales process had to go through a third party. The project is relevant to **SDG5**.



ASA E-Services Supper Application

WSIS Prizes Contest 2020 Nominee

In Iran (Islamic Republic of), **ASA E-Services Supper Application** is an aggregator of applied services to meet the needs of citizens for electronic services. ASA was launched by the private sector to provide public sector services. We have collected all the e-services needed by citizens on an application and the user does not need to install and manage various applications on the phone. Consequently, a citizen can easily access the services of e-government services, booking and travel services, payment services and Some of ASA Services is: E-Government Services (Post, Municipality, Police, etc Booking Services (Flight - Train-Bus, Hotel, ...) Paid Bills (Postpaid Mobile, Services Bills,...) Recharge Prepaid Mobile Deposit money from card to card Access to the nearest required centers based on the user's location (Restaurant, Cafe, park , Gas Station , ...) The project is relevant to **SDG1, SDG7, SDG8, SDG9, SDG10**.



The System of Informing Business Licenses and License-Related Inquiries (NAMA)

In Iran (Islamic Republic of), **The System of Informing Business Licenses and LicenseRelated Inquiries (NAMA)** is accessible to the public since 2016. The system provides fundamental and essential Information that is pivotal issuing, extending, reforming, and removing business licenses aimed at reducing the time and procedures of issuing licenses. This is done through identifying the existing prerequisite relationships

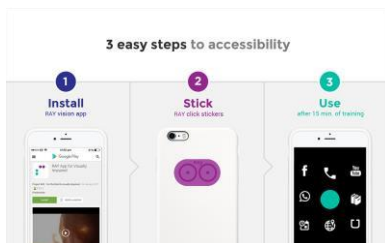
among licenses and the services required for each of them (including inquiries, confirmation of documents, etc.). The database with the development of e-government is able to provide a full roadmap to prioritize access to business information and knowledge, and decrease the bureaucracy for stakeholders (applicants for licensing and economic actors). It is to be mentioned the license information is update every 6 months, which in its update the progress and contribution of licensing authorities is monitoring to reduce the unnecessary time and documents and make electronic their services. NAMA Information is aggregated, reportable and constantly updated. The project is relevant to **SDG5, SDG8, SDG9, SDG10, SDG16**.

Ultra security

In **Iran (Islamic Republic of)**, Planning to Increase Security by Using Biobiological After Trusted Person Identification. Using **Ultra security**, it is possible to detect or prevent the subversive actions of its employees who are trusted by the institution's organization. The method used sensors designed to detect bio-biological alerts of a person who decided to sabotage. A brief description of how this works is that an employee who has previously had a high level of access is also trusted by the organization and has access to all the key and sensitive secret rooms including fingerprints, fingerprints, etc. This person may at any time, under any external circumstances, decide to exploit this information by designing and using sensors embedded with prior authentication, including fingerprints, without any prior notice. The project is relevant to **SDG8, SDG13**.

EyePhone

In **Israel**, **EyePhone** is an innovative and disruptive solution designed to allow the visually impaired to access and use touchscreen technology on smartphones at a price much lower than comparable solutions. EyePhone is a smartphone and tablet application that once installed, automatically imposes a special user interface (UI) across all system functions, daily used applications and life-changing set of services, reading aloud the contents on the screen so no sight is required. Using RAY's simple user interface, with common and consistent behavior that works the same across the entire system, users can learn in a matter of minutes to easily access their smartphone and all its features, including any third-party apps. This is done through a real-time conversion of the original visual presentation of these applications into a simpler interface made of two screen elements. The project is relevant to **SDG9, SDG16**.



DINARAK Mobile Money Female Agent Network

WSIS Prizes Contest 2020 Nominee

In **Jordan**, **Dinarak** is a Mobile Payment Services Provider in Jordan, fully licensed by the Central Bank of Jordan and connected to the national switch for mobile payments ('JoMoPay'). The company's mobile payment services are tailored primarily to benefit the financially excluded, under-banked and unbanked population with a focus on low income Jordanians, women, youth, SMEs, refugees and host communities: Dinarak's payment platform allows customers to set-up e-Wallet accounts on their mobile phones and deposit cash at local agents to create e-Money balances. Users can then send and receive money, make deposits and withdrawals, and pay for bills, goods and services with complete locational freedom, using Dinarak's Mobile Payments App. Dinarak customers may obtain an optional Dinarak prepaid card that they can use to make online payments and purchases (e-commerce), make purchases at point of sales and withdraw cash from ATMs in Jordan and globally. The project is relevant to **SDG1, SDG5, SDG16**.



CraveHome

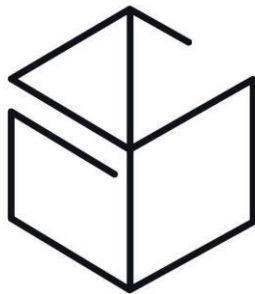
WSIS Prizes Contest 2020 Nominee

Originating in **Lebanon**, **CraveHome** believes that "Happiness is Homemade". Over the past few years, we have seen much greater integration of technology into the food industry – from aggregators to food delivery in all its shapes and cloud-based platforms connecting farmers with end consumers, to online chef hiring and 3D food printing. However, the food industry is not only being transformed by entrepreneurs using food technology in innovative ways, but also by consumers, especially millennials whose taste and demand for technology are driving the startup scene. According to Goldman analysts, millennials care more for healthfulness, convenience and transparency than price and they are hence expected to account for more than 75% of growth within the food vertical over the next decade. A study by McKinsey revealed that the growth in "new delivery" is driven by two sources of consumer demand: the first is as a substitution for dining in restaurants; the second is as a substitution for meals prepared at home, since there is an actual problem of lack of time, knowledge or desire to cook especially for working individuals. Therefore, CraveHome designed a product that caters to consumers' appetites, health needs and lifestyle demands. CraveHome is an online homemade food ordering and delivery platform that connects home cooks with users, creating opportunities for people at home to generate income by connecting them to consumers willing to pay for their healthy home-cooked meals. Increased smartphone penetration and cloud based software will potentially enable CraveHome to become

the Uber of homemade food delivery while empowering women and allowing them to increase throughput and gain a status. The project is relevant to **SDG2, SDG8**.

Speetra Design Studio

In **Lebanon**, **Speetra** is a design focused innovation firm, working at the intersection of architecture, product and fashion design. Helping designers prototype and complete their product that still heavily relies on human resource and trial and error. Through Speetra's innovative materials and processes, the company aims to reduce waste and optimize the fashion production industry. By digitizing the process, 3D Printing will allow for more bespoke pieces to fit the market need, a new way of mass customization through generative design. 3D printing helps on many levels - from digitalization, easy and faster way from idea to prototyping and to a ready product. Less hard handwork and therefore, potentially, the exclusion of low-skilled manufacturing produced by humans and more opportunities to create and develop their creativity – not just for designers, but for everyone. Zero-waste and cruelty-free for a more sustainable fashion. The project is relevant to **SDG12**.



Zima

WSIS Prizes Contest 2020 Nominee

In **Lebanon**, Today more than 3Billion people still do not have internet access. On the other hand, there are 4 Billion Internet users worldwide. A third of them is served by small Internet Service Providers (ISPs). There are 5 million small ISPs globally, especially in rural areas. **Zima** is a Software as a service platform that enables small ISPs to manage their bandwidth, user subscriptions, and billing without the need for hardware. As a result, using Zima saves each ISP between \$3000 and \$15000 in upfront costs and hundreds of dollars in monthly recurring costs related to hardware maintenance, electricity fees and IT support. We currently have clients in 13 countries from Europe, North America, Middle East, Africa, and South Asia. The project is relevant to **SDG4, SDG9, SDG10**.



eUsahawan

In **Malaysia**, **eUsahawan** is a digital entrepreneurship programme aimed at mainstreaming digital entrepreneurship education amongst emerging and current micro-entrepreneurs via a communitycentric approach. The key objective of eUsahawan is to empower micro-entrepreneurs with digital entrepreneurship and e-commerce know-how, in a mission to drive digital entrepreneurship adoption. By doing so, eUsahawan aims to create a talent pool of microentrepreneurs who will expand their business to become significant players in e-commerce and cross-border commerce, thus propelling the country's digital economy. Following its successful pilot programme in 2015, eUsahawan was scaled nationwide starting 2016. It has since been deployed to more than 40 public Technical Vocational Education Training (TVET) colleges and Institutes of Higher Learning (IHL) nationwide. To date, eUsahawan has trained over 306,849 participants including those from the B40 and marginalised communities, of which 107,588 participants have reported additional sales generation amounting to RM 586.1 million. The project is relevant to **SDG4, SDG8**.



Persiaran APEC

WSIS Prizes Contest 2020 Nominee

In **Malaysia**, an important part of championing digital economy is to embrace digital inclusivity across all communities. The Malaysia Digital Economy Corporation (MDEC) as an agency that envisioned to provide leadership in the Information Age decided to start an initiative in 2013, as part the country's response to one of the disruptive technology trends that is Crowdsourcing; the Sharing Economy. **MDEC** has embarked on the journey to develop a unique, country-level strategy and approach to leverage on crowdsourcing; the sharing economy models. The initiative aspires to enable and provide opportunities to the community to earn additional income that is facilitated by digital technologies. As part of the Sharing Economy Initiative, the eRezeki

programme was launched on 17th June 2015 to target primarily the B40 communities which includes urban and sub-urban poor, single mother, youth, people with disabilities, unemployed graduates and latent workforce. The programme's original aim was to help Malaysians to earn supplementary income online by performing tasks or jobs which is matched against their profile. The type of tasks / jobs which they are trained to performed provide them with work flexibility and will utilizes either their idle time, idle assets, knowledge, intangible skills or services. The project is relevant to **SDG5, SDG16**.



STRATEGIC BLOCKING OF MOBILE EQUIPMENT THROUGH THE EQUIPMENT MANUFACTURERS IDENTITY CODE (IMEI)

In **Mexico**, on July 8, 2019, the Mexico City Government presented the **Strategic Blocking of Mobile Equipment through the Equipment Manufacturers Identity (IMEI) code**. "Block your cell" aims to simplify the process of blocking equipment in the case of theft such that the equipment cannot be sold illegally. Another important objective is to reduce the theft of cell phones in Mexico City. In 2018, 1,972 cell phone robberies were recorded every day. This represents property damage of approximately \$9.8 million pesos per day in Mexico City. "Bloquea tu Cel" is one of the five principle actions of the Increased Security Strategy in Mexico City which also includes: Attention to Sources, Greater Police Presence, Intelligence and Justice, Coordination, and a strengthened Legal Framework. The project is relevant to **SDG11, SDG16**.



Green Fresh Nigeria

WSIS Prizes Contest 2020 Nominee

In **Nigeria**, **Greenfresh Nigeria (GFN)** is an online food stuff platform that enables farmers, fresh foodstuff sellers to sell their products to customers and get it delivered to them at their doorstep. GFN are dedicated in providing good, healthy and nutritious well packaged food stuff for our client at affordable price. GFN ensures that all foodstuff items ordered are delivered on time to the customer and collects customer satisfactory feedback on the point of delivery for

management review of the company's performance and relationship with client. GFN's objectives is to encourage rural farmers, foodstuff sellers in various market(s) within the country to access millions of customers within and outside Nigeria, with the aid of smartphone, computer and internet. Also, GFN want to ensure that the federal government financial inclusion program for those living in rural areas is achieved, GFN encourages youths to go into agribusiness due to the abundance opportunity of selling their products to millions of people without paying for a shop rent or hiring vehicle to convey the product to the market. Also, people can easily order for fresh foodstuff they want to cook as meal and get it delivered to them at easy. GFN provides jobs, inspires youth to go into full time farming, support and motivates people to eat healthy, fresh and nutritious meals all day, reduces food shortage and promotes healthy living. The project is relevant to **SDG1, SDG2, SDG3**.



PACI e Transformation System (Sanubda)

WSIS Prizes Contest 2020 Nominee

In **Oman, PACI e Transformation System (Sanubda)** is an e-Transformation System to manage the relationship between crafters and PACI. All services from PACI to crafters are automated through it starting from the registration of the crafters throughout all requests including the process to verify them, approve them or reject them and pushing all notifications to the crafters. It also includes sections for quality checks, request training, paying inspections fines, applying for copywrite, requesting for financial and logistic help from PACI and so many other services with a secure channel of logging in using public key infrastructure (PKI). The portal have reduced the time required previously for all the services from months/weeks/days to few minutes or a couple of days depending on the service and have allowed crafters and PACI to manage the entire cycle through the portal with no need to do any follow up calls or visits. The output of this was the encouragement for all crafters including young people to take this as a career and work towards being professional crafters producing well-made items and make crafting their main source of income thus help reducing the unemployment rates in Oman. The project is relevant to **SDG5, SDG8, SDG10**.



Shock Preventor Smart-Shopping System

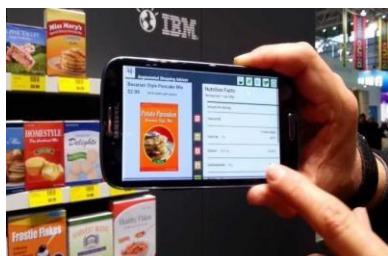
In **Pakistan**, Everywhere around the globe, advancements in technology are being used as tools to improve the standards of living of human beings. Just like every other field, shopping and retail services is an areas where there is a constant need for upgradation and improvement. Store owners as well as individuals are working for the computerization of the existing systems for providing a smart shopping experience. One of the way is by removing the barrier of waiting in long queues with a smart billing system. **Shock Preventor Smart-Shopping System** proposes the development of a smart shopping system, which includes a smart cart for automation of bill while shopping and yet saving the time by reducing queueing process. Furthermore, theft protection is also introduced for a secure, carefree and a user-friendly shopping experience both for customers and retailers The project is relevant to **SDG8, SDG9**.



Following the dreams

In **Pakistan**, **Following the dreams** are inclination that reflect individual interests and desires in life. But some dreams demand acts. The act of making the customer feels competent after shopping negligent of the ruffle that can really trigger an annoying encounter. Everyone nowadays is willing to save their time through any mean in busy working routine. So, for the purpose of succor the customer in having an enjoyable episode of shopping, and to have excitement and fun for the kids in a retail shop, Following the dreams propose a system that mutually combines the AR strategies and profound learning. The customer will target the objects and tangible animated creatures will popped up from the objects and added to the surroundings of an individual. In similar fashion, to guide the customer to the required location palpable path will be affixed to the milieu of the customer which will be pavement towards required item and also to allow the customer to get all the information of desired product in order to increase the selling

numbers . Following the dreams designed a smart platform for shopping with four major components location of desired products, data collection and analysis components details and customer's feedback. Into the bargain, the cameras will be fixed at the exit points through which mood of the customer can be detected before leaving the shop through image processing, so an angry customer can be spotted and can be made pacified for the next experience as well. The project is relevant to **SDG3, SDG9**.



Digitally Decentralized Rural Economy

WSIS Prizes Contest 2020 Nominee

In **Pakistan, Kaarvan Crafts Foundation**, established in 2004, believes that every woman has the right to earn a dignified livelihood. Its mission is to create opportunities for income generation among women in poor communities, by strengthening their skills, providing business capacities and market linkages, both conventional and digital. Thereby facilitating them in accessing better economic opportunities and improving their quality of life and that of their families. Kaarvan strives to bring female Microentrepreneurs at the heart of development, implementing the Sustainable Development Goal (SDG) 5 & 8 on ground in Pakistan with the aim to act on SDGs at a local level. Kaarvan Crafts Foundation has developed a holistic practice of immersive grassroots operational fieldwork of providing vocational skills training, soft skills training, creating culture of informal economy of home-based work in villages and connecting women to wider markets. These life skills are opportunities towards attaining economic and material goods. Skills to develop self-confidence and ability to move freely. Skills to participate in local decisionmaking. Skills to develop socially constructive attitudes and behaviour. Skills to craft a living as right to development, right to peace and right to healthful environment. The project is relevant to **SDG5, SDG8**.



FAB WOMEN

In **Peru**, **Asociación Fab Lab**, is a non-profit civil association, part of the Fab Labs World Network, which seeks to democratize Digital Manufacturing technologies. Asociación Fab Lab are laboratories of digital manufacturing, spaces of creativity and innovation in the use of digital technologies to improve productivity and competitiveness, they transfer digital manufacturing technologies to the entire community with emphasis on children, adolescents and women. The project is relevant to **SDG5, SDG9, SDG16**.



Theqa

In **Qatar**, **Theqa** is a non-for profit governmental program that aims to support the online shopper's community in Qatar regardless of their gender. Theqa which means “trust” in Arabic is an eCommerce trustmark, an electronic label indicating that an online merchant has demonstrated its conformity to standards regarding business practice, privacy, and security. Theqa was created to help drive eCommerce in Qatar given the high internet penetration rate. This badge of trust gives peace of mind to local residents and nationals that it is safe to shop from local merchants due to the challenging market. Theqa aims to inspire trust and empower growth across Qatar by encouraging spend and facilitating entry to market of new eCommerce players. The entrance of new merchants will increase job and investment opportunities across the country. The Ministry of Transport & Communications (MOTC) has been working on setting up the trustmark for over a year and officially launched in October 2019 with 42 early members from the local online merchants community. MOTC is planning to grow nationally with local service providers and internationally by partnering with international trustmark associations to ensure their common goals are achieved together and the network of eCommerce in Qatar becomes international. The project is relevant to **SDG1, SDG5, SDG8, SDG9, SDG17**.



Digital Transformation of Small & Medium Business Enterprises

WSIS Prizes Contest 2020 Nominee

In **Qatar**, The vision of the program is to enhance Qatar's SME ecosystem in key sectors through digital ennoblement by creating value for all stakeholders in Qatar's digital economy, aligning its strategic goals with Qatar ICT Sector Vision 2022 of leveraging technology to develop a

regionally competitive smart economy that improves and promotes ICT innovation with a niche focus on international activity and exports. With the mission to promote digital innovation, competitiveness and growth of SMEs through end to end digital transformation of their value chain in areas such as Web Ennoblement, Ecommerce, Cloud & Emerging Technologies supported by an ecosystem of technology enablers, the program aims to cover the objectives of: Increasing knowledge and awareness on digital solutions for SMEs, Empowering SMEs to optimize their business model through digital solutions & Enabling SMEs to provide better access to services to meet hidden customer demands. Today, Digital Transformation of Small & Medium Business Enterprises have successfully raised awareness on digital adoption among over 5600 SMEs through the execution of over 270 interactive sessions, connecting further over 50 technology enablers' digital partnerships & government entities in the digital ecosystem with business establishments in Qatar. The project is relevant to **SDG3, SDG5, SDG8, SDG9, SDG17**.



Single Window

In **Qatar**, **Single Window (SW)** is a smart platform providing a unified interface of the State of Qatar to all investors seeking to start or manage their businesses in the easiest and quickest way in order to raise Qatar's international rank amongst other countries in terms of starting businesses which in turn will contribute to its economic growth. SW conducted extensive studies to analyze the landscape and its key challenges. It engaged all stakeholders and covered more than 22 entities and 180 services. Its outcome and bench-marking against similar successful international models shaped the SW's organization, components, and re-engineered state to be investor-centric and achieve SW's goals. SW's technology component plays a crucial part in its success. SW digital platform is composed of: Smart Application, Digital Signature, Approval Portal, Company Information Center, Performance Monitoring and Management Dashboard, and Knowledge Portal. SW launched its first phase focusing on establishing new business services and currently working on the second phase focusing on managing them. SW had a very positive impact and many benefits such as reduced costs of business licensing on both investors and government, it introduced a fully integrated digital transformation of the government services and offered enhanced and professional user experience. The project is relevant to **SDG9, SDG16, SDG17**.



Maroof

In **Saudi Arabia**, **Maroof**'s objective is to regulate the eCommerce different platforms in the Kingdom. The idea is to put a pressure on the eCommerce stores to have their legal identity and to have a commercial registration by recognizing those who have their legal document by labeling them with (Maroof colors) so the user could deal with the store comfortably. Furthermore, now Maroof is recognizing different aspect of the eCommerce stores by having other criteria such as security, trade policies and their payment channels verification. The project is relevant to **SDG1, SDG4, SDG8, SDG9**.



Product Safety

In **Saudi Arabia**, **Saber** is a platform that allows the investors and local manufacturer to electronically issue the required Certificate of Conformity and certificate of Shipment conformity for consumer Goods whether it was imported or locally manufactured to enter the Saudi market. Saber aims to protect the businesses from fraud and ensure that products are free from defects that may affect the health and safety of consumers. The project is relevant to **SDG3, SDG12, SDG13**.



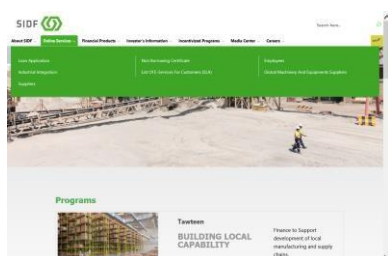
The Unified Media Licenses System – Electronic Services – The Ministry of Media

In **Saudi Arabia**, **Unified Media Licenses System** automates issuing licenses and certificates. It provides 216 electronic services, including 100% issuance, renewal, data updating, waiver, and cancellation. These services apply for the following activities: drawing and calligraphy, photography, copying and reproduction, publication, advertising, distribution, press services, media studies and consultations, selling computer software, computer software production, libraries, printing press, public relations and services before printing. Unified Media Licenses System targets every member in the community and it has been self-implemented in The Ministry of Media. It targets to facilitate the process of issuing license or registering media's activity,

which the user can get the license or register the activity immediately for some activities and without any paper documents or manual procedures. In case of the activities that needs to approval of committees outside of the ministry, it may take 30 days and the process complete electronically. This comes in complementarily with 13 government agencies in The Kingdom of Saudi Arabia: Ministry of Education, Ministry of Commerce and Investment, National Information Center, Meras., Sadad Payment System., Saudi Post., General Directorate of Civil Defense., Ministry of Labor and Social Development., General Authority for Statistics., General Investment Authority., Ejar service., Ministry of Municipal and Rural Affairs., E-Government Program. The number of beneficiaries of the system since the date of 1\1\2019 to 30\9\2019 : 10,197 beneficiaries. The project is relevant to **SDG3, SDG11, SDG12**.

E-Industrial Loan

In **Saudi Arabia**, **E-Industrial Loan** is an investor enablement that aimed at empowering the private sector or the industrial investor by improving the customer experience, raising the quality of the procedures and providing services and products efficiently, quickly and transparently that meet the needs of the industrial market. The most important of what was launched from the possibilities: First: the completion of loan procedures and the launch of electronic loan and the application of smart phones. Second: Linking with government agencies and providing joint products such as land and loan with a city authority. One of the most important impacts of this project is to create and increase job opportunities, Saudize jobs and develop and increase Saudi Arabia's GDP, leading to one of Saudi Arabia's 2030 vision, the National Industry Development and Logistics Program (NIDLP), and achieving part of the objectives of the Industrial Fund which Aims to meet the needs of employees and customers, to achieve more effective outputs, in line with the national priorities of economic and industrial development of Saudi Arabia. In addition, Achieve and Develop e-Government objective (digital transformation) on Governmental Operational Excellence dimension which is part of National Transformation Program 2020. The project is relevant to **SDG7, SDG8, SDG9, SDG11**.



Safer Students App for Smart Phones

In **Saudi Arabia**, **SAFEER platform** released SAFEER mobile application for smart devices, to achieve further support and a smoother facilitation. SAFEER platform is currently available in the students' hands through their smartphones. The application is designed and developed in accordance with the highest international standards in the field of smartphones in Service Sectors.

By taking advantage of smartphones features such as user interaction, GPS and phones attachments, SAFEER app offer all SAFEER services with the highest quality and ease for

students abroad. Students can submit requests, upload attachments, and follow up with their requests instantaneously through different access points on SAFEER mobile application. This application provides completely automated services to the students studying abroad and saves effort and time for them to visit the attaché in to get the services they need either related to their study or payment and personal services. These are some services the application provides for the student: 1) Comment Request; 2) Reopen Payment; 3) Ticket Request; 4) Edit Personal Information request; 5) Add Educational Report; 6) Pay Differences Request; 7) Financial Warranty Request; 8) Definition Request. The project is relevant to **SDG4, SDG5, SDG10, SDG17**.



MySTC 4.0

In **Saudi Arabia**, **MySTC 4.0** is focused on revamping the user experience and user interface for its telecom mobile application. Its aim is to move from a utility application focused on telecom services to a lifestyle / companion application that will help customers in their daily lives across many industries. The project is relevant to **SDG8, SDG9**.



Digital Transformation through Collaboration

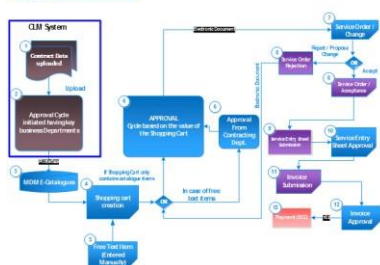
WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, **Al Khafji Joint Operations** had implemented SAP Supplier Relationship Management B2B project using which the business process of procure-to-pay for services will be automated, simplified, and accelerated. This project has led to reduction of procurement cost by

closing the loop from source to pay. The following are the highlights of the system: 1.

Supplier Registration Portal allowing the suppliers worldwide to register with the company provided they satisfy certain basic criteria; 2. The registered suppliers receive the information about any tenders in the category they are qualified for; 3. Once a Supplier / Contractor wins a tender, the services being offered through it are available in form of a catalog for the concerned KJO Business users; 4. The Users use the Shopping Cart functionality and procure the services as needed. The contractor receives this in form of a service order; 5. The contractor delivers the services and creates a confirmation in the system and attached evidence of service delivery. The KJO users verify the confirmation and approve / reject it as applicable; 6. Based on the approved confirmation, invoice is created by the Supplier which is sent to KJO for approval and once it is approved the payment is released. The project is relevant to **SDG9**.

B2B Process



Self-service machine

In **Saudi Arabia**, **Self-service machine** project is one of services channels for ministry of justice, which distributed in MOJ premises and public locations selected in some public areas, malls and Airports in the Kingdom of Saudi Arabia. The machine provide a direct video-call channel (that make this project as a unique project) between beneficiaries and notary public and allow beneficiaries to execute many services without trouble and by one touch around the clock. The machine is designed well and taking into consideration the privacy subject by putting the machine at a dedicated room that help the beneficiaries to finalize the needed services securely. The project is relevant to **SDG9**.

THE APPROVAL AUTHORITY ENGINE – CORPORATE WORKFLOW SOLUTION

In **Saudi Arabia**, the **Approval Authority Engine** is a workflow approval solution designed to integrate with other enterprise applications and to handle the approval step in a standardized and streamlined fashion. Workflows are triggered from within the applications and processed by AAE which routes the request to the appropriate approval route list and then returns the final result to the application once the workflow is completed. The route list is determined using pre-configured business processes and workflow schemas as well as business scenarios derived automatically from instilled business policies. This automated process ensures the right decision maker is determined based on the relevant authorities described in the various policies. Moreover, the solution leverages the concept of financial objects and using its attributes and changes to derive workflow policies and behavior to enable finer-grained workflow routing is unconventional in terms of incorporating technical financial objects to dynamically infer business requirements.

Precisely, AAE provides a generic template with built-in and configurable agent determination rules to enable workflows to be quickly used to automate the approval step in any business process in the organization without the need for a technical SME in the system. Specifically, we use a meta-model to represent the skeleton of the workflow. The model enables de-coupling of the workflow from business by the creation and customization of workflows to fit any business process without the need for specialized integrated development and design tools. The metamodel is unique in its ability to: a) employing any agent determination rules needed for the modeled scenario, b) dynamically changing these agents as the scenario changes in the processing of workflow, c) integrating the financial objects implicit requirements in the workflow. The project is relevant to **SDG9**.



Crude Price Optimization Solution

In **Saudi Arabia**, in line with the Saudi Aramco vision, Information Technology IT is driven by the value of its human resource base, the expertise and skills of the people, and a continuous focus to apply best-in-class practices. Its emphasis is to create value for its business partners by developing cost-effective, secure and innovative IT business solutions, utilizing leading-edge technologies and employing highly skilled & talented people while maintaining a safe and motivating work environment. **The Crude Price Optimization application** is an Artificial Intelligence (AI) based solution predicting upcoming crude nomination (demand) and estimating price elasticity for all Saudi Aramco crude export markets and products. The solution is one of the tools available for the company marketers to perform quantitative analysis on identifying optimized offset or discount values during crucial monthly crude pricing cycle. The uniqueness of this project is the utilization of I.R 4.0 technology predictive model as business decision analysis tool using standard and in-house machine learning algorithms based on external market condition, customer recommendation and historical crude nomination data. The project is relevant to **SDG9**.



Enterprise Project Management Solution

In **Saudi Arabia**, **Enterprise Project Management (EPM)** is a solution that standardizes the way in which Saudi Aramco manages its capital projects. This solution is based on an integrated

IT applications infrastructure built around the best-of-breed applications. EPM integrates a collection of applications from SAP and Oracle to improve project execution efficiency, enhance project controls, and provide a structured project management approach. By standardizing & automating capital project management's business processes, EPM provides governance, powerful analytics, and reporting and metrics capabilities. EPM's scope covers the project management lifecycle starting from Project Initiation through Project Closeout. Saudi Aramco Enterprise Project Management (EPM) solution is expanded to automate the end to end business processes of the capital projects planning function, including the phases of Front End Loading (FEL), and to provide full visibility of Capital Projects health and performance through peace of art Capital Projects Dashboard. The project is relevant to **SDG8**.



Supply Chain Excellence – Aramco eMarketplace

In **Saudi Arabia**, **Supply Chain Excellence** is a project to establish a private collaborative environment (private e-Marketplace) where Saudi Aramco and its business partners meet to collaborate, negotiate, carry out business transactions and exchange information. This is to enable a strategic partnership environment that identifies and builds partnerships with new suppliers worldwide, strengthens relationships and streamlines sourcing and procurement processes with current business partners, and rapidly distributes information and specifications to business partners. The project is relevant to **SDG8, SDG9**.



Communities of Practice Solution, enabling Knowledge Sharing

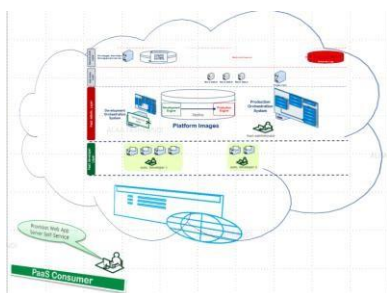
In **Saudi Arabia**, **Communities of Practice application** connects people through conversations that translate into meaningful information for access and reuse by other people in the company. This application is being used as a cornerstone in Saudi Aramco's Knowledge Management (KM) Program. The project is relevant to SDG4, SDG5, SDG8, SDG16, SDG17.



Platform as a Service Automation

In **Saudi Arabia**, **Novel PaaS Cloud Management System** was adopted. Automated and parallel systems management was achieved by this project with innovative security and quality control which resulted in human hours saving and downtime minimization. Additional benefit beside human hours saving include service agility. A task that requires 4 hours of manual work was achieved automatically in less than 20 minutes using the system.

The project is relevant to **SDG9, SDG12, SDG17**.



Business Grants Portal

In **Singapore**, MTI wants to better support industries and businesses – especially, Small-And Medium-Sized Enterprises (SMEs) – in their economic growth and digital transformation journeys. Great support was provided through the provision of business grants (i.e. financial support). In 2015, there were more than 100 grants offered across our government agencies. However, grant application was a tedious process for businesses. The feedback received was that even though there were many helping hands (i.e. grants), businesses were unsure which grant was the “right” one to approach. Businesses were often confused by the grants available, unsure of which public agency they should go to, and find it difficult to fill up the grant forms. Hence, **the BGP project** was developed to improve the accessibility of grants by simplifying both the grant landscape and application processes. BGP integrates the government agencies’ backend systems and digitise internal processing of business grants. Bringing government grants in one place, so it is easier to find and apply for the grants businesses need. For businesses, BGP helped to make the grant application process shorter, less confusing, and much simpler to complete. This results in both cost and time savings. For the government agencies, it allowed them to reach out to a larger number of businesses with the improved accessibility. The project is relevant to **SDG8, SDG9**.



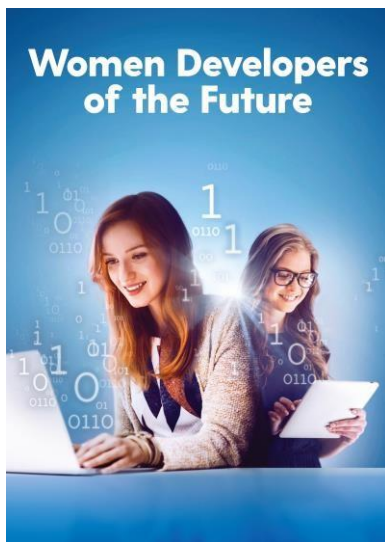
Ahmini

In **Tunisia**, Tunisian rural women, most of them working in farms, are exposed to a lot of dangers and deprived of their right to be socially covered because of the lack of appropriate legislation, low income and long also costly administrative procedures. **AHMINI**, is a platform facilitating access to social security and financial coverage, serving as a bridge between rural women and the insurer whether are private or public. Ahmini aims to decentralize rural women's affiliation to social security coverage while facilitating the payment and contribution by fragmenting it and bringing it closer to the people. With the Ahmini solution, workers and artisans can join and contribute remotely through the mobile phone and in a very simplified way. The project is relevant to **SDG3, SDG5, SDG8, SDG10, SDG16**.

Women Developer of Future

WSIS Prizes Contest 2020 Nominee

In **Turkey**, The aim of the “Women Developers of the Future” is to train women regarding software, to support them in developing mobile applications, and to increase the employment capacity and entrepreneurship. The program offers two amazing opportunities for the women who have completed the initial in-class and online mobile application development training. Firstly, there's the ‘Entrepreneurship Journey’, where women learn how to develop and create successful business model for their own mobile apps. The second opportunity is the ‘Tester Journey’ where 100 women are actually employed by Turkcell to contribute to Turkcell's strategic product and services by conducting end user test The project is relevant to **SDG1, SDG5, SDG8**.



Mollak - Trust, Transparency, innovation and happiness for property owners

In **United Arab Emirates**, The Dubai Land Department, through its regulatory arm Real Estate Regulatory Authority (RERA), has launched a first-of-its-kind e-system called **Mollak** (the Arabic word for Owners), Which regulate jointly owned properties, service charge and monitor the payment of service charges by owners in Dubai. Mollak provides a new and integrated system to regulate, monitoring accounts related to service charges and providing support services for all

parties involved in jointly owned properties in Dubai. The system operates across a range of stakeholders in managing jointly-owned properties. It also operates within the real estate unit owners' database and the database of real estate units registered and approved by the DLD. RERA aims to additionally issue electronic service charge approvals through Mollak to real estate unit owners, who will receive quarterly service charge invoices through the system. It enforces comprehensive regulatory governance on property management companies registered with RERA, requiring them to upload financial statements and copies of maintenance, service and other supplier contracts for common area services. The primary aim of Mollak is to regulate, govern, online service and support system to parties dealing with jointly-owned Properties in Dubai. With the increased number of real estate developments in Dubai, the Mollak system aims to simplify the registration of properties and standardize their regulatory processes.

- > Dubai has close to 1 Million properties that will be part of Mollak system.
- > Mollak will provide ready-to-use platform to more than 1100 management companies.
- > More than 300K owners will get benefit from Mollak system.
- > 220K invoices are already generated in Mollak for 2019 financial year.
- > USD 250 Million worth invoices are already generated from Mollak for 2019 FY. > 10 financial audit large firms are involved auditing details submitted by management companies.
- > 7 banks are already integrated with Mollak for ESCROW and payment management.

The project is relevant to **SDG1, SDG3, SDG5, SDG6, SDG7, SDG8, SDG9, SDG11, SDG12, SDG14, SDG15, SDG16, SDG17.**



The FQ App

In **United States**, **SAP Next-Gen** is a purpose driven innovation university and community aligned with SAP's commitment to the Sustainable Development Goals and supporting SAP's 437,000+ customers across 25 industries and 7 lines-of-business in 180+ countries. The community leverages 3,700+ educational institutions in 116 countries, 150+ SAP Next-Gen labs/hubs at universities and at partner and SAP locations, 160+ SAP Next-Gen Chapters, 25+ innovation with purpose communities through a partnership with Startup Guide, a growing global network of 30+ FQ Lounges, the Home of Equality @ Campuses in a partnership with The Female Quotient, as well as startups, accelerators, tech community partners, venture firms, impact investors and philanthropists, futurists, and purpose driven institutions. The community also leverages SAP's 100+ innovation, development and customer experience centers and SAP's network of 18,800+ partner companies. 3SAP Next-Gen connects companies and citizens around

the world to academic thought leaders and researchers, students, startups, accelerators, tech community partners, purpose driven partners, venture firms, futurists, social activists, government leaders, impact investors, and SAP experts to reimagine the future of industries, the intelligent enterprise and the experience economy; seed in disruptive innovation with startups; build skills for digital futures; and use new mindsets such as science fiction thinking to accelerate “Innovation with Purpose” linked to the UN SDGs. Companies can benefit from SAP Next-Gen services as well as events where digital innovators come together in an open “innovation with purpose” community to foster the future of industries and the experience economy with SAP’s latest technologies including Qualtrics Experience Management solutions and in support of SAP’s commitment to the UN Global Goals for Sustainable Development. The project is relevant to **SDG4, SDG5, SDG10, SDG16**.



BotUp

WSIS Prizes Contest 2020 Nominee

In **Viet Nam**, **BotUp** is a platform that helps business people quickly create a micro apps such as: food ordering, flight booking, meeting scheduling, customers survey, employee services evaluation ... on messaging platforms such as: Messenger, WeChat, Telegram, Zalo, Viber and so on. It figure out main issues of business people who want to develop applications that support their customers:

- High costs when developing applications for platforms (IOS, android, Web app) and maintenance costs (server infrastructure, technical personnel) per month.
- High cost to get 1 customer until customers subscribe (Customer Acquisition Cost).
- High costs have impacted on profitability and efficiency of business application, which makes the application only exist for a short time.

BotUp helps businesses develop applications on BotUp with the "Platform on Platform" solution by developing applications based on larger applications to optimize costs, get a fast customer and increase conversion rates. Until now, BotUp help its customer save 40% cost of Marketing. Moreover, BotUp can connect with different partners who are chatbot, management system, payment gate. The project is relevant to **SDG8**.

Actionline: 7-EMP

Recruitment Process Management as a Shared Service for Government Agencies of Bangladesh

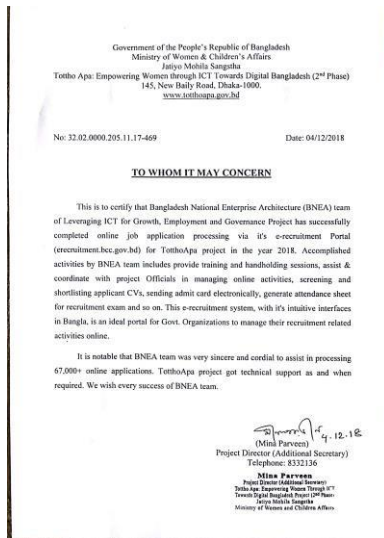
WSIS Prizes Contest 2020 Nominee

In **Bangladesh**, The concept of shared platform/services to facilitate citizen service delivery utilizing emerging technologies is a crucial part of Bangladesh National Digital Architecture. **Recruitment Process Management** ensures cost reduction and optimization is achieved while improving process, information systems and technology support in a disciplined manner. Bangladesh Computer Council established this System as a shared service for all govt agencies. It enables the Govt agencies to accomplish end-to-end recruitment process and related tasks through increased interoperability, enhanced security measures, reduced risk and lower procurement costs. It's a web based secure system to process recruitment management activities electronically. It covers activities from Job posting to shortlisting of candidates. There is facility to manage Question Bank and online exam. It contains Provision of Online transaction verification with Bank. It's integrated with DLS platform (a private Blockchain infra) for storing admit card info. It has 3 modules: e-Recruitment module, Exam Controller module and Online Exam module.

Results achieved: This System is a successful project based on implementation achievements. It has been used by 24+ Govt agencies/projects. Recruitment of 1800+ applicants is already completed! It has processed 1,50,000+ online job applications against 70+ posts of 50+ different recruitment notices in last 2+ years. Several entities have used this system multiple times. 2-3 new agencies are in pipeline.

Impact: It has helped agencies to process large number of job applications within shortest time & effort and enable agencies to focus on their core functionalities. We are seeing impressive response from govt organizations and applicants. It's saving govt expenditure to a great extent as they no longer need to procure similar system. Job applicants from rural areas are now able to apply with ease and relieving them from standing in queue in bank branch. It's creating positive impression among applicants about govt services The project is relevant to **SDG1, SDG8, SDG10**.

WSIS Stocktaking 2020 Global Report: ZERO DRAFT



National Skills Portal

WSIS Prizes Contest 2020 Nominee

In **Bangladesh**, Honorable Prime Minister of Bangladesh has declared that Bangladesh will be a developed country by 2041 and to achieve this goal 73M skilled youth will be needed. To address this vital issue, **National Skills Portal** (skills.gov.bd) was launched in 2018 by Mr. Mustafa Jabbar, former Honorable Minister of the Ministry of Post, Telecommunication & Information Technology with the vision for the portal to act as a collaboration hub for youth, skills providers and potential employers; to serve as a platform to monitor and mentor countrywide skills development initiatives; help youth enroll in skills development trades; ensure e-Learning of TVET courses and face the challenge of unemployment. National skills portal (NSP) has developed to solve the problem of the Unavailability of a unique platform for skills and job seekers, at the same time, for Government in skills development and job placement for the unemployed population with upscaling and rescaling program. NSP is also a collaboration hub among youth, industry and skills providers. For data-driven decision making, government use NSP as a one-stop service monitoring platform in skill development to develop future market demands and opportunities through public-private partnerships. NSP is playing the role of matchmaker among youth, employer and training service provider (TSP). Till now, 200k unemployed youths, 1.6k industries and .1k TSP have been enrolled in multiple skill development program through this portal. NSP guides the youth to develop and boost up their career. NSP is playing as skills ecosystem in Bangladesh. National Skills Development Authority (NSDA) uses NSP as monitoring, nurturing and decision-making platform. All the TSPs and industry skills council found government orders and solutions in NSP for what they should report to NSDA. So, as a whole, all public and private organizations of skill developments are working under a same roof. In parallel, citizens get all skills development and job-related information here. The project is relevant to **SDG8**.



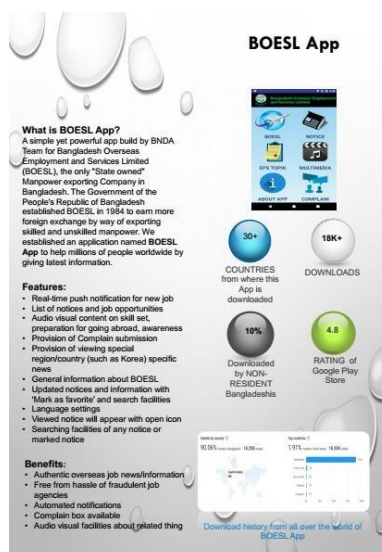
BOESL App – An aid for socio-economically disadvantaged people of Bangladesh to work abroad

WSIS Prizes Contest 2020 Nominee

In **Bangladesh**, **BOESL** is the only "State owned" Manpower exporting Company in Bangladesh. The main purpose of this company is to provide honest, efficient and quick services to the valued foreign employers in the field of recruitment and deployment of manpower with the full satisfaction of the foreign employers. Objective of BOESL app is to provide help/assistance to poor and lower income people of Bangladesh to get news and info on new job opportunities with tip of the finger. It's the 1st and only mobile based solution from BOESL. It was Launched on 12th Dec 2017 by Hon'ble Speaker of Bangladesh National Parliament. It's FREE to download. Job seekers can get useful and authentic info from smartphone app even from home. It provides Real-time push notification for new job opportunities! Job seekers are able to submit complain to BOESL authority from his/her smartphone. BOESL works in both horizontal and vertical mode. It is developed using Open source tools/technologies. It's available both in Apple store and Google play.

Results achieved: They will term the BOESL App as a successful project based on implementation achievements. The app has been downloaded 22,500+ times from 30+ countries of the world. 10% of the total downloads are done by Non-Resident Bangladeshi people working in abroad. 350+ job opportunities and related news/notices has been published in the app so far. It's rating is 4.7 in Google play.

Impact: We are seeing impressive response from Bangladeshi citizens and NRBs. Based on feedback from user community, iOS version of the app is released recently. Bangladeshi citizens, aspiring to go abroad for employment, are getting timely and authentic news instantly as soon as it's published by BOESL. They are able to submit complain using the app. Previously, it required them to come to capital from remote area. Job applicants from rural areas are now able to apply with ease and relieving them from the hands of middlemen/broker to a great extent. It's creating positive impression among job seekers about govt services. The project is relevant to **SDG1, SDG8, SDG10**.



SKILLSET

WSIS Prizes Contest 2020 Nominee

In **Israel**, **SKILLSET** is a unique characterization and selection system for job applicants with disabilities, providing reliable profiles with a high predicting ability concerning the performance of individuals with disabilities. SKILLSET streamlines the recruitment procedure for people with disabilities and promotes equal and quality employment for the candidate as well as the employer. SKILLSET's system focuses on locating and predicting the variety of actual performance abilities of the candidate. SKILLSET integrates advanced technological systems with "Job Analysis" questioners providing the candidate with practical and specialized tests, simulating the future work-related tasks. The project is relevant to **SDG9, SDG16**.

SWIFT Code Initiative

WSIS Prizes Contest 2020 Nominee

In **Lesotho**, **SWIFT Codes** is a three point strategy initiative that considers working with women of all ages in three key areas to address inequality, unemployment and undignified engagement spaces.

1. Advocate for innovative, inclusive and safe spaces (platforms such as conferences and seminars) for women and girls to create/develop through technology. Girl Tech Talk Conference founded by two women led organization in 2019 is proving to attract public and private support. It is a first in Lesotho and Southern Africa hemisphere.
2. Upskill young unemployed women as GEM Fellows in areas of technology, farming, creative industries and leadership to diversify their skills beyond what they studied to cope with challenges of unemployment.

The project is relevant to **SDG5, SDG9, SDG16**.



Developing Malaysia's Global Online Workforce

WSIS Prizes Contest 2020 Nominee

In **Malaysia, The Global Online Workforce (GLOW)** programme was introduced to develop competitive and sustainable freelancers and digital entrepreneurs which were able to bid and win projects/jobs globally and earn lucrative income via various international freelance marketplace platform such as Upwork.com and Freelancer.com. The GLOW programme focuses on community with higher skill sets, consist of unemployed graduates, young professionals, degree holders housewives and retrenched workers and ultimately is about Exporting Malaysian Professional Services. GLOW is currently being rolled out to universities as part of selfemployability programme to develop new digital entrepreneurs that will export Malaysian highvalue services. In addition, the programme also intend to address the increasing number of unemployed graduates and skilled workers who are being retrenched. The GLOW programme is also being positioned to address the issue of latent workforce; encouraging those who are currently outside of labour workforce, especially women with qualifications to discover new ways to contribute to the economy and continue to enjoy freedom especially from traditional employment requirements. The project is relevant to **SDG4, SDG8, SDG9, SDG10, SDG11, SDG17**.

Fomento, Constitución y Fortalecimiento de las Empresas Sociales y Solidarias de la Ciudad de México (FOCOFESS 2019)

WSIS Prizes Contest 2020 Nominee

In **Mexico, Promotion, Constitution and Strengthening of Social and Solidarity Enterprises of Mexico City**: The program is focused on the following issues: The social and solidarity enterprises in Mexico City are made up of unemployed people lacking training in administrative, marketing, and production. This has led to a large part of this population employed within informal commerce. As the population making up social and solidarity enterprises has mostly empirical knowledge about the administration of cooperative societies, this generates difficulties in the administration, production, marketing and / or project development processes. The program therefore provides advisory services in training for production and employment organizations, preparation of business plans, cooperative training, specialized technical assistance, and

WSIS Stocktaking 2020 Global Report: ZERO DRAFT

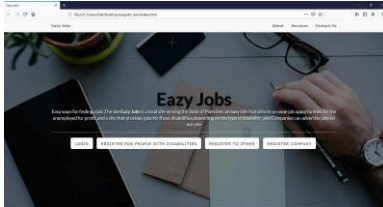
differentiated economic support for the acquisition of equipment, machinery and/or services focused on strengthening production, marketing and/or promotion processes. This is to develop capacities that allow beneficiaries to enter into and remain in the market, contributing to the generation of formal jobs in Mexico City. In the Subprogram for the Strengthening of Cooperative Societies in Mexico City, 150 such societies received indirect support in the form of training and technical assistance by higher education institutions and were granted machinery and materials for the promotion and dissemination of their cooperative societies, in addition to direct financial support for the acquisition of equipment. The project is relevant to **SDG8, SDG9, SDG10, SDG11, SDG16, SDG17**.



Eazy Jobs

WSIS Prizes Contest 2020 Nominee

In **Palestine**, The Special Needs Employment website is one of the ideas that we must pay attention to in order to bridge the gap between employers and job seekers, who have several obstacles that prevent them from getting the right job opportunities. From this perspective, we started designing a website that aims to meet the wishes of two categories. Two key labor force members in the labor market, women and persons with disabilities, by providing flexible employment opportunities that go beyond the barriers of lack of transportation, the inadequacy of the workplace for female job requirements and the need to care for children or the elderly during the working period. The site contributes to bridging the gap between employers and job seekers who have prevented them from obtaining suitable job opportunities, such as: (transportation and geographical dimension). The importance of this site lies in trying to eliminate the problem of unemployment in our Palestinian society in particular and other communities in general. People with disabilities also aims to try to recruit as many people as they can work according to their talents and abilities. Save time and effort on housewives or home workers. The project is relevant to **SDG1, SDG5, SDG8**.



TESSA - Our Youth Virtual Assistant

WSIS Prizes Contest 2020 Nominee

In **Philippines**, **TESSA**'s strategy is to work with vulnerable children and especially girls so that they can learn, lead, decide and thrive. Within the strategy we have an ambition to transform the lives of 100 million girls. Child sponsorship and grassroots community work are central to our strategy and achieving this ambition. Plan International invests in six global thematic networks, called the Areas of Global Distinctiveness, which would capitalize on the knowledge, resources and experience of the Plan Federation, and contribute the most to the lives of children and young people. Youth Employment and Entrepreneurship is one of the six AoGDs. The AoGD on Skills and Opportunities for Youth Employment and Entrepreneurship aims to ensure that vulnerable and excluded young people, especially young women, are resilient and actively engaged in decent work of their choosing. TESSA works with agents of change – private sector, training providers, young people, civil society (including youth organizations), governments and international actors (including multilateral development banks) to drive policy and practice changes in favor of young people's access to the world of work. The project is relevant to **SDG4, SDG5**.



DICT Mindanao Cluster 1 Digital Hub

WSIS Prizes Contest 2020 Nominee

In **Philippines**, **The Digital Hub** is a learning, innovation, and co-working space facility which is open to the public for 24/7. It has three-fold objectives: (1) Provide access to ICT resources and opportunities. The Hub is equipped with 25 computers and has served over 2,500 people for the past two years. Visitors use the Hub for learning, research, accessing government services online, applying for jobs, or freelancers working for their clients. Due to high demand, the Hub became accessible to the public for 24/7, including weekends and holidays. (2) Provide training on ICT skills; Various capability building activities were also conducted to include training on basic to advanced office productivity tools, modules on Digital Marketing, and other online freelancing

courses. From 2017 to date, 718 were trained while a fraction of this number is now working online. (3) Provide a facility for digital workers. The Hub served as a venue for online job fairs and co-working space for online freelancers. This year, the facility has served 12 call center agents and 54 online English teachers. Freelancers using the Hub are now earning a total of 1.5 million a month. Through this initiative the number of online English teachers grew rapidly to 1,000. The project is relevant to **SDG8**.



reBIRTH on the internet (REviver na Rede)

WSIS Prizes Contest 2020 Nominee

In **Portugal**, **reBIRTH on the internet (REviver na Rede)** is an online project to support the use of digital social networks to strengthen new forms of active job search and promote employability, social integration and socialization in the Region of Madeira, Portugal. The goal is to help unemployed adults take advantage of social networks (e.g. Facebook) to improve in their employability. These social global tools 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 that has less than 255.000 inhabitants. The online spaces we have been managing have become very dynamic, with many testimonies of people who have been able to find jobs through the sharing of job offers available there. Although the main results are not measured directly, because it is about inducing changes in behavior and attitudes, studies indicate that the project has already contributed to 2,957 people finding some kind of job (temporary, parttime, full time). It should also be noted that 6,428 people have said to know someone in these circumstances. The project has a strong pedagogical, social and solidarity basis, relying on voluntary work, in a social entrepreneurship spirit. reBIRTH is already planning to expand it to another context, and further replicate it (inter)nationally.

VIDEO: <https://youtu.be/MbguKMLfaHE> The

project is relevant to **SDG4, SDG8**.



Youth Employment and Employability Platform

WSIS Prizes Contest 2020 Nominee

In **Rwanda**, **Youth Employment and Employability Platform (YEEP)**, as the Youth Empowering Project (YEP) is the direct response to Rwandan Youth workforce especially young women and other young disadvantaged people that are either leaving academia or have already entered Labor Force, because it will be the bridge between education community and employers to build the capacity of later workers.

Mission: YEEP is mainly aimed at adding value to the Rwandan Youth workforce by bridging their Skills Gap through digital and other enabling tools or programs. Below are specific objectives: 1) Raise awareness about employment opportunities in Rwanda. 2) Support informal education as an important skill at work to empower young people and women to efficiently develop and use their skills to get into employment. 3) Empowering the future workforce through internships as work experience. 4) Certify workforce soft skills they have to perform their job successfully and advance in career. At least 5,000 job candidates or transition workers will be certified in the first year. 5) Empower Youth, especially young women and young people with disabilities to become job creators not only job seekers. 6) Develop the best leading Big Data-based Labor Market Information System (BD-LMIS) in Rwanda.

Target Communities: Youth in general and especially young women and young people with disabilities. Programs: YEEP. Added values products: Professional Skills Certification, Internship Placement, Career Mentoring backed with Digital Community Program. Delivery of YEEP products to targeted communities: ICT Tools & Services to Support YEEP Programs Career Development Centers in Kigali and each Province of Rwanda. YEEP dissemination make YEEP a successful project: Via Rwanda Job Day and BusY Conference Resulted impacts: The qualified workforce in Rwanda, more jobs and hire more people, big Data-based Labor Market Information System (BD-LMIS). The project is relevant to **SDG3, SDG4, SDG5, SDG8**.

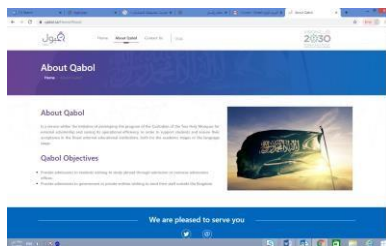


Qabol

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, **Qabol Platform** is an online platform offering services to students willing to study abroad, international educational institutions, government and private sectors scholarship providers, recruiting and training entities, admissions agencies, educational consultancies and the deputy of scholarship in the ministry of education. The platform will provides information and services for first step in the abroad educational and Intellectual journey. Qabol contributes in employment growth, reduction of the unemployment ratio, and guarantees equal opportunities to all individuals of the Society (Male-Female-Disabled) in getting information of suitable

opportunities for overseas education and training through this platform. It also provides data by co-operating with international educational Institutions and local educational organizations, to offer opportunities of getting admissions from participating educational institutions, and enables e-Communication between admission seekers and admission providers. Participation of international educational institutions of various Countries will contribute to present continuous and new opportunities in education and training. Furthermore Institutions will be able to receive students and scholarship sponsors applications through the Platform. This platform contributes in providing reports and statistics for education improvement, evaluate education process performance and provides indications of goal achieving status. Qabol also supports raising education levels, quality, equality, and human resources development in the Kingdom of Saudi Arabia. The project is relevant to **SDG4, SDG5, SDG8**.



Skill Register

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, An electronic platform through which the non-academic personal and professional students' skills are monitored and documented during their undergraduate studies. **Skill Register** will enhance the students' awareness of self-development, community engagement activities, and voluntary work. By the students graduation, an official transcript will be given to students which will assist and enhance their career opportunities after graduation. SR is serving more than 60000 undergraduate students.

The project is relevant to

SDG8, SDG16.



Musaned

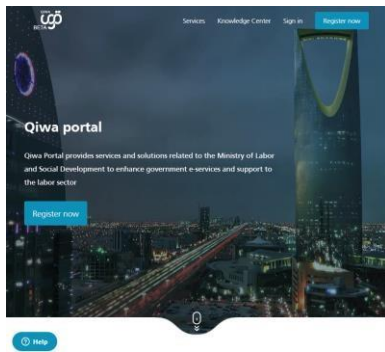
In **Saudi Arabia**, **Musaned** is an electronic platform and a new integrated system that facilitates recruitment procedures in an unprecedented manner. Under the supervision of the Ministry of Labor and Social Development in order to facilitate the procedures for the recruitment of domestic workers and to increase the level of protection of the rights of all parties, where Musaned raise awareness of employers and domestic workers to clarify their rights and duties. In the sense that everyone who has a role in the recruitment process is clear before him responsibilities, rights and duties towards The project is relevant to **SDG8, SDG9**.



Qiwa

In **Saudi Arabia**, **Qiwa** is an ecosystem that aims to create an integrated competitive labor market that relies on total transparency to become a corner stone in developing the economy. Qiwa's mission is to transform the entire services provided by the ministry of labor and social development to give the best quality of services by developing creative solutions to all labor market parties. The targeted segments are: Businesses, Individuals participating in the labor market (Saudi and expats), and government. The project is relevant to

SDG8, SDG9.



YLAB Academy Application

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, **The Young Leaders Advisory Board (YLAB)** was established in 2011 to act as a bridge between the youth of the company and executive management. As an autonomous body with a direct line to the Strategy Council, YLAB facilitates two-way communication between millennials and senior management, and provides a Gen-Y perspective on a wide range of complex corporate issues. The YLAB Academy is a very important part of the admissions process to becoming a YLAB member. The Academy is administered by Strategy and Market analysis annually, with stakeholders spanning all of Saudi Aramco departments, Admin Areas and Business lines from all over the kingdom. This system will automate the application process for the eligible employees. The Application process starts with submitting a thorough and complete application which includes information about work experience, performance appraisals, educational credentials as well as recommendation letters from current or previous Saudi Aramco management. After that, the application will be scored and ranked by the business line and the YLAB team. Finally, the applicant will be shortlisted and invited to the academy. During the academy, the candidates' interview remarks will be captured in the system to help the management and YLAB team to select the final team. The application target young talent irrespective of gender, nationality, and race. The project is relevant to **SDG5, SDG8.**



Increasing the Women Participation in the Labor Force

In **Saudi Arabia**, Saudi Arabia has launched a massive initiative for increasing women's participation rate the Labor Market and increase contribution of women to economic and social development. **Increasing the Women Participation in the Labor Force** is one of the pillar initiatives of the National Transformation Program, to achieve the ambitious goals of Saudi Arabia's Vision 2030. Main target for this program are Saudi Women of working age. They have many sub initiatives put in place to fulfill our main objective of increasing women's participation rate in all sectors including the Tech sector and to remove all the barriers that stand in the way of their joining the labor market. The sub initiatives to help us in achieving our main objective includes: 1. Increase woman's share in the labor market through training and awareness, encouraging flexible work, remote work and improving employment mechanism's for women in all sectors. 2. Increase woman's share in managerial positions through training and leadership orientation for women cadres, empowering women in the civil service and strengthening their leadership role. 3. Promote the culture of work and develop skills (personal and technical) for women. 4. Develop the enablement of woman's work support - example transportation, nurseries and attractive work environment. Some of the activities that were implemented to achieve the overall objectives are: An essential element that needed to be taken care of was changing the mindset of accepting women to work in all sectors. As such, we conducted an awareness media campaign to highlight role models, success stories and different professions to be followed. The project is relevant to **SDG5, SDG8**.



E-COMMERCE MOBILE APPLICATION AFRICAN AWARDS

WSIS Prizes Contest 2020 Nominee

In **Senegal**, **ECMAAAA** is a project run by the African Civil Society on Information Society and a non for profit project. The award project offers a platform opportunity to young innovators in Africa in the mobile application space to present creative ideas to develop ecommerce in African states description and also contributing to the achievement of the global Sustainable Development Goals (SDGs). For now the Projects submitted as part of the competition must target one or more of the sectors categories but not limited to: Agritech, Banking finance and insurance, Health,

energy, Industry, TIC, education and environment. The impact of African youths in ecommerce space has improved because many youths in Africa can now afford low-cost phones, which have become increasingly popular in the developing world. Because of this market niche and need of innovative solutions in African societies that address the fundamental material and existential problems that these countries face, each year the ECMAAA. ECMAAA aims to facilitate the integration of young start-ups in the continent in the ecommerce through innovations in mobile applications three winners are selected in each edition. In the spirit of pan africanism, this Project seeks to engage more African countries, partners and sponsors into the award project. The project is relevant to **SDG1, SDG4, SDG5, SDG10, SDG11, SDG13, SDG16, SDG17**.



Pully under the microscope : Implementation of U4SSC KPIs in the City of Pully WSIS

Prizes Contest 2020 Nominee

In **Switzerland**, Recognizing the growing impact of digitalization, **Pully** has embarked on a journey to integrate new technologies into its city operations. In the process of becoming smarter and more sustainable, Pully has implemented numerous ICT projects aiming to improve the quality of life of its residents, strengthens relationships among citizens and leverage the full benefits of digital technologies. In 2017, the city decided to partner with the U4SSC in piloting the Key Performance Indicators for Smart Sustainable Cities. The objectives of this partnership is; to test the viability and applicability of the KPIs; to measure the effectiveness of the smart projects the city has developed so far; and to measure the city's progress in the SDGs. The results of this collaborations are contained in this project. It has successfully highlighted and measured the contribution of ICTs in different aspects of the city, from environmental quality, water and sanitation, culture, to education, food security, housing, employment, innovation and more. Each indicator is connected to one or multiple SDG targets, therefore, the results have constructed a holistic view on the city's progress on the SDGs. The outcomes of this project has supported Pully in improving its smart strategy and establishing a clear pathway to reach the SDGs. The project is relevant to **SDG11**.



Design Your Future

WSIS Prizes Contest 2020 Nominee

In **Turkey**, **Design Your Future** Program focuses on 3 main areas; ICT training, Entrepreneurship and employability. The program aims to develop digital skills and capacity of youth to support their employability and entrepreneurship in the ICT sector. In the context of ICT training, we give training on coding for children, digital literacy, cloud computing and IoT training for young people. In the context of entrepreneurship and employability, we organize entrepreneurship and informatic seminars, technology meetups, entrepreneurship camp, and hackathons. The project is relevant to **SDG4, SDG8, SDG10, SDG17**.



DevelopHer

WSIS Prizes Contest 2020 Nominee

In **the United States**, **DevelopHer** is a national, award-winning platform bridging the gender wage gap, inspiring, and empowering women to self-advocate to break glass ceilings. Through DevelopHer thousands of women have negotiated higher salaries and built confidence to secure better jobs. DevelopHer offers a repeatable, scalable, and affordable platform providing women knowledge and specific tools and empowerment to realize their value and potential, take personal

responsibility for their career growth and reach higher to create success. DevelopHer's vision is to share this mission to companies and educational institutions nationally. The scalability and affordability of DevelopHer programs has empowered thousands of women to earn 26%, 43%, and 67% salary increases in just a single negotiation. DevelopHer creates real change at a grassroots level. Women have also gained confidence to secure better positions and move beyond glass ceilings, bridging the opportunity gap. DevelopHer gives women tools to earn higher salaries and confidence to reach higher in their careers. This change and impact are evidenced by the clients DevelopHer has served, and the awards DevelopHer has received. DevelopHer makes career success tools accessible to all women. As a recognizable brand, DevelopHer conveys a vision of knowledge and empowerment and broadcasts this message to thousands of women. The project is relevant to **SDG5, SDG8**.



AYITIC GOES GLOBAL

WSIS Prizes Contest 2020 Nominee

In **Uruguay**, **Ayitic Goes Global** is a pilot program ran by IDRC and LACNIC, aimed at identifying the enabling conditions for young Haitian women to find employment in the digital economy by addressing skills and infrastructure deficits in Haiti. Looking at the future of work and emerging opportunities in international digital markets, the project rationale is that digital employment can mitigate poverty and gender inequality in Haiti. From 2017 to 2019, the project has brought together key Haitian institutions working in the ICT sector with leading experts in digital learning from the Caribbean Open Institute to design a successful online skill training strategy for resource-constrained environments such as Haiti and to test strategies to promote the inclusion of women from disadvantaged backgrounds in the digital economy. Additionally, the project has also undertaken a range of actions to strengthen local technical internet capacities and infrastructure, given that connectivity, represents a key challenge to the growth of a digital services market in Haiti. The project is relevant to **SDG4, SDG5, SDG8, SDG10**.



Actionline: 7-ENV

Scream to Survive Intelligent System to Life-Saving in Disasters Relief for Devlopping and Poor Countries

WSIS Prizes Contest 2020 Nominee

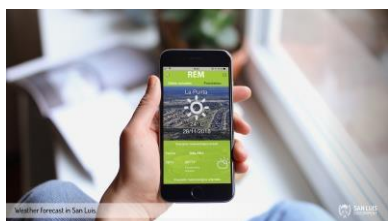
In **Algeria**, Disasters are becoming more and more common around the world, making technology important to guarantee people's lives as much as possible. One of the most modern advances of recent years is how AI is used in disaster relief. Researchers propose works based on new technologies (IoT, Cloud Computing, Blockchain, etc.) and AI concepts (Machine Learning, Natural Language Processing, etc). But these concepts are difficult to exploit in low and middle socio-demographic index (SDI) countries, especially as most disasters happen in. We propose project called: S2S intelligent system, based on voice recognition to life-saving in disaster relief. Generally, a disaster victim is enable to access to his Smartphone and ask help, with this system, saying "help" will be enough to send automatically alerts to the nearest Emergency Operation Services (EOS). S2S is composed of two parts: Intelligent application embedded on citizens and victims Smartphones, and S2S System for the Emergency Operation Services. The project is relevant to **SDG3, SDG11, SDG13**.



Weather forecast in San Luis

WSIS Prizes Contest 2020 Nominee

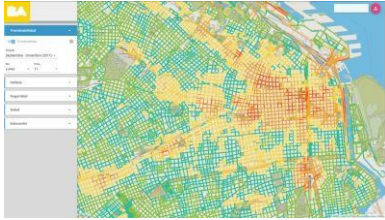
In **Argentina**, there is important information on the web about the global state of weather that comes from national observation networks, radars and satellites. Likewise, forecasts for the entire planet are published on the web, prepared with sophisticated computer models. The vast network of automatic weather stations operated by San Luis (58 stations) makes it possible to validate these forecasts and consequently select which websites offer the best forecasts for each of 39 locations. Thus, **Weather forecast in San Luis**, the best forecasts for the province available in the world, is used. With this methodology, the weather forecast for the day and the next two (72 hours) is issued. Additionally, when there is a risk of unfavorable events (fog, hail, etc.), alerts are issued as soon as they are detected. The forecasts are published on the website (www.clima.edu.ar) with high receptivity (120,000 monthly entries). To this, are added the local news media that disseminate these forecasts and conduct interviews with the forecasters. Related information is disseminated on Facebook, Twitter and Instagram. The prediction of the general weather and the issuance of alerts are made by 6 forecasters trained at the University of La Punta, who cover 365 days a year from 6 to 21 hours. The project is relevant to **SDG13, SDG14, SDG15**.



Walkability Index for the streets of Buenos Aires

WSIS Prizes Contest 2020 Nominee

In **Argentina**, for urban and transport planning, it is important to have tools that allow to understand the mobility patterns of people throughout the cities. Understanding the mobility flows that occur in a city enables appropriate infrastructure and policy decisions that provide transportation alternatives and encourage efficient ways of moving around, especially taking into account the problems of traffic congestion and environmental pollution, caused by transport and the direct relationship it has with the health and life quality of citizens. The **Walkability index** is a tool that seeks to describe the pedestrian flow in each of the streets of Buenos Aires City and 40 districts in the Province of Buenos Aires. This service is designed entirely with tools that process big data, such as the one acquired from the electronic ticket system of transportation (SUBE). It is a service that provides state organizations with information on the mobility of individuals considering street and time period, to make data-driven decisions for public policies. We aim to become a more sustainable city. The project is delivered to the different areas that required it in a BI dashboard, and it will also be included in the new version of the Map of Commercial Opportunities, a platform for citizens. The project is relevant to **SDG3, SDG9, SDG11**.



Sidewalk Predictive Model of Buenos Aires City

WSIS Prizes Contest 2020 Nominee

In **Argentina**, Cities are constantly growing and with them, the need to develop and maintain an infrastructure that allows neighbors to live with good quality conditions. It is a challenge for local governments to be able to meet these demands, which is why it is very important to incorporate innovative tools that provide fast and efficient solutions. The General Directorate of Information Sciences together with the General Directorate of Intervention Planning in Pedestrian Paths - in charge of the planning of the maintenance of the Sidewalks - decided to design and develop the **Predictive Analysis Model of Sidewalks**. On one hand, this tool seeks to determine which paths are more likely to break; and on the other, which are the companies that generate the most breakage -due to underground arrangements, as well as those that have a low degree of efficiency in the repairs they make. The final product will be displayed on a Power BI dashboard for an easier and faster preview. The Sidewalk Predictive Model of Buenos Aires city aligns with the idea of generating data-driven public policies to achieve innovative, efficient solutions to improve quality of life of the residents of the city. The project is relevant to **SDG9, SDG11, SDG12**.

Data exploration



China Unicom “Smart Blue” Public Service Big Data Platform

WSIS Prizes Contest 2020 Nominee

In **China**, as one of the world's largest telecom operators, China Unicom provides services to billions of mobile subscribers. Therefore, China Unicom has a large amount of telecom big data, which contains rich network and user information. In order to give full play to the value of big data, and better protect the environment and better implement WSIS Action Lines in order to promote the realization of SDGs, the “Smart Blue” public service big data platform was proposed, which is a cross-industry integration platform for environmental protection. **China Unicom “Smart Blue” public service big data platform** is dedicated to improving the application of big data technology. It positively integrates telecom big data with air quality data, population data, and behavior data for the first time to achieve refined air quality prediction and pollution traceability. Aiming at the key pollution areas, the platform can realize the functions of people flow and vehicle disintegration early warning so as to alleviate air pollution. What is more, the platform can rack pollution discharges, assess the impact on resident residents and enterprises,

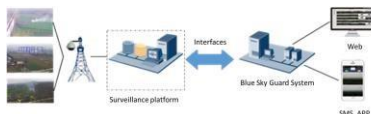
and provide support and reference for government guidance and decision-making. The project is also proved to have the transplant ability, which can be applied in other fields and different communities as it provides a technological model and architecture. The project is relevant to **SDG3, SDG5, SDG8, SDG9, SDG11, SDG13**.



The Blue Sky Guard System

WSIS Prizes Contest 2020 Nominee

In **China**, **The Blue Sky Guard System** aims at building an automatic straw-burning monitoring system to reduce air pollution. From this perspective, this project is closely related to WSIS Action Line E-environment, it will foster cooperation between the ICT communities, the environmental community, the meteorological community working on ceasing burning straw to reduce greenhouse gas emissions. From September, 2017 to November, 2017, even zero burning point was found in Henan Province, China, showed by satellite, which is a historic breakthrough. This project has a strong correlation with SDGs 13, 3, 9, and 12. By reducing the burning of wheat straw and cornstalk through innovation in the field of ICTs, carbon emissions can be reduced, while the damage to human and other land life is mitigated. The same model can be promoted in other countries and regions reusing existing infrastructure such as communication towers. It can also be applied in river pollution prevention and soil loss management. No more investment is needed to achieve continuous target in coming years except simple maintenance cost. It is followed by the comprehensive utilization of feed, fertilizer, biogas energy, raw materials of papermaking. The project is relevant to **SDG3, SDG9, SDG12, SDG13**.



DEVELOPMENT OF THE PORTABLE PHOTOVOLTAIC SOURCE FOR USE OF THE ARMED FORCES

WSIS Prizes Contest 2020 Nominee

In **Colombia**, **development of a rechargeable photovoltaic source** based on solar panels, modular, that meets the characteristics of economy, portability and functionality, which provides the basic energy to supply electrical power to the main communication equipment used by mobile patrols in areas rural.

Results achieved: The project patent is achieved through Resolution No. 23666 S.I.C Generated impact: When developing this device, it is intended to optimize the processes and procedures developed by the operational groups, both police and military, in areas of the national territory where there are no electric power supplies, to supply electronic and communications equipment

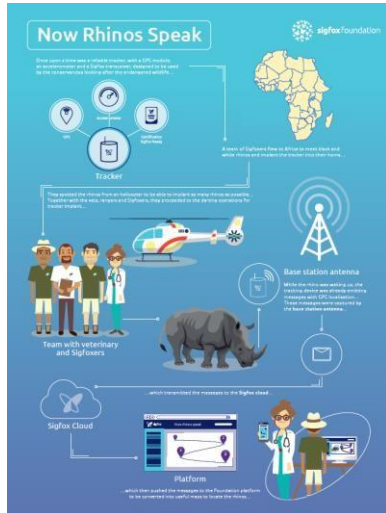
as radios and computers used by members of the public force that will have enough energy to maintain constant communication. The project is relevant to **SDG7, SDG11, SDG13, SDG16.**



A less intrusive rhino conservation, a hope for endangered species

WSIS Prizes Contest 2020 Nominee

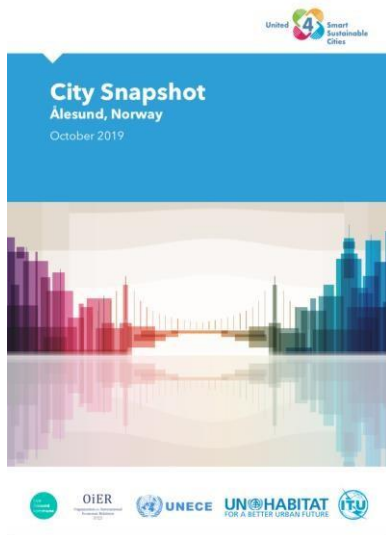
In **France**, A lot of solutions have been deployed to help endangered species. But looking closely to these devices (collars, tags) it is a known fact that they all are very intrusive, very expensive, consume a lot of energy and do not last long in terms of autonomy. As a result, these wild animals need to be bothered very often to get the equipment renewed. It is not adapted to wildlife which needs as little human or technical intervention as possible. The Sigfox Foundation, using the Sigfox 0G network, has imagined a new tracking/monitoring solution, to help rangers to better monitor a population of wild rhinos in Africa. The Foundation has rolled out **the Sigfox frugal network** (low energy, low cost, long-range radio signals): three base stations fully working in autonomy, covering more than 3000 km² conservancy area. Partnering with a group of rhinos' conservationists, we prototyped a small tracker giving a GPS signal every day, directly installed in the horn of around 20 black and white rhinos. It allows collection of extremely valuable data on the location and movements of the animals in a very simple way. This prototype is much less intrusive, barely more than an inch but having a battery autonomy of several years and estimated at around 50 dollars per unit. The next step is to produce more sensors at the lowest price to equip a maximum of rhinos and contribute to their survival. With this objective in mind, Sigfox Foundation is currently working with a manufacturer to develop an industrial version of the prototype. The design, hardware and software of this very small device are available in order to accelerate the development of similar devices for other species and amplify the impact globally. Our objective is also to foster innovation and the use of emergent, simple and affordable technologies to tackle global causes. In addition to the rhinoceros device, our Foundation is working on a PoC to use sensors to connect parks and reserves, in order to provide rangers with information about asset movements. The project is relevant to **SDG7, SDG9, SDG15, SDG17.**



Implementation of U4SSC KPIs in the City of Ålesund

WSIS Prizes Contest 2020 Nominee

In **Norway**, The City of Ålesund recognizes that climate change is a global challenge that requires the city to work with local entities, regional actors, and the international community to develop truly global solutions. In response to climate threats, the city has taken up the challenge to become the second lab for the development of smart sustainable city. The Lab has since developed smart solutions using simulation and visualization technologies that aimed to improve the quality of life of its citizens, accessibility to social services, make the city more climate resilient, promote e-mobility, e-governance, and more. However, the Lab recognizes that in order to foster the digital innovation and ensure the smart solutions are effective, it is important to leverage benchmark tools that are able to evaluate smart performance and sustainability at the same time. In 2018, the Lab decided to partner with the U4SSC to pilot the Key Performance Indicators for Smart Sustainable Cities. **Implementation of U4SSC KPIs in the City of Ålesund** have successfully evaluated the contribution of ICTs in the three key aspects of the city: environment; economic; and social and culture. The results have given the Lab vital information on how to improve its approach to digital technologies and strengthen its capacity to develop more reliable, more effective and more innovative solutions. Most impressively, by piloting the U4SSC KPIs, it has also reported on the city's progress on the SDGs since the KPIs are connected to the SDG targets. This has allowed the Lab to further catalyze actions on the SDGs. The project is relevant to **SDG11**.



AstuteBin

WSIS Prizes Contest 2020 Nominee

In **Pakistan**, **Astute Bins** are IoT enabled smart bins. It produces against poor mechanisms of waste collection. Astute Bins is a complete system with perfect combo of software and hardware bins are capable enough to communicate with cloud-based interface and inform municipal worker with the volume of waste, Nature of waste presence of toxic gas in or near by the bins system also recommend the size of bin according to amount of waste produces on a particular location. The novelty of the solution introducing a monitoring mechanism on municipal worker as per work done by the worker system will send an endorsement to municipal authority which will be count in as dignity & performance factor for his salary. Astute Bins are self-treatment unit, with help of sensors inputs and machine learning algorithm it computes the growth of fungus and bad (unhealthy) bacteria. After computation, if the concern staff is not responsive it spray the solution to reduce the growth rate of that fungus and bacteria. Bins are constructed, Tested & now ready to deliver. The project is relevant to **SDG3, SDG9, SDG12, SDG13, SDG16, SDG17**.



Abduction Redemption System (Tracking and monitoring)

In **Pakistan**, the research is concerned with finding out a suitable means to protect the victim against this phenomenon of abduction using tracking systems like GSM, GPRS. The research aims at illustrating the advantages of the tracking systems that are used in locating missing or lost children and also tracking the child movements outside from the safe area. The new method helps in following up the kidnapped child for a long time as the used system is connected with the parents via text messages to their mobile phones when the child changes the defined location as it specifies the location more accurately. The system can also be used to locate women who are in danger. The GPS is combined with one of the basic services of a smartphone which is GSM more specifically SMS in one system. Its proposed model contains various sensors which measure different parameters on a regular basis. In case of emergency, a message will be sent to parents and/or police, by pressing the panic button. The complete system is implemented using Raspberry Pi 0. Python programming is used to interface all the sensors and other hardware. This device is easy to carry. The project is relevant to SDG11.



BhaiChara

WSIS Prizes Contest 2020 Nominee

In **Pakistan**, **BhaiChara** is an android application, that allows the user to search for a ride in a radius of his choosing, providing a cost effective and timely efficient commute. The goal is to share a vehicle with passengers having same destination and source i.e. employees of a particular company going for their jobs or a people traveling out of station having same route or destination. This results in less number of cars on the roads with maximum passengers. Hence reducing the overall consumption of fuel, less traffic and reduced pollution. The project is relevant to **SDG9**, **SDG11**, **SDG13**, **SDG17**.



ShareKNA

WSIS Prizes Contest 2020 Nominee

In **Palestine**, **ShareKNA** is an effective and innovative Web 2.0 citizen engagement/communication platform that allows users to communicate, submit complaints, or request information from and to a participating organization. It initially was designed to engage citizens with municipalities and strengthen their relationship with them to acquire services or submit complaints. Its backend system has a fully-fledged workflow that allows employees to handle requests submitted from mobile apps, reroute issues to other departments, and also report on issues. ShareKNA solution will enable local government units or any subscribed organization to monitor their service level and will also allow citizens to collaborate with the municipalities, local government units, or participating private sector organizations. ShareKNA solution will strength the relation between citizen and local government. Enhancing services, voting, notifications, report errors or failures; engage citizens in decision-making; strengthening the role of women in raising their views; collect and analyze incoming data (AI); Digital metrics evaluations (local government classification); Smart City. ShareKNA mobile apps and its backend system have deployed and used by certain municipalities and radio stations with no less than 800 active users. The project is relevant to **SDG3, SDG5, SDG11, SDG16**.



Better Connections

WSIS Prizes Contest 2020 Nominee

In **Qatar**, the **Better Connections** Programme is a research-based national programme that launched in 2015 in order to tackle the digital divide that workers in Qatar face. Background research found that 67% of transient workers did not have access to ICT tools, which limited their technology awareness and benefits that come from having ICT skills. The Better Connections is based on establishing ICT facilities inside the workers accommodations to minimize the travel time to 0, these facilities are equipped with furniture and donated refurbished computers connected to the internet, loaded with content tailored to their needs in 5 most common languages among the workers communities. Each facility provides the access to ICT tools for 1000 workers, the program target has been set to 1500 ICT facilities by 2019, during QITCOM 2019 HE minister of MOTC and HE Minister of ADLSA had announced reaching to 1676 ICT facilities with 10% more than the targeted number. Better Connections applies our vision of being innovation and openness of content, tools and approach. It is also self-sustainable, due to unique implementation model based on multiple partners and cascade model of training. The project is relevant to **SDG1, SDG4, SDG9, SDG12, SDG17**.



Muscovite's card

In **Russian Federation**, **Muscovite's card** began with an experiment in several areas of the capital. Today, the card allows you to pay for goods and services, receive benefits, use the benefits of transport. The Muscovite card is used by almost five million residents of the capital. It allows you to safely receive pensions, scholarships and allowances, pay for goods in stores and pay for many services at a discount, use the benefits when traveling by public transport. The Muscovite map appeared 18 years ago, we can say that this year it celebrates its coming of age. Initially, it was supposed to make it easier for citizens to receive social benefits. But every year the functionality of the card expanded, and today we already call it the key to the smart city. The project will continue to develop. For example, in the future it will be possible to issue a Muscovite card on a special medium - a trinket, a bracelet and other identifiers. The card is registered and is issued to pensioners, citizens of pre-retirement age, students, schoolchildren, pregnant women, members of large families, recipients of housing subsidies and those who receive other social support measures. The functionality of the card has been constantly updated and expanded. At first, it made it possible to use public transport for free and receive discounts on goods and services. But already in 2004, the card became a full-fledged means of payment. One of the important directions was cooperation with trade and service enterprises. At the moment, 7.5 clothing and shoe stores, perfumes and cosmetics, cafes, fitness clubs, cinemas, commercial medical facilities provide discounts. Over time, the card began to support the Troika transport application and was used as a compulsory medical insurance policy ID. Then, the function of recording and paying for purchases with points of a social certificate became available, which certain categories of Moscow citizens can receive as a measure of social support. The project is relevant to **SDG3, SDG4**.



Transportation system

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, **transportation system** that provides bus fleet management services in universities and schools. It is targeting all students, parents and transport management. This system is concerned mainly with female and male students, in terms of the quality of provided service and the safety and comfort of the student and parents. It also offers a service to track the bus route of the students. It contains the following components: Registration services for students and parents and linking with the system, processing bus management and control tracks and monitoring it Services of Transportation Management and supervision Drivers' services Main bus

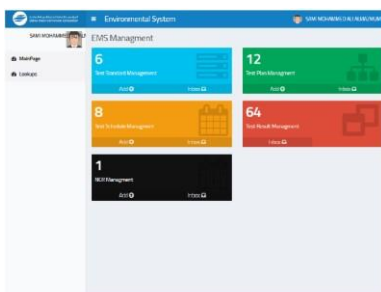
devices for surveillance and tracking (GPS RFID Tablet) Integration with other systems such as academic system and all relevant regulations Business intelligent Reports provide statistics and accurate information about buses, drivers, female students and all traffic tracking. The project is relevant to **SDG11**.



Environmental Information System

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, SWCC Build an **Environmental Information System** that shows the environmental testing results and the environmental KPis immediately in a dashboard in the headquarter office; Enabling the management team to get immediate results, indicators and environmental KPis. The project is relevant to **SDG3, SDG14**.



TMS System

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, an internally developed business solution aimed to achieve automation in Shipping Operations Planning and execution business functions, for the refined oil products, LPG and bulk includes (diesel, gasoline, petroleum coke, pelletized sulfur, butane, propane, naphtha and benzene) through King Fahad Industrial Port.

Following critical business processes are automated as part of this business solution: Shipment Operations Planning (Vessel Pre-Arrival); Shipment Handling Operations (Vessel Post-Arrival). The project is relevant to **SDG7, SDG8, SDG9, SDG14**.



Contractor Safety Solution Project

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, SafeLife system will standardize and manage Saudi Aramcos' safety working environment by providing a solution that supports strategies and drives actions to prevent potential incidents. **Contractor Safety Solution Project** shall support excellence in worksite safety by utilizing industry best practice, standards and lessons learned for the development of corporate contractors' safety system for monitoring, reporting and continually improving worksite safety performance and effectiveness. The project is relevant to **SDG3, SDG11**.



Accelerating Green Tourism Through Energy AI

WSIS Prizes Contest 2020 Nominee

In **Singapore**, tourism is a fast-growing industry around the globe, while at the same time accounting for a growing contribution to greenhouse gas emission. According to ITP Hotel Decarbonization Report, global tourism industry will need to reduce its annual greenhouse gas emission per room by 66% by 2030, and even 90% by 2050, to stay within 2°C threshold of COP21 Paris Climate Agreement. However, capability development and budget are hindering hospitality industry to facilitate Green Tourism. Critical equipment such as chillers, boilers and pumps keeps the hotel running daily. However, most hotel operations team does not have the know-how to operate these equipment in the most optimal configuration, and it is increasingly difficult to recruit young and knowledgeable youth into this sector to manage energy and sustainable operation. Successfully implemented IoT hardware and AI assistant for Pan Pacific Hotels Group (PPHG) HQ in Singapore, Evercomm's solution now manages all the critical equipment across five different hotel in Singapore (scaling up to their global portfolio of 40+ more hotels) in a centralized, digital platform, improving 50% of operation team's productivity by reducing tedious on-site manual data collection and processing, and enhancing more than 20% of operational performance by providing real-time, data-driven operational recommendation. Furthermore, the digitalization of energy data enables the automation of sustainability reporting, identifying the right action for hotels to go "greener" – such as reducing energy wastage or replacing obsolete brown technologies. The project is relevant to **SDG7, SDG9, SDG12, SDG13, SDG17**.



Transforming Urban Tree Management

WSIS Prizes Contest 2020 Nominee

In **Singapore**, the digitalization of Tree Management aims to meet the challenges of managing Singapore's greenery, which includes declining labor workforce, rising public expectation, urbanization and climate change. NParks transformed its urban tree management through digitalization to maintain Singapore as a City in a Garden and sustain a quality living environment for its residents. In a study by MIT Senseable City Lab in 2017, Singapore was cited as the greenest city in the world. This was possible based on a rigorous regime of tree management and a spirit of continual innovation in greening. Below are some recent digitalization initiatives:

A common geo-spatial platform & mobile field application was developed for arborists to access the geo-tagged urban trees and update the inspection & maintenance records. An online portal (trees.sg) was setup for the public to obtain trees information, tag photos, and email a tree, for public outreach & education. Other technologies adopted includes aerial drones to access hard-to-reach areas for tree inspection, statistical models to assess tree structural stability, and data analytics for tree risk assessment. NParks is further developing a system to automatically extract the physical tree parameters from LiDAR scans to create spatially, semantically & biologically accurate 3D tree models. From this, many potential applications can be developed, which will fundamentally change the way we manage our trees. E.g. by significantly cutting down time to measure & collect these data, allowing modelling of a single tree & at a city scale level to glean insights to our tree management plans, performing landscape design through 3D visualization, performing carbon accounting and quantification of greenery. This **Transforming Urban Tree Management** will bring about more efficient, effective and sustainable ways of managing trees in a city and show the way forward as cities increasingly turn to greening as a response to climate change. The project is relevant to **SDG3, SDG9, SDG11, SDG13, SDG15**.



WooHoo Plus

WSIS Prizes Contest 2020 Nominee

In **South Africa**, **WooHoo+** was designed to help creative people to connect their ideas to companies who want to make the difference helping the planet. Users deposit your ideas in WooHoo+'s 100% secure platform with all the rights protected. Users say how much money they are requiring in order to finance your project, get the correspondent amount of tokens which will be acquired by (a) company(ies) or investor(s). WooHoo+ is a peer to peer Blockchain-powered Atomic Swap Platform for eco ideas that allow for transactions to take place in an environment that is secure and transparent without the need for a centralized authority. The application allows individuals to submit ideas that provide sustainable solutions to many of the worlds environmental problems and procure investment from companies or investors who wish to make these ideas a reality, ensuring sustainable development and fostering innovation in the green economy. The project is relevant to **SDG9**. Actionline: 7-GOV **ePosta**

In **Albania**, **ePosta** is a digital platform that enables the customer to perform online a variety of Albanian Post services through a smartphone, tablets, computer. So the customer can: 1.track & trace his/her mail items; 2. search & pay online electricity, water bills, penalties and custom fees for his/her mail items; 3. track his/her money transfer incoming/ongoing; 4. find the nearest post office to his/her actual location. The customer register his credentials and then can save his/her contracts/plates/mail item so he/she can check online anytime. The project is relevant to **SDG9**.



Creation of a database concerning official reports

In **Algeria**, for the computerization of the Litigation department, seen his sensibility, Conception and **creation of software** were put into the department:

- Creation of a database containing all the information concerning the reports sent to the legal authorities.
- Computerization of counts and statistics, which automatically taken from the database according to several criteria of choice.
- Automating the printing of several documents and evaluating the activity of the control personnel.
- Operation of the intranet, since the program works by "Client Server".

The project is relevant to **SDG4, SDG8, SDG10, SDG16, SDG17**.



Mobile application used in the control of the economic operators and traders

In **Algeria**, **the mobile application** connected to the database of traders will help the control officers in the field to award offenders and allow them to record the data relating to official reports on the spot, and use data in the mobile application to computerize the drafting of the reports, and exploit them directly by the software used in the department of litigation and Legal Affairs. Establish effective coordination between different control structures, by developing intervention strategies managed and disseminated through the mobile application, which will be a hub encompassing all technical aspects of control. Improve the warning network system for

sensitive products that affect the health of the consumer, using the mobile application to take all the information relating to the detected products, and transmit them to the central administration and other agents on the ground. The project is relevant to **SDG10, SDG16, SDG17**.



Geographic information system for territory planning

WSIS Prizes Contest 2020 Nominee

In **Algeria**, Territorial planning represents all actions that consist of planning and coordinating land use by organizing the distribution of infrastructure and activities in the geographical area. **Geographic information system for territory planning** aims to facilitate all these actions through ICT by collecting, exploiting and updating all the public asset (used case is telecommunication infrastructure). Therefore, the project will help the public sector in enhancing its efficiency and transparency. However, several actors intervene in the planning of the territory whether they are:

Economic operators generally owning networks they deploy and operate such as: water supply and sewerage networks, electricity and gas network, and telecommunications networks or public administrations ranging from ministries to municipalities. The proposed solution is to provide all the actors of territorial planning with an effective mean capable of: Collecting all types of infrastructure in a spatial database. Modeling the infrastructure for an efficient exploitation. Following the state of the infrastructure because its characteristics don't only change in space but also in time. The project is relevant to **SDG9, SDG11**.



Algerian Interoperability Framework

In **Algeria**, **Algerian Interoperability Framework (AIF)** is a technical document defining the standards and norms to be considered when implementing communication interfaces between public information systems (PISs). This document is intended for CIOs and IT managers (project

managers, IT/IS architects, designers, developers, integrators, etc.) of public entities, and technical staffs working on the development and upgrade of PISs, and also the associated partners (suppliers and customers). The main objective of AIF is to provide an interoperability benchmark that contributes to improving services offered by all public operators to citizens and businesses, by establishing a common vision of interoperability within the public administrations and promoting simplification of processes and exchange formats. AIF interoperability framework aims to standardize data exchange formats used between administrations in order to improve interoperability; ensure communication at different levels through the adoption of norms and standards and thus reduce the costs of developing specific and ad hoc gateways; ensure the sustainability of public information systems through the use of internationally recognized and established norms and standards. The project is relevant to **SDG2, SDG3, SDG4, SDG5, SDG6, SDG7, SDG8, SDG9, SDG10, SDG11, SDG12, SDG13, SDG14, SDG15, SDG16**.



Sistema de Clasificación Docente

In **Argentina**, Since 2014, the main objective of the **classification system** has been to allow teachers, and those who wish to teach, to upload and update their information and register to apply for the position or promotions as well as internships and substitute teaching. It also helps to optimize the validation process for the documentation submitted by teachers, to calculate teacher score according to area, position and academic specialty and, finally, generate the Merit Order listings that are used in public events. Among the main benefits we find: ● Allows teachers to have a single channel to submit documentation and apply to positions (create a single file). ● standardizes the scores calculation process providing more transparency. ● Expedite processes, specially score calculation and issuing listings. ● Automate processes. ● Display listings on the ministry's website. The project is relevant to **SDG8**.

Marital circumstance management crisis and proposed marital status code (MSC) for International common law policy

In **Bangladesh**, United nation plan for sustainable development goal (SDG 17 goal) 2030 will impact to the world sustainability. There are a lot of issues in daily human life. The mainstream fact is equality management and feminine victim. The maximum feminine is a victim by the spousal status fact. In this case, marital status management is a big crisis in Bangladesh. Moreover, present marriage and divorce registration policies are not accurate for personal identity. This paper proposed a new concept of **marital status code (MSC)** to solve this issues very easy way a strongly sequential matter. A marital status code: unmarried code, married code, divorced code, widower code, and third sexual code. The MSC would use in the personal identity card and passport front page. The 11 digit code structure maintains personal biography interconnected between birth certificate codes. At the last 2 digit will match between husband and

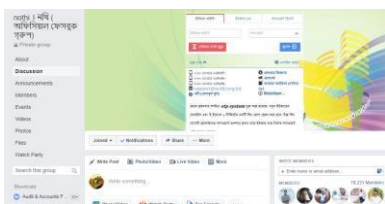
wife marital status code (MSC). The special code is access to keeping store the whole life as a single, married and divorce history of conjugal status. Each digit shows of his/her personal data statement contribution. This marital status code usually should confirmation include of marriage, widower, and divorce day. The third sexual person will get an approval certificate by the medical center. Whole policy proposed to family planning and health welfare ministry of Bangladesh. This supervises is a concern to the contribution of sustainable security of life. The special issues will be solved and getting the peaceful impact of family and society. After all perfect success, this scheme and it will remove a complex conflict in Bangladesh.

Keyword; Marital status code (MSC), Married, Divorce, Widower, equality, Identity. The project is relevant to **SDG16**.



Electronic Nothi (Electronic Filing)

In **Bangladesh**, Bureaucratic efficiency is an important prerequisite for state effectiveness and economic growth. An aspect in that regard is the various services that the government provides to the citizens which are then added to the engine of growth of the economy. Recognizing this importance of bureaucratic efficiency and public service delivery, governments around the world introduce all kinds of reforms and initiatives to enhance bureaucratic efficiency and public service delivery. In this era of digitization one such initiative is “**e-filing**”. This initiative has been facilitated by the Access to Information program of ICT Division since 2016. Among 19,000 government offices, 6,940 offices are now live in the system and using e-Nothi. Total users of the system are 78,665 to date. Total beneficiaries till 31st October is 10,101,447. Currently ICT Division is contributing in terms of policy level assistance and overall guidance to this initiative. The initiative is saving time and is less laborious than manual system. It is ensuring efficiency in rendering service, changing officers’ behavior in administrative work and increasing accountability and transparency. Besides this initiative is helping environmentally by bringing transformation of manual system into an electronic means. The project is relevant to **SDG16**.



’333’ – Central Helpline for Government Information, Services and Grievance Redress

In **Bangladesh**, to become middle income country and creating Digital Bangladesh, saving time, costs, visits and steps in getting government services and information and expanding accessibility

and availability of the same are necessary. In Bangladesh above 60% citizen either don't have the access or don't know how to access the available channels for information and services and also don't have a proper channel to raise their concerns. To address these problems, a **voice based National Information, Service and Grievance Center - 333** was implemented by Access to Information Programme (a2i) that ensures equal access to all citizen of information, services and grievances. Calling 333 from mobile and 09666789333 from abroad any citizen with or without internet access can: 1) Get Government Services', tourism and districts information; 2) Apply for 58 Government services and increasing; 3) Complain and get remedy of various Social Problems; 4) Seek measure against violence against woman and children; 5) Get contact information of all Public Representatives and Government Officials; 6) Apply for home delivery of 20 public services and increasing; 7) Consultancy on safe Migration, Islamic Masala, e-TIN, Weather & Family Planning etc and increasing; 8) Register for acting as service provider for on demand citizen request. The project is relevant to **SDG5, SDG16**.



Mr. Sajeeb Ahmed Wazed, Honorable ICT Affairs Adviser to HPM launched the Call Centre 333 on 12 April 2018

E-Challan

In **Bangladesh**, **e-challan** is the Person to Government (P2G) payment receipt portal of Government of the People's Republic of Bangladesh developed by a2i programme. Under the guidance and supervision of the Finance Division. The government revenue or payment can be submitted through the E-Challan platform. The word "challan" means a receipt of payment. Likewise, the term "e-challan" refers to the online receipt of challan. Citizens will get an online receipt for the payment to the government. P2G payment digitization through E-Challan will enable the transfer of funds directly from an account of an individual or business to the government treasury through the digital payment method. Some types of treasury payments that are included in E-Challan are Passport fees, Police clearance fees, Trade Mark Application/Registration Fees, Travel Tax, Patent and Design Renewal Fee, and others. The primary objective of the E-Challan is to develop an online platform to provide citizens a secure, instant, and convenient way to make treasury payments. The specific goals of the E-Challan are:

- To introduce the facility of electronically submitting challan directly to the treasury
- To make the payment process easier for the recipient of government service
- To prevent the tendency of evading government revenue and submitting fake challan - To ensure accountability and transparency in the process as well as increasing government revenue

The project is relevant to **SDG3, SDG8, SDG9, SDG10**.



Internet + Health Poverty Alleviation

In **China**, The **Internet + Health Poverty Alleviation** Project aims to create a pattern that can be replicated, acceptable, promoted, and sustainable to help poor areas across the country. The government has attached great importance to anti-poverty, Since 2017, CAICT has been doing plenty of research analysis. Finally, some remarkable Internet+Health Poverty pattern in the local areas have been chosen and promoted to the country, CAICT has guided them to strengthen the network infrastructure construction and built the family doctor contract service system, remote diagnosis and treatment system, chronic disease management system, tele-education service system, AI diagnosis system and other platforms. To ensure the new technologies such as the Internet, big data and mobile intelligence truly help these poor areas. According to the new technologies, it solved the problem of information interaction between medical institutions. Through the remote diagnosis and treatment, doctors' advice and guidance has improved the selfhealth management of poor patients. The health education knowledge on the mobile APP has popularized the commonsense of health management, the remote diagnosis and treatment system and online medical education platform have solved the problem of inconvenient transportation and shortage of medical resources in rural areas, thereby, This project has promoted the medical resources sharing rationally and enhanced medical service capabilities and public health capabilities. It reminds us what most importantly for us is living a healthy life. The project is relevant to **SDG1, SDG3, SDG7, SDG10**.



Jiangbei New District Enterprise Service Platform in Nanjing

In **China**, The construction of **Jiangbei New District Enterprise Service Platform in Nanjing**, provides important basis for Government decision-making, and help the enterprise to provide resources to match the demand information, thus can promote the government administrative service efficiency and comprehensive service level, improve enterprise and personnel service benefit, realizing the win-win relationship between government, enterprises and talents. This provides a new model of economic growth, and responds to the requirement of smart government and finally smart city. It will also create new models of industries and business, seize the commanding heights of urban and industrial development. Innovative and unified platform for government, enterprise and the talents can provide stable and flexible comprehensive data service for administrative work, connect online and offline, and comprehensively improve the experience

of administrative organs and enterprises which helps promotion of WSIS values in society and help the realization of SDGs. The platform also helped make the service platform turn into the open center of data resource and data visualization to support government service transformation and promote service ability, finally realizing data collection and data sharing, realizing visibility of command and dispatch sharing and realizing information sharing in society. Under the system planning strategy, the platform builds sustainable development mode of production and obtains achievements of the smart management and smart service which can be quickly copied to other cities and regions in the world. The project is relevant to **SDG8, SDG9, SDG11**.



Big Data Platform of Universal Service for Targeted Poverty Alleviation

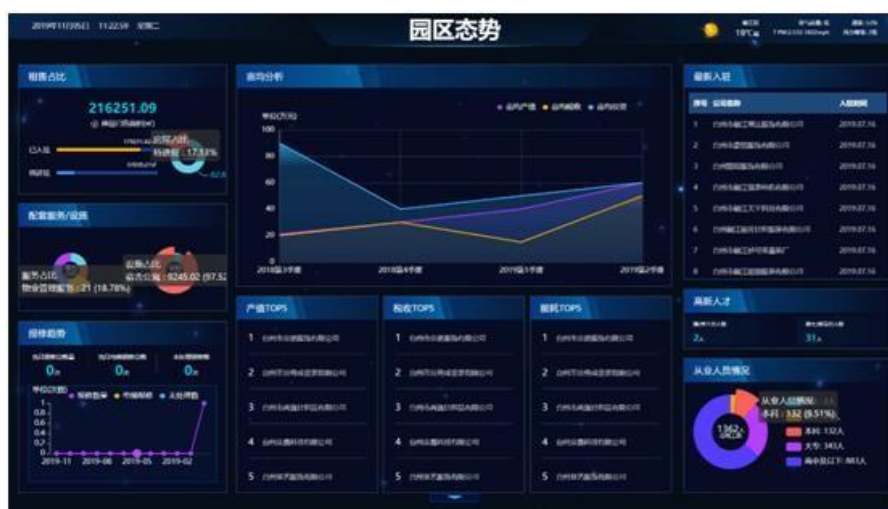
WSIS Prizes Contest 2020 Nominee

In China, the Big Data Platform of Universal Service for Targeted Poverty Alleviation (the “Platform”) innovates applications of ICT-enabled information collection, big data analytics and visualization technologies to provide an effective tool for government capacity building in scientific decision-making and improved performance in order to achieve Targeted Poverty Alleviation Goals. After more than three years of hard work, 130'000 administrative villages in China have been covered by the platform, benefiting millions of rural households, which proven that the project has a strong replicable nature and can be promoted in a wider scope. The platform is capable of sensing broadband availability accurately linked to individual households in real time. As a result, it improves government efficiency, promotes scientific policy-making and precise industry regulation, guarantees the rights and interests of rural broadband users, and helps benefit the general public from national strategic achievements. Well aligned with the sustainable development goals in terms of poverty reduction and fostering innovation, the platform can be widely promoted and duplicated. The project is relevant to **SDG1, SDG4, SDG9, SDG10, SDG16**.



5G-based full-stack digital small and micro enterprise park brain platform

In China, the 5G-based full-stack digital small and micro enterprise park brain platform is a government informatization platform for the park to develop smart operation management services. The platform includes five sub-platforms: the leading cockpit, the park management portal, the enterprise service portal, the industry evaluation portal and the mobile terminal APP. The functions of investment management, property management, IoT integration and industrial services help realized the efficient investment, convenient property management, precise service and industrial scientific evaluation of the park, and promoted the integration of “digitalization of the park, digitalization of enterprises and digitalization of the government”, thus forms an industrial ecosystem. The platform has important social significance to promote urban industrial agglomeration and coordinated development, and therefore meets the sustainable development goals. The project is developed based on the government's unified standards and can be quickly copied and promoted. It has been deployed in 55 parks in Zhejiang Province and serves more than 3'000 companies. At present, the country is promoting the construction of digital parks. The platform is fully in line with the requirements of digital construction and can be built nationwide and worldwide. The project is relevant to **SDG9, SDG11, SDG16**.



E-governance Mechanism from Application to Certification for Training

In India, an **E-governance Mechanism from Application to Certification for Training** project has been launched.

Objective – Enabling students of age group from 16-24 years including girls, those from rural communities, urban disadvantaged and those of remote locations for admission through entrance examination to certification in Technical Education System through easy access by internet and mobile friendly means which supports Go Green technology and leads to Digitisation and unification of Technical Education System in West Bengal. Results achieved – Socially and economically backward classes as well as common people have become aware of the Technical Education System. They can prepare themselves to face the world with advanced skill training by sharing advanced system with others. Paperless office management has been achieved due to development of this website and a faster, fairer and transparent system has been prepared by use of e-Technology.

Impact Generated – Large number of students are enriched with technical education from various region of West Bengal and other states of India. As the website is both mobile and desktop friendly, all students can use it from his/her personal phone for filling up of any sort of application form or going through the display of published results in the website. In some districts which are under developed and village oriented in West Bengal, the number of students admitted has been increased significantly due to communication through this website. After the website was launched a remarkable improvement has been noticed in the admission of students to our institutes, specially girls and those from remote area. The Online portal resulted in a positive increase in student admission in Engineering & Technology (Diploma) from 28907 in 2017 to 31,177 in 2019. In Pharmacy (Diploma) the student admission increased from 567 in 2017 to 1514 in 2019. The admission of students in the Polytechnic from backward community and remote areas increased from 37.8% in 2017 to 42.18% in 2019. Admission of girls in the Polytechnic also increased from 11.32% to 14.56% during the same time. The project is relevant to **SDG4, SDG5, SDG8, SDG9, SDG10, SDG11**.



Sabooj Sathi Online 3.0

WSIS Prizes Contest 2020 Nominee

In **India**, State Government's endeavor and commitment has established primary and upper primary schools within walking distance. Many of the students, particularly from economically and socially disadvantaged backgrounds and especially girls had to drop out from high Schools owing to the distance. To ensure that all students graduating from upper primary schools (8th Standard) could continue in the high schools, Government of West Bengal announced the flagship scheme titled "Sabooj Sathi" in 2015-16 for providing bicycles to all students of Class IX to XII in Government Schools with the main objective to increase access to high schools. The scheme was also expected to increase retention, inculcate sense of confidence amongst the girl students and promote environment-friendly and healthy means of transportation, aligned to four Sustainable Development Goals of the 2030 agenda – SDG3: Good Health & Well-being, SDG4: Quality Education, SDG5: Gender Equality and SDG13: Climate actions. **Sabooj Sathi Online 3.0** (www.wbsaboojsathi.gov.in) is the e-Governance mechanism which ensures end-to-end ICT enabled management of entire processes involved in implementation. Hon'ble Chief Minister of West Bengal Mamata Banerjee flagged off the Sabooj- Sathi on 29th October 2015. Around 8.00 million students have already received bicycles so far, another 0.4 million will receive bicycles by December 2019. The scheme is continuing, and the students are receiving bicycles immediately on admission in class IX. During the last four years of implementation, enrolment in high school increased by 12%; among the students appearing in Board exams girl students are more than the boys. The bicycles increased general mobility of the students, particularly the girls. These bicycles are also being used for various domestic and social purposes. According to Pratichi (India) Trust, an organisation founded by Nobel Laureate Dr. Amartya Sen, these bicycles are breaking many boundaries. The project is relevant to **SDG1, SDG3, SDG4, SDG5**.



Nivida

In **India**, **Nivida** is a leading web design, web development, web hosting & web promotion company in Vadodara (Gujarat, India) which is one of the most happening IT hub of India. It is human nature to be zealous about doing creative and new things. Technology is a hub around to make it real and exhibit to others around the world. Websites are playing an important role in that segment. Actually we design customers' own design that they have thought to make it possible on the webpage to show to others they wanted to. At the same time, we would offer our own creativity to make it more effective and user-friendly. Web designers are ones who bring out the creativity without losing customer's own thought combining attractiveness. We find so many online websites irritating their visitors as well as their premium and regular customers, as there are irrelevant designs, contents, concepts that are not self-explanatory either. The project is relevant to **SDG11**.



West Bengal Development Finance Program

In **India**, the **West Bengal Development Finance Program** has been launched.

Objective: The primary objective of the Integrated Financial Management System (IFMS) is to establish an enabling ecosystem for all stakeholders to facilitate growth and development through efficient, effective management of public expenditure in social and infrastructure sectors. It is a web-based application implemented for improved fiscal management and efficient financial administration of the government for achieving sustainable development through better allocation of resources to priority sector aiming at reducing poverty and bringing about inclusive growth. The complete cycle of financial activities like budgeting, expenditure, payment processing, revenue collection, project management, HR management with real-time MIS facility and Reporting System for all the stake holders has been integrated under IFMS.

Results Achieved: IFMS has improved processes and activities involved with financial management through creation of a better and effective model of Annual Financial

Statement, reducing financial transactions cost, in terms of receiving and disbursing funds, provide historical data for informed decision making, better management of cash, debt and liabilities and improved revenue collection and easy reconciliation of data payments are seamless and easily traceable through online systems for all types of beneficiaries by instantaneous credit to their bank accounts. The revenue collection facility has been extended up to the doorstep of citizens through online system. Thus integration and availability of such services has ensured efficiency, effectiveness, and transparency of the Department.

Impact Generated: IFMS has widened the scope and function of the PFM through availability of real time authentic data for informed decision making, optimal resources utilization through constant monitoring. In addition, the State has adopted Green computing practices to the domain of e-Governance by adoption of environment friendly practices with the aid of ICT facilities. The project is relevant to **SDG1, SDG5, SDG8, SDG9, SDG17**.



E-VOTEKADES Information System for Election of the head village in the region of Blitar regency

In **Indonesia**, the **E-VOTEKADES Information System for Election** has been launched. In 2019, the Blitar District Government held an Election of Village Heads (Pilkades) simultaneously by involving 167 Villages located in 22 Districts. The simultaneous Pilkades will be held on the same day as coordinated by the District-level Village Head Election Committee, hereinafter referred to as the Village Unit Election Support Unit (DESK) Support Element. The series of Pilkades activities in Blitar Regency began on 18 June 2019 with the formation of the Village Head Election Committee by the BPD (Badan Perwakilan Desa). For D-day voting will be held on October 15, 2019.

NAME OF PROGRAM: Implementation of a website-based application that contains information on the Pilkades (Election of Village Heads) Simultaneously in the Regency of Blitar.

OBJECTIVES: The purpose of this project is to facilitate the community in following the PILKADES (Election of Village Heads) simultaneously, both in their own villages and other villages that still exist in the Blitar Regency. So that this information can be accessed without being limited by territorial zona. As a reference the security forces in overcoming the stability of social conditions that exist in society, by the community and other parties who have the authority in the success of the simultaneous implementation of the Pilkades.

OPERATIONAL REASONS: 1. Election of Village Head is the exercise of people's sovereignty

in the village in order to elect Village Heads who are direct, public, free, confidential, honest and fair. 2. Blitar Regency Pilkades simultaneously involves 167 villages located in 22 Districts. The simultaneous Pilkades will be held on the same day, October 15, 2019. 3. Supporting the 100 Smart City Movement, namely Smart Governance, to enhance the role of the government as protector and service provider to the community. 4. Carry out Public Information Openness as mandated by the Law of the Republic of Indonesia Number 14 of 2018. The project is relevant to **SDG1, SDG17**.

FITUR APLIKASI SITEM INFORMASI PILKADES KABUPATEN BLITAR



Kakekku Datang (Updating Civil Registry)

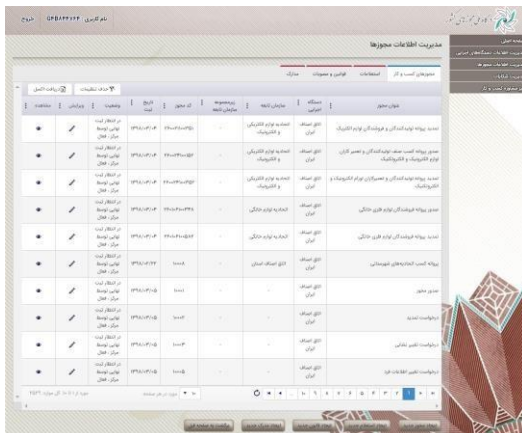
In Indonesia, **Kakekku Datang (Updating Civil Registry)** is an update of population administration to create a single identity with NIK (Population Identity Number). This is the impact of the Indonesian population system, which began as a partial service with SIMDUK (Population Management Information System) which was implemented before 2011. After 2011, using SIAK (Population Administration Information System) as a centralized system but still leaving data that was not successfully migrated. The impact of invalidation of data made the Gresik district's Office of Population and Civil Registry implement an update with KAKEKKU COMING. Unity of identity occurs at the center while the process is through an operator in the office. The main target of KAKEKKU CAME is to improve the data in the KK (Family Card), so that it will affect other documents such as KTPL-el. Updating population data that was done manually initially on 23,765 duplicate data, 69,230 anomalous data, 20.99% achievement birth certificate aged 0-18 years, and 488,848 inactive data (May 2016 data). At present, there are 7,666 duplicate data, 23,082 anomalous data, 94.97% of birth certificates aged 0-18 years, and 19,519 inactive data. The action taken besides manual with KK extract also uses an update application, namely Dr. KePO (online population doctor), LapeRDe (village register officer report), and population services on line. The project is relevant to **SDG10, SDG11**.



The System of Issuing Business Licenses (SAAM)

WSIS Prizes Contest 2020 Nominee

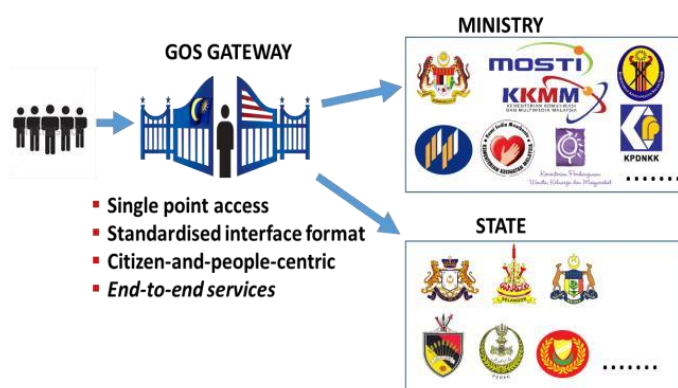
In Iran (Islamic Republic of), the **System of Issuing Business Licenses (SAAM)** has been implemented and utilized since 2018. SAAM is a web-based system which is free of charge and accessible at any time and in any place. By identifying the Iran's licensing system with more than 5000 dashboards in the range of country's administrative system (154 types of administrative executive organizations) and over 8000 dashboards in the range of business unions (equal to the number of business activity categories across the country), it allows applicants of obtaining or renewing business licenses to apply online for a license after online authentication and allocating a dedicated dashboard to them. The National Portal of State Licenses, while informing the applicants, in case of a problem happening in the licensing process during the period prescribed by the law, will take the necessary measures to address the problem. Not only does it lead to providing relevant authorities with ample data required for monitoring and supervising status of license issuance processes, but it also results in significant facilitation of issuing and renewing licenses for applicants. In this system, all Inter-Organ inquiries are carried out from the national network of information (GSB). According to best practices, this mechanism is the only well-known way of establishing a unified procedure for issuing and renewing licenses, as well as, preventing personal preferences in formal procedures. The project is relevant to **SDG9, SDG16, SDG17**.



Government Online Services Gateway

WSIS Prizes Contest 2020 Nominee

In **Malaysia**, **MyGovernment Portal** is a citizen centric single gateway portal that delivers information through online services based on life events. The portal provides online access to an integrated, inclusive and secured information and services across government agencies. Nevertheless, the goal is to have an end-to-end online service and eliminate faceto-face interaction, creating positive impact to citizen throughout all life stages, the noncitizen, business community and government. The main objective of this initiative is to improve the quality of government online service delivery while increasing citizen's satisfaction, enhancing integrity and transparency to any citizen's goings-on with the government. This initiative provides and accelerate the services anytime, anywhere and using any devices. MyGovernment Portal has generated information about a group of life events to serve a comprehensive, inclusive and easy to access information. While community is currently accessing to the silos government online services, it is redesigning and developing something boundless to beat the konvensional; an inclusive and secured service across agencies. This innovation entails government to have a requirement process reengineering in order to enhance interoperability and accessibility of online services offered. The innovations also brought a wave of new opportunities and challenges for government to fulfill the needs of the citizens, especially to simplify the existing processes. Thus various effort has undertaken by the Malaysian Government to enhance the performance of Digital Government, such as providing a Single Sign-On (SSO) platform that will enable citizen to access multiple services using single identification and password. Hence, this technology will lead to the development of Digital Identification (Digital ID) to perform secured transactions. The shift of digital government is foreseen to improve citizen's lives to be more harmonious and to prepare for the Industrial Revolution (IR4.0) challenge. The project is relevant to **SDG4, SDG17**.



Digital Government Transformation Strategy 2018–2022

In **Mauritius**, the **Digital Government Transformation Strategy 2018–2022** has been launched. In 2013, this office formulated an e-Government Strategy 2013–2017 to reengineer the e-Government agenda and to rethink delivery of its services and operations where citizens are given pride of place. Five years onward, around 75% of the eGovernment Strategy has been implemented and helped to further integrate technology in support of

government operations and service delivery. Policies and projects in areas of data sharing, open source, open data, e-Participation, e-Payment, digital signatures, document management system, e-Procurement, mobile apps among others have reformed how government transacts with its stakeholders while improving international digital indices. During the last few years, new digital technologies have been changing the way governments operate and interact with its stakeholders. Mauritius had to adapt to this digital disruption. In anticipation of how expectations and demands from digitally engaged citizens would likely to grow in the future, this office responded with the formulation of the Digital Government Transformation Strategy 2018-2022 (DGTS). The DGTS facilitates the transition from e-Government to the next level of digital government which calls for more transformative set of changes to renew public sector service delivery. The DGTS advocates greater use of digital technologies and data sharing to achieve openness, transparency, engagement and informed decision-making as well as to offer integrated services to citizens and businesses. The strategy encompasses:

- A review of the existing e-Government Strategy 2013-2017;
 - A needs-centric approach through consultations and surveys with citizens, businesses as well as government agencies to tackle the current challenges of Mauritius;
 - Recommendations which will leverage on latest technological trends and best practice; • An action plan to accompany government agencies in the implementation of the strategy.
- The project is relevant to **SDG1, SDG2, SDG3, SDG4, SDG5, SDG6, SDG7, SDG8, SDG9, SDG10, SDG11, SDG12, SDG13, SDG14, SDG15, SDG16, SDG17**.



Strategy to move to an Electronic Government (Estrategia para transitar a un Gobierno Electrónico)

In **Mexico**, the **ETGE project** began with the main objective of analyzing, devising, and implementing technological solutions to improve the link between citizens and the government. That is to say, it sought to simplify and facilitate life by enabling mechanisms that speed up the responses and solutions to the needs asked for by citizens. In this first year, two thematic axes were implemented. The first was an application titled Alameda Central which centralizes relevant information for users. Among these were: precipitation alert (semáforo de lluvias) and an air quality alert, immediate contact with police officers in

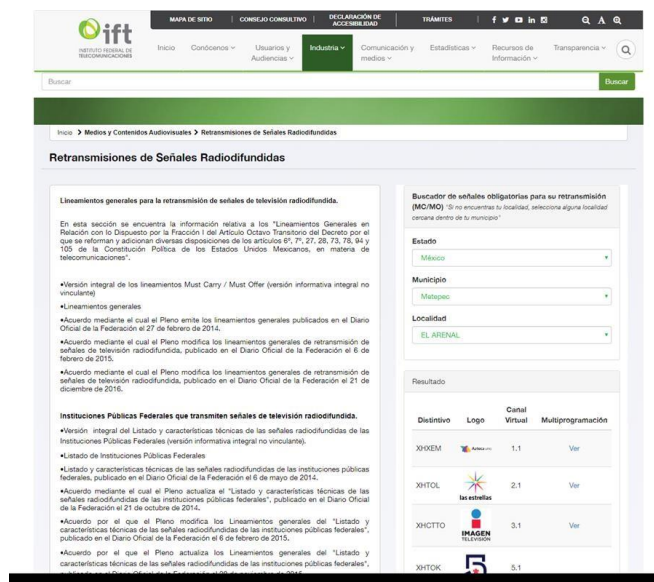
the users' area, consultations for traffic penalties and vehicle impoundments, citizen service reports, maps of the public transit system and estimated times of arrival, free wifi access points, and a panic button in case of emergencies during taxi rides or on the street. The second axes is the digitalization and simplification of government procedures related to car ownership obligations, business loans, unemployment insurance, low impact companies, family visits to the penitentiary system, the reporting of criminal offences, and the misplacement of goods, among others. In the first axis, the application has been downloaded to 14'700 iOS devices and to 72'724 Android devices. In the second axis, around 15'000'000 inquiries have been made to the platforms. The project is relevant to **SDG9, SDG11, SDG16**.



Mexican Telecommunications Reform – Search engine of broadcast television signals that subscription television systems are obliged to carry

In **Mexico**, the **Mexican Telecommunications Reform** introduced the Must Carry/Must Offer regime, which established the obligation of Subscription Television Licensees (STL) to carry the signals of Broadcast Television (BT) systems, in the geographic area in which both of their authorized service areas concur. To ease the fulfillment of these obligations, a tool allowing STL identify BT signals that must be retransmitted, in accordance with their geographic designated market area, was developed. The platform links together the totality of localities in Mexico with the information of the designated market areas of BT signals of the country and brings as a result the signals that must be retransmitted in a locality. The platform is accessible through the website of the Instituto Federal de Telecomunicaciones, is free, and available to the public. It can be consulted by anyone interested, who can obtain the information that can be used to facilitate the accomplishment of the regulation, or to recognize the signals that should be retransmitted in a locality. The platform has helped the fulfillment of the regulation, bringing benefits to licensees, that have had the possibility to broaden the presence of their signals and services, as well as to audiences, who can receive more audiovisual contents. The project is relevant to **SDG8**.

WSIS Stocktaking 2020 Global Report: ZERO DRAFT



Social Media Point of Contact – Facebook and Government

WSIS Prizes Contest 2020 Nominee

In **Poland**, the Ministry of Digital Affairs dedicated **Social Media Point of Contact (PoC)** helps Facebook users re-appeal for their removed content or accounts to be restored. The IT tool has been available on the Polish government website GOV.PL since mid-December 2018. Up to the date of this submission there have been over one thousand entries to the system, with almost 35% of appeals leading to Facebook content restoration. This is the first tool of this kind ever developed by any government entity together with an online platform as big as Facebook. The service is free of charge. The project is relevant to **SDG9, SDG16, SDG17**.



Metrash2

WSIS Prizes Contest 2020 Nominee

In **Qatar**, **Metrash2** is a smart application designed and developed to be the Ministry of Interior's electronic service delivery channel for smart devices. Metrash2 is based on the Qatari government's long-term strategy to offer electronic, integrated, and sustained services for citizens, residents, public and private organizations and to make them accessible to all categories of the Qatari community. Metrash2 supports six major languages

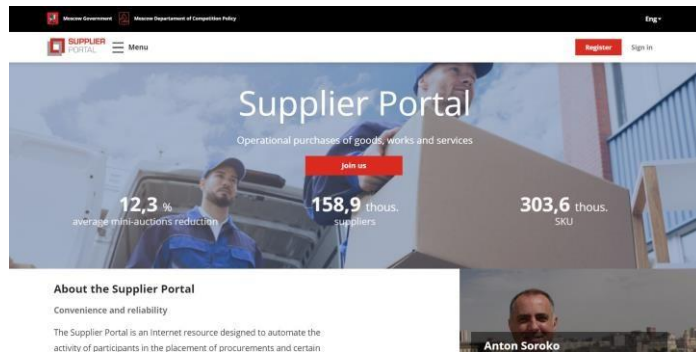
for a community that accommodates nationals and residents from different countries. These languages are English, Arabic, Spanish, French, Urdu, and Hindi. Metrash2 offers 180 electronic government services; more and more services show on the application after securing the necessary approvals from stakeholders, to cater for the ever-growing public and business needs of the people in Qatar. Metrash2 has a measurable impact on its subscribers' lives as it cuts service application and execution time down to two minutes, which saves their time and eliminates the need to pay personal visits to government offices to apply for such services. The number of G2C, G2B, and G2G operations has increased tangibly as Metrash2 provides full eServices including payments, a matter that led to a stunning yearly average of 3,000,000 transactions. Metrash2 has duly become the favorite eService channel for the Qatari community. The project is relevant to **SDG8, SDG9, SDG16**.



Suppliers Portal

In the **Russian Federation**, a platform for interaction between Customers and Suppliers of the city of Moscow and the regions of the Russian Federation in the framework of public procurement of "small" volume and operational transactions was created. The **Suppliers Portal** has absorbed the best world practices, developed and simplified them. There are similar resources in other economically developed countries. However, the comparison shows that it is here that a complete digital product, a new procurement format is developing. The availability of quoted sessions, direct procurement and request for quotations are among the Portal's benefits. Also, the platform offers an electronic procedure for transactions and full coverage of price parameters. In the first half of 2019, the number of contracts concluded through the Suppliers Portal between Moscow and regional customers and small businesses increased by 14%, with 160'000 transactions worth RUB

14 billion. Today, there are more than 13'500 Moscow and regional customers working in different fields registered in the Suppliers Portal. The project is relevant to **SDG9, SDG11**.



The Public Services Quality Monitoring System “Your Control”

WSIS Prizes Contest 2020 Nominee

In the **Russian Federation**, the government of Russia launched the **Public Services Quality Monitoring System “Your Control”** in 2011 as a part of the State Program “Information Society”. The aim was to establish a framework for objective feedback from citizens on the quality of provided public services. Since the implementation of National Program “Digital Economy of Russian Federation”, which occurred in 2017, the system “Your Control” has been developed and gathered a lot of new functional, such as grading staff for their courtesy and competency and also assessing each stage of provided public service, including regional and municipal public services. However, the most crucial change is the possibility to give detailed feedback to legitimacy of control and supervisory measures. That was the first step to construct on the basis of the system “Your Control” unified assessment system of the citizen’s contacts with government. The system “Your Control” is currently one of the world’s largest systems of feedback between a state and citizens-recipients of services. As for November 2019, citizens have evaluated more than 93 million provided services and posted more than 893 thousand comments. More than 1000 responses are given every day from public authorities. It’s planned to make them compulsory in order to notify about solved problems. The project is relevant to **SDG16**.

Interactive GIS project "Digital 3D model of the region based on unmanned aerial photography using artificial intelligence”

WSIS Prizes Contest 2020 Nominee

In the **Russian Federation**, the first **interactive GIS project** containing geodesic accurate digital 3D model of a region was created, using artificial intelligence based on unmanned aerial photography and GLONASS technologies. Geoportal is created for a complete assessment of land resources, development of information and communication infrastructure, prevention of violations of legislation at land use, environmental monitoring and control, and the promotion of a peaceful and inclusive society for sustainable

development. The portal uses innovative methods of visualization of objects and territories to provide information. The project focuses on the development of integrated IT solutions for sustainable infrastructure, industrialization, development of innovations and preservation of agriculture and ecology. The project includes:

- Monitoring and control of agricultural land use, identification of unused land, correction of cadastral errors;
- Control of solid waste landfills, detection of illegal dumps;
- Monitoring of environmental and water protection zones, quarries;
- Prevention of wildfires by early detection of fire;
- Providing the necessary information to the population, involving it in the management of the territory;
- Development of tourism through the use of 3D models of museums and territories;
- Actualization of topoplanes for use in planning and urban development;
- Control the state of the road surface;
- Monitoring of condition of housing stock and architectural supervision

This project makes it possible to optimize the work in different directions, both between government structures and with the population in the field of geodesy, cartography, land use and cadastre, environmental protection. It is a high quality multifunctional product. The portal promotes economic, environmental and social development, which contributes to significant economic impact and sustainable development. The project is relevant to **SDG2, SDG3, SDG8, SDG9, SDG11, SDG12, SDG13, SDG15, SDG16, SDG17**.

Integrated Electronic Case Management System

WSIS Prizes Contest 2020 Nominee

In **Rwanda**, an **Integrated Electronic Case Management System (IECMS)** was implemented to modernize Rwanda's Justice System introduced and operationalized since January 2016 to improve the provision of legal services and access to justice by reducing delays and transaction costs associated with judicial case processing and management. The main objective of Rwanda IECMS is to serve as a centralized and computerized judicial case processing system for whole judicial chain that is to say all justice sector institutions, including the Rwanda Investigation Bureau (RIB), National Public Prosecution Authority (NPPA), Rwanda Judiciary (RJ), and Rwanda Correctional Services (RCS) as well as Military court. Concerning Results achieved are the successful implementation of the justice chain system that comprise 6 modules (Investigation, Prosecution, Adjudication, Civil Litigation, Correctional and Judgement Execution), allowing data and case sharing among institution but preserving institutional independence. The system's impact is to provide fast and affordable justice to citizens, with electronic and reliable case filing, processing and management, sharing of case information between various institutions involved in the case, access information to all case parties, strict adherence to legal requirements in all matters; accurate monitoring, evaluation and reporting on the work accomplished and creating a

reliable jurisprudence archive that is accessible, searchable and available 24/7. The project is relevant to **SDG16**.



Establishing Corporates Contracts Service

In **Saudi Arabia**, the **Corporates Contracts Service** enables you to submit all applications & contracts for corporate memorandum of association online. This is for all types of corporate, except the joint stock Co., Professional Co., and holding Co. without attending the offices to authenticate the contract, which is done electronically and remotely, and also applying governance in companies. Increasing the number of companies in Saudi Arabia and increase awareness of e-governments in Saudi Arabia. Also, it helps improving governance inside companies and develop the contracting inside the companies and the transparency between companies partners. The project is relevant to **SDG13**.

Government Services Observatory system “MARSAD”

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, E-Government Program (YESSER) launched the **Government Services Observatory system “MARSAD”** as a single point of truth regarding all government services and source for National e-government platforms. Marsad allows government agencies to inventory services and develop a roadmap to transform traditional to higher maturity electronic services.

MARSAD Vision: Increase the e-maturity of all government services to the highest level.

MARSAD Mission: MARSAD system enables the following:

- Govern, track and monitor the progress of service transformation initiatives across all government entities
- Provide citizen and decision makers with up-to-date and detailed information about government services
- Deliver instant and valuable reports to all relevant stakeholders
- Developing a roadmap to transform government services from traditional to electronic, and raising the level of maturity of e-services.
- Assess the progress of government agencies in the e-services process correctly and accurately based on documented and updated provided by the entities itself.

The project is relevant to **SDG9, SDG11, SDG12, SDG16**.



Mullak

In **Saudi Arabia**, continued demographic expansion combined with inadequate policy support and development incentives has led to an acute gap in home ownership. Exorbitant cost of land and construction of independent houses have aggravated the situation and therefore, many Saudi citizens and residents do not own homes. The Ministry of Housing (MOH) has aggressively pursued a series of reforms that anchor on stimulating the supply and demand for houses and enabling the private sector to participate with full capacity. One such initiative is the **Mullak** Saudi Arabia's Home Owners Association Program (HOA), managed by National Housing Services Company (NHSC). Mullak is a transformational initiative that aims at increasing home ownership by systematically targeting ownership of homes in jointly owned property (JOP). The program comprehensively addresses the residential housing situation and allows formation of legal entities – home owners' associations – to represent the collective interest of home owners. It achieves this by setting in place appropriate regulations, guidelines and operation frameworks under which the associations can operate, and developers and owners can understand their rights and obligations. The program also proactively nurtures new service industries in an innovative manner to support HOAs and homeowners. Below is the response for the specific questions. The project is relevant to **SDG9, SDG11**.

The screenshot displays the Mullak platform interface with the following components:

- Header:** Mullak logo and navigation links in Arabic and English.
- Main Content Area:**
 - Top Left:** A section titled "معلومات الإتحاد" (Association Information) showing a table with columns: "رقم الإتحاد" (Association Number), "اسم الإتحاد" (Association Name), "تاريخ الإنشاء" (Creation Date), "تاريخ إصدار شهادة الإتحاد" (Association Issuance Date), and "تاريخ انتهاء شهادة الإتحاد" (Association Expiry Date).
 - Top Right:** A section titled "تجديد الشهادة" (Renew Certificate) with a button "تجديد" (Renew).
 - Middle:** A table with columns: "رقم الطلب" (Request Number), "تاريخ الطلب" (Request Date), "حالة الطلب" (Request Status), "ملاحظات" (Remarks), and "تفاصيل الطلب" (Request Details).
 - Bottom:** A section titled "تفاصيل الطلب" (Request Details) showing a table with columns: "رقم الطلب" (Request Number), "تاريخ الطلب" (Request Date), "حالة الطلب" (Request Status), "ملاحظات" (Remarks), and "تفاصيل الطلب" (Request Details).

Elm Social Services Platform

In **Saudi Arabia**, **Elm Social Services Platform**, SSP, is an eligibility solution that enables governments , NGOs, and the private sectors distribute benefits in a fairly and an efficient manner. The project is relevant to **SDG8, SDG15, SDG16**.



Takkad

In **Saudi Arabia**, a **Takkad** application is an application developed by Saudi Standards, Metrology and Quality Org. in partnership with Saudi Energy Efficiency Center allows the consumer to verify the quality mark, biodegradable plastic products and energy efficiency certificates for electrical products (air conditioners, washing machines, refrigerators, heaters and dryers), tires, vehicles, lighting and water consumption.

Application properties:

- Quality Mark product search list
 - Search list for biodegradable plastic products
 - The property of products licensed by biodegradable plastic
 - Search list for electrical appliance products
 - Advanced search feature in electrical appliances by determining the type of product, model, number of stars or letters
 - Vehicle search list
 - Advanced vehicle search feature: by selecting the model of the vehicle, the manufacturer, the type of vehicle
 - Tire search list
 - Advanced tire search list: by selecting the manufacturer, trade name
 - List of search for Water-Consumption products
 - Inquire about imported vehicles
 - Lighting search list
 - A complain list of a product that allows the user to complain
 - My list of communications allows the user to review the communications submitted
 - My favorite menu allows the user to add favorite products
- The project is relevant to **SDG3, SDG11, SDG12, SDG13**.



Meetings and Committees System – Electronic Services – The Ministry of Media

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, an **Electronic Meetings and Committees System Service** that serves the employees of The Ministry of Media was created. It allows the user to make periodic meetings and committees electronically. It distributes roles to committee's members in the ministry according to their power in tracking system for the work, start from make a new session and determine its time and place. Then it uploads the session's agenda, files and documents to the members. After that it invites the members to the session by alerting them via email and mobile messages SMS, record their attendance, then upload the session minutes on the system. Also, it informs the committee's members on the minutes through the system. They can sign electronically with approval, or approve with reservation and write down the reason. It ends with adoption of the session minutes from the authorized person, and archives it. The system is provided for the employees of The Ministry of Media. It exists and has been self-implemented in the ministry. The system allows the user to:

- Clear and sequential scheduling for the committee's sessions and topics
 - Make statistical reports
 - Electronic signature for the committees' minutes
 - Archive all the minutes in PDF format and save it, which facilitates referring to
 - Solve the geographic spacing problem for the committee's members
 - Upload all the documents electronically
 - Follow-up the session's recommendations and what was done in it in an easy way
- The project is relevant to **SDG3, SDG11, SDG12**.

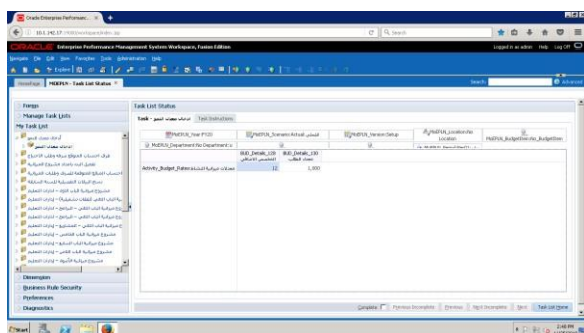
“My Participation Service” (King Faisal University)

In **Saudi Arabia**, the project “**My Participation Service**” was founded to enable better in between-communication services and giving suggestions to all customers. The project helps in making inquiries, giving opinions and advice, following up contributions, and ensuring

that all transactions are transferred to the university's relevant departments through an effective-electronic-system. The system also supports electronic auto-notification mechanisms, e-mails and short mobile messages (SMS) for feedback. The project is relevant to **SDG16**.

MOE – Enterprise Performance Management (Hyperion) Project

In **Saudi Arabia**, the Ministry of Education (MOE) is intending to implement the **Enterprise Performance Management (Hyperion) Project**, an enterprise wide planning and budgeting solution for the body of the ministry and at a high level for each of the Education Directorates spread across the kingdom. The system should adopt the new financial system adopted by Ministry of Finance (GFS). The system will allow each division (7-10 divisions in each educational department) within the educational departments (48 Educational Departments (Ed's) across the Kingdom) to submit their own budget requirements to the budget division, which will consolidate all the requirements from the divisions and submit them to MOE headquarters. The system will then allow the budget division within each educational department to verify and submit the consolidated budget requirement for the whole educational department. The system should provide extensive workflow functionalities to allow all users of MOE (across all ED's, Agencies and MOE HQ) to collect, review, approve, revise, consolidate and submit multiple versions of budgets on multiple levels (division, ED, Agency and whole MOE). This system has the potential to be extended to include all cultural missions (39 missions) around the world as a next stage. The project is relevant to **SDG4, SDG9**.



SAP Trader Scheduler Workbench – Digital Transformation through Automation

In **Saudi Arabia**, KJO implemented a **SAP Trader Scheduler Workbench** which was one of the first kind of projects in this region where we integrated SAP with Radar Tank Gauges and Digital Flow Meter. Objectives of the projects were to:

1. Automate the Shipping Process
2. Eliminate the paper based processes
3. Improve accuracy of the data
4. Reduce the time taken for tank dip reading (eliminate manual dip reading)
5. Ship Loading document generation

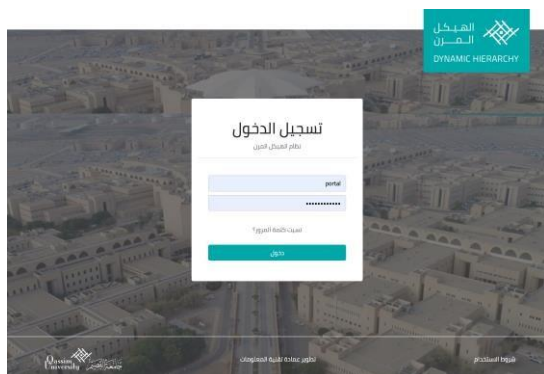
6. Simplify correspondence with Stakeholders

We succeeded in our endeavor and accomplished all of our objectives. The automation was achieved, paper-based processes are no longer used and data accuracy has improved. We receive tank dip readings in SAP every 2 minutes through the integration with Radar Tank Gauge and immediately receive crude loading quantity in SAP through integration with Digital Flow Meter. The correspondence is simplified through a collaborative corporate Portal. It has a positive overall impact for the company and has automated the very core business processes. It has also led to increased safety for operators as the need to take manual tank dip readings is greatly reduced. The project is relevant to **SDG9**.



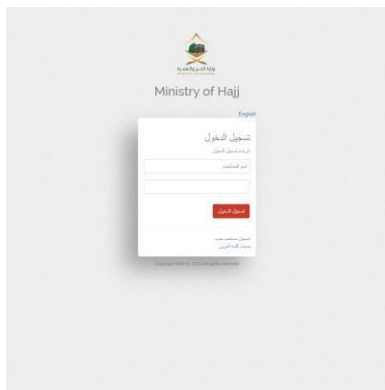
Dynamic Hierarchy

In **Saudi Arabia**, the electronic platform “**Dynamic Hierarchy**” was created. The platform is used to manage and control the organizational hierarchy structure in universities in an easier way, through presenting the structure in the form of an electronic tree, where the supervising authority on the platform can give the necessary permissions to each entity within the university to manage its own organizational structure in their faculties and departments. DH is serving more than 400 different departments and more than 5000 from facilities and employees. This electronic platform has its own certified API. Thus, other electronic systems can connect to the platform and access the organizational hierarchy structure to inherit its permission properties. This connection is governed according to the API specified requirements. Also, the API allows the connected electronic systems to extract the necessary reports in a detailed manner. The project is relevant to **SDG9, SDG16**.



Umrah E-path

In **Saudi Arabia**, through the **Umrah E-Path** system, Mutamers from everywhere in the world can choose the services needed like hotels and transportations and apply for the visa to visit Makkah to preform Umrah. Also, in the platform all service providers and government agencies that are involved in serving Mutamers will interact and exchange information through the ePath system including payments, contracts and information. The platform enables the MOHU (Ministry Of Haj and Umra) to perform a monitorial role to safeguard the stated rights of the external Mutamers according to the controls specified by the MOHU, and in conformity with the binding contracts between the services providers and Mutamers. The E-path system is linked with more than 40 government agencies, 750 Umrah Operators in Saudi Arabia, 10'000+ service providers and 5000+ external agents all over around the world. The E-path system targets the Muslim community (1.5 Billion Mutamers in the world), 1000'000 Mutamer transactions daily and an E-payment system with more than 100'000 transaction daily. The project is relevant to **SDG16**.



External Hajj unified System (ePath)

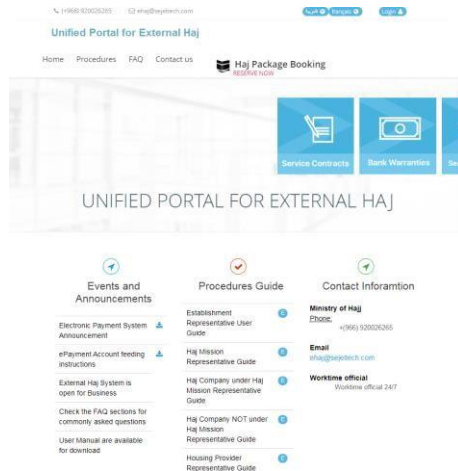
WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, the **External Hajj unified system (ePath)**, considered as the biggest online project which MOHU started developing few years back, continued enhancing and adding services each year. It's a mega project which consists of huge number of e-services which serve diverse kind of users inside and outside of the Kingdom, integrated with most of the government entities inside kingdom and several private entities as well. The MOHU is performing a monitorial role to safeguard the stated rights of the external pilgrims according to the controls specified by the MOHU. The External Hajj Unified portal serves MOHU's roles in different aspects especially when it comes to pilgrims rights and service provides rights:

- Electronically automates the binding contracts between the pilgrims' representatives (the offices of the pilgrims' affairs or the companies) and the pilgrim.
- Electronically automates the binding contracts between pilgrims' representatives and the service providers, such as the services of housing, transportation, catering, logistics and accommodation at the holy shrines.
- Electronical facilitate, monitor and track pilgrim's transportation and movement in side Kingdome to holy places and between cities.

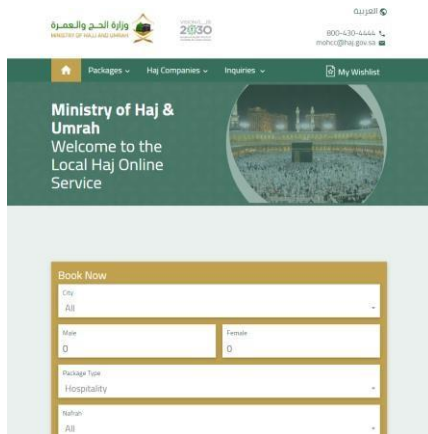
- Electronically monitor and evaluates the performance of different parties during the season of hajj, together with the reports it receives from other concerned authorities in order to see into the pilgrims' complaints.

It shall also impose penalties on the violating companies and agencies by fining them financially, stopping them from the service for one season or more, or cancelling their licenses. The project is relevant to **SDG9, SDG17**.



Local Hajj System (LH-Path)

In **Saudi Arabia**, the **Local Hajj System** is considered to be the unique online project in which MOHU helps the local Hajj's by continually enhancing and adding services each year. The platform manages financial and administrative transactions and supervises contracts between Hajj and Hajj companies. The Local Hajj project is fully integrated with related government entities inside the kingdom. The Local Hajj portal serves MOHU's roles in different aspects especially when it comes to pilgrim's rights and service provides rights. It electronically monitors and evaluates the performance of different parties during the season of Hajj, together with the reports it receives from other concerned authorities in order to see into the pilgrims' complaints. The platform manages financial and administrative transactions and supervises contracts between Hajj and Hajj companies. There are more than 190 Hajj Companies in Saudi Arabia and the platform manages (210 Thousand Hajj) reservation yearly. The E-payment system manages more than 500K transactions. The project is relevant to **SDG9**.



Bayan

In **Saudi Arabia**, the **Bayan** service provides automation for all verification procedures for the data of government employees who have completed their service period, taking into consideration the calculated service period for the purpose of retirement and end of services. The service enables issuance of service statement to send it to the Public Pension Agency and complete retiree pension payments automatically. The project is relevant to **SDG1, SDG16, SDG17**.



Balady

In **Saudi Arabia**, within the National Transformation Program for the Municipal Sector represented by the Ministry of Municipal & Rural Affairs and the Secretariats of the Kingdom in their support to improve the level of satisfaction of beneficiaries & improve the quality of life and prosperity in Saudi cities to respond to the aspirations & needs of present & future generations and achieve the happiness & well-being of residents; **Balady Portal** was developed in cooperation with the municipal authorities to be the national portal supporting for the municipal community. At this stage, the portal includes three main services:

- (1) Interactive services that help promote the concept of community partnership to improve the quality of services provided to beneficiaries
- (2) E-services that assist in the submission of electronic requests for obtaining the most used licenses
- (3) Information services, That helps beneficiaries in making relevant decisions which contribute in improving the level of satisfaction with the bodies of the municipal sector. By providing these services, Balady portal aims to improve the quality of municipal services provided to all the municipality's secretariats & municipalities, and to activate the role of

beneficiaries as active partners, also to improve their level of satisfaction & enhance the level of transparency among the municipal sector. The project is relevant to **SDG3, SDG9, SDG11**.



Najiz Portal

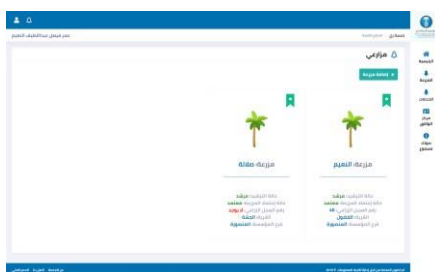
In **Saudi Arabia**, **Najiz portal** is an integrated platform for the Ministry of Justice electronic services and its goal is to combine the e-services in one single portal according to the highest standards of the modern technologies as it is targeting more than 200 judicial services. The services include judiciary, real estate, execution, personal status, accreditation, lawyers' services and other services, which their goal in the first place is the satisfaction of the end user and accomplish the national digital transformation by offering 80% of the Ministry's services electronically. It also will accomplish the Ministry overall strategic goals which are aligned with the kingdom's 2030 vision in terms of simplicity and availability and continuous development. Najiz portal links the end user with more than ten partner portals using the single platform log in (IAM). The project is relevant to **SDG5, SDG16, SDG17**.



Rai Platform

In **Saudi Arabia**, **Rai Platform** is a digital platform developed with the main goal of facilitating farmer's access electronically to the irrigation services provided by the Saudi Irrigation Organization (SIO). It is implemented based on the ASP.net which is a Microsoft's cross-platform open source and framework for building dynamic web applications and web sites. There are more than 25 type of services for which the farmer can apply after registering his farm in the platform using his mobile phone and the internet. Registered farms are inspected by SIO specialists to finalize the registration, whereby the farmer gets access to select the service which he demands, and has the facility of tracking his request. The platform which is at the moment applied for Al Hassa farms , will cover farms all

through KSA, a matter that will make available a large up-to-date data base that will support SIO in its irrigation modernization initiatives as well as promote research activities. Other capabilities of Rai platform include: integration with other governmental and research centers and data sources. Rai Platform helps to increase and spread the use of the internet among farmers and introduces the use of ICT into their lives, in addition to making acquiring services easier for them and in due time , and consequently leads to their satisfaction in addition to lowering administrative costs and accelerates decision making. The project is relevant to **SDG2, SDG6, SDG10, SDG13, SDG15, SDG16**.



ICT Equipment Licensing Portal

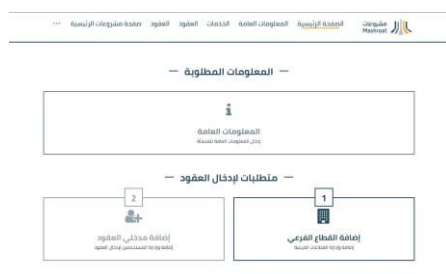
In **Saudi Arabia**, the **ICT Equipment Licensing Portal** is provided by the Communication and Information Technology Commission (CITC) that offers all the services of licensing and approval of ICT equipment. All concerned parties can submit, follow-up and receive CITC's decision on their applications electronically through this portal from anywhere and without the need of visiting any of CITC's offices. The portal is also linked with different local authorities such as the Ministry of Commerce, the Ministry of Interior, and Saudi Customs for the exchange of information and sending approvals electronically. The project is relevant to **SDG8, SDG9, SDG15**.



National Facility Management Performance Portal

In **Saudi Arabia**, the **National Facility Management Performance Portal** (NFM Portal) is a platform to monitor the execution, safety, spending, and performance of government facility management contracts and highlights key performance indicators to Saudi Royal Court, ministers, province governors and key decision makers in government sectors to enhance facility management, process control, transparency and reduce delay impacts. NFM Portal will be accredited as information analytic hub to oversee all government facility management contracts and as a strategic enabler for all government entities to identify areas of improvement in regard to facility management planning, tracking, execution, and performance management. The Portal illustrates key performance indicator to monitor government facility management progress and analysis the supplied information through

an advance artificial intelligent (AI) system to provide behavior data that will help formulate required directions. The project is relevant to **SDG8, SDG9, SDG11, SDG12**.



Integrated Field Operations System

In **Singapore**, the **integrated Field Operations System** (iFOS) is a mobile workforce solution developed to support the National Environment Agency's (NEA) operational needs, so that NEA officers can remain fully mobile and perform their tasks on-the-go, and respond swiftly and effectively to environmental and public health incidents. The unified platform enables seamless workflow integration, joint operations and supports community engagement in an integrated manner, allowing NEA officers to access information and resources at their fingertips, through a single platform on their mobile devices. Through integration of data from sensors and operations, iFOS enables NEA to achieve a more efficient allocation of resources and adapt to the needs of citizens and businesses. iFOS also harnesses information from relevant systems to provide officers with timely, relevant information on-the-go so that they could better understand and engage their customers. With the availability of more granular near real time data, coupled with the use of data analytics, insights can be derived to support decision making and augment NEA's services to the public. Leveraging on ICT, NEA is better positioned to overcome its challenges and sustain a clean and green environment in Singapore while facilitating more collaborations and enhancing transparency, accountability and efficiency. Moving forward, iFOS could be scaled up through development of mobility capabilities and link up with external systems, where required, to enable a more integrated and pre-emptive mode of operation and incident and crisis management. **The project is relevant to SDG3, SDG11.**



MyInfo - Enabling seamless digital transactions

WSIS Prizes Contest 2020 Nominee

In **Singapore**, **MyInfo** is a Singapore Government data platform that allows residents to share their personal data digitally with ease. With real-time consent-based access to data

items from more than 10 government agencies via Application Programming Interfaces (API), residents are able to populate forms over 420 services across private and public services. Since on-boarding to MyInfo, there were reports where:

- (i) 80% usage by eligible residents
- (ii) 80% reduction in transaction time for digital transactions
- (iii) 20% improvement in digital transaction completion from better user experience
- (iv) 15% increase in approvals due to better data quality
- (v) Instant approvals of product/services such as bank account opening, credit card and remittance services.

The project is relevant to **SDG9**.



Balloting and Electoral Services

WSIS Prizes Contest 2020 Nominee

In **South Africa, Balloting and Electoral Services (BES)** of EISA has recently successfully managed the electronic registration of AMCU regional voting delegates and election of AMCU national office bearers at its 2019 national elective congress. Between April and July 2017 the Balloting and Electoral Services department, successfully concluded elections of seven office bearers at four of the AMCU regional elective congresses that is: KZN Coastal, KZN Midlands, Northern Cape and Gauteng West Rand. It is notable to mention that this was the first time that the KZN Coastal and Northern Cape regions have held an elective congress. AMCU observers assigned by branches, expressed their satisfaction with the voting and counting of ballots. EISA announced results immediately after counting. BES successfully conducted a further three elections for the AMCU Mpumalanga region in Parktown, Nelspruit and Secunda. Voting delegates varied between fifty and eighty per region with the nominated candidates being elected uncontested at all three regional elective congresses. Moreover, BES conducted a demonstration of its newly developed electronic balloting for on sight non statutory elections presenting the electronic ballot paper to the SATAWU Eastern Cape provincial congress held in East London on the 17 and 18 May, 2014. We believe modern technology can be used to ensure the voting process is resilient. At the same time, this is not an intention to replace paper ballots but rather to supplement and improve systems that rely on them, and it is not designed to support internet voting. In short, it is a new tool for use by the existing election community and government entities that run elections. The project is relevant to **SDG16**.



Comprehensive Monitoring System in cases of Gender-based Violence (VioGén System)

In **Spain**, the **VioGén System** is a computer application aimed at protecting women victims of gender-based violence and children in charge of gender-based violence. VioGén System is based on a Web application included into the SARA Network to which any State Public Administration, as well as the European public administration, has access. VioGén gathers information from different sources: police, judicial, prison and assistance. Its objectives are aimed at: bringing together the different public institutions that have competences in matters of gender-based violence; integrating into a single database all the information of interest considered necessary in this matter; facilitating the assessment of risk of further violence, through a police risk assessment system for victims of gender-based violence. Considering the level of risk appreciated, follow up on the case and, if necessary, provide protection to the victim throughout the national territory; helping the victim to draw up a “Personalized Safety Plan” with adapted and individualized self-protection measures and, finally, carrying out preventive work, issuing notifications to the different institutions involved, when an incident or event of interest for the protection of the victim is detected. The project is relevant to **SDG5, SDG16**.

Smart-being for a NEXT GEN Ageing Society

In **Thailand**, Ageing Society in Thailand has begun the major challenging for economic development of the country. At present, more and more people are becoming aware of Thailand’s demographic transition toward a fully ageing society. Advanced Contact Center Co.,Ltd. is also well aware of this trend and have a clear strategy in response to the growing of aging society and always encourage Thailand government policy for economic development. ACC has initiated a project since 2017 called “**Smart-being for a NEXT GEN Ageing Society Program**” which consist of 3 programs to encourage the standard of living in digital era, delivering exclusive assistant channel, IN-Person technology workshop and career opportunity for older people. Currently, senior exclusive assistant channel including assisted technology for seniors; such as, AI Chatbot and IVR speech recognition deliver seniors’ satisfaction index over 84% at top box score and significantly above global customer satisfaction index. Working collaboration with “BAN PAN LAK SENIOR ASSOCIATION” to open initially of IN-PERSON technology workshop can bridge the gap

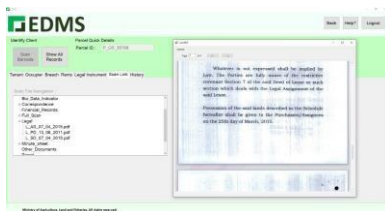
between older adults and younger generation and make them communicate with family easier via smartphone technology. In 2020, ACC continue moving forward to new challenges of Providing Silver-Age Contact Center as Career Opportunity for older people. The project is relevant to **SDG4, SDG8, SDG10, SDG17**.



Electronic Document Management System for State Land

WSIS Prizes Contest 2020 Nominee

In **Trinidad and Tobago**, the **Electronic Document Management system** is aimed at improving the service delivery of the Ministry of Agriculture, Land and Fisheries to its farmers, fisherfolk, foresters and tenants. Since implementation in 2017, the system has captured 6'500 tenants, approximately 300'000 pages of legal documents accessible through a secure portal. This portal increases the transparency and effectiveness of State land management and administration. The system is targeted to connect the 80 satellite offices of the Ministry who process land-related activities for 1.3 million citizens of the country that the Ministry serves. Spatial technology and ICT is harnessed to provide a digital platform for clients to access through their barcoded Land Card in the Ministry offices or over the phone using a unique parcel ID generated from the Geographic Information System (GIS). This digital access reduces the time from approximately 3 months to 3 seconds to locate a file. The project has now gone into its second phase and is developing a web portal for access to public clients to pay rents online, view rental balance, web chat with staff, log in and view the stage of their lease application, amongst several other queries. The objective of the EDMS Project is to ensure alignment with the service delivery objectives of the Ministry through a digital Land Client. The EDMS allows better management, tracking and updating of State land files, streamlining access throughout the Ministry, eliminating bottlenecks and optimizing security. A digital and secure record of each State land file is imperative for the effective and efficient management and administration of each State land parcel. It is essential to utilise ICT's to boost the service delivery and information access which will, in turn, equip decision-makers and involve stakeholders for overall sustainable development of the country's agricultural, fisheries and forestry sector. The project is relevant to **SDG1, SDG2, SDG3, SDG12, SDG14, SDG15**.



DIGIPOST BNK D17

In **Tunisia**, aiming to modernize cashless payment instruments, the Tunisian Post developed a national payment solution via mobile based on wallets, free downloadable from Google Play and Apple Store. The **D17** is a solution that aims to equip merchants with a new low-cost payment method (QR Code) certified EMVCO by MasterCard.

The main objectives include:

- Diversify payment channels for Tunisian citizens
- Promote the Merchant Payment Service with an affordable solution based on QR codes – Orient the customer to wallet payment gradually to promote Cashless, social and financial inclusion
- Decongest the Post Offices
- Offer a remote, fast and simple service to citizens
- Strengthen the role of Tunisian Post as a microfinance integrator
- Inspect other government activities (Transport, Sport, Youth, health ...)
- Prepare the foundations of Digital Transformation and the Postal Digital Bank – Contribute to the development of the digital economy and decashing solution A range of services are provided:
- Management of wallet's account (consultation, history, renewal, blocking, ...)
- Recharge of the e-Dinar Wallet from the postal and bank's cards
- Money order
- Merchant Payment with a QR code technology
- Money transfer
- Collection of money orders (express, etc.)
- Bill payment
- Repayment of Microcredit deadlines
- Chat

The project is relevant to **SDG8, SDG9, SDG16**.

E-NOTIFICATION

In **Turkey**, as part of the Action Line of 2016, with the aim of developing the quality and effectiveness of Judicial System, empowering the notification system and enhancing the usage of informatics systems in the judiciary, **e-Notification** Project has been started. ENotification is transmitting of formal letters to the related persons electronically. To be able to make e-Notification to one, he/she must have a KEP (Registered e-mail) address and inform the related units of that address. E-Notification bears the same legal consequences with the physical one. Thanks to this project the notification progress that takes weeks can be completed just in seconds.

Advantages of e-Notification:

- While it takes days to reach the physical notification to the address, thanks to eNotification it takes just seconds, thus it provides time and energy saving.
- It is a nature-friendly Project, contributing protection of nature and green since no paper is used at e-notification,

–While physical notification costs 14 Turkish Lira, e-Notification costs 4.5. It makes a major contribution to the budget. When taking into consideration that it provides 50% saving, it seems that it has saving effects on operational costs.

–Since the physical notification is made to local authority, law enforcement officers etc. in case of the related person is not at the address, it's possible the notification not to reach the related person but e-Notification is made to the e-mail address that he/she registered and he/she is informed with SMS about the notification it is impossible he/she does not see the notification.

–Time and labor saving

–It was achieved to make judiciary notification progress possible at little cost, within the shortest time, transparent and reviewable with own resources.

–When considering the human factor of making possible faults like miswriting the address, registering the notification wrongly could cause delays and forfeiture of the citizens. With project, it becomes possible to avoid from user-based wrong data entries. The project is relevant to **SDG9**.

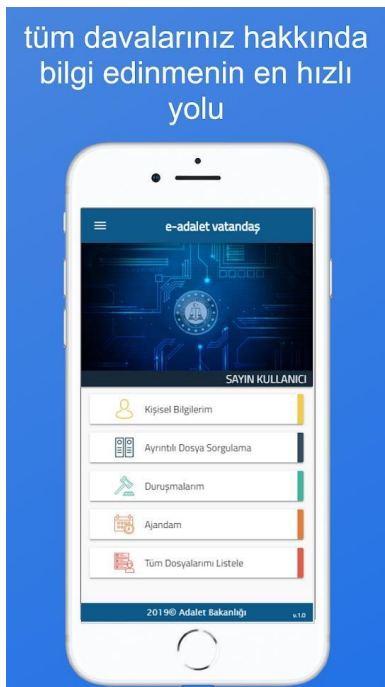


e-Justice for Citizen Mobile Application

WSIS Prizes Contest 2020 Nominee

In **Turkey**, many reforms within the scope of a trusting and accessible justice approach have been signed. The Ministry of Justice of Turkey has also facilitated access to justice services by using the opportunities of technology. Accessing to case files brought into mobile platforms via the application called by “e-justice for Citizen”. With the new application prepared for Android and IOS, citizens will be able to have immediate information about open or closed files in judicial and administrative jurisdictions and see their contact information registered in UYAP (National Judicial Network Project) Information System. Via **e-Justice Citizen App**, citizens can see all their judicial information registered in UYAP Information System because the application prepared in a comprehensive manner. Citizens can see e-mail, phone and address information from the contact information shortcut within the application and make them updates if necessary. In

the application menu, they have the opportunity to query their files by filtering the judiciary type, judicial unit, file status, file year and file order. Also they have knowledge about the current status of their files in the judicial unit. By means of “My Hearings” menu, citizens can see detailed information about the hearing and viewing day in terms of hours, days, months and years. With the agenda menu, they can see the developments related to the file on the days that are listed monthly on the mobile device’s agenda, and when they select any relevant day from agenda, they can see all the progress is related to that day. Thanks to the e-Justice Citizen application, citizens have time limited access to their case and hearing information. It is provided to save labor and labor force of court officials and call center agents. With this mobile apps it is expected significantly decrease of the workload onto the information channels will as considering CIMER (Presidential Communication Center) applications are mainly about “What are my cases which are currently continue on judicial units. The project is relevant to **SDG9**.



ePosta – Digital Postal Office Information Management System

WSIS Prizes Contest 2020 Nominee

In **Uganda**, **ePosta** is an Enterprise Transactional Postal Office Management platform that allows any Post Office offer all its services, all government services as well as private services online using one single platform. ePosta is intended to revolutionize post office by turning it into a supermarket for all postal services, government services as well as Financial Services. ePosta seeks to provide a single platform through which all postal offices can seamlessly offer services and create new avenues for revenue enhancement. ePosta has

transformed the way citizens communicate and transact business through the post office as well as propelled the postal industry into greater heights. This has helped Posta Uganda generate both incremental change and wide-ranging strategic reforms in the delivery of mail. ePosta has enabled citizens enjoy postal services electronically via any electronic device thus invigorating the aspect of convenience, inclusion and affordability in the postal services. The purpose is to provide a platform to help users access all services anytime anywhere at their convenience.

Impact:

- Delivery of e Government Services through the Post Office (innovative, integrated and inclusive)
- Creation of new sustainable sources of revenue for the company; • Cost reduction
- More return of equity
- Productivity improvement
- Improved customer satisfaction
- Better customer retention
- Faster time-to-market

In Conclusion, ePosta is an enabler for the achievement of the Sustainable Development Goals (SDGs) in Uganda. The project is relevant to **SDG7, SDG8, SDG9, SDG10, SDG11, SDG12**.



Smart hub – Digital transformation project

In the **United Arab Emirates**, **Smart hub** is a national platform developed by Abu Dhabi municipality to provide more than 400 services to the citizen of Abu Dhabi. This includes the integration and partnership between 15 other government entities and 25 banks to provide all kind of customer services online. 5 main objective for this project:

- 1- customer satisfaction
- 2- enhance the customer experience instead of using the traditional service methods
- 3- enhance the work efficiency
- 4- use he technology to enhance the service experience
- 5- enhance the municipality service

The project is relevant to **SDG9**.



Slemt

In the **United Arab Emirates**, **Slemt** Service is to provide NOC (non objection certificate) for traffic accident in case there are damages on asset owned by government entity across UAE streets, and it is implemented on UAEHUB, a national portal that connects 90 government entities, police, accident departments with all insurance companies to provide the customer journey with zero visit. In case of accident and once the police report is created, the driver will receive SMS from slemt to wish safe drive, and then automatically will initiate a service that will be processed by government entity and insurance company to fix the damage and once it is done, the driver will receive another SMS to notify him the process were completed. This project saves thousands of visits to different entities and solves the issue of communicating of stakeholders. The project is relevant to **SDG12**, **SDG17**.



NuTech Portal

WSIS Prizes Contest 2020 Nominee

In the **United Arab Emirates**, **NuTech Portal** automates the process of obtaining transfers approvals of regulated items. Regulated items are nuclear material, nuclear eelated items and nuclear related dual-use items listed in Nuclear Suppliers Group guidelines published by the International Atomic Energy Agency (IAEA). Portal supports the fulfillment of licensing requirements; by checking, monitoring and auditing of all shipments suspected of being subject to a license. The name itself is a combination of two words, Nuclear Technology. We, at the Federal Authority for Nuclear Regulatory (FANR), use this system to ensure the safeguards of these items in accordance with the international treaties and conventions. The system is paperless and has reduced approval time for the clearing of shipments from Customs by 80% and achieved a customer happiness rating of 100%. The project is relevant to **SDG3**, **SDG9**, **SDG11**, **SDG17**.



National CRM (Tawasul 171)

In the **United Arab Emirates**, **National CRM** is a massive integrated platform between government entities. It is made to ease the customer experience in reaching out to the government service. Customers can easily reach any government entity with one platform and one username and password. Services made easy.

- The system has multiple communication channels to provide services to the public.
- (Social Media) The system is supported by a social media integration.
- (Positive or negative comments ?) It also has a sentiment analysis tool that will enable the government to analysis and predict the necessary information to develop right decisions accordingly and to understand the overall impression of the services provided by the entity. This feature adds extra value in understanding customers happiness. The project is relevant to **SDG17**.

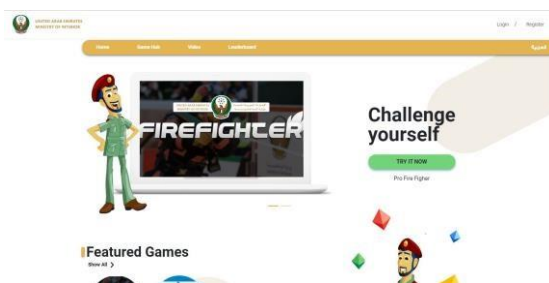


AI and gamification Implementation in the MOI Portal

WSIS Prizes Contest 2020 Nominee

In the **United Arab Emirates**, the **Ministry of Interior Portal** launched in 2008 and is being updated regularly to achieve the goals of Smart Government Strategies, UAE Vision 2021 and the National Agenda. The electronic portal contains many sections that reflects its identity, functions and services provided. The electronic portal has been developed to target all categories of visitors and facilitate the user journey in executing services that cover the

Ministry's Sectors with a total of 107 procedural and 17 informative services which is equivalent to nearly a third of government services in the UAE. Services has been developed to make it easy for customers to execute in less than two clicks or through voice commands and guided tour of the site's components. The customer satisfaction for the services is measured through innovation of happiness index using facial recognition (Emotion Detection). The portal provides innovative features to support and communicate with customers through smart engine, the Chatbot. AI feature has been used to search content in all images and videos through the definition of a repository of images and videos. The content publishing has been developed to reach big number of people in a three-dimensional display and infographic format, publishing open data related to the SDGs, as well as displaying all data in the form of spreadsheets and on interactive map that displays and filters data for each emirate, sector and service. The number of visitors has been increased from 1850387 in 2018 to 3207492 in 2019 leading to increase in usage of the Smart Services and the customer satisfaction. The portal achieved Sheikh Salem Al-Ali AlSabah Informatics Award which is a regional award in 2017. The portal achieved leadership in the electronic and smart services KPI during the last three years, and UAE has been ranked the first in the Arab world, the third in Asia and the eighth globally in the e-government development survey (EGDI) issued by the United Nations Committee for Economic and Social Affairs. The project is relevant to **SDG3, SDG4, SDG5, SDG16**.



Actionline: 7-HEA

Save-Me&Mum: An E-Healthcare Solution to Save Algerian Pregnant Women

WSIS Prizes Contest 2020 Nominee

In **Algeria**, in recent years, we have heard about noticeable number of deaths among Algerian pregnant women that died before giving birth to their babies. Either this was mainly due to the overloaded hospitals in the Algerian big cities, such as the capital Algiers, or the lack of medical staff in the southern cities. In both cases, the pregnant woman should have the useful information about the nearest hospital where she could be accepted and taken care of. Our project "**Save-Me&Mum**" deals with that issue and proposes a solution by which the pregnant women could get on-demand statistics about services availability within hospitals that are near to their local hospital. The solution consists of two main parts. One part is the server that is situated in the hospital and carries the vital information regarding all local cases of pregnant women. In addition, the hospital's server gets statistical data of availability from other hospitals. The second part consists of a mobile application that runs over the women's mobile device. The application connects to the local hospitals

server after a successful authentication, in order to get on-demand statistics that would help that pregnant woman to decide about the nearest and most available hospital where she could deliver her baby safely. The project is relevant to **SDG3**.



Smart Insole for Prevention of Diabetic Foot Ulceration

In **Algeria**, it is estimated that by 2040 there will be over 642 million people with diabetes in the world. The diabetic foot syndrome are a source of high impact for the patients and societal cost. The frequency and severity of foot problems varies from region, due to differences in diabetes incidence and treatment, socio-economic conditions, use of protective shoes, and standards of foot care. Foot plantar pressure is the pressure field that acts between the foot and the support surface during every day loco-motor activities. Information derived from pressure measures is important in gait and posture research for diagnosing lower limb problems, injury prevention and other applications. In this project, we have developed a **Smart insole** embedded in the shoe **for prevention of plantar Diabetic Foot Ulceration (DFU)**. The Smart insole contains pressure sensors in critical point of high risk to prevent ulcers, and a temperature / humidity sensors. All sensors for both feet communicate wirelessly and in real time with a mobile application through Bluetooth. We used a Smartphone for data processing and visualization tasks for both feet, in order to be informed about the risk of ulcer formation during the patient's daily activities and warns in case of danger. The project is relevant to **SDG3, SDG5, SDG9, SDG10**.



Provincial Sports Map

In **Argentina**, a **Provincial Sports Map** has been launched. The main purpose of the provincial sports map is to assess the physical condition of children in San Luis province, using a pile of reliable tests, according to the physiological age and easy to apply due to the use of technology. The results allow us to establish, on one hand, health parameters related to low weight, normal weight, overweight and obesity, through the calculation of the body mass index (B.M.I); and on the other hand, to generate a database of sports potential that allows early identification of talent in relation to the ideal sport; to achieve this, a crosssectional study of the entire population of third and sixth grade in elementary school

students was developed, giving a total of 13,840 children evaluated. In 2018, 6,995 sixth grade students were tested and in 2019, 6,845 belonging to third grade; In turn, data collection was immediate thanks to the connectivity that exists throughout the province. The level of physical fitness is a good indicator of the general health state of the inhabitants of a country, region or province; therefore, it is very important to start generating databases of our own, in order to make decisions in relation to the results obtained. This requires a political decision and the joint effort of different areas of the same government, and it is in that sense that San Luis is working. The project is relevant to **SDG3, SDG5, SDG17**.



Humanitarian Crisis Health Service Platform

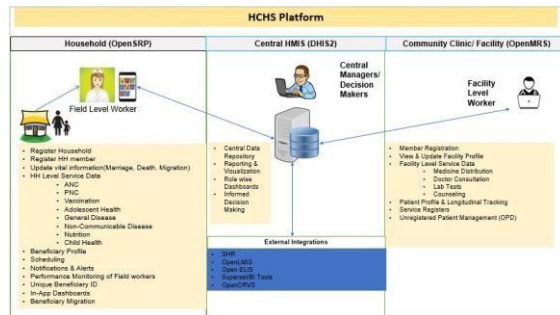
WSIS Prizes Contest 2020 Nominee

In **Bangladesh**, violence in Rakhine State has driven approximately 723'000 Rohingya refugees since August of 2017 across the border from Rakhine. The speed and scale of the influx has resulted in a critical humanitarian emergency. At present, there are 70 INGOs, 40 National NGOs and 7 UN agencies which are operating in the Rohingya camps, offering a variety of healthcare services and consultations. Health services are offered at 3 level – one, at the household level (household in the case of Rohingya camps are more like temporary tents which house a family); two, at small facilities generally providing primary health care services for specific hours; three, at somewhat larger facilities with beds providing 24/7 health care services. To ensure proper health services, the **Humanitarian Crisis Health Service Platform** was developed which will enable both intra-organizational coordination among health cadres, inter-organizational collaboration through referrals and targeted interventions, automated reporting to the government information systems for timely policy decisions and connect health services with beneficiaries to ensure continuity of care regardless of whichever health facility they go to.

The solution works in key 4 areas:

- 1) Strengthen individualized service delivery within and among organizations
- 2) Strengthen real-time reporting to the GoB and Inter Sector Coordination Group(ISCG)
- 3) Improving adherence and timeliness towards services provided
- 4) Disease Surveillance

The project is relevant to **SDG3, SDG17**.



Viamigo

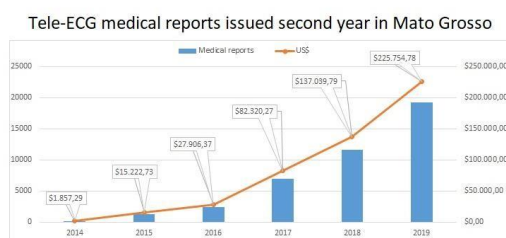
In **Belgium**, in order to both support the independent outdoor mobility of persons with intellectual disabilities (PwIDs) themselves and to reduce the caregivers' burden due to companionship of the person during the trip, the geographic information system-based application "**Viamigo**", by which an individual can be monitored in real time from a distance, was developed. PwIDs are taught a known individual route, which they can accomplish independently afterwards while non-intrusively being monitored by a personal coach (caregiver, family member or friend), taking care of this individual while making a trip. Viamigo determines the location of the user and compares this in time and space within a predetermined range, so that deviations from the planned route, an incorrect speed, entering a dangerous zone, among others; can be detected. The project is relevant to **SDG9, SDG16**.



Tele-Eletrocardiograma

In **Brazil**, the aim of the project is to improve the quality of life of people living in remote and isolated regions of large cities. For this we provide the **Tele-Electrocardiogram** service that allows not only access to the medical report, but also the support of a cardiologist to the patient's assistant physician. This produces both economic and social benefits and promotes equal access. In this project it was possible to articulate several stakeholders around a common outcome, bringing access to health care to the remote

population. For this purpose, the use of ICTs proved to be fundamental, since it is a tool with the capacity to make the population's access to health services economically viable. The project is relevant to **SDG3**.



5G Mobile Stroke Unit

In **China**, the **5G mobile stroke unit** uses advanced information technology such as the Internet of Things, Mobile Internet, Cloud computing, and 5G to connect people, information, equipment, and resources related to medical and health services in order to achieve positive interaction, which builds a model of advanced technology application in medical field, this model can also be further applied in other fields and different communities as well as countries. The 5G mobile stroke unit can play an important role in the emergency field. The project uses the mobile CT, inspection equipment, monitoring equipment, and remote mobile consultation system equipped on the “5G Mobile Stroke Unit” to integrate stroke examination, diagnosis, thrombolysis and monitoring, and help change the traditional treatment process of stroke. On May 16, 2019, China Unicom, Capital Medical University Xuanwu Hospital and the First Affiliated Hospital of Hebei North University jointly realized the application of the on-board CT mobile stroke unit based on 5G technology. Multi-party collaboration promotes the realization of 5G-based remote guidance and treatment of stroke in Beijing, Zhangjiakou and Chongli. This major breakthrough has far-reaching significance for the prevention and treatment of acute stroke, which better ensure healthy lives and promote well-being for all, and finally accelerates the development of just, peaceful and inclusive societies. The project is relevant to **SDG8, SDG16**.



The world's first human 5G telesurgery

In **China**, taking "Healthy China" as the blueprint and aiming at sharing high-quality medical resources, China Mobile and General Hospital of the People's Liberation Army of China have made full use of their own professional advantages and top-level resources in different fields to complete the world's first **5G human telesurgery** which have spanned 3000 kilometers from Hainan to Beijing. The telesurgery has achieved milliseconds response, millimeters accuracy and real-time HD video interaction in order to ensure the stability, safety and reliability of the surgery, which is a breakthrough in the field both of medical treatment and communication. The successful practice of this operation has fully proved the

technical feasibility and application feasibility of 5G telemedicine, making more people believe that high-quality medical resources can be spread to all parts of the country through 5G and other information technologies. The project has been one of the candidates to be the case of Central Corporate Social Responsibility in 2019, which is a beneficial practice to help implement the "Healthy China" strategy. Based on the success of the operation, China Mobile further carried out 5G telesurgery practice in the other fields such as ophthalmology and orthopedics with a number of leading hospitals, and promoted more than 50 hospitals in more than 20 provinces across the country to carry out more 5G medical application innovation practice. The project is the full combination of 5G capability and medical field, which has a strong demonstration role in the field of ICT and medical field. It promotes the sharing of high-quality medical resources, leads more 5G medical application scenarios completion, and accelerates the development of communication, medical services, medical devices and other industries. It has strong sustainability in social benefits, commercial value and technological innovation. The project is relevant to SDG3, SDG11, SDG16.



Productivity Models for Improving the Timeliness of Health Care Delivery to Cancer Patients

In Colombia, Productivity Models for Improving the Timeliness of Health Care Delivery to Cancer Patients have been created. It is a strategy for the design and implementation of models of additional productivity and performance in the Institute, to improve the opportunity in the provision of care services of some key specialties for the care of cancer patients: clinical oncology, hematooncology, head and neck surgery and radiotherapeutic oncology. In Clinical Oncology, there was an increase of 93% in first-time consultations and 69% in control consultations, comparing 2013 with the end of 2017. At the production level, the following results are evident (all the activities performed by a service are added together, such as first time consultations and control, inter-consultations, procedures, surgeries, medical boards, evolutions). In terms of turnover, comparing 2010 with 2017, there is a variation in the total turnover of each service of 424% in Clinical Oncology, 390% in Hemato Oncology, 342% in Radiation Oncology and 646% in Head and Neck Surgery. The project is relevant to **SDG3, SDG8**.



Farmacorreos

In **Costa Rica**, an innovative digital platform called “**Farmacorreos**” has been launched. Through this platform the patient or their caregiver can self-manage the shipment of medications to the place of their convenience, accessibly and expeditiously through their cell phone or computer. This is a model of cooperation between the Costa Rican Caja del Seguro Social and Correos de Costa Rica, in order to improve citizen service by approaching and facilitating their access, strengthening social security and expediting pharmacy processes. The project also reduces the rate of "no withdrawal of medications", decreases the ranks and prevents the movement of patients to medical centers, improving their quality of life. It also offers traceability of the shipment during the preparation, collection and delivery stages, a tracking code will be provided through a text message. On behalf of the Caja Costarricense de Seguro Social, this service does not imply the dismissal of personnel, since this resource is going to take care of the preparation and dispatch of medications, reducing patient waiting times. The project is relevant to **SDG3, SDG17**.



Omoguru

WSIS Prizes Contest 2020 Nominee

In **Croatia**, the **Omoguru** mobile application offers a set of specific tools that facilitate reading for dyslexics. The tools have been developed by our specialised team that has over 10 years of experience in the field and scientific research. The core of the system is the proprietary OmoType font system shaped to satisfy specific needs of dyslexics. Right now

we offer Android and iOS mobile apps, we have a plugin for Chrome and we are starting the development of web application. All these tools make the Omoguru ecosystem that helps people with dyslexia read and learn. They are cross platform and connected through user account enabling each user to collect notes and use content of handheld and desktop devices. The project is relevant to **SDG4, SDG10, SDG16**.



ActiVitaE – PaciniMedico

In **Denmark**, RemPulse works by inducing deep, sonic vibrations into the patient's abdomen. The vibrations are masked by soothing audio, putting the patient at ease in a relaxed state. The vibrations is 100% controlled and managed. The device therefore consists of a vibration transducer, a pair of headphones, an Audio Control Unit (ACU) and an iPad with an app, allowing the patient to control the treatment session. The transducer is mounted in an applied part. The mobile version employs a corset, which holds the transducer in place on the patient's belly. The recliner chair holds the transducer against the patient's lower back. Lastly, the bed solution sends vibrations through the mattress in the region around the belly. All solutions thus induce the vibrations in a manner that targets the patient's abdomen. **PaciniMedico** help people getting their life back and the main use case for RemPulse is to do professional treatment in clinics and at home of; A. Chronic pain B. Chronic and temporary mental illness. The project is relevant to **SDG9, SDG16**.



Barrier-free emergency call system with HandHelp – Life Care

In **Germany**, the **barrier-free emergency call system “HandHelp – Life Care”** was launched. The highest good that we possess ALL, to protect our health and our lives! Living together, without fear - never again alone on the way. We are very proud to be nominated with our cooperating organizations ZfK e.V. and WIS LLC as technological partner / developer for the ITU Telecom Award 2019 in Budapest, as finalist for the best scalable solution. In an emergency, our applications can transmit the conventional 5 W questions including photo/sound documentation and emergency passport to the responsible control centers police / fire brigade (rescue services) on all existing infrastructures in the control

center system without a call & local/language knowledge (very suitable also for tourists!) as well as inform relatives of the affected person (f/m/d) of the emergency as a first-aider. These emergency call messages are made in an end-to-end encrypted procedure and not via a cloud-based solution. Every person in the world, with or without disabilities, who owns a smartphone or tablet, can make an emergency call to his helper network via HandHelp – Life Care App or connectable mobile emergency button and request optimized first aid in an emergency situation within seconds. This solution for barrier-free emergency calls does not exist anywhere in the world and was previously tested by our patent attorneys, so that we granted a European patent and validated in 21 countries for our innovation on 24.10.2018 for the first time. The project is relevant to **SDG9, SDG16**.



Accessible- Smart Universal Intelligent Toilet - A-SUIT

In **India**, the proposed solution called “**A-SUIT**” is really compelling compared to options available in the market. Most of the options / available accessible toilets are fixed – ours is fully mobile and portable. They are lacking use of technology – we have implemented use of open source technology. They are not flexible or customisable – ours is flexible and customizable. They are not having communication facility – we have provided SOS and social network feature. They are not able to lift the user if the user is heavy to move – ours has a built hanger which can lift up and down to the user. Most of the solutions are handles bars near toilet and not movable – we have attached left and right arms and are fully movable using mobile app or switches on the arms itself. The project is relevant to **SDG16**.



Artificial Intelligence and Voice enabled devices to assist Dementia Patients

In India, Artificial Intelligence and Voice enabled device to assist Dementia Patients were created. Population ageing is a universal global phenomenon and Indian subcontinent is no exception, it has profound impact on social, economical and political context. There are nearly 104 Million elderly people in India 70% from rural India and 30% from urban areas. The increasing number of older persons put a strain on health care and social care systems in the country. Old age comes with lot of disturbances, misplacing objects, memory lapses, forgetting recent events, anxiety, depression, changing moods. Dementia is one form of progressive mental deterioration increasing rapidly as an epidemic in Indian Subcontinent. The primary focus of my research is to develop a low cost customized digital assistant that is always available, can assist in multiple tasks and high interaction, hands free, record conversation, memory lane connecting users to the past. The advent of conversational UI will be beneficial from the view point of assistive technologies. However surprisingly, at present there are not many interventions, practices or proper exposure in the digital realm to support Indian rural community, whether they are a patient, carer or family member. The project is relevant to **SDG3, SDG11, SDG16**.



Smart Ophthalmoscope for Diabetic Retinopathy and Elderly care

In India, a Smart Ophthalmoscope for Diabetic Retinopathy and Elderly care was created. Ophthalmoscope: Used to view the optic disk, retina, macula, and choroid in the back of the eye. Diabetic Retinopathy is referred as a clinical diagnosis, depicted by; Presence of one or more several retinal lesions like micro-aneurysms (MA), haemorrhages

(HE), hard exudates (EX), and soft exudates (SE). Presence of venous beading, retinal neo vascularization which can be utilized to classify stages of diabetic retinopathy. This classifier when fitted onto an ophthalmoscope, will classify and predict the different phases preoperative diabetic retinopathy as well as non-preoperative diabetic retinopathy in realtime. The project is relevant to **SDG3, SDG10, SDG16, SDG17**.



Using eCompliance Suite – an android based application to prevent default in Tuberculosis Treatment

WSIS Prizes Contest 2020 Nominee

In **India**, OpASHA has developed a community driven, doorstep delivery model for healthcare that leverages technology alongside human intervention. Communities are empowered by recruiting and training local, semi-literate youth who make door-to door visits, find symptomatics, take them to labs or carry samples, ensure diagnosis by a qualified physician, provide prescribed medicines and intensive counseling. Each activity, its duration/location are monitored with GPS enabled biometric devices. It uses **eCompliance Suite** – a combination of 4 software applications (detailed below) that are integrated with each other for flow of patient information:

eDetection – an algorithm used to screen contacts of existing TB patients and other highrisk individuals.

eCounselling – a series of 9 counselling videos lasting 2-3 minutes each on all aspects of TB such as effect of missed doses, how to handle side effects etc.

eCompliance – a fingerprint-based tracking system to ensure adherence to TB treatment. It also generates alerts for missed doses through a built-in SMS reminder system, enabling the CHW to track patients and reduce drop-outs.

Electronic Medical Record – compiles data from all softwares and analyzes it. It can produce any type and number of reports at the click of a button, helping project staff to monitor progress.

The project is relevant to **SDG1, SDG3, SDG5, SDG17**.

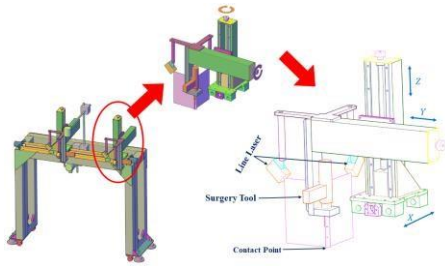


In **Indonesia**, **Bully.id** is a life changing App that educates, saves and improves bullying and cyberbullying victims' lives through legal and psychology counsellings, by providing confidential emotional support and legal assistance with global aim to create safer online community with the feature "Be a Whistleblower" by implementing Artificial intelligence, Blockchain and Gamification technologies. With the help of Artificial Intelligence (AI), bully.id will be able to identify and analyze the conditions and issues faced by users through integration with social media accounts of the users and self-assessment questions aimed for the users. From this analysis, AI from bully.id will produce mental conditions parameters and brief legal regulations. These parameters will provide suggestions; whether the user should perform personal emotional services and/or legal assistance with psychologists and/or lawyers according to the type of counseling suggested by AI. Not only for those who are victims of bullying/cyberbullying, but bully.id is also intended for those who want to participate in creating a better online community, namely by becoming a Whistleblower. The "Be a Whistleblower" feature in bully.id application is available for anyone who sees and witnesses the bullying and cyberbullying incidents, and wants to report them. Reporting evidence will later be verified by the Blockchain system from bully.id. For every verified evidence, Whistleblower will get reward in the form of points from bully.id business partners. The next goal of this application is to create community when certain number of users are reached. Offline events such as seminar, workshops, or conferences will be held regularly by bully.id together with this community. The events may take place in schools, universities, or even companies which involved youths as the main human resources. The education about cyberbullying and the actions that should be taken to prevent and resolve it will be taught to larger society throughout these events. The project is relevant to **SDG3, SDG5, SDG16, SDG17**.

ICTs for Digital Health: Robotic Remote Surgery

WSIS Prizes Contest 2020 Nominee

In **Iran (Islamic Republic of)**, a system for **robotic remote surgery** was designed, implemented and produced. The system can be used when ultra-emergency surgery is required to save a patient's life in cases that qualified surgeons are not physically present at the site of the accident. Intracranial bleeding at the site of an accident is an example such cases where accumulation of blood inside the skull puts pressure on the brain, causing increased blood pressure, decreased heart rate, decreased respiratory rate, coma and finally death. Our system can be used to remove the accumulated blood and discharge the hematoma, leading to quickly reducing the pressure on the brain. The system includes a precision robot and its accompanying fixture at the patient's location, a set of command and control consoles and sub-systems at both the surgeon and patient locations, as well as an ultra-reliable low-latency (URLL) wireless link for the remote surgeon to perform surgery from distance and monitor the patient. The project is relevant to **SDG3**.



Electronic Health Record implementation in Iran (Islamic Republic of) healthcare system

In **Iran (Islamic Republic of)**, an **Electronic Health Record Deployment Program** is now running throughout the country after being evaluated in the pilot steps. The recognition of the components and functions of the country's health system has been studied at first and the successful experiences of other countries and international standards have been consulted and the plan has been developed in accordance with other infrastructural aspects, related laws and regulations. The developed program has been piloted in 7 Medical sciences and health services universities before nationwide establishment (Gilan, Golestan, Zanzan, East Azarbaijan, Mazandaran, Babol and Khorasan Razavi). The project is relevant to **SDG3**.



Malaria application

In **Iran (Islamic Republic of)**, a **Malaria application** was launched. The project consists of two parts, the Web and the app, which include Kit & Lam, Diagnosis, Positive, Entomology, Gateway Larval Mapping, Recording and Focusing. The app also includes the full process of treating patients and also incorporates notification and prevention features using artificial intelligence technology. This application provides the possibility to provide a variety of applications and reports. The project also has the option of publishing videos and educational documentation. In our opinion, this project is the most complete and best malaria system and application ever produced and implemented in the world and we are ready to implement it in other countries as well. The project is relevant to **SDG1, SDG2, SDG3, SDG4, SDG5, SDG6, SDG7, SDG8, SDG9, SDG10, SDG11, SDG12, SDG13, SDG14, SDG15, SDG16, SDG17**.



mHealth4Afrika

WSIS Prizes Contest 2020 Nominee

In **Ireland**, **mHealth4Afrika** has co-designed and validated a standards-based, comprehensive patient-centric health platform for use in resource constrained environments. mHealth4Afrika integrates Electronic Health Record (EHR) and Electronic Medical Record (EMR) functionality with the use of medical sensors and analytical, data visualisation and decision support tools at the point of care. It supports automatic counting of aggregate program indicator data required by Ministries of Health and SMS appointment notifications. HL7 FHIR integration was undertaken to support transfer of vital sign readings from CE approved medical sensors, lab system data exchange, and the ability to import and export individual patient records to support patient mobility. mHealth4Afrika leveraged a user-centred design and Collaborative Open Innovation based approach, working in partnership with Ministries of Health, District Health Offices, Clinics Managers and healthcare professionals in healthcare facilities in Ethiopia, Kenya, Malawi and South Africa to inform required functionality, workflow and usability requirements. Following three years of co-design, alpha and beta development, the pilot platform was formally validated in real-life environments by 23 intervention health facilities in Northwest Ethiopia, Western Kenya and Southern Malawi and by clinicians from South Africa, between October 2018 and April 2019. It supports a holistic “cradle to grave” approach to patient centric healthcare. The project is relevant to **SDG3**.



MirroHR - Epilepsy Research Kit for Kids

In **Italy**, the **MirrorHR** project will use currently available wearable consumer sensors (e.g. Apple Watch, Polar sensor, ‘pajama’ sensor) paired with iOS devices. The device will capture data and will:

- a) Actively monitor patients to alert family/friends when a seizure is happening as soon as possible (real-time).
- b) Provide a video log feature that allows caregivers and patients to log daily routine and lifestyle related information in order to gain insights to be shared with doctors.

Mario is one of over 50 million people in the world living with epilepsy. It is the fourth most common neurological disorder, characterized by unpredictable seizures and causing other health complications, affecting people of all ages. There are a wide range of seizure types and medicines for effective person-to-person. The project is



control vary from relevant to **SDG6**, **SDG16**.

BrainControl

In **Italy**, **BrainControl** is a framework for human-machine interaction through bio-feedback (brain electrical signals, movements, gestures, gaze, etc.). Application of the BrainControl

technology targets the medical sector (assistive technologies, diagnostics and rehabilitation) and in the future, also, IoT and Robotics (automotive, industrial, home/office). This first released product is our MVP, BrainControl BCI AAC, a disruptive medical device CE Class I assisting severe disabled people to easily communicate and interact with others and their environment in their everyday activities with their mind (non-invasive Brain-Computer Interface). The MVP target application is the medical market for assistive technologies. It allows controlling a user interface on a tablet PC with several functionalities as sentence finder, virtual keyboard and advanced communicator features. It acts as a “mental joystick” usable by anyone. It only requires complete cognitive skills (sight is not required) and the desire to use thoughts related to movement. It does not require physical movement, making it usable for people with severe disabilities. From the end user perspective who receives the kit that includes a tablet pc with BrainControl software installed and a commercial EEG headset, the user, assisted remotely by a trainer, starts the training sessions with the possibility to interact through imagined movements controlling the BrainControl UI. Technologically, the core innovation of the system is a classifier of signal pattern coming from wearable biometric sensors based on a Machine Learning technology for the customization and prediction of the specific needs of each patient. It allows advanced communication and entertainment (web browsing, interaction via sms, social networks,e-mail, web radio), home automation (lighting, alarms, temperature) and robotics (humanoid robots and exoskeletons). Some of these functionalities are already implemented, others need to be further improved. The project is relevant to **SDG9, SDG16**.



BrainControl

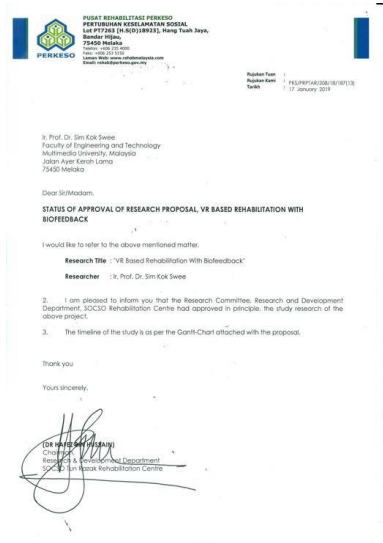
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physical movement, making it usable for people with severe disabilities. The project is relevant to **SDG9, SDG16**.



Development of Visual-based Rehabilitation with Biofeedback System for Stroke

In **Malaysia**, a **Visual-based Rehabilitation with Biofeedback System for Stroke** patients was developed. This project describes the development of visual-based rehabilitation system using sensors for stroke patient. The project develops the rehabilitation using sensors rather than the conventional rehabilitation exercises. Besides, the system is integrated with the biofeedback system of ECG and EMG measurement. The rehabilitation training involves fingers motor rehabilitation and upper limb motor rehabilitation. Therefore, there are two applications developed in this project to serve motor dysfunctions. These two applications are known as Pick and Place Training and Stone Breaker Training. In this case, Microsoft Kinect sensor and Leap Motion sensor is used in the project. For the Pick & Place training, the patient is required to pick up the virtual blocks and stack it up according to the size of largest at bottom to the smallest at the top. Meanwhile, there is also virtual hospital created in order to allow the patient to feel the realistic environment of the hospital in order to enhance the motivation of patient in carrying out the rehabilitation training. For the Stone Breaker training, the patient is required to move his or her upper limb in the game playing. Hand movement will be detected by the sensor and it is used to control the paddle movement in the game. In the game, the patient is required to bounce the ball by moving the hand. Before the training, the patient is required to carry out the ECG testing in order to determine the heart condition of the patient. Throughout the rehabilitation training, the patient is required to undergo the EMG measurement in order to evaluate the muscle power. It is an indicator for the muscle recovery of the patient. The testing for both applications had been conducted in PERKESO Rehabilitation Centre and Melaka Hospital. As a result, the patient uses shorter time to recover. It proves that the applications bring improvement for the patients who undergo the rehabilitation exercise training. The project is relevant to **SDG3**.



Development of Virtual Reality Hospital Rehabilitation

In **Malaysia**, most of the rehabilitation is done in a traditional way in hospitals and is a time-consuming session for patients. The patients do not feel motivated as they have to travel to hospital from their home. A newly home-based application which is a virtual reality rehabilitation is introduced. The patients can choose a rehabilitation activity at home without any need of on-site supervision by a medical caregiver. The **virtual reality hospital rehabilitation** needs to use virtual reality (VR) equipment such as Oculus Rift, HTC Vive or Valve Index in order to use this project. There are 4 activities programmed in the application: Pick and place, Mirror Pick and place, Wall Climbing, and Hit the ball. Each of the activities is set for rehabilitation of upper limb motor function. Pick and Place game required the patient to pick up a number of cubes in front of him and place it beside of him. Mirror Pick and Place is similar to Pick and Place, but it has mirror therapy concept. Hit the Ball is the patient need to grab a bat to hit the ball as many as possible within the time limit. Wall Climbing is the patient need to climb up around 10m long ladder and reach the end of ladder. Each time the patient finished a game, the time taken will be record down and save into the project. Moreover, if the patient feels bored after doing the rehabilitation, he can go around the hospital and enjoy the environment. Currently, it has been tested on normal person and control person who mimic the stroke by apply tension on their arm. As a result, the time taken between normal person and control person able to see the significant change. Afterward, it will be going to be test on the patient on PEKESO Rehabilitation Centre and Melaka Hospital. However, based on the current result, it will be able to proves that this application can bring great improvement for the patient who undergo this rehabilitation. The project is relevant to **SDG3**.

Adaptive Ambient Empowerment of the Elderly

In the **Netherlands**, **Adaptive Ambient Empowerment of the Elderly** was developed. A platform connects bio-sensors for movement, weight, heart rate and blood pressure with wireless interactive devices of cell phone, tablet and touch screen PC/TV with a 3D virtual

coach. The virtual coach interacts with the system users as their personal virtual coach and friend. Software has been developed for combining and integrating the sensor and user information for health care judgements and decisions. The end users are: patients, their family and friends, healthcare organizations and scientific researchers and developers. Specific software was developed for command control rooms for the health care and scientists. Specific software was also developed for the family and friends so as to follow the patients on distance. In addition, software has been developed for interactive life style change programs given by the virtual coach, for breaking sedentary lifestyles and loneliness. Specific software was developed for the emotional, verbal and nonverbal expressions for the virtual coach and the avatars. The system is developed in a Living lab and fulfills all standard AAL EU and ISO international requirements. The project is relevant to **SDG4, SDG9, SDG16**.



SOSO CARE

WSIS Prizes Contest 2020 Nominee

In **Nigeria**, with pervasive poverty, poor healthcare financing and high maternal mortality, less than 3% of Nigeria's 200 million population have health insurance as it is considered an expensive luxury. Again, Nigeria generates over 34 million tons of waste yearly and about 20 billion PET bottles causing poor sanitation, poor healthcare and affecting the environment **SOSO CARE** is a social enterprise low cost insurtech which aims to use recyclable garbage as a financial resource enabling millions of uninsured slum dwellers mostly pregnant women and kids to access micro health insurance and gain points on food stamps. By linking garbage to healthcare access and food stamps we are killing 2 birds with 1 stone as the solution addresses the needs through the following:

- Access to healthcare to reduce infant and maternal mortality in these regions
- Improving sanitation & environment in slums and
- Creating Jobs for the distribution network and waste collectors
- Access to micro capital
- Access to food stamps

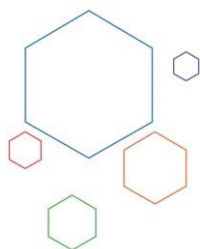
The project is relevant to **SDG2, SDG3, SDG6, SDG8, SDG11, SDG13, SDG17**.



VACAM

WSIS Prizes Contest 2020 Nominee

In **Nigeria**, **VACAM** is an artificial Intelligence powered software that was programmed to detect the deficiency of vitamin A in the body by taking the picture of the face of the person. It is targeted to help detect vitamin A deficiency even at the first stage. It is designed to assist in medical activities and environments. At least this project has been tested on 100 women and detect the level of vitamin A in all the women. We also use the software to test 100 men and also got the vitamin A level in them. We have been able to detect vitamin A deficiency by taking just the picture of the face The project is relevant to **SDG5, SDG16**.



Early Diagnosis of Breast Cancer using Artificial Intelligence (AI)

WSIS Prizes Contest 2020 Nominee

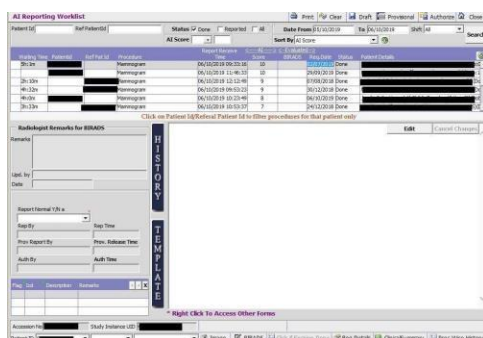
In Oman, an **Early Diagnosis of Breast Cancer using Artificial Intelligence (AI)** project was developed.

Objective: This project aimed at aiding the radiologist in the early detection of Breast Cancer by analyzing mammograms using AI thereby saving the patient's life and reducing the costs associated with treatment of cancer. In addition, because there are fewer qualified experts in this field in MOH, Oman, this also would aid in processing more no. of patients than currently possible.

Results Achieved: The radiologists were able to process many more patients and focus their attention on the patients where AI reported positive findings while reliving the patients with negative findings. They were also able to detect with higher degree of accuracy the cases, which were in Early Stages of Cancer thereby reducing the cost of the treatment.

The following Impact generated as follow:

- a. Reducing the turnaround time of reporting especially of positive cases
- b. Reduction in the need of multiple qualified experts to report
- c. Reduction in False Positives
- d. Less Errors due to human fatigue
- e. Early Detection means less impact on the person and their family
- f. Reduction in healthcare costs The project is relevant to **SDG3, SDG9**.



Bioniks

In **Pakistan**, **Bioniks** is building and developing fully functional brain-controlled prosthetic limbs and turning disabilities into superpowers which are comparable to all the artificial arms of the present era because these Bioniks arm are cost-effective, light weight, customizable and are constructed by keeping in mind the degree of freedom. Bioniks revolutionizes the field of healthcare through advanced-level prosthesis and surgical planning tools that are created using state of the art technologies and designing techniques. We at Bioniks aim to provide healthcare solutions that bring measurable value to those who use it and are shaped keeping their precise needs in mind. The project is relevant to **SDG3**.

Pakistan's First Portable Kidney Dialysis Kit

WSIS Prizes Contest 2020 Nominee

In **Pakistan**, a **Portable Kidney Dialysis Kit** was developed. Byonyks is Pakistan's first biomedical engineering startup that exclusively focuses on developing affordable portable healthcare devices for the one billion that do not have access to these by using state-of-the-art existing medical technology. As a first in Pakistan, Byonyks is developing an affordable automated peritoneal dialysis (APD) machine that counters the challenges associated with hemodialysis. Pakistan's 200 million has no access to a single APD machine to serve kidney failure patients. There are an estimated 314'000 active patients waiting to get dialysis treatment in hospitals that will otherwise die. Byonyks has signed up multiple major medical institutes and hospitals to provide the machine as soon as it is launched in the market after the upcoming patient trials. Byonyks' medical technology will impact the upper, middle and lower-income social groups across the country in terms of cost, the convenience of medical APD therapy. The machine that do not have access to launching in Pakistan. The treatment and the safety of will also reach countries such technology after project is relevant to **SDG3**.



Creation Watcher

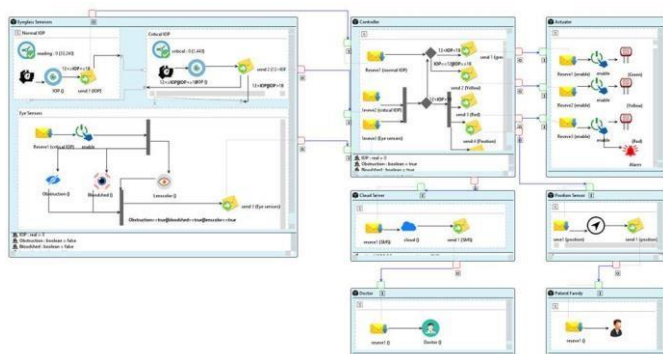
In **Pakistan**, "**Creation Watcher**" an enhanced pregnancy monitoring device was developed. The period which starts from conception and ends to birth... Every pregnancy

has its own share of health problems. These health problems can be conditions that were already there in you or are developed afterwards during pregnancy. So, it is important to take care to ensure that the health of the expectant mother and the unborn baby is good and is free from complications. So for taking care and eradicating the problems caused to women during pregnancy in remote areas where there are not much facilities of health care, we are introducing a pregnancy monitoring device with enhanced software and hardware. We have presented a device for monitoring the Contraction counts, Heart rate of fetus, Kick counts, Pulse rate of mother, Bp of mother, Heart rate of mother, Emergency location update, Emergency notification via SMS and Ultrasonic image of fetus. We have used better quality hardware and enhanced software to monitor the growth of baby and mothers health in a better way possible than before. The project is relevant to **SDG3, SDG5**.



E-health system Guide

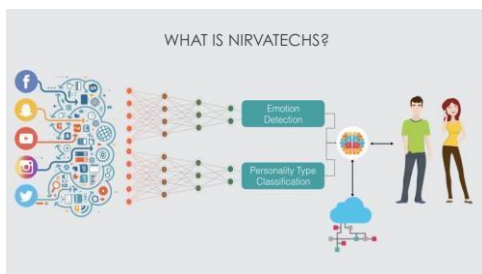
In **Palestine**, an **E-health system Guide** was created. E-Health Guide is an E-Health System Based on IoT and it consists of 2 main parts: 1) Modelling that can design and test the system architecture of the medical sensors showing how they can work with their controller. 2) Code generation algorithm that can generate the system architecture code so that it can be tested with real sensors and controllers. Applying the model on real-life using IoT devices leads to prevent the frequency of clinic visits. easy to monitor body such pulse rate. prevent complications patient. prevent the symptoms of chronic disease. Continuous monitoring of a patient more interest in the patient's health easy to communication between the patient and the doctor. The project is relevant to **SDG3**.



NIRVATECHS

In **Palestine**, **NIRVATECHS** is an AI powered mobile application that is concerned about the psychological health, the main idea of the App. is to study and analyze the users' behavior with the power of deep learning and AI techniques and provide the users with many

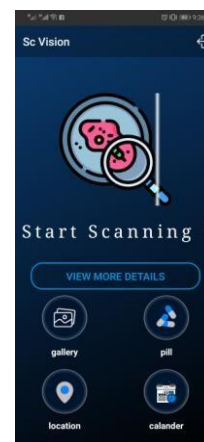
services and features that will help them in reaching the psychological stability by providing them with recommendations system, therapy sessions with licensed psychotherapists, and other related services that will improve the mental state of people and help them in having a peaceful, optimistic, and meaningful life. This Application will play an important role in reducing unemployment rates, by training people to be part of the community of Nirvatechs, and by helping people to find their talents and passion to have a meaningful jobs that fit their souls and capabilities. The project is relevant to **SDG3, SDG5, SDG11, SDG16**.



ScVision – Skin Cancer Classification Using Machine Learning & Image processing

WSIS Prizes Contest 2020 Nominee

In **Palestine**, **ScVision** is a mobile app that detects and classifies skin cancer using the latest cutting edge deep learning and image processing technologies, the app is very handy and simple to use for non-technical users. The only tool used for diagnoses is the mobile camera. ScVision main objective is to increase the chance for early skin cancer detection, early detection of skin lesion cancer increase the chances of a successful treatment and saves a lot of people's lives. Further, skin lesion cancer can only be detected and classified by expertise in this field. However, the detection costs the patient time and money which ScVision saves! ScVision has an accuracy of 77%, hence seven out of ten (7/10) people's lives are saved by simply taking a photo with their mobile phone (a piece of cake right?). Additionally, ScVision is a link between the user (patient) and the doctor, where each patient have a continues communication with expert doctors across the world. The project is relevant to **SDG3**.



SmartBEAT

In **Portugal**, the **SmartBEAT** is composed of a mobile phone that collects health data through a set of sensors. This data is then send to a server that can be retrieved for visualization in a web portal. Within the portal, there is a built-in algorithm that can be customized by the health professional to generate alarms. These alarms are listed to the health professional so it can effectively follow-up and intervene on the patients most in need. The sensors provided to the patient are a weight scale, a blood pressure monitor, and a smartwatch (for activity tracking and continuous heart rate). In the mobile, the patients answer a short questionnaire for heart failure related symptoms, register their medication

intake, and receive motivational messages. It also has available an educational menu with short and simple information on heart failure self-care and the importance of monitoring regularly these health parameters. In the portal, the health professional can customize the default algorithm (developed by SmartBEAT's cardiology team), manage patient adherence, manage patients' medication and analyze patients' trends through time. The project is relevant to **SDG9, SDG16**.



Clinical Information Systems (CIS) Implementation and Adoption across 12 Hamad Medical Corporation Hospitals and 27 PH Centers

Qatar's public health system has grown exponentially in recent decades and it has never been more important to connect the systems and share patient medical information between providers. Implementing one-of-kind **Clinical Information System (CIS)** across all 12 Hamad Medical Corporation hospitals and 27 primary health centers in a span of 4 years, Qatar is one of the first country in the world to have a single, integrated Electronic Health Record for every patient across its entire public health sector serving more than 90 percent of the country's population of 2.7 million people. Post CIS implementation, the patients in Qatar see all the services at HMC and PHCC as one connected system of clinical, administrative and financial solutions, and receive the same high-quality care regardless of where they are treated. CIS has benefited patients by providing an electronic lifetime clinical record, increasing clinicians' efficiency by utilizing evidence based Order sets, Clinical Pathways and augmenting care delivery via clinical decision support thus reducing sepsis mortality and improving efficiency and eliminating errors. Data in CIS is now ready for its next stage of deriving actionable insights for further improving clinical care to the patients. The project is relevant to **SDG3, SDG5, SDG17**.



CAMI – Artificial Intelligence based System for Self-Management and Sustainable Quality of Life in AAL

In Romania, CAMI – Artificial Intelligence based System for Self-Management and Sustainable Quality of Life in AAL was developed. The target group of CAMI is older adults in general and older adults with a risk for cardiovascular diseases, diabetes or mild cognitive impairment. CAMI aims to provide flexible, scalable, and individualized services that enables self-monitoring of this group. The main features are: i) Health Monitoring -

performs regular monitoring of the user's blood pressure, heart rate, weight, number of steps; ii) Fall Detection and Alarm - detects the falls-cases and sends an alert to the formal and informal caregivers of the user (using Vibby Oak fall detector together with its IoT gateway); iii) Home and Environment Management - monitors different environment parameters and controls the smart devices; iii) Physical Activity Monitoring – it stimulates the physical activities of the user through games. If the user activity is reduced, the user will be advised, to perform some physical exercises; iv) Program Management - it allows the management of the user's personal data such as: the user's medical plan, exercise planner, interactions-related information, the program planning; v) Multimodal Interactions – it allows the multimodal interactions between the user and the system –it allows speech, touch, gesture and emotion inputs together with phonetic and visual outputs; vi) Robotic Telepresence – it allows the user to interact with the system through two robots: Pepper (it can perform dialogs with the user; it can identify, track and follow the user and display information on its tablet) and Tiago with manipulator capabilities. The project is relevant to **SDG9, SDG16**.



Healthy Moscow pavillions

In the **Russian Federation**, 46 **Healthy Moscow pavillions** operated in the parks of Moscow from the beginning of June till October 6, providing the citizens with the opportunity to have an extended medical checkup in just one hour. Doctors welcomed patients from 08:00 am till 10:00 pm without breaks and days off. The pavillions were equipped with ultrasonography apparatuses, ECG recorders, spirographs, pulseoxymeters and body composition analysis equipment. All the examination results were recorded into the person's electronic health record and became available to the doctors at the clinic where that person is registered, no matter where the check-up took place. 430 thousand people have had their check-ups in 124 days. The pavillions were aimed at promoting healthy lifestyle and increasing health awareness of the Muscovites. This format helped to involve Muscovites who do not usually go to the clinics for regular checkups. Comparing to the usual visitor profile of the city clinics, 15% more people of working age visited the pavillions. Various medical conditions were identified in 12% of patients. Those patients were sent to specialist doctors. 286 people were hospitalized directly from the pavillions. Thirteen parks next to the pavillions also had special venues for classes. From early morning to late in the evening Muscovites could visit yoga and stretching sessions, various martial arts master classes, healthy lifestyles and disease prevention lectures. First aid master classes and lectures were arranged on the grounds next to the pavillions. The pavillions will open again next summer. The project is relevant to **SDG3**.



Zipline Rwanda – ICT Applications: benefits in all aspects of life - E health

WSIS Prizes Contest 2020 Nominee

In **Rwanda, Zipline Rwanda** was established in Rwanda to increase accessibility to medical products: insulin, vaccine, etc and also the blood products: red cells, platelets, cryo, etc to remote and rural locations. By the end of our expansion contract our two distribution centers will serve more than 400 facilities and represent more than 90% of the hospitals and health centers in the country. The majority of the population in Rwanda lives in those areas and having quicker and easier access to those vital products in some of the most remote areas was a challenge that our project was able to bring a solution and it is the reason why the Government of Rwanda invested in Zipline in the first place. We have made over 23'000 deliveries (of which 7'800 were emergencies) with over 40'000 units of medical products (of which 16'000 were emergencies). Note that since we introduced medical products (pharmaceutical products) in March this year, we have made 300 deliveries of those and delivered over 1'250 medical products units. We are currently serving 24 hospitals and 20 health centers. The project is relevant to **SDG3**.



Hajj Health Information Systems In Mecca and Madinah for the season of Hajj

In **Saudi Arabia, Hajj Health Information System HHIS** development was a product conceptualized, designed, developed as result of discussion materialized between Arabic computer systems and the Saudi Ministry of Health. The Hajj Health Management System was successfully implemented during the Hajj of 2016 to 2019. The core purpose of HHIS is to ease the treatment for more than 4+ M visitors in hospitals and primary care centers located in Mecca and Madinah. HHIS was deployed and integrated to ensure the same medical information for patient is available in all sites. Having the accurate information in the right time is essential to give a fast and effective medical attention to those in need. HHIS were also integrated with World Health Organization and designed a specialized model "EWARS" for early health alarms to notify outbreaks. Application features: Cloud Based Application (EMR) Mobile & Responsive Supportive System Work flow supported

Interfaces OPD & Emergency Scalable and integrated with data standards E-Prescription Integration with Ministry of Hajj (Hajji's) database Time to Develop Software Solution was 6 weeks Scope of Work 1. Deploy the application on testing servers and production servers. 2. Hajj Database Integration with Ministry of Hajj 3. Create username and passwords for each role for each center and hospital. 4. ACS was to help train the trainers so that training by centre for each role is carried out in a timely manner. 5. Configure Peripherals to the application to enable Print patient labels, verify the business flow to the application flow. 6. Training of the Staff Members including Administration, Medical Doctors, Nurses, Emergency Nurses, Pharmacy Manager, Pharmacists, Receptionists as required. 7. Update on Data loading in database for support for Pharmacy. 8. Configuration with Statistical Dashboard (New Work Assigned on Arrival in Mina as we were not asked to do it before nr was identified as a must to do task) The project is relevant to **SDG3, SDG11**.



Health information systems

In **Saudi Arabia**, **EMR** shall offer a greater and more seamless flow of information within a digital health care infrastructure, which will encompass and leverages digital technologies progress and shall transform the way care is delivered and compensated The project is relevant to **SDG3, SDG15**.



Children with a Disability Assistant Program

In **Saudi Arabia**, the **Children with a Disability Assistant Program** is a web-based solution allowing employees to enroll their children with disabilities in the financial assistant program offered by the company. This application is integrated with Medical & Financial systems thereby allowing seamless end to end processing from the enrollment to payments reimbursement. The project is relevant to **SDG3, SDG4**.



eLearning platform of Health Ministry of Senegal

In **Senegal**, **eLearning platform of Health Ministry of Senegal** is a software for health workers. It allows them to learn new protocols and new health practices. It is used to plan, implement and evaluate a specific learning process. It is a web platform that facilitates access to learning content. And in the context of improving the performance of human resources, continuing training is important to have competent health workers whose knowledge is continually upgraded. Usually, health workers followed program's trainings out of their districts. This situation creates a problem of availability of health services. To train health professionals efficiently and effectively, it is therefore necessary to diversify the training support. The health Ministry introduce this platform to allow health workers to access on training content online. This platform allows them to learn from everywhere and every time. Health workers need to have Internet and parameters to access to courses content. Presently, we have many contents in different domains: maternal and child health, emergency management, malaria, diabetes... The project is relevant to **SDG3, SDG4**.



Urge'Sang

WSIS Prizes Contest 2020 Nominee

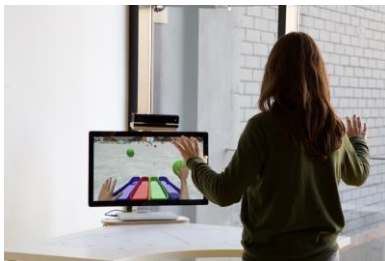
In **Senegal**, the blood stock deficit is estimated at 40% in 2017. This situation, arising in many african countries is becoming more and more alarming and is worrying the biggest actors in the health sector. Despite all the messages launched by the National Blood Transfusion Center, regular donors (those who make more than two donations per year) represent less than 35% of all donors. **Urge'Sang** is a mobile application, also available in a web version, which brings elements of solutions to different problems related to the depletion of blood stocks noticed in recent years. With already a functional prototype, the app includes the following features: ^[2] A "Search" feature that locates users of a particular blood group in order to find a potential donor. ^[2] A system of Link: Urge'Sang allows its users to save certain information related to their blood group and also

a list of people to contact in case of emergency blood needs. These informations are stored in accordance with all information security standards. They are accessible only for the owner and rescuers. In case of an accident, the rescuer enters on his board the number of the identity card of the accident victim to have his blood type and the list of his Links with their contacts. It will only be necessary to carry out medical tests and then save the casualty in time. The purpose of this feature is to give the injured more time to increase his chances of survival. A Chatbot to educate the user about blood related diseases, push the user to participate in blood donation campaigns... A News feature that allows you to post certain information such as donations of blood or requests for blood that will be sent to all users of the blood group concerned. For more visibilities, these publications can also be shared on social networks. Data collected analysis for stock depletion prediction (months before), thanks to AI and Data Mining tools. The project is relevant to **SDG3**.

Cognitive Rehabilitation Gaming System

WSIS Prizes Contest 2020 Nominee

In **Spain**, **cRGS** will be developed to tackle unsolved problems in diagnosis, treatment, and prevention of cognitive impairments after stroke, dementia and depression, that affect more than 400 million people worldwide, creating a severe health-related burden adding up to annual costs that are measured in trillions of euros, with depression being the leading cause of disability worldwide. cRGS taps into the latest technologies such as AI, VR, big data, and cloud computing to provide treatment that does not require the presence of a health professional. cRGS solves two significant obstacles in delivering healthcare, namely, the lack of resources and the lack of trained professionals. The project is relevant to **SDG4, SDG9, SDG16**.



InnovCare

WSIS Prizes Contest 2020 Nominee

In **Spain**, **InnovCare** combines ICT eHealth solutions, services and products by adapting and integrating different innovative AAL solutions. The high level of interoperability and standards of use of the InnovCare platform make the difference, allowing a high flexibility and adaptability to other complementary solutions. This open approach enables a personalized service composition and a central health-focused information point, accessible for different user groups. Hence, the aforementioned features of the solution can be

summarized in the following advantages:

- Common open platform, enabling the dynamic composition of packages of services based on interoperability and standards, taking into consideration the growing need for self-management, integrated care and support by informal caregivers. The current InnovCare solution structure includes:

- Wearable sensors to monitor activity/rest/falls, vital signs and alarms
- Smartphone application to monitor neurological state
- Collaborative tool, including video-conferencing
- Decision Making System: open IoT input/output hub, which provides an integration middleware for sensors and devices into the InnovCare platform. The data gathered via this hub enables algorithms and rule-based services, aimed at enriching the business layer of the common open platform for providing personalized recommendations of services and user interfaces." The project is relevant to **SDG9, SDG16**.



KWIDO MEMENTIA

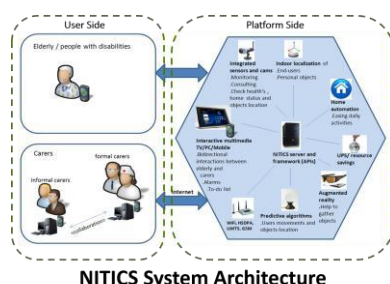
WSIS Prizes Contest 2020 Nominee

In **Spain**, **Kwido Mementia** has been developed along with psychologists and geriatricians with broad experience in performing cognitive stimulation therapies with elderly people, healthy or suffering from dementia or Alzheimer's. Its multi-platform scope (Android tablet, PC, iPad, touch screen, digital whiteboards, etc.) offers the versatility that it can be used on any of the organization's touch equipment. It uses a SaaS approach for the backend (using Grails framework and MySQL database) and HTML5 for creating the serious games used by the elderly users. We also use an algorithm that learns how the user plays using Artificial Intelligence techniques to analyze how they are playing and the possible cognitive impairment that may start suffering due to their performance while playing. The project is relevant to **SDG3, SDG9, SDG16**.



NITICS

In **Switzerland**, the quality of life of elderly persons does not rely on the combination of health and environmental parameters detecting their interaction with the surrounding ambient. **NITICS** seeks therefore the wellbeing of such persons affected by mild cognitive dementia, cardiologic problems and diabetes not only by collecting medical data, but also by providing support in daily life along with ICT-enabled social counsel. NITICS goes beyond common ICT systems in Telemedicine and Active Assisted Living because: - it unifies the collection of data from sensors exploiting different transmission protocols; - it merges the physiological measurements with localization and context-awareness; - it processes large volumes of data through new approaches based on “big data” methods. The project is relevant to **SDG4, SDG9, SDG16**.



Care Campus

In **Switzerland**, **Care Campus** is focused on professionalizing the vocation of caregiving based on the principles of person-centered care. We work with current caregivers, or those seeking to enter the field, to provide the comprehensive knowledge needed to help older adults age with dignity. Through our structured learning programs, students can become certified as a caregiver and learn how and when to integrated into the broader care team including healthcare professionals. Successfully matriculating students can then seek employment within Bangladesh or look for opportunities elsewhere. We also provide training and education to family members seeking to provide better care for their loved ones. Our curriculum democratizes advancements made in the world’s leading medical institutions and universities and provides it to those people who need it the most – caregivers – to perform their daily work with the greatest impact. By doing so, we are able to improve care while lowering overall cost to the healthcare system. The project is relevant to **SDG3, SDG4, SDG5, SDG10, SDG11**.



NITICS

WSIS Prizes Contest 2020 Nominee

In **Switzerland**, being able to concentrate data from a wide variety of sensors, **NITICS** offers for the first time a real solution to caregivers assisting elderly persons affected by mild dementia, cardiologic illnesses or diabetes, and unharnesses the novel capabilities of a network where information coming from medical and domotic sensors are synergically used and enhanced by AI techniques, to ensure the wellbeing of the clients benefitting from the service and to preemptively address situations of risk. Users are chosen in a constituency of elderly patients which begin being affected by limited mental problems (mainly related to degradation of memory) and/or age-related illnesses, but appreciate the possibility of continuing living in their homes if support to daily activities and protection/assistance in case of incidents can be immediately provided. The project is relevant to **SDG4, SDG16**.



Dashboard of medical sensors installed
in a NITICS network

POSTHCARD

In **Switzerland**, the **POSTHCARD** core consists of a simulation engaging player into a unique experience where he will be able to experiment various situations of the daily living with a patient suffering from Alzheimer disease. In this simulation the player plays its own role and must interact with a patient suffering from Alzheimer disease to achieve successfully a selection of activities of daily living (eating, personal hygiene...). To interact with the patient, the player is proposed with a set of choices not only reflecting different actions to perform but more importantly reflecting different way of communicating these actions. Therefore, two actions aiming at the same goal (for instance, asking the patient to sit on the chair) can be expressed on very different way (using humour, being directive...) and have very different results. In this sense the simulation teach the player that it is more his attitude than the action itself that matter in interacting with patients suffering from Alzheimer disease. The project is relevant to **SDG3, SDG9, SDG16**.

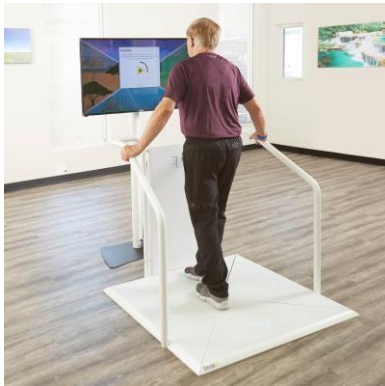


Dividat Senso

In **Switzerland**, the **Dividat Senso** consists of an input device (plate), a standard computer, a standard 43-inch screen and a web-based software that is accessed via a browser.

INPUT DEVICE: The input device was development by Dividat. It is a highly sensitive and

measures force on an area of 100cm x 100cm. COMPUTER: The computer runs an operating system that is developed by Dividat (PlayOS). The PlayOS operating system is based on NixOS, a free Linux distribution released under a permissive MIT/X11 license. Compared to other standard Linux distribution NixOS is much more reliable. In existing distributions, actions such as upgrades are dangerous and can often break things. Biggest advantage for the users: They can't do anything wrong, the software only does what it is supposed to do. Updates are done by Dividat only after an intensive testing procedure. The project is relevant to **SDG9, SDG16**.



To Know Me

In **Switzerland**, **To Know Me** has developed an integrated digital platform that facilitates hospitals' and clinics' ability to engage with people prior to their admission to systematically and efficiently gather the key information most important to them regarding their care. This product, called MyProfile, is specifically engineered to ensure global data protection regulation (GDPR) compliance. It has a lap-top portal that patients use to establish their profile that is then linked to the hospital's unique patient identification number. Each profile can be readily accessed by healthcare professionals on their smart phone through a unique QR-code. The information is displayed in a way that allows care workers to review the information in under two minutes, prior to engaging with patient being cared for by them. This efficient process provides a sublime process for transforming quality of care by enabling each person's preferences, needs and concerns about their care to be efficiently captured and displayed to facilitate person-centered care at the bedside. The project is relevant to **SDG3**.



Be Healthy, Be Mobile

WSIS Prizes Contest 2020 Nominee

In **Switzerland**, The WHO-ITU **Be He@lthy, Be Mobile** initiative was set up in 2013 to support the scale-up of digital health services for non-communicable diseases (NCDs). Its mission is simple: to see digital health make a tangible contribution to creating a healthier world. As a collaboration between the UN agencies for health and ICTs, it works with governments to scale up digital health services for NCDs and their risk factors, using evidence-based content and best practices. It now works with 12 countries from a range of regions and income levels, tackling issues as diverse as raising awareness on cervical cancer to helping people quit tobacco use. Since its inception, BHBM has reached over 3.7 million end users. Some of our programs, such as India's mTobaccoCessation program has reached 2.1 million subscribers and has been translated into 12 languages. The tobacco cessation program in India had an improved self-reported quit rate among a sample of users. In addition, India's mDiabetes program has had over 105,000 users. BHBM's mDiabetes program, which runs during the month of Ramadan in Senegal, is in its sixth year. More than 200,000 users have registered in 2019.; 180,000 users in 2018, including 10,000 health care workers (HCWs). A biometric evaluation has shown improved glycemic control among subscribers. The initiative's innovation comes from its emphasis on scale. It is the first UN initiative to use population-wide mHealth prevention services at scale, and is the largest scaled mHealth initiative for NCDs in the world. It is also unique for its development of a multisectoral approach to ensure that programs are sustainable, by bringing together stakeholders from across the mHealth ecosystem: Ministries of Health, Ministries of ICTs, academia, local NGOs, and private sector. The project is relevant to **SDG3, SDG17**.



Libre/gratis games to promote respiratory health

In **Switzerland**, Worldwide, 6 people out of 10 have no access to treatment or are not encouraged to follow it. Air pollution alone kills 7 million people yearly, reduces our life expectancy by 20 months, and costs 6% the gross world product. Devices to assess lung capacity remain often unavailable in low/middle income countries. We co-create inclusive, open science knowledge and technologies to foster respiratory health and air quality: opensource hardware controllers, and libre/gratis digital games to raise awareness on risk production and exposure (outdoor and indoor air pollution, smoking, lack of physical exercise, malnutrition), and make care fun for people affected in their respiratory health. The project is relevant to **SDG1, SDG3, SDG4, SDG8, SDG9, SDG11, SDG12, SDG17**.



SEED (Système Echange Electronique de Données)

In **Tunisia**, the **SEED** is the Tunisian National Digital Health Insurance System. It is a webbased platform for the digitalization of information flow between the CNAM and its partners (Health Practitioners in both public and private sector and Social Insured persons), It enables the CNAM to improve the level of healthcare services and strengthen its effectiveness. The SEED is a platform that offers business services with high added value, for Health Practitioners and insured persons. The main services include: • Automated Health Insurance medical check • Privacy and Data Security • Real time services: orders, prescription, healthcare bills, pre-agreement, historic medical record • Customer support • Automated dashboards for Employee and Decision makers • Antifraud The platform will connect over 20 000 healthcare practitioners in both public and private sector and provides health services for more than 8 million of beneficiaries in all The Country (70% of Tunisian population) The project is relevant to **SDG3, SDG16**.



Saudi Drug Track & Trace System

WSIS Prizes Contest 2020 Nominee

In **Turkey**, **RSD system** is established to monitor and control the whole drug supply chain in Kingdom of Saudi Arabia. RSD has also a free mobile app for citizens to be able to check the status and recall information of a drug by just scanning. RSD is recently awarded as best eHealth application in GCC countries. In this concept, all drugs are serialized uniquely in box level, and the movement and transfer of the boxes are tracked in real time. Since the system records all history of the drugs, each loop of the end-to-end supply chain is connected to each other strongly and no counterfeit or fake drugs can enter into the middle of supply chain. Governments are responsible to provide safe drugs to their citizens. However, counterfeit in pharmaceuticals has an average of 15% counterfeit worldwide. Based on WHO statistics, annual human deaths in world caused by drug counterfeit is between 500k-1million. This can be considered biggest war. For this reason, the need arises to find solutions for this problem by help of technology. The central system connects all

manufacturers, warehouses, pharmacies and hospitals in one central system, which is called RSD. A patient can be 100% sure that, the drug purchased in the legal supply chain is original. For this reason, RSD not only protects human health, also protects the patients, governments and also the stakeholders to loose their money. As acronym, in Arabic language RSD means "to monitor". All stakeholders has to connect the system forced by legislation, which means building the capacity for 12k+ stakeholders by trainings. For those reasons, RSD system is not just a technology, but is a whole concept of knowledgetechnology-training-law. The project is relevant to **SDG3, SDG12**.



EDUSMART HEALTH

WSIS Prizes Contest 2020 Nominee

In **United Arab Emirates, Edusmarthealth** is a mobile application which maintains the health data of every student and it also maps the health record with the learning that is happening through the Health , Hygiene and safety courses conducted in class rooms. Edusmarthealth Mobile app Objectives: 1) Maintains the health records of the customers (students to any users) 2) For students it tries to map the impact on learning with the actual health 3) It makes the user convenient to know his health status by mobile and share it with anybody 4) It helps the corporate to reduce their insurance cost 5) It provides Assessment for any Health curriculum at school level and tries to mentor the teachers on health and provide with learning materials on health courses. 1) Maintains the health records of the customers The moblie app is so easy to operate, which has a scanning tool, Once you receive any medical record from lab or from hospital, you need to scan it through the application and store it. 2) For students it tries to map the impact on learning with the actual health:

Edusmarthealth will closely work with the educational of the country involved and adopt their current curriculum on health , hygiene & safety and try to enhance the same with the developed Edusmarthealth curriculum. 3) It makes the user convenient to know his health status by mobile and share it with anybody Edusmarthealth mobile application stores the health data of the users and makes the users to conveniently share it with physicians whenever required. 4) It helps the corporate to reduce their insurance cost In developed countries insurance cost is bared by the corporate and when we see the utilization of the insurance services, most of the employees do not use the services and the cost incurred by the corporate's is not justified. 5) It provides Assessment for any Health curriculum at school level and tries to mentor the teachers on health and provide with learning materials on health courses. The project is relevant to **SDG3**.



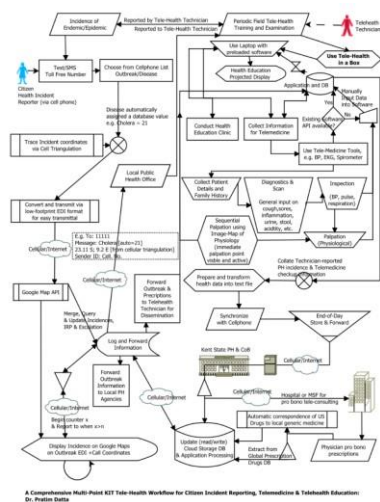
Atom5 platform

In **United Kingdom**, **Atom5** is a SaaS platform for all patient generated data. As a hardware agnostic, with the ability to integrated all Bluetooth enabled into our software. Utilising our platform patients and carers can share patient generated data from wearables, videos, voice, photos and text. There is an optional medication adherence module too. Our friendly UX and dynamic engagement and personalised features is designed to maximise patient engagement. A clinical dashboard allows for researcher and clinicians to see the data at individual patient level data and at cohort level data. The project is relevant to **SDG4, SDG9, SDG16**.



Health Information and Reporting Apparatus

In **United States**, Sustainable, mobile-first AI health information and reporting that uses (i) AI-based language and location assessment to find health-incidences in a particular area, (ii) use the location to automatically present a custom-set of health information and education for users (iv) personalized to the user's spoken language, (v) offer a mechanism for users to report a health crisis, (vi) use metadata (to maintain user privacy) to transparently highlight crisis in real-time via Google Maps, and (vii) use the information to connect NGOs and agencies closest to the crisis. The project is relevant to **SDG3, SDG5, SDG9, SDG10, SDG12, SDG16, SDG17**.



Mi Historia Clínica Digital - URUGUAY

In **Uruguay**, Since September 2019, all Uruguayans and residents over 18 years of age can access to their digital clinical information from any Internet device. Uruguay is the first Latin American country to achieve the goal of a national scale digital health record, and makes it accessible to its citizens. Users are authenticated on the portal through their Digital ID or Mobile Digital Identity, which the State provides without cost. The main objectives of the application are: **EQUITY**: all health system users can access to their digital clinical information registered in public or private health providers, regardless of their medical affiliation. **FULFILLMENT OF A RIGHT**: the user can access easily and directly, without intermediaries, to his clinical information, which legally belongs to him. **EMPOWERMENT**: the user acquires control over his data health. **HEALTH EDUCATION**: the portal can be use by the health team as a tool, in order to take educational actions towards the patient. Despite the fact that the implementation is very recent, there's a consensus regarding the new scenery created from the moment that this portal was deployed. Undoubtedly, it will transform the relationship between patients and health professionals. The project is relevant to **SDG1, SDG2, SDG3, SDG5, SDG17**.



Actionline: 7-LEA

Haya! Iqraa service

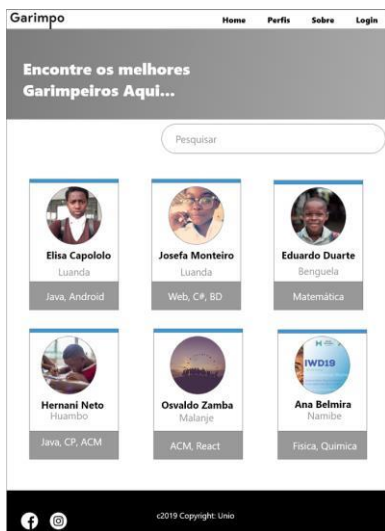
In **Algeria**, **Haya! Iqraa** is a language learning service Application, containing more than 1,000 lessons created by professional linguists with the support of Artificial Intelligence, including customized study plans and a voice recognition tools. The service offers

opportunities for customers to learn 12 languages (English, Spanish, French, German, Italian, Portuguese, Chinese, Japanese, Polish, Turkish, Russian, and Arabic languages). « Haya IQraa » suggests several learning levels that come in different learning unities, wich include vocabulary, conjugation, dialogue tests and writing exercices. The project is relevant to **SDG1, SDG3, SDG4**.



SkillFinder

In **Angola**, **SkillFinder** is a platform that helps students find tutors on any subject as close as possible to them. From students or professionals, there is always a need to improve our skills, for this we need in most cases to find people who understand these subjects for an explanation of them, and better if that person is closest to me. Soon SkillFinder came to improve the search for a tutor on any subject wherever the user is. SkillFinder comes to help unemployed students, tutors and professionals, thus improving student skills and a form of part-time jobs for tutors and professionals. The project is relevant to **SDG4**.



Mi Escuela

WSIS Prizes Contest 2020 Nominee

In **Argentina**, it is a computerized management solution that allows systematizing and digitizing the processes of the establishments and areas. This unifies the pedagogical information referred to the students of the Initial, Primary and Secondary levels, allowing the Ministry of Education and Innovation of the City of Buenos Aires to guide efforts and

apply public policies in order to provide a more personalized education in which students reach their full potential. The main modules are: 1) Enrollment - unification of the updated establishment's enrollment lists (with the data of the students and referents). Throughout the entire platform, one can find reports that help the articulation between educational levels, and passes between schools that allows to track the students' academic development. 2) Repository – it refers to material approved by the ministry for the different school levels (available for both teachers and students). This includes videos, tutorials, teaching materials. 3) Communication module 4) Module of presentism. The project is relevant to **SDG4**.



Hands on Science

WSIS Prizes Contest 2020 Nominee

In **Argentina**, to ensure that students in the province arrogate knowledge related to science through experimentation, with the use of the platform www.manosalaciencia.sanluis.edu.ar. Since July 2019, a total of 3,690 students accessed the platform participating, watching videos and then answering trivias. Science videos are made with homemade materials, found anywhere at home and that children have access to make them. This is developed within the framework of activities to stimulate and encourage the curiosity and experimentation of students and the role that science plays in education, as well as in the implementation of using new technologies, is developed for students in primary and secondary levels of public and private schools, in San Luis province. As a consequence of this, the average and participation of students, was growing in the course of the contest, motivated by the discovery and curiosity. We reward the best results that achieved the highest score. For the implementation in the classroom, a teacher who enters the platform can track the students in charge, as well as download the videos and use them in class with their students during the school year. Through these strategies, we hope that all students in the province experience and know more about science. The project is relevant to **SDG4, SDG5, SDG11, SDG16**.



ULP Virtual

In **Argentina**, in 2004, the **University of La Punta (ULP)** was created by law II-0034 with the purpose of training professionals in strategic areas associated with the growth and progress of San Luis province. In the year 2018, and in order to reach all the inhabitants of the province, it is decided to make agreements with different national universities that propose a virtual academic offer and achieve, from the given conditions, the maximum training potential. Thus, the first agreement with the Tres de Febrero National University is achieved. The main objective of the project is that all citizens of San Luis have access to free university education. The access to devices and free Wi-Fi by all the inhabitants, according to the implementation of a Digital Agenda of almost 20 years of execution, allowed that in its beginnings this strong demand achieved more than 29,000 registered students, currently reaching a total of 48,268 students, in an economically active population of 300,000 inhabitants and an extension of the educational offer from 43 to 70 university degrees, between courses, diplomas, technical degrees, bachelor's degrees and degree courses. This massive registration demonstrates the extraordinary latent demand for university education in the population of San Luis. The project is relevant to **SDG4, SDG5, SDG11, SDG16**.



Supply and Demand of School Establishments

In **Argentina**, the school supply in Buenos Aires is not even. In some areas students must travel longer distances to get to school or the classrooms are overcrowded. This project aims to find the optimal locations for building new schools using different sources of information and data science techniques. Based on the question of how to improve the planning of the construction or expansion of school buildings for the coming years and designing the development of the School Infrastructure Plan, we worked on a project to establish the optimal location for the construction of new establishments of preschool, elementary and high school education levels, taking into account the particularities of each educational level as well as the regulatory framework. The project contemplated the analysis and projections of both the effective demand and the potential demand of the population to school, foreseeing the access of the entire population to quality education, considering the obligation of the state to guarantee that right in conditions of equity. The project is relevant to **SDG4, SDG10, SDG11**.



"A Potential with Barriers" (Un Potencial con Barreras)

In **Argentina**, Chicas en Tecnología's (CET) mission is to close the gender gap in technology. Its programs and initiatives aim at motivating, training and guiding teenage girls to become the next generation of women leaders in technology. By leveraging concepts and methodologies from Science, Technology, Mathematics, Art and Engineerings (STEAM) and with a focus on social impact CET encourages girls from an early age to consider technology as an ally to fulfill different purposes that impact their realities and communities. Furthermore, CET's vision is to create an ecosystem in order to bridge the gender gap. This entails a systemic change in the public and private sector along with the communities they operate in. For that purpose, while CET's programs directly target adolescent women, data have always been gathered to create realistic solutions. The main objectives are: Objective 1: To Systematize an unpublished database of training proposals related to STEM in Argentina. Including university institutions, national programs and other modalities. Objective 2: To produce knowledge about good practices in relation to inclusion and gender in training courses related to STEM in Argentina. Including university institutions, national programs and other modalities. Objective 3: To generate information on the professional and training profiles of women in STEM with a focus on programming: their challenges, barriers and obstacles throughout their career development. Including companies, cameras, startups and public bodies to understand the changes in the digital market that includes a gender perspective. Objective 4: To accompany and advise the development of the systematization of the publication from the gender and STEM perspective of Chicas en Tecnología. In order to do this, data were collected from more than 1,700 undergraduate, graduate and postgraduate degrees related to science, technology, engineering and mathematics from more than 80 universities and public and private university institutes throughout the country. The project is relevant to **SDG1, SDG4, SDG5, SDG16**.



eLearning for primary education in PNG

WSIS Prizes Contest 2020 Nominee

In **Australia**, this program launched in early 2019 in the Western Province of Papua New Guinea to provide fifteen thousand children, parents and teachers with access to thousands of digital learning activities from Age of Learning through apps such as ReadingIQ, ABCmouse, and Mastering Math. The Western Province eLearning Project is the first step

towards a vision of a connected school system in one PNG's most isolated regions. The program aims to provide curriculum support and teacher training. Mapped to national curriculum standards, the activities include provision for some custom, localised educational content. The Western Province eLearning Project will improve learning outcomes for 9,000-grade 3-6 primary-school students through the design and delivery of a tablet-based eLearning program. Program materials, centred on the ABC mouse suite of learning software, will achieve the following learning objectives: Supplement the grade 3 and 4 curriculum with age and context appropriate programming. Improve foundational skills among grade 5 and 6 students through a focused remediation program. For the most recent week of 10th Nov 2019 alone we have seen: 4311 students were actively using the eLearning applications. 5762 digital books were read 7628 hours spend on the learning applications. The project is relevant to **SDG4, SDG10, SDG17**.



Search for the Next Tech Girl Superhero

WSIS Prizes Contest 2020 Nominee

In **Australia**, Vision: A society in which girls confidently lead in STEM entrepreneurship, education and contribute to their community and the economy. Established in 2014, by Dr Jenine Beekhuyzen the Tech Girls Movement Foundation (TGMF) was designed to change the way the world, society, industry and individuals viewed girl's involvement in STEM. To reverse the unacceptable trend of low female participation across STEM disciplines. Ultimately, we want to change existing cultures and break down that glass ceiling. But how do we plan to break down the glass ceiling? Mission: To champion Australian schoolgirls, using hands-on learning, to transform their future and encourage equity in the technology industry. We believe society will be better if we have a more diverse STEM workforce. Having an equal representation of society's citizens in the teams and organisations of the world (e.g. Google, Facebook, Twitter) that develop the technology that we use every day is imperative. For instance, in 2014 Silicon Valley giants Twitter released figures that only 10% of their technical workforce is female. NOT OK! To reverse this unacceptable trend, we want to empower schoolgirls to build technology to change the world. The Search for the Next Tech Girl Superhero competition is a 12-week program, held annually, currently in its sixth year. Launching on International Women's Day each year the competition partners with many organisations and invites teams of girls from across Australia and New Zealand to solve real-world problems through technology. The 12-week competition has a welldeveloped curriculum, based on the curriculum outlined by Technovation. We have also ensured our 12-week program aligns with the Australian Digital Technologies

curriculum, making our program even more relevant to today's schoolgirls. To further enhance the impact of each team's contribution we encourage teams to align their entries with the Sustainable Development Goals as set by the United Nations. The project is relevant to **SDG4, SDG5**.



DIGITAL MADRASAH

In **Bangladesh**, most enjoyable environment by conducting the class activities of the class through the multimedia content of this institute. The project is working on a comprehensive implementation of SDGs through 2030 years. 2. Accessories 3. The power of desire 4. Talented teacher of content creation To facilitate the creation of the world by providing valuable education for the students to participate in the most enjoyable environment by conducting the class activities of the class through the multimedia content of the institute from all classes. As a result, quality education will be implemented for all. The project is relevant to **SDG4**.



Sheikh Russel Digital Lab

In **Bangladesh**, **Sheikh Russel Digital Lab** is a flagship project of the Government of Bangladesh for meeting the demand of Digital Bangladesh aligned with SDG and for strengthening institutional capacity ensuring the quality of education by the highest use of ICT. Objectives: To establish specialized computer labs in educational institutions of all the districts to speed up the expansion of computer education, quality education, job opportunity, employment skills and develop language competency. To establish local cyber center by providing internet connectivity in the selected institutions. To promote and inspire multimedia education in PSC, SSC & HSC level by providing state-of-the-art computer facilities. To create IT enabled language learning facility to promote language dependent freelancing, outsourcing and inculcate other employable skill. To build a large ICT skilled work-force and equip them with adequate skills so that they can access in

global market for decent work. Results Achieved: Transfer of technology and capacity building of educational institutions have been achieved by establishing 4176 well-equipped computer.

A greater awareness has been created for the best use of ICT through seminars ; The project has speeded up the expansion of ICT in education ; ASA GURU Software & Language Training labs have contributed to create decent job & employment generation in broad & abroad; Teachers are enabled to teach the students and ensured the quality of education ; Impact Generated: Students and teachers are more motivated and attentive in the class for using ICT facilities and achieving better result in SSC and HSC level

These infrastructural facilities ultimately have made the young people employable, which have contributed to poverty alleviation; These labs have been created a greater sense of awareness of the vicinity of rural areas for the uses of ICT. The project is relevant to **SDG1, SDG4, SDG5, SDG8, SDG9.**



Promoting Media Literacy in Bangladesh

In **Bangladesh**, Youth constitute quite a large segment of Bangladeshi population (34% aged 15 and younger by June,2019). Therefore '**Promoting Media Literacy in Bangladesh**' project aims to empower the youth of Bangladesh with Media and Information Literacy knowledge and create critical minds to combat fake news – disinformation, and take appropriate decision to use the huge benefit of digital society and then be prepared to play active citizenship role at national and global level. SACMID has carefully designed its project in line with the mandates of both of its own and the national Digital Bangladesh-2021 vision. The project includes baseline research, dissemination, capacity building, pilot content development, curriculum assessment, advocacy (with the designated ministry to include ML in textbook), beneficiary mobilization, and massive campaigning actions. Apart from financial and technical support from Free Press Unlimited in the international arena, SACMID has received supports and acceptance from the government, academia and other think-tanks as the pioneering organization to work on media literacy issue. This helps SACMID to be engaged in policy formulation and other decision-making forums on media literacy by the government. The baseline study findings and the recommendations generated on media literacy competency research helped as benchmarks for other organizations to move further. The project is relevant to **SDG1, SDG2, SDG3, SDG4, SDG5, SDG6, SDG7, SDG8, SDG9, SDG10, SDG11, SDG12, SDG13, SDG14, SDG15, SDG16, SDG17.**



Quality education

In **Bangladesh**, I could see that students are similar because they have a lot energy and need to be through movement concerning quality education, nothing is more important than to make sure that you do not define quality education is board,not only in its way: quality education is board, not only its purpose, but also in terms of what it entails .when we look at quality education. We therefore need to not only look at the aggregated number,we have to disaggregate them and look at what is the situation for girls,for children with special needs,for indigenous groups. The project is relevant to **SDG4**.



Millennia2025 digintelles

In **Belgium**, "digintelles" is a Millennia2025 label meaning: "dig" = digital (digital skills); "int" = intelligence (collective intelligence) and "elles" = she, women (empowerment, equality, leadership). It is also a foresight tool proposed to the communities or regions interested to contribute. Its objective is to enhance human beings with digital tools. In line with the 64ths Commission on the status of women (CSW64), Millennia2025 digintelles invites you to answer to 7+1 questions online, in order to let us understand the configuration of collective intelligence and digital skills in your region: www.millennia2025foundation.org/votre-contribution_en.html. The final objective will be to present, implement and promote the results of Millennia2025 in order to mobilize the political and economic leaders against violence, for women's empowerment and equality, within the framework of five UN Sustainable Development Goals identified within the Millennia2025 Strategic Axes: 3 = Health, 4 = Education, 5 = Equality, 6 = Justice and 8 = Economic leadership (http://www.millennia2025-foundation.org/un_sdg_en.html). This survey will remain open to allow you to spread this call to your networks and mobilize them to contribute. We will present the first results at the Forum Generation Equality, a global gathering for equality between women and men organized by UN Women in Paris from July 7-10 2020, as a commemoration of the 1995 Fourth World Conference on Women in Beijing, especially since Marie-Anne Delahaut is now a member of the UN Women Beijing+25 / Generation Equality Advisory Committee Working Group. Contribute, invite your colleagues, your students, your associations to answer and spread this call of Millennia2025 digintelles! All contributions will be taken into account and analyzed to better understand how to benefit from collective intelligences and develop digital skills as

drivers for new generations: www.millennia2025-foundation.org/votrecontribution_en.html. Welcome! The project is relevant to **SDG3, SDG4, SDG5, SDG8, SDG16**.



Genius Centers

WSIS Prizes Contest 2020 Nominee

In **Cameroon**, **Genius Centers** is a company created in March 2017 that offers youths aged 4 to 17 years, activities to develop their leadership and creativity by learning computer engineering, robotics, design and leadership skills. To achieve this, Genius Centers provides a bilingual (French and English) e-learning platform (Genius eLab) containing interactive courses presented in a fun and engaging manner, specially adapted to the Age of the learner. Genius eLab works even in the absence of the internet. The platform is used in schools, homes and a network of approved centers. A team of 15 people work daily to implement the orientations put in place by the board of directors and supported by a panel of advisers. To date, Genius Centers is present in Africa (Cameroon, Morocco, Tchad, Benin,...) and has 6 centers, 50 partner schools and 4500 users of which 32% (1450) are girls. By 2021, Genius Centers intends to make a turnover of 14 million USD with 2 million users (50% being girls), distributed over 35 countries. The project is relevant to **SDG5, SDG16**.



Online class about cyberviolence against women

In **Canada**, From September 2018 to March 2019, I was in Costa Rica to create an online class on gender base cyberviolence with Sula Batsu, a non-profit organization. The online class, or platform, is divided in 5 sections. The first one "how Internet works" explains the basics of Internet and cyber communications. The second section is a feminist analyst of cyberviolence against women as an act of domination. The third section is created to help women develop tools from a feminist comprehension of cybersecurity. It has different categories for different type of realities. For example, elderly women have specific suggestions related to their use. Then, the chapter 4 is about the legislation around digital security and what can women do when they are victim of cyberviolence. Finally, the section 5 gives resources for women in Latin America. This project is built to better the understanding of the functioning of Internet, the risks and threats for women and the potential of cyberspaces when safe practices are developed. It is also a critic of an unequal access to technologies made by men for men. Our audience is therefore very large : all women of all ages in Costa Rica and in Latin America. But, my dream is now to create the same platform in English to larger the audience. I started to educate and mobilize people in

Quebec since I am back. Two weeks ago, I gave a panel on sexual online violence against women and since then I am in contact with people to build the platform again. The project is relevant to **SDG4, SDG5**.



5G Virtual Reality Education

WSIS Prizes Contest 2020 Nominee

In **China**, in this project, we integrate 5G with VR/AR/MR/Naked Eye 3D/holographic technologies to realize creative smart education applications, which brings new model to the implementation of WSIS Action Lines E-learning. This model can be replicated to different areas as it provides a structure of combining technology with education resources, which can be applied not only in urban cities but also in remote areas. The objective is to use 5G VR applications as pioneering practice of smart education to solve the existing problems in education system and thus making teaching and study process more interesting, vivid and accessible. So far, we have developed **5G virtual reality education** cloud platform, which integrates software, hardware, platform and resources, using immersive virtual reality technology to create a near-real, highly developed and interactive immersive 3D learning environment for students. We are cooperating with the Central Conservatory of Music, China, to create 5G AR instrument analysis and appreciation. It visualizes instruments in augmented reality methods, and students can get study experience in a more interesting way. This application was demonstrated in 2019 ITU Telecom World in Budapest. In future, the project will produce and introduce more education content, and create new standards, new business models and new ecosystems in smart education. The project is relevant to **SDG4, SDG10**.



The nine-year compulsory education network construction in Yunnan Province

In **China**, the project aims at providing high-quality teaching resources for 1.8 million students and 170,000 teachers in 4,065 primary and middle schools all over Yunnan Province's National-level poverty-stricken counties. It also provides smooth access to enrich teaching resources thus promotes educational reform and innovation, implements the balanced development of compulsory education and ensures educational equity. After application, 4065 schools in 25 counties all over the Yunnan Province, China, are covered with quality-assurance private network data channels of 100 gigabit and outbound bandwidth of 20 gigabit. 40,000 classrooms all have access to integrated gateways which integrate functions of telephone, optical modem, router and TV set-top box. The system construction is very important. Using stable network, remote controllable operating platform and early warning protection platform, the network construction could continuously guarantee the sustainable development of new mode of poverty alleviation through education. Through this project, Classrooms all have universal coverage of fiberoptic and multimedia, and seamless access to gateway and video surveillance. The construction scheme can be replicated easily and efficiently by using those devices and equipment. The project can help promote the development of society in a long run, enable equal access to educational resources, and finally foster economic growth. Therefore, from the national perspective, the project is comparatively sustainable for the developing countries. The project is relevant to **SDG1, SDG4**.



Life, a trusted educational resource for first-time internet users

In **China**, we launched the **Life** app because we noticed most content around these topics is not optimized for small screens, nor for people who are accessing the internet for the first time. To address this issue, we created an app that brings the best content for consumers in emerging countries in an easy to use interface. The goal is to demonstrate the usefulness of the internet efficiently and safely. The app is a content directory built around several key topics. These are Digital Skills (a KaiOS made Digital Skills course, GSMA certified), Health, Gender Equality, Education, Financial Education, Agriculture, and Youth. We have partnered with organizations such as CARE, Worldreader, Wefarm, Girl Effect, Cell-ed, Funzi, and iCow to bring content that meets the following criteria: 1) Local, safe, and trusted content. We curate the content to ensure it's locally relevant, and there are no cultural sensitivities. 2) Easy to engage and use. We work with partners to ensure they optimize their content for small screens and button keypads. 3) Tailored to first-time internet users. We partner with mobile operators and other organizations to create awareness and distribution of the app. The project is relevant to **SDG1, SDG3, SDG4, SDG5**.



#Hackeuses

WSIS Prizes Contest 2020 Nominee

In **France**, Simplon.co is a social business that empowers and trains unemployed people in highly sought after digital technical trades through a series of tuition-free coding bootcamps. Priority is given to groups of individuals who are underrepresented in the tech sector, such as: women, young job seekers, unemployed youth, individuals with handicaps, refugees, and recent immigrants, regardless of their age or education level. Simplon.co has opened over 89 training centres in France and abroad, and is present in 15 countries throughout Europe, Africa, the Middle East, and Asia. Since its creation, over 4,854 trainees have graduated from Simplon's bootcamps. Of these graduates, 75% had a positive outcome in the 6 months following their training, with 62% finding a job and 13% pursuing further tech trainings. In order to ensure the success of our trainees beyond the end of their training period, Simplon works in partnership with companies to ensure the professional integration of trainees post-graduation. The project is relevant to **SDG4, SDG5, SDG16**.



Mobile based knowledge sharing, networking and attendance monitoring platform for schools in remote areas

In **India**, efficient knowledge sharing, networking and monitoring mechanisms are essential to ensure effective delivery of educational services by the stakeholders at the grassroots. Technology is a proven facilitator in this regard. However, adoption of technology aided mechanisms in remote, rural and scattered service delivery points (such as rural/ tribal schools) have limitations in terms of resource constraints (eg. electricity, connectivity). ePEN is a simple mobile based knowledge sharing, attendance monitoring and networking platform for schools of remote resource constrained areas. Accessed through a mobile app, ePEN is made available in regional language, works seamlessly in offline & online modes, has a geolocation based attendance monitoring feature and enables knowledge sharing and networking among schools, teachers and the district education department to share learning resources, best practices and broadcast key messages to the teaching fraternity in just a click. The app also facilitates citizens to locate nearby schools and provide feedback on school services to the district administration. Implemented in 692 primary schools of a remote backward district, ePEN has been effective in enabling a participatory and decentralized knowledge sharing and monitoring mechanism that contributes to better education service delivery in remote schools. ePEN is a frugal innovation of using existing

technologies to deliver services thereby making it acceptable, effective, scalable and viable for users in remote locations. The project is relevant to **SDG4, SDG9, SDG16**.



Free Computer Education to Children of Under-Served Communities

In **India**, we in India face a tremendous range of unmet needs. As of the 2001 Census, there are more than 400 million school-age children that reside in the nation. Families are not able to afford the costs of obtaining an adequate education provided by the private sector. At Computer Shiksha our Vision is to bridge the divide between haves and have-nots using technology. The project 'Eradicating Computer Illiteracy Through Self Learning Videos' aims to combat one of the troubling features of education inequality by providing technology access and instruction for underprivileged children in areas of need. The project began as an idea back in 2012. Computer Shiksha, (80G, 12A Certified and FCRA approved), a non-profit trust formed under the Indian Trust Act of 1882, offers free computer literacy programs as a service to schools who are already successfully engaging with communities but do not have the assets, and resource capabilities to produce an effective Digital Literacy program. The organization believes that exposing children to the modern marvels of the personal computer can serve as a mechanism that will better their lives substantially. In the short time since its inception, Computer Shiksha has seen tremendous growth in the number of students that it has reached. The impact ranges from attracting more and more children to come into the fold of formal education to a desire amongst beneficiaries to pursue further education. The project is relevant to **SDG5, SDG16**.



Jigyasa Project

In **India**, AROEHAN is a grassroots organisation that aims to bring about sustainable change in tribal communities in the Jawhar-Mokhada blocks of the newly formed Palghar district of Maharashtra. AROEHAN is striving to bring sustainable changes to the tribal communities. It currently works on an integrated approach of development in areas of Right to Health, Education, Livelihood and Good Governance. Today, Out of 28 Gram panchayats in Mokhada, AROEHAN works in 12 Gram Panchayats of Mokhada and 9 Gram Panchayats in Jawhar Taluka of Maharashtra. Major objectives and activities revolve around 4 components: Health, Education, Livelihood and Good governance. The project is relevant to **SDG5, SDG16**.



kind Comrade

WSIS Prizes Contest 2020 Nominee

In **Iran** (Islamic Republic of), Our goals in this project are to increase the reading time per person of the country and the culture of study from the age of childhood and adolescence, as well as to create the same access for all types of society to a variety of educational, scientific and entertainment books for free. Because reading time per person in Iran is very low and there is no equal education for everyone. That's why we built an electronic library that motivates our users to read more books by providing interactive books, as well as rating the user's reading time and sending awards such as a tablet and book collection to top performers on the first day of each month. We also select the best books in various fields of science, education and entertainment and make their interactive version available for free in our library to everyone have equal access to information, fun and knowledge. The cost of producing books, buying prizes and purchasing licenses was originally provided through our personal capital, but now people are also helping us by donating. All these and the fact that we increased reading time per person of our users by 400% in 12 months, gives us energy and confidence to do more! So for second phase we added educational and cultural videos, audio books and PDF books to our app and redesigned it in last season of 2019. The project is relevant to **SDG4, SDG5, SDG16**.



Augmented Reality (AR) Educational Apps for 8-Million Elementary School Students
WSIS Prizes Contest 2020 Nominee

In **Iran** (Islamic Republic of), the project is to provide Augmented Reality (AR)-based mobile applications to improve the quality of learning in K-6 schools by bridging AR technology and education for more than 8,000,000 elementary students all over the country. It aims to speed up the learning process and make 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 country. The project is relevant to **SDG4, SDG9, SDG10**.

Bridge. Outsource. Transform

In **Lebanon**, **B.O.T (Bridge. Outsource. Transform)** is Lebanon's first impact sourcing platform providing high quality digital services executed by skilled youth trained by DOT Lebanon and coming from untapped communities in Lebanon. B.O.T provides B2B digital services, mainly Data Management, Surveys and Call Center Services, to small, medium and big organizations from the private and public Sectors in addition to Non-Governmental Organizations. The project is relevant to **SDG4, SDG8, SDG17**.



Certification on Public Policies and Programmes Evaluation

WSIS Prizes Contest 2020 Nominee

In **Mexico**, the **CPPPE** is a comprehensive training Programme addressed to federal and local public servants which also considers the academic, social and private sectors. Its main objective is to provide information and methodological tools on the main types of public policies and programmes evaluations used in Mexico, to guarantee that public resources are

focused on the achievement of the national and local planning. To accomplish this goal, the CPPPE is entirely taught online using different e-learning 2.0 tools provided by MéxicoX digital Platform. The use of these technological tools boosted the project's horizon since 26,027 people coming from all the national territory and more than 15 countries got enrolled, 16,683 actively participated and 11,538 obtained an official Diploma issued by Mexico Finance Ministry. This numbers are the greatest achievement in the Ministry's capacitation history. Worldwide, the online courses graduates' average is between 15 and 25 % while 69.16% of the active enrolled participants successfully concluded the Programme. It is also important to consider that this project has already won a national award for contributing to the democratization of the evaluation culture using the digital environment. The project is relevant to **SDG4**.



ELPIDA

WSIS Prizes Contest 2020 Nominee

In **Netherlands**, **ELPIDA** has developed an e-learning platform primarily targeting parents of people with intellectual disabilities (PWID) in order to empower them for better quality of life of PWID. Teaching recourses have been developed on the themes/topics of Human Rights, Communication, Stress management, Transition to Adulthood, Ageing and Sexual health. These themes have been chosen in consultation with family members of PWID. An own Needs Assessment study has been taken into consideration and informed the content of the e-learning modules and prioritize parents' preferences regarding the chosen topics. The project is relevant to **SDG9, SDG16**.



Teachers.ng

WSIS Prizes Contest 2020 Nominee

In **Nigeria**, **Teachers.Ng** provides digital skills, resources and training for teachers in public schools in Nigeria, especially for those in underserved communities. Teachers are linked up with educators and researchers in developed countries in collaborative STEM projects for primary and secondary schools. Driven by WSIS C3 and SDGs 1,4,5,8,10; over 6,000 teachers have been directly imparted, reaching more than 320,000 underprivileged and marginalized children and youths with girls comprising over 55% of beneficiaries, since inception. It employs low-cost teaching resources such as open source softwares and use of

discarded computers to educate children in slums, rural and remote communities. Re-use of old computers for hardware classes greatly reduces e-wastes, saving carbon emission and energy. With entrepreneurship, digital storytelling, coding, critical life skills and computational thinking also comprising integral components of this project; young people are prepared for sustainable livelihoods, innovation and are empowered to use their voices (especially girls) for positive impacts. With about 10.5 million Nigerian children aged 5-14 years out of school, this project, approved by states ministries of education immensely complements the government's efforts to provide quality, inclusive and accessible education for children and adolescents in the country. The project is relevant to **SDG1, SDG4, SDG5, SDG8, SDG10, SDG17**.



HETAVED SKILLS DIGITO EDU-PRENEURSHIP HUB

In **Nigeria**, this is a digital entrepreneurship education to train and empower TEN MILLION social and digital entrepreneurs in Nigeria and Africa. Here, leveraging on the digital skills, tools and space, we undertake a Learning- Working and Earning training, mentoring and empowerment of the active but idle youths and women to earn decent means of livelihood and overcome poverty, ignorance, hunger, social injustices and thereby minimizing illegal migration, violent extremism and vices. Our program on HETAVED DIGITO EDUPRENEURSHIP is universally available and affordable through online, digital and offline formats. Please refer to <https://mb100.hottopics.ht> for our international endorsement. Also, kindly see our African Union -AU-endorsement as one of the unique innovations for TVET educational model in Africa at: https://www.dropbox.com/s/3d2hs3jwafz1yh6/Africa_Education_Innovations_Handbook_2018_final.pdf?dl=0. The project is relevant to **SDG1, SDG4, SDG5, SDG8, SDG9, SDG11, SDG12, SDG17**.



Africa Education Technology Fair Lagos

In **Nigeria**, **ARPG Tech** major objective is to deliver intricate solutions to spur businesses, improve educational outcomes and engage professional outlook at a competitive advantage. They empower women and teenagers to maximize their productivity but to also increase economic empowerment through proffering them technical solutions alongside tech skills. Our target audience are educational institutions, underrepresented women in

tech, women in their mid career towards a transition in tech. The activities include science fairs, Edtech Fairs, Onsite and Virtual training on STEM courses and ICT skills. They also provide small and medium business with technology solutions. The project is relevant to **SDG5, SDG16**.



Interactive Educational Network

In **Oman**, **Interactive Educational Network** is designed to facilitate educational social interaction between teachers, administrators, students, parents and all segments of society who searching for e-learning. It makes it easier to create educational groups of different members to discuss a particular educational topic, as well as creating live conversations between two or more members, resulting establish educational classes, enrich educational content, and conduct live educational discussions. The system has many features, such as creating individual posts and share texts, images and multimedia, which contributes to the exchange of educational files between members of the educational family. Also, it has the ability to view and report on (hashtags), and show members view through publishing questionnaire and view feedbacks. The Interactive Educational Network contributes in increasing community e-participation for it enables users to free discuss, follow up as well as to give their feedback about the education and its development in Oman. The value of the Interactive Educational Network is to increase collaboration. When the Ministry of Education provides social educational network to the public via free easy user account, researchers and developers are quick to develop value-added researches and studies, which in turn fueled education growth in Oman. The project is relevant to **SDG4, SDG5, SDG10, SDG11**.



Muse

In **Pakistan**, Pakistan is suffering from a major learning crisis, especially in the primary grades. Children in low-cost, low-resource schools fail to learn adequately, due to inadequate teaching capacity and unengaging educational content. Almost 50% of students in Grade 5 in Pakistani schools cannot perform Grade 2 level arithmetic and reading tasks (Annual Status of Education Report, 2018). Poor learning in the early grades is one of the biggest factors in children failing to complete primary education and results in massive dropouts, leading to over 22 million out of school children. Improving learning outcomes in early grades would support children building a strong foundation and improve chances to continue beyond grade 5. This is why we do what we do. SABAQ is an EdTech startup

aiming to help millions of Pakistani children succeed in the primary grades. We leverage technology to sustainably improve learning in classrooms where resources are limited. SABAQ's flagship product, Muse is a curriculum aligned K-5, digital learning system that improves learning outcomes for Math, Science, English, and Urdu. Muse is engaging and interactive, with story-based video lessons, exercises, and tests. SABAQ has already reached 100,000 students across Pakistan through Muse in 1,000+ schools. It plans to reach a million students in 3 years. As per multiple third-party impact studies, Muse's impact has been the increase in learning gains, increased engagement, and improved enrollment among students. The project is relevant to **SDG4**.

No picture!

Empowering Out-of-School youth Through Innovation and Technology

In **Pakistan**, UNICEF states that 14% of school age children worldwide are outside the school system. Imagine a solution with community-based facilitators, locally-relevant content, & technological innovation in the form of cost effective, hand-held technology aimed at reinventing the role of the modern-day classroom & the role of the "teacher". We have created a disruptive, creative, & unconventional educational framework, model, & system that is currently live in 18 informal schools. We train & empower community-level facilitators using small, open-source devices that inspire out of school youth with 21st century skills. 1500 Out of school children develop basic literacy. Around 20 OOSC transitioned in formal education of grade 6 after primary level accelerated literacy. Outreach to 29 Communities in diverse culture and ethnicities. Trained 35 community members on curriculum implementation and digital learning model. Trained 18 community members on Microsoft Innovative Educator program. Provided Part-time employment as facilitators to 35 community members. The project is relevant to **SDG4**.



CodeGirls

In **Pakistan**, **CodeGirls** is a fully-funded IT and Business Skills boot camp run by ConsulNet Corporation with its partners, United Global Initiative and WomenInTechPK. The boot camp is specifically designed for girls/women, aged between 15 to 30 years, with no prior tech education/training and are looking for a break into the tech industry by learning how to code. The Program is in three phases, Phase 1 is web design and development, Phase 2 has

four tracks, SQA, WordPress Development, Node JS & PHP. Phase 3 consists of freelancing skills. Program's Objective is to create a more inclusive tech industry and create financial inclusion for women. CodeGirls inducts around 200 girls every four months. The project is relevant to **SDG4, SDG5, SDG9, SDG16**.



Digital entrepreneurship Adolescence Leaders " DEAL"

In **Palestine**, the program aims at building a belonging, effective and productive citizens that are able to innovate and excel in professional sectors, and equipped with skills for increased employability, matched to their individual talents, desires and passion by developing a 12 life skill for the students and teach the a lua programming language to develop applications that helps in relieving Associations issues by utilizing the concept of Gamification and the acquired technical knowledge. DEAL Main components: -Web Portal Which acts as a communication channel and Hosts all the supportive material, tasks, achievements, sessions, etc. and Monitoring and evaluation purposes for both of Al-Nayzak coordinators and teachers and Students have to complete 10 tasks according to the portal and videos. -Minetest game that Resembles the Minecraft sensation, to insure immediate engagement of the students in the game and Mods Developed to attain the purpose of introducing the 12 Life Skills, and Coding and In each task student have to use one or more of life skills to complete the task. -YouTube Channel Provide Support in both of the learning material and gameplay of Minetest for both of the students and teachers. -Defold is a cross platform game engine used by the students to create their own apps that can work on all platforms and The students use this skill to create an application. The project is relevant to **SDG4, SDG5, SDG16, SDG17**.



Arabic for non-native speakers

In **Palestine**, an easy-to-use application available to all, suitable for the needs of all learner who wants to learn Arabic especially Arabs who lives in foreign countries, where it meets their needs to learn the Arabic language through attractive content that highlights the Arab identity and promotes belonging to the Arab culture. The application introduces Arabic as a foreign language through an intensive and interactive digital content aimed to develop the ability to use the language effectively for practical communication. The app focuses on language skills associated with listening, reading, speaking and writing, and allows app users to track their progress. The application also reflects the culture of Arabic-speaking countries, encouraging positive attitudes towards the Arabic language from people who speak other languages. A pilot study was held to test the usability of the application on an experimental group of foreigners at the Virtual University of Tunis. In this experience, learners were strongly agreed that the application helped them to learn the language and develop positive attitudes towards learning Arabic and provided them with an opportunity

to practice the language anytime, anywhere, from any device. The project is relevant to **SDG4, SDG10**.



Yalla Neqra

In **Palestine**, for a long time, we formed a perceptive predicting how technology will affect schooling in the future, but the future of learning is already happening. The shift from schooling to learning allows us to look for the many opportunities of learning outside of the formal system of schools, and the “**Yallaneqra**” initiative Launched 29-1-2018 comes in this direction. “Yallaneqra” is an online flexible interactive electronic learning application that connects Networks of learners, teachers, students, and parents in a productive learning environment, aiming to develop learners’ five reading skills and encouraging reading as a daily habit. Providing them access to knowledge and learning, unbounded by geography. The platform includes until now, 150 leveled reader books chosen according to Arabic language standards and addresses the needs of 2000 students age 5-10 years old in 15 Schools (government, UNRWA, and private). The initiative is ambitious in it's designed to spread and cover all Palestinian schools. The “Yallaneqra initiative provides teachers with the opportunity to track their students’ development. We now know that learning in the future will happen through networks of learners, teachers, students, parents, and other specialists, until then we will be there. The project is relevant to **SDG4**.



Palestine Medical Council E-Learning and Accreditation System

WSIS Prizes Contest 2020 Nominee

In **Palestine**, Palestine Medical Council (PMC) launched **Palestine Medical Council ELearning and Accreditation System (PMC-EAS)** that seeks to efficiently raise the level of medical learning and accreditation by elevating the quality of learning for physicians who are enrolled in the national residency program with a corporation with the Ministry of Health (MOH) and the training hospitals. PMC-EAS is a fully web-based system that provides a lot of E-Services through the PMC website (www.pmc.ps). It contains the training curriculum for each specialty, also it provides the E-Logbook for residents, where each resident can fill his daily medical activities, operations, share the experience and knowledge with the colleagues. The supervisors should approve the resident's activities and give feedback to the residents via the system. At the end of the training year, the supervisor should evaluate residents to sit for the PMC E-Exams. On the other hand, the system provides Exam Evaluation which gives a high level of transparency, security and confidently. It provides accurate exam results, so PMC can enhance the training in the hospitals efficiently. Besides, PMC established a question bank that contained more than 50,000 questions and online resources. PMC-EAS will contribute to supplying the Palestinian community with high-qualified specialists and will raise the practical and learning aspects and improve medical health care in Palestine. The project is relevant to **SDG3, SDG4**.



WAZZA

WSIS Prizes Contest 2020 Nominee

In **Palestine**, **WAZZA Inc.** is a leading Edtech project in MENA, which is focusing on applying artificial intelligence solutions to improve education and eLearning experience and improve enrolment rates in schools. WAZZA was founded on 2018, by engineer Amani Abu Tair, where she has extensive experience in Edtech technologies, and found a massive need for revolutionizing solutions for the education sector especially the pre-school/ elementary sector in the Middle East North Africa, now WAZZA has a full team of passionate educators, developers, and engineers who are working with all their efforts to create the best technology to improve the eLearning experience and implement ICT solutions. Now WAZZA honored to authorized by the ministry of telecommunication and IT and been provided to its Pre-schools and schools in Palestine and Bahrain and India. WAZZA project released a cloud-based management platform for the preschool/elementary sector, which provides a simple and direct user- friendly interface for teachers to provide live attendance reporting to reduce dropout rates, maintain daily records, communicate calendar activities, send announcements & receive confirmations. Image processing and artificial intelligence will

allow for an individualized experience for parents while leaving the teacher free to continue looking after the children. WAZZA's mission is to lead the next generations to have a better pre-school and elementary education experience, increase enrollment rates of schools by providing a customized administrative and communication tools for their teachers and parents. WAZZA team provides full training in many topics in Information and Communication Technologies and entrepreneurship free of charge to more than 2000 students in universities and small business owners in addition to schools in marginalized areas. In addition to providing different services from mentoring and supporting students to build their own projects that are related to using ICT to serve the community. The project is relevant to **SDG4**.

Champions (Close connections)



Eng. Nabilah al-Tunisi
Chief engineer for
Saudi Aramco.



H.E. Adnan Samara
Chairman of HCIE
Advisor to the Palestinian
President



H.E. Osama Sadiqi
Minister of
Entrepreneurship and
Empowerment

CogniViTra - Cognitive Vitality Training at home

In **Portugal**, Hardware - **CogniViTra** uses an RGB-D sensor, a microphone array and a capacitive touch screen. Software - **CogniViTra** uses different types of reasoning algorithms (e.g. Bayesian Networks, Neural Networks and Markov Decision Processes) to implement different parts of the solution that require processing and analysing data. Integration (communication layer) - **CogniViTra** communication layer is supported by conjugating RabbitMQ and WebSockets technologies. Interaction - **CogniViTra** executes both visual and sound actions, which are feedback (i.e. by display and speakers), the actions of the solution are executed by a Virtual companion and the virtual cognitive games. **CogniViTra** integrates Multimodal Interaction (Automatic Speech Recognition, Gesture Recognition) and Natural Language Processing features Standards - **CogniViTra** is following the standardization activities of the IEEE AuR working group, which is defining a standardized knowledge representation for autonomous systems; Additionally, **CogniViTra** is following some standards in terms of validation and assessment of usability and acceptance of the system - for example adopting SUS scale and other similar measurement instruments. The project is relevant to **SDG4, SDG9, SDG15**.



IPN
INSTITUTO PEDRO NUNES

Improving Students through Effective Education

In **Qatar**, producing a set of digital education lessons associated with the Qatari curriculum standards for all school students from the third grade to the twelfth grade for the following subjects: Arabic, English, Social Studies, Mathematics, Islamic Education, General Science, Chemistry, Physics and Biology). These courses are produced by the teachers of these

subjects in public schools after receiving a specialized training in the production of video lessons and reviewing them academically and technically by specialized committees in the Ministry of Education and Higher Education. The objective of these courses is to raise the standards of academic achievement for students and ensure the achievement of their educational goals. These video lessons are uploaded on the Ministry of Education and Higher Education's YouTube channel and they are available for anyone to make use of. The production of these video courses began in 2015. So far, 1836 video lessons have been uploaded to the channel. Results achieved: - Raise the standards of academic achievement for students. - Encourage self-learning and reduce the reliance on private lessons by publishing approved video lessons to be accessed anytime and anywhere by teachers, students, parents and adult students. - Provide various learning opportunities that enable teachers to improve their potential and contribute effectively to the workforce and the Qatari community. The number of views has reached 3,893,177 worldwide, and the number of subscriptions has reached 30K from different countries around the world. - They have contributed to building the technological capacities and skills of different teachers to design and produce video lessons. The project is relevant to **SDG4, SDG9, SDG15**.



Moscow Electronic School

In **Russian Federation**, education in Moscow seems to be impossible now without **Moscow Electronic School**. Launched three years ago, the project has already become an assistant both for teachers, schoolchildren and their parents. The target of the project is to optimize education processes by using ICT. In 2018 the project encompassed all Moscow schools and had over 2 mln users, including over 70,000 teachers. Now the online educational library of MES is available for any user in the world, not just in Moscow. The basis of the project is creation of a unified infrastructure in all schools: high-speed internet, interactive panels, laptops for teachers. There is also special equipment for the mentally challenged, visually impaired, hearing impaired and other children with special needs. Parents and pupils can access an online diary and mark book to monitor academic performance. Library of educational content is the key part of the project. There are more than 98,000 lesson plans, 1,500 electronic textbooks and study guides, and around 82,000 interactive educational apps. Most of this content is created by the teachers. MES library and diary are available as mobile apps as well. The project is relevant to **SDG4, SDG8**.



The First International CyberSchool of the Future for the New IT Generation KIBERone

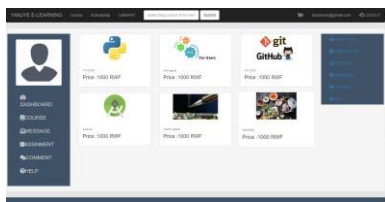
WSIS Prizes Contest 2020 Nominee

In **Russian Federation**, the **CyberSchool KIBERone** is the international CyberSchool of the future for the new IT generation, a project for additional training of children from 6 to 14 in digital technologies. The project participants focus on several important tasks: 1. to provide the young generation with modern digital skills that are not taught in secondary schools, but are in demand in the era of global informatization; 2. teach children to use various gadgets for the benefit of learning and development and make them full-fledged members of the information society. The project contributes to the early professional orientation of children and, in the long term, to the reduction of the deficit of qualified IT specialists, which is currently observed around the world. For this purpose, a long-term integrated development program is being developed within the project, which includes teaching popular programming languages (Python, Java, JavaScript, etc.), developing computer games, artificial intelligence and virtual reality technologies, blockchain, web development, cybersecurity, and much more. The curriculum contains more than 50 areas, and this is the largest number among all the curricula on the market. In the classroom, children get acquainted with innovative technologies, learn what programming is and why it is interesting and exciting, become developers of their own digital projects. The program is developed by existing employees of large IT companies who have experience in creating innovative IT products, and tutors are practicing IT specialists who are able to pass their experience and knowledge to the younger generation in an accessible language. The total period of study at the CyberSchool is up to 9 years. The project is relevant to **SDG4, SDG8**.



Yanjye

In **Rwanda**, after 6 years learning to code, it was not easy to understand exactly the coding without Reading it in our my language so I came out this the logic of creating the website of teaching coding in our language and currently I have 45 students in the only 2month and and the problem that I was facing that time because of my background I don't want also student from bad background to face it and Africa we need to understand that our language has value which means learning content from language we understand is very important than leaning in language we don't understand The project is relevant to **SDG4**.



Joint Training Program among the Saudi Universities in the e-Learning Field

In Saudi Arabia, **Joint Training Program among the Saudi Universities in the eLearning Field** is a training program targeting the Saudi universities faculty members. It aims to enhance their competencies and provide them with core skills needed in the elearning field. It's Vision building a knowledge community on clear and unified foundations among the Saudi universities in the e-learning field. JTP aim to open communication channels among the Saudi universities in the e-learning field and distance education through various training programs. JTP Areas: • E-learning tools and applications • Building digital educational content • E- assessment and evaluation • E-learning advanced skills • Eelearning recent trends The number of beneficiaries of the JTP reached more than 6,000 faculty members in Saudi universities, to enhance their competencies and provide them with core skills needed in the e-learning field. The project is relevant to **SDG4, SDG5**.



King Abdulaziz University



The Joint Training Program among the Saudi Universities in the e-Learning Field

JTP (Joint Training Program)

The Future Gate: Digital Transformation of K-12 Education in Saudi Arabia

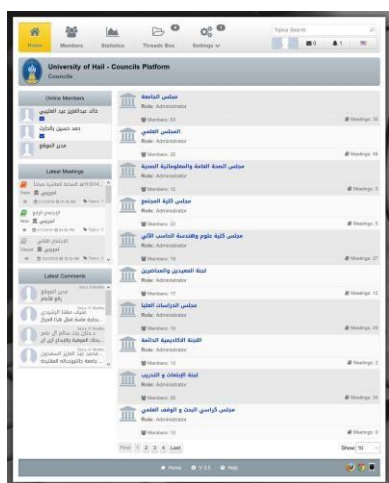
In Saudi Arabia, **Future Gate** is one of the Ministry of Education's initiatives to achieve Vision 2030, and a country-wide, large-scale initiative to implement a set of EdTech infrastructure and services for more than 25 thousand schools, 6 million students and 500 thousand teachers in Saudi Arabia. This makes it by far the largest endeavor of its kind in MENA region (the Middle East and North Africa). The initiative, scheduled to be completed in 2021, is implemented by the Tatweer Educational Technologies Company (TETCO), the leading EdTech. FG was designed from the get-go to be sustainable, scalable and replicable. attendance, and take online exams. The communication tools integrated in the system allow for effective communication between students, teachers, parents, school administrations, and other stakeholders. Signs of the ongoing digital transformation in the Saudi school community are already visible and promising, while at the same time a number of challenges already surfaced, posing threats, but also opportunities for learning and deeper understanding of how EdTech can empower all stakeholders towards the goal of Quality Education for All. In cooperation with the National Education Portal (IEN), FG presents high-quality digital content covering all subject matters for all K12 grades. Students can

download course materials, view grades, track achievements. The project is relevant to **SDG4, SDG5**.



Meetings Management System

In **Saudi Arabia**, E-Majlis is a web-based system developed to manage and archive the meetings (councils) with all contents and procedures, so that the members have an opportunity to preview the contents before the event and could discuss, contribute or communicate through commenting and instant messaging. Hence, moving from traditional to modern techniques would facilitate the communications between members, improve the quality of decisions and reduce papers wasting. The project is relevant to **SDG4**.



A 3D adventure game to teach clinical history taking to medical students (Med Metaphoria)

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia, Med Metaphoria** is a 3D Serious game designed and developed based on the latest in medical education research to teach medical students clinical history taking which is the most common procedure performed by doctors. This is the first 3D visual metaphor enhanced serious game targeting this essential skill and have been investigated empirically amongst medical students. The use of easily recognizable visual metaphors and symbols in this adventure game caters for the millennial students through interactive learning principles and engages them well. The game was proven to be associated with higher satisfaction levels than traditional teaching and the qualitative feedback favoured the game to its comparator. The game design and development was built upon Cognitive Load Theory and capitalized on the power of visual metaphors to enhance learning complex

medical concepts. The game will be launched in both Google Play and Itunes stores late 2019 for the international audience. The game has been presented in few conferences including Stanford University Medicine X conference, ASCILITE conference, and New Zealand Gaming Developers' association. The project is relevant to **SDG3, SDG4**.



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Plateforme NIOFAR

In **Senegal**, Nio-Far Agro-school cherche à instaurer une approche pédagogique moderne et pratique de l'enseignement de l'agriculture dans les écoles. Ainsi à bas âge, les élèves ont la chance de se familiariser avec ce métier de la terre, d'où une revalorisation de cette activité économique qui se trouve être le premier élément pour tout développement durable avec une approche pédagogique plus concrète et pratique à travers de petites fermes installées au sein des établissements pilotes. Nous ferons en sorte que l'enseignement soit à la portée de tous par des modules simples, ludiques et instructifs. The project is relevant to **SDG1, SDG2, SDG3, SDG4, SDG5, SDG6, SDG7, SDG8, SDG9, SDG10, SDG11, SDG16, SDG17**.



MOBILE LITERACY IN CITY OF JOHANNESBURG LIBRARIES

WSIS Prizes Contest 2020 Nominee

In **South Africa**, in 2016, the City of Johannesburg's (CoJ) Libraries' eLearning Department (ELA) established a team consisting of library staff from all CoJ regions, mandated to initiate and implement eLearning programmes to the citizens of Johannesburg. Among many successful eLearning programmes implemented in libraries citywide, Mobile Literacy has been one of the most successful programmes with more than 3000 library users between ages 8 to 16 benefiting through planned and point of need intervention activities since 2018. City of Johannesburg libraries collaborated with Goethe-Institut Johannesburg in 2017 to train staff on the concept and in 2018 Mobile literacy programs were initiated with 30 donated tablets. This resulted in the introduction of Mobile Literacy as an eLearning program. Mobile Literacy programmes in libraries focus on productive use of using mobile devices such as smartphones, tablets and laptops for learning, creativity, leisure reading and other personal development needs. This program has helped address the issue of lack of sufficient computers or computer labs in libraries and allowing users to take ownership in accessing information services through their own devices. The project is relevant to **SDG1, SDG4, SDG5, SDG8, SDG9, SDG11, SDG12, SDG16**.

No picture!

International Network of Emerging Library Innovators-Middle East & North Africa

WSIS Prizes Contest 2020 Nominee

In **Tunisia**, **INELI-MENA** is an e-training leadership program, implemented by AFLI and funded by Global Libraries Initiatives (GL) at the Bill and Melinda Gates Foundation (BMGF). It aims to: 1. Supports future Arab leaders in public and national libraries by developing, improving their skills & competencies, which will contribute to enhancing the level of services in public libraries throughout the region. 2. Building an active regional e-learning network of emerging leaders in libraries in the Arab region by the end of the program. 3. Encouraging the cooperation between regional library associations and specialists in the field through a cooperative project. The program consists of Convenings (two convenings were held); Skills development modules (an online platform was created); Forums (a number of forums have been allocated through the e-learning environment); Evaluation (the program was assessed by external consultants). The e-training program succeeded in building connection between Arab professionals around the MENA region, enhancing the skills & competencies of emerging public library leaders in Arab region; six projects were implemented by innovators in their community: Homeless Children, Human Library,

Marketing Plan (1), Marketing Plan 2, Adapting Talents, Pre-school program, proposed plans for how the network will be sustained after the program ends. The project is relevant to **SDG4, SDG17**.



Turkcell Whiz Kids Project

In **Turkey**, not all children have equal opportunity to reach quality education. **Whiz Kids** mobile application enables young people in Turkey to reach quality education without limits, get empowered with digital skills and eventually realise their potential and create a better future for themselves and for their country. Turkcell establishes technology laboratories since 2016, where students are introduced to robotic coding, software, Maths, Space Science, Internet of Things and Artificial Intelligence. Physical laboratories being limited to geography, Turkcell created Whiz Kids mobile application in 2019 as a further step to spread the technology knowledge all around Turkey, without any barriers, with more content than in-class. The mobile application is free, all access, eligible throughout the country. Until today, 50K users reached 2.500 pages of mobile content, attended 220K hours of mobile courses, viewed pages 5M times, asked 5K questions answered on discussion boards. The project changes our children's lives. Whiz Kids supported a group of students from a small village, called Sivrice Dream Team, which won the Rising Star prize in First Lego League competition held in Barcelona. A student stated his happiness of this experience by these words: "I did not know there was another world behind these mountains of ours". The project is relevant to **SDG4, SDG5, SDG10**.

No picture!

AQDAR Smart Academy

In **United Arab Emirates**, eLearning is a centerpiece of future education models. hence Khalifa Empowerment Program, which aims to develop the next generation of UAE citizens and expats by equipping them with the knowledge, skills and expertise to be productive members of society has created the AQDAR SMART Academy. A unique and leading eLearning project that is designed to serve the youth and women. The academy consisted of 7 programs in 3 languages that covered 5 of the national document pillars. The programs are: 1. TOLERANCE 2. HAPPINESS 3. POSITIVE ENERGY 4. ENVIRONMENT 5. CITIZENSHIP 6. INTELLECTUAL SECURITY 7. VOLUNTEERING. Each program is designed to be completely covered in one day and they have the following components: 1. Pre Assessment 2. Course materials a. Videos b. Infographics c. Text 3. Mid-course Quiz 4. Final Exam 5. Certification. The project is relevant to **SDG4**.



Cosmo

In **United Kingdom**, in order to design **Cosmo** we worked with 200+ professionals from different specialisations and with over 500 people with disabilities (autism, cerebral palsy, brain injury, dementia). We learned that every person with additional needs have their own individual skills, condition, skills they need to work on and get support by different professionals. So we ended up creating a solution that is very customisable, has activities for different skills and can work in a variety of settings. The system comprises of three main components: (a) the Cosmo hardware devices^[1] (b) iPad activities designed by teachers and therapists^[2] (c) Lesson plans that help professionals market specific cognitive communication and motor skill areas. The project is relevant to **SDG4**.



Social Skills Animation

WSIS Prizes Contest 2020 Nominee

In **United Kingdom**, **SSA** is a software which enables creation custom-made animations for targeted learning support to children with autism and other intellectual disabilities. It can be either downloaded and bought online from its website. In that case SSA software would only be available to be used on the device to which it is downloaded. However, the animated videos made in SSA can be transferred to any other device at no cost via email or by other means. Other way of purchasing SSA is by getting on Dongle (USB key). In that way the USB dongle key with the software on it is being shipped to a customer and it can be installed by inserting a USB key in a computer. In this option SSA can be used in any computer as long as the USB key is inserted in it. SSA uses 2D animations. Whole software was created by the team of animators and programmers. They have used Actionscript for Adobe Flash/Air platform for programming. For graphics and for the basis for flash/air platform the Adobe Animate was used. The software is very light in terms of required memory on a device as it does not require more than 30 MB. The project is relevant to **SDG4, SDG9, SDG16**.

iMlango

In **United Kingdom**, the overarching aim of the iMlango project is to improve educational outcomes of 180,000 marginalised schoolgirls across 245 schools within Kenya in maths, literacy & life skills by delivering access to digital education services & content. Additionally the project aims to improve the Quality of Teaching in Literacy and Numeracy using effective ICT by primary school teachers. The key components include:

- o High-speed satellite internet providing interactive resources for teaching and learning.
- o Labs equipped with computers, teachers' laptops/projectors, and servers.
- o Digital Learning materials in literacy, numeracy, life skills and other areas.
- o A Personalised-Adaptive Maths Learning Platform allowing each child to learn specific to their own needs and learning levels.

- o Whole-class digital materials for literacy & numeracy to support teachers.

Professional development through regular in-school support and in-service sensitization. Students who have access to the satellite-enabled individualised learning platform for 60 minutes per week improve their “maths age” by, on average, 18 months in their first year of access. In marginalised communities, we are able to double learning progress rates and improve attendance records. Over time the progress rates for students using the platform has consistently improved and has always been above the Kenya baseline rate. The project is relevant to **SDG4**.



Democratising educational game design

In **United Kingdom**, about 3 years ago I wrote my master thesis on how online education could be used for people who don't have access to education. Growing up between Geneva, in Switzerland and Sincelejo, a small town in Colombia has taught me how concepts of what quality education could be, vary from one context to another. I understood that an aspect that contributes to quality education is to enable people, and not only teachers/professors, to learn from other people's experiences, stories and knowledge. I decided to explore how the voices, experiences and knowledge of more people, especially women, people of colour and minorities, could be integrated into education. Nowadays these conversations don't happen without talking about new technologies and how to use them to create more access to impactful education. This created a personal passion for gaming and triggered my activism toward finding ways to use games for learning, social change and for giving people a voice that will be heard globally. Games have the potential to be one of the best tools to create powerful stories and experiences that induce learning and social change. My goal is to show that making game design open and accessible to anyone unlocks this potential. The voices of game designers are directly represented in the games they create. I wasn't a gamer or a game designer up until three years ago but I decided that I could become one and enable people to go through the same process as me. I designed and implemented the first

grassroots initiative that democratises educational game design, after 2+ years of research to develop the needed resources and processes. This initiative enables people, mostly women, people of colour and minorities, would learn how to design educational games aimed at raising awareness of social inequalities in two days. I also created an initiative that led to the creation of 193 games on Climate Change – in partnership with Global Game Jam and Dr. Alaa Murabit, one of the 17 UN SDG advocate. The project is relevant to **SDG4**, **SDG5**.



k-12math.info

In **United States**, **www.K-12math.info** begun in Thailand, this top 5 star Merlot open access educational resource and twice (2018/2016) internationally recognized e-learning resource, continues globally to help anyone “... to help a 7 year old to add whole numbers”. Be they gifted classmates, parents of, teacher of, school or provincial content coordinator, reference librarian, materials developer, curriculum designer, undergraduate and graduate students who are preparing to help. In this information age, how can we improve the way to help those who help that 7 year old so that their learning opportunity will not be lost? **www.K-12math.info** has redesigned the approach to finding information. K-12math.info focuses only on the terms and resources that the elementary and secondary 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 4 000+ links to OER and Open Access resources. In addition to Khan Academy, CK-12, A+Click, AAAMath and others; new resources like NCERT [from India] and the Open Textbooks by Siyavula from South Africa are being added. K-12math.info is multilingual. K12math.info exploring memory maps for Artificial Intelligence. WSIS Action Lines – elearning : SDG – 4. The project is relevant to **SDG4**.

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WSIS Prizes Contest 2020 Nominee

In **United States, SheWorks!** is a social impact enterprise that aims to disrupt gender unemployment by helping women access online training and find flexible jobs that can be done remotely. We leverage cloud technology, machine learning, matching algorithms and data science to help companies hire vetted professionals and provide them with the tools to transparently monitor and manage remote and global teams. By using data analytics and machine learning we are able to understand: 1. Talent available skills -- by women registered on the SheWorks! Platform we're able to see what skills and expertise are readily available 2. Job market analysis -- we're able to use data analytics and report on what jobs and skills are in high demand 3. Skills gaps and suggested training paths -- based on job market analysis we can close the skills gap by guiding women on particular training recommendations Via SheWorks! Academy, we connect the dots between talented women from around the world and offer free online training on skills for employability for the digital economy so they can be matched with flexible and remote jobs. Through this platform, we will close the loop by making recommendations on what the best path for employability and customize it to each woman's unique journey: 1. Online and professional branding - to help women succeed in the digital economy by building a presence and portfolio online 2. Remote workforce and productivity tools (soft skills) which are extremely valuable when entering the workforce -- resume building, salary negotiation, leadership, and communication skills! 3. Tech skills for employability -- training and certifications provided by the leaders of the industry like Google, Salesforce, Facebook, Splunk, etc. so they can be connected with top companies immediately after completing their certifications The project is relevant to **SDG4, SDG5, SDG8**.



Knowledge Management System for Digital Government - URUGUAY

In **Uruguay**, the **Agestic Digital Government Knowledge Management System** is made up of a set of activities aimed at generating knowledge and skills in different topics related to Digital Government and the Information Society. To this end, since 2009 it has developed face-to-face and online training activities aimed at three priority audiences: Agestic members, Public Officials and Citizenship, with teachers in the formal and non-formal education system as a priority. With the aim of reaching more people, overcoming geographical and access barriers, Agestic has developed alliances with public institutions and civil society that allowed strengthening the ability to come into direct contact with the priority segments of both the public sector and citizens. In the case of Citizenship, the effort made since 2014 was aimed at children and adolescents, developing training plans, educational guides, awareness campaigns and competitions with primary education institutions, training more than 2000 teachers throughout the country, arriving with issues such as the Protection of Personal Data, Information Security and Access to Public Information to thousands of children and their families throughout the country. Since 2018,

Agestic developed a new strategy to generate and share knowledge through the creation of Knowledge Spaces, areas aimed at developing and managing processes and tools for creating, obtaining, organizing, using and distributing the appropriate knowledge for compliance of the AGESIC Mission in the different audiences involved. The project is relevant to **SDG1, SDG2, SDG3, SDG4, SDG5, SDG6, SDG12, SDG13, SDG14, SDG16, SDG17**.



The EasyPrep Lavalley CBT

In **Vanuatu**, Introduction and sponsorship of **EASY PREP LAVALLY** Computer Based Test (CBT) DVDs. With this initiative, students are being empowered for academic excellence in order to obtain better results in the national examinations. The initiative has many other social and intellectual benefits for the communities and country at large. One resultant effect is that students overcome barriers to academic excellence by having access to computers and good teachers. This Initiative has been scaled but not sure if it has been replicated. The CBT package allows students to prepare for JAMB (UTME) and SSCE (WAEC & NECO) online, on computers and on home DVD players with access to over 12,000 practice questions and answers covering 13 subjects. It is no longer mandatory for students, especially those living below poverty level to acquire a computer before they can practice past questions, no matter their location. The project is relevant to **SDG5, SDG16**.

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Konnect: An adolescents' education, soft skills and counselling platform

WSIS Prizes Contest 2020 Nominee

In **Bangladesh**, to transform 36 million adolescent and youth into future ready workforce through skills, education and counselling, **'Konnect'** stands as a platform for all adolescents and youth in Bangladesh. Konnect connects adolescents especially aged between 10 to 24 through both online and offline activities ensuring collaboration and co-creation within adolescents and development partners. On February 1, 2018 Honorable Prime Minister Sheikh Hasina inaugurated "Konnect" (www.konnect.edu.bd). Since then more than 3.5 lac adolescents are active user and its getting popularity among youth. It has been enriched with more than 25000 edutainment contents based on life skills, STEM based Experiments and comics, books, movies etc. developed by adolescent development partners and youths. Konnect organizes various online & offline competition for adolescents throughout the year. The competitions come with different theme to cover nationally important agenda where

participants can showcase their ability & talents, compete each other for the championship. More than 5 lac student participated various competition titled 'My District, My pride',

'Book Shows the light, It tells the dream!', 'Childhood of Father of Nation/My childhood/ My Freedom', 'Amar Mujib GemiQuiz', 'Fulbondhu quiz: Liberation war', Language' have been organized through this platform. The project is relevant to **SDG2, SDG3, SDG4, SDG5, SDG8, SDG11, SDG13, SDG17**.



The Week of Science and Technology in DRC

WSIS Prizes Contest 2020 Nominee

In **Dem. Rep. of the Congo**, since 2014, every year, the non-profit association Investing In People with the Ministry of Primary, Secondary and Professional Education and the Ministry of Scientific Research and Technology organize **The Week of Science and Technologies in Kinshasa, D. R. Congo**. This event was created in order to develop a culture of science and technology among young people and girls in particular, to promote knowledge and know-how in these fields, and to encourage vocations. It is structured in four activities - scientific animations, conferences, exhibitions and a national competition. The event is open to elementary and high school students, graduate students and academics, as well as the general public. The project is relevant to **SDG5, SDG16**.



Ganj

WSIS Prizes Contest 2020 Nominee

In **Iran** (Islamic Republic of), in the data era, knowledge extraction from massive data is the most important issue which brings people in big trouble. Creating a platform to retrieve proper information from massive data is an idea to make the High-level Segment more dynamic and interactive. On the other hand, audiences of different sciences have not the same goals, knowledge and mental ability. Experts, scholars, students, and other segments of society who are not familiar with the sciences form different spectra. It is appropriate to plan the facilities according to each one's understanding, ability and opportunity. Information management research center in Islamic Sciences and Culture Academy responded to this by designing, developing and releasing a platform entitled "Ganj" which has four sections includes thesaurus, encyclopedia, indexing, and digital library that bring comprehensive tool for managing, organizing and retrieving knowledge in sciences. Ganj also has a powerful search engine that uses artificial intelligence techniques to return more

accurate and reliable results (semsearch.isca.ac.ir). The thesaurus section contains organized terms based on the relationships between the concepts of sciences. In the Encyclopedia section, any term explained in a specialized article. In the indexing section of the system, the resources are indexed and organized using thesaurus terms. The digital library contains 4 million documents that are growing day by day by connecting to other libraries. Ganj is based on service-oriented architecture that means it's cross-platform (windows, android, web) and can negotiate with other systems through APIs. With Ganj, everyone can have easy, free and fast access to organized knowledge and structure of sciences. The project is relevant to **SDG4**.



High Performance Computing Facility for Lebanon

WSIS Prizes Contest 2020 Nominee

In **Lebanon**, In a collaborate effort between The European Organization for Nuclear Research (CERN) and the Ministry of Telecommunication / OGERO and a handful of major Universities in Lebanon, it was agreed to Install and Operate in Beirut-Lebanon the first **HPC “High Performance Computing”** facility in the Middle East. This Super Computer is needed for scientific research at Universities, Industrial and Research companies. The role of MOT/OGERO is to provide an appropriate location and a high speed internet connection for the installation and operation of the system. This project aims to strengthen cyber infrastructure in Lebanon and build research capacity for Lebanese university students by expanding data analysis and computing capabilities and transferring the latest technologies to Lebanon. The most beneficial users of the HPC system are academic institutions, scientific researchers and engineers who face certain challenges when they use technology, as they will be able to run different types of simulations at high speeds, increasing the chances of scientific discoveries at a faster rate thus bringing Lebanon closer to other developed countries in terms of the technological gap. It will also provide unique opportunities for students to gain practical and technical experience by running and using this super computer. The project is relevant to **SDG4, SDG5, SDG9, SDG17**.



Breast Cancer Classification CAD through Multilayer Neural Network

WSIS Prizes Contest 2020 Nominee

In

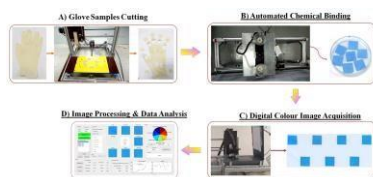
Malaysia, this system employs Multilayer Neural Network for breast cancer classification. Through the employed algorithm, it can classify the medical images into benign, malignant cancer and normal patient without prior information regarding the images. It is designed to assist medical doctors for breast cancer diagnosis through Multilayer Neural Network for breast cancer classification. The learning capability of designed neural networks enhances the quality of classification. The invention is applicable in medical image processing relevant industries, such as medical imaging devices companies, medical institutions. It has filed for 1 relevant patent, 6 copyrights and published in 6 journals and 8 conference papers. The project is relevant to **SDG3**.



Latex Glove Samples Protein Determination System

WSIS Prizes Contest 2020 Nominee

In **Malaysia**, this project involved the development of **latex glove samples protein determination system**. The main objectives of the system are reducing the manpower required in order to perform the entire processes and shorten the time taken of the protein testing process from several hours to one hour. The system formed by three phases of machines: the cutting machine that retrieve several samples from a single latex glove; the chemical binding machine that bind the chemical reagent on the surface of all samples at once; and scanning machine that the samples image for further protein concentration analyse and this developed system patented (PI2018002435). The patented (PI20190026797) samples cutting machine consist of a rotary cutter actuator with CNC mechanism that allows different sizes of the glove can be cut into several latex glove samples into desired dimension. The chemical binding machine consists of several types of nozzle and releases different solution on the samples which included chemical reagent, distilled water and compressed air that perform the binding, washing and drying processes. The project is relevant to **SDG3**.



Developing internet: R+D skills

WSIS Prizes Contest 2020 Nominee

In

Paraguay, The development of experiences based on the incorporation of ICTs to school work has acquired a variety of formats and has obtained different results; This project provided a public school with fixed Internet access, a classroom equipped with new computers, educational management software and 3D design and printing technology in an electronic laboratory so that students of the technical baccalaureate can develop innovation projects. In Paraguay, state schools do not have infrastructure, do not have free internet access and do not have computers or have obsolete equipment. The installation of a Design and Innovation Laboratory makes it easier for students to access information, newer technology, and the possibility of developing their own technological solutions. The project is relevant to **SDG4, SDG5, SDG8**.



Wikis, Education & Research

WSIS Prizes Contest 2020 Nominee

In **Portugal**, while it is true that people in general, and in particular pupils and students, as teachers, trainers and researchers, use Wikipedia, it is not yet clear what role it plays, or can play, for example, as a pedagogical strategy. Indeed Wikipedia is a key resource in digital contexts, specially when doing an online search on the internet. But can it also be a resource in educational, training and research contexts? How can wikis, and mainly Wikipedia, be a catalyst for the development of ICT skills and digital competences? The WEIWER Wikis, Education & Research project aims at training pupils and students, along with their teachers, in ICT skills and digital competences, namely by: developing informational and communicational literacies; enhancing collaborative writing and work. The project has a strong pedagogical and social basis, relying on voluntary work, in an innovating empowerment spirit. So far, open sessions, with and for international audiences have taken place, along with seminars and workshops for both pupils, students, teachers and librarians. We are already planning to continue to expand it to contexts, and further replicate it, in response to requests of local communities, for instance, like schools. The project is relevant to **SDG4**.



Open Data Policy and Portal

WSIS Prizes Contest 2020 Nominee

In

Qatar, the Government of Qatar announced the adoption of open government policy in 2014. Therefore, a project was initiated to establish an open data platform that would allow the agencies to release and manage their datasets as well as the recipients to discover and make use of the datasets at a single place in the most efficient manner. One of the four strategic thrusts of Qatar Digital Government (QDG) Strategy 2020 emphasizes promotion of open government and this is also outlined in one of the strategic objectives to increase government openness. This aligns with the UN SDG "Decent Work and Economic Growth" directly, and indirectly influences the achievement of other SDG's such as Sustainable Cities and Communities, Industry, Innovation, and Infrastructure, and Quality Education. The Open data portal launched in April 2019 will enable the government agencies in Qatar to readily publish the datasets in an open format ready usage of the datasets, thereby contributing to the achievement of the national goals. This will also enable the people, institutions and business to freely access the datasets that were previously not available. The project is relevant to **SDG1, SDG4, SDG7, SDG15, SDG17**.



Scientific Research Production Platform

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, establishing a program for the management of scientific research in the university, preserving, documenting, categorizing and disseminating it, which will improve the level of scientific research and dissertations in the university, as well as upgrading and developing graduate programs. It also contributes to the exchange of research information with universities, institutions, research centers and researchers. In addition, it provides a conducive research environment for research, creativity and innovation, and contributes to building global research partnerships. The project is relevant to **SDG4**.



Unmanned Aerial Vehicle (UAV) Based RFID Technology Inventory Management

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, In the past few years, the supply chain industry has been keen in adopting technologies that uses Radio Frequency Identification (RFID) to enhance inventory management. RFID technology has shown strengths in resistance to harsh environment, storing information, reading batches, and ability to get information wirelessly and process it accordingly. As a result, the industry has been developing RFID based inventory management system to address the existing challenges. Subsequently, implementation of RFID solution is a significant contributor to a lean production since it eliminates waste in the production process. This is a result of the technology's ability to reduce costs of inventory management, minimize logistics time, and lowering overall wastes. In other words, utilization of RFID technology enhances the efficiency of material inventory compared to the traditional methods. Pipe Yards Inspection Department, UAV and Robotics Team, has partnered with IT Logistics Group and Supply Chain Policy & Systems Department to improve Saudi Aramco pipe yard inventory management system by adopting UAV-based Radio Frequency Identification (RFID) technology as a solution. The partnership objective was to develop and deploy RFID solution to enable pipe yards to conduct effective material inventory. The UAV solution resolved the limited mobility of the conventional ground inventory practices due to limited aisles accessorially. UAV-Based RFID Solution To overcome the mobility challenges in the pipe yard, UAV was the latest and most capable mobility solution. The combination of the advanced UAV platform with a complete RFID solution payload resulted in introduction of an intelligent solution that changed the way inventory management is done in the pipe yards. The project is relevant to **SDG8, SDG9**.



Sustainable Development Goals at the New Millennium School&2030 Vision

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, project's objectives 1. Achieving sustainable development goals with the students of the school from primary to secondary 2 - breeding conscious and strong intellectual and creative generation 3 - Mastering the skills of the twenty-first century, such as problem-solving and critical thinking 4. To possess the necessary knowledge for the

future function through the application of modern technologies and software Results achieved -Designing various social, educational and technical projects Such as the use of Minecraft game composition of the elements of the chemical periodic table of the elements in line with the goal of non-traditional quality education for sustainable development Awareness campaign to prevent breast cancer - Organizing scientific exhibitions and clubs that show experiences to apply what has been learned in the curriculum in a practical way - Use of technologies and technologies such as applications of smart devices and how to employ them to serve the educational process, including the application (discoverer) of augmented reality in addition to charitable works such as donating old clothes to the poor. The impact generated. The projects and exhibitions held at the school aroused the enthusiasm of the students, which led them to learn and maintain their mental and physical health and to develop internal awareness of the importance of having a noble goal to achieve for a better future. The project is relevant to **SDG1, SDG2, SDG3, SDG4, SDG7.**



Loxion science STEMI camps for girls and boys/Loxion science fair and expo

WSIS Prizes Contest 2020 Nominee

In **South Africa**, this educational initiative is conducted in service to the previously disadvantaged African young learners in the public schooling sector at no cost. This affords them the opportunity to engage and interact with the field of Science physically and helps put the classroom curriculum in perspective relative to socio-economic challenges faced in the various communities. With the initiative, we aim to spread the knowledge, excitement and interest of Science, Technology, Engineering, and Mathematics and Innovation (STEMI) to spark innovation and develop young black scientists who are able to identify a problem in their community, analyse data, find solutions and be able to communicate their findings effectively. We aim to engage the public in a celebration of our local Science community, and the way STEMI helps us to better understand our and improve our world. Here we give emphasis to hands-on, enquiry-based activities, and participation in field experiences. We also offer the industry the opportunity to interact and connect with our future scientists by showcasing various exhibitions, specialists conducting demonstrations /experiments, and speakers from various fields talking about relevant scientific topics to the community. This flagship project takes Science from leaders in the STEMI industry in the form of laboratories, universities and research institutions and places it in the heart of township and rural communities in South Africa. The project is relevant to **SDG5, SDG16.**



GlamOre Tech for Females

WSIS Prizes Contest 2020 Nominee

In **United Kingdom**, **GlamOre** works with female businesses who are actively engaged in CSR and knowledge-based projects. Its target are female scientists and inventors. Main objectives are support females' scientific research, projects and creative ideas to bring them to the market successfully.

The project is relevant to **SDG5, SDG8, SDG9**.



Actionline: 8.0

WSIS Prizes Contest 2020 Nominee

In **Argentina**, San Luis is a province located in the center of the Argentine, it has a territory of 76,748 km² and a population of 500,000 inhabitants[**San Luis 4.0 programmable model**]. The provincial government provides free broadband connectivity to the entire population and the internet penetration reaches 95%. The programmable model San Luis 4.0 has, in the 40m² of its surface, the representation of geographical, cultural places and the connection with the past, present and future of San Luis. The model is divided into 10 thematic modules. Within each of these modules there are groups of objects that can be remotely operated individually or together. Each set has an appropriate number of sensors that allow the interaction of the model in that sector (trains, cars, street crossings, tractors and field instruments, archaeological ruins, airports, sports stadiums, public buildings...).

Children, adolescents and adults, from anywhere in the province, get practice in the operation of robotic systems and the Internet of Things through programming the objects of the model and can see the result of such programming through streaming. By connecting to a web enable programming platform -and after acquiring a certain skill- the users can experience the manipulation of robots and "smart communities", working in one or more areas, according to levels of experience and complexity. The thematic division shows a balance between three elements that define the culture from San Luis: - respect for its natural environment - its cultural and heritage identity - its constant search for growth, transformation and innovation. The archaeological areas of Sierra de las Quijadas and Inti Huasi, represent a message of protection and preservation of their history. The native communities of Huarpes and Ranquel have a preferential foccus to allow them to have the necessary training for the 4th industrial revolution. This programmable model promotes

the training of human resources in IT, the preservation, promotion and respect for the cultural heritage of San Luis. The project is relevant to **SDG4, SDG5, SDG8, SDG11**.



WSIS Prizes Contest 2020 Nominee

In **Austria**, Developed was an app for ios and android mobile platforms[**ARCHES Museums App**]. This enables the user to choose their own preferred hardware to view the content. The app was developed in react-native which besides cross platform support also has good support for the built in TalkBack and VoiceOver tools. The app also allows to change accessibility preferences by the user. These include basic features like color scheme, font sizes and filters for visually impaired people but also more advanced like selecting how content should be presented. This allows for example to use sign language videos instead of text descriptions. The available settings were chosen by multiple testgroups of people with various accessibility preferences. The project is relevant to **SDG9, SDG16**.



In **Brazil**, The project consists in stimulating the simultaneous union of the senses of touch and hearing in the teaching and learning process through the study of a Tactile and Political Map of the Southeast of Brazil [**THE INTERNET OF THINGS AND THE ARDUINO PLATFORM AS COMPUTER BOARDING ON TAPE MAPS**]. The objective is to contribute to the transposition of barriers imposed by visual impairment to the teaching and learning of students with visual impairment. The project consists of a computational model embedded in 06 Touch Maps, they are: The Wind Rose; The four States of the Southeast Region of Brazil (Minas Gerais / Sao Paulo / Rio de Janeiro / Espirito Santo) and the Tactile Map of the Southeast Region of Brazil. The project is relevant to **SDG9, SDG16**.



WSIS Prizes Contest 2020 Nominee

In **Brazil**, Seeing your child communicate with the world is one of the greatest wishes of parents of children with disabilities. And this achievement was made possible by the use of technologies that help students learn in the public school system in a city named Recife, Brazil. Diagnosed with cerebral palsy at birth, Amanda Cabral, 10, is in her fifth year of elementary school and is now able to express herself because of our educational solution

called **Key-X**. he writes his name and goes to class with his classmates, and is no longer invisible. Key-X is a set of hardware and software tools that enable individuals with physical, motor, and intellectual disabilities to use computers and mobile devices effectively for communication, learning, games, and life with greater autonomy. It consists of an exclusive design device (the Key-X itself) that basically functions as a keyboard and mouse for anyone who does not have fine motor coordination or any limb movement ability. By using the Key-X and its accessories, people can even use the blink of an eye or light body gestures to learn lessons, write, access the internet, communicate, or play. In Recife, where it was installed, we have more than 600 children with disabilities, including Down syndrome, different degrees of autism, physical and motor deficiencies and are now learning. Some of them went back to the regular Classroom. The social impact was so high that the project was a semifinalist of King Hamad Bin Isa Al-Khalifa at UNESCO. Inclusive education seeks to ensure that all students, with or without disabilities, participate actively in school activities and in their community. From this inclusive perspective, Google applications can mean technologies that culminate in ways of teaching and learning that make the interaction between teacher and student the fundamental point of the learning process, respecting the individual pace of learning. With the Key-X solution, we issued the first google certificate in Brazil for people with disabilities. The project is relevant to **SDG4, SDG8, SDG10**.



WSIS Prizes Contest 2020 Nominee

In **China**, The project aims to apply 5G and modern information technology to the smart management of scenic spots, with the aim to provide better tourism experience for tourists, to promote the integration of culture and travel, as well as the dissemination of national culture[**Red Flag Canal 5G Cultural Tourism Project**]. This is a great attempt in introducing advanced technology into travel field, which creates a sustainable economic growth pattern, and helps make cities inclusive. It also provides an alternative way of disseminating culture and local content. In this project, 5G technology was firstly applied to the cultural tourism project, providing an important application carrier for the development of spiritual culture. Project-derived applications can connect public libraries, cultural centers, museums, post offices and archives through ICTs; They can also give people around the world almost instant access to information and knowledge of these mechanism, and let them benefit from it. The project can tap the cultural connotation of tourism resources, make use of modern information technology comprehensively and rationally to develop

tourism cultural resources, and realize the sustainable development of cultural tourism resources. Through the project, China Unicom has established China Smart Culture and Tourism Industry Alliance with industry partners. The products of this project are reproducible, which can be applied in different scenic spots, museums, education and other industries. The project is relevant to **SDG8, SDG12, SDG17**.



WSIS Prizes Contest 2020 Nominee

In **Croatia**, Senior citizens make up almost a quarter of the population of Koprivnica-Krizevci County in Croatia [**Smartphone? Yes, Please! – Face-to-Face Training for Seniors**]. Because young people migrate to towns and to other countries to work, many older people live alone and struggle with loneliness and feelings of isolation. „Smartphone? Yes, Please!“ project has been introduced because senior members of the community are often reluctant of using smartphones and ICT in general. At the same time they are aware that ICT is essential part of everyday life, and that digital technology makes staying connected with family and friends easier than ever. The service is held by library volunteers and it consists of informal, customized lessons in using smartphones which last for one hour and are held once a week. Project objectives are digital inclusion of senior citizens, social inclusion, promoting importance of equality and equity and intergenerational solidarity. By now, a total of 51 workshops were held which included 48 participants. The greatest impact of the project is that by giving them tools and knowledge for communicating with their family and friends, librarians and volunteers help them to avoid loneliness, abandonment, dejection and depression. They also encourage their self-confidence by giving them more independence in doing their daily tasks. The project is relevant to **SDG4**.



WSIS Prizes Contest 2020 Nominee

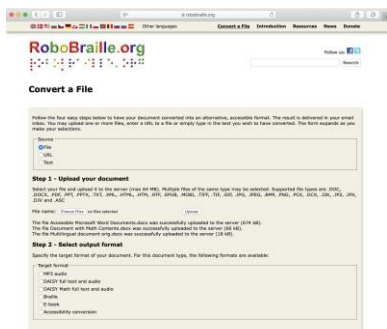
In **Czech Republic**, Oscar Senior Family app connects elderly with family friends and useful services [**Enable easy digital access for those not online**]. Each participant has Oscar Senior installed on his/her own device. This can be any smartphone or tablet running on iOS (Apple) or Android operating system. It is possible to make Oscar Senior the default home screen on the device of the elderly, so they can't get lost. The big buttons make it easy to select the right function. With one click the user will go back to the default Oscar Senior screen. Users will add only trusted contacts to the Oscar Senior directory (needs to be confirmed) to ensure maximum safety. No unwanted messages can be received. Users will

be able to communicate (also with group) via video calls, messaging/chatting and sharing photos. In addition, there are many entertainment and information functions allowing the elderly to explore digital possibilities like games, weather, latest news, reminders, music, etc. All functions are configurable, meaning they can be switch on/off to individualise the home screen of the user. Only functions needed/used will be visible. A unique feature is the remote management function. An assigned administrator (trusted family member or care giver) can control remotely the device of the senior. This means that the admin can add/remove contacts, switch on/off functions and even set up calls between the elderly and someone from the contact list. There is also a platform version of Oscar Senior for (care) organisation that want to have one tool to communicate with their clients/patients/residence. The project is relevant to **SDG9, SDG16**.



WSIS Prizes Contest 2020 Nominee

In **Denmark**, **RoboBraille** is a web-based solution capable of converting a wide range of documents into alternate media such as digital Braille, MP3 files, structured audio books, digital large-print and e-books. The service can also be used to convert otherwise inaccessible documents - e.g., scanned books and papers digitized using the camera function of a smartphone - into more accessible formats. The main objective of RoboBraille is to promote independence and self-sufficiency amongst people with disabilities in order to support inclusion in mainstream environments such as education and employment. The main target audience for the service include people with print impairments, e.g., the blind and partially sighted as well as people with dyslexia, learning disorders, cognitive disabilities, motor deficiencies, concussions and others. The service is also widely used by people with poor reading skills or poor language skills, foreign-language learners, flexible learners and others. The project is relevant to **SDG9**.



WSIS Prizes Contest 2020 Nominee

In **Ecuador**, his organization join 102 artisans from highlands in Ecuador [**Ethical fashion from Ecuador to world**]. They have access to training, microcredits, social health and also they can make handcrafts and sell in Ecuador and export
The project is relevant to **SDG10**.



In **Germany**, The mobil info is an application for the public transportation system in the area of Soest [**Projects Guide4Blind**]. It offers a digital and barrier free timetable information system which includes real-time services and a pedestrian navigation from the starting point to the bus stop or train station. Within the bluetooth range of the buses the app receives the line number and the destination of the entering bus. The app can be easily operated with the VoiceOver function (iOS) and TalkBack (Android) so that blind people can use the application easily. The project is relevant to **SDG9**.



In **Ghana**, **Unlocking Women in Technology (UWAT)** project's primary aim is to harness the use of technology in mobilising women and to utilise the skills of the Diaspora community in reaching this goal. This initiative is funded by Comic Relief and led by iSpace Foundation (GH) working in partnership with Ghana Code Club, Mobile Web Ghana, and The Radical Leap Company (UK). Offering programs and courses that include Coding, Business Management, Entrepreneurship, Professional Networking and Pitching {for Funding}, Mentorship. UWAT aims to create the type of ecosystem that offers training and the right support for women to thrive professionally. UWAT Targets women between the ages of 18-35 years from diverse background who have the passion to make an impact, gain new skill and kickstart her business. Our project is about the social impact of technology and entrepreneurship therefore our target group had to be members of the public who lacked access to funding, training, and general resources. The project is relevant to **SDG4, SDG5**.



WSIS Prizes Contest 2020 Nominee

In **Ghana**, **Afrocomix** is a content hub for all Afrocentric creative work made by Africans on the continent to provide a one stop shop for people all over the world who love African content while focusing on monetization, social integration and fixing the issue of fragmentation among the African creative industry. Since we launched in December 2017, we have been able to source for content from over 50 creatives across the continent and delivered it all over the world. One of our greatest achievements with this app includes publishing the Karmzah comic which has a superhero with cerebral palsy as its star. This is the first superhero ever created with this condition and has generated a lot of conversation about the disabled community which we are proud to pioneer. The project is relevant to **SDG4, SDG8, SDG9, SDG17**.

WSIS Prizes Contest 2020 Nominee

In **India**, Tata Communications partnered with Trickle Up in 2016 to initiate project '**MPowered**' with the intent of eradicating extreme poverty in Sundergarh and Bolangir districts of Odisha and Pakur and West Singhbhum districts in Jharkhand, by reaching out to 1800 ultra-poor women of; with a 2-pronged approach:

1. Increase access to information for ultra-poor women and their households to enable greater financial, social inclusion and sustainable livelihood through appropriate mobile technology and seed grant support.
2. Enhanced responsiveness and accountability of government to the needs of these women and their families by increasing access to real time data, subsequently strengthening households' ability to provide input and feedback about services provided.

KEY ACTIVITIES

1. Participant selection - 1800 ultra-poor women from 4 districts selected as project participants (PPs) through Poverty Assessment Tool (PAT) and Poverty Wealth Ranking (PWR).
2. Livelihood planning – Livelihood generation activities such as agriculture, livelihood and small businesses identified for each of the 1800 women through extensive planning, focussed on longer term goals of income generation and wellbeing.
3. Seed Grants - Seed grant of INR 3000 provided to all participants to support the livelihood generation activities identified, with the help of which they have diversified into multiple livelihood activities to combat the potential need to migrate.
4. Use of technology – A 'Package of Practice' (PoP) mobile application was developed to help cultivate vegetables, manage livestock for livelihood generation and provide access to financial literacy for informed decision making. 1000 women were given smartphones, formal training of using the devices and the internet were conducted. During the last year, 15 trainings took place in Jharkhand and Odisha.
5. Access to financial resources – SHGs have been energized in the area to help women gain access to loans and entitlements. 1,694 women are now a part of 564 SHGs.

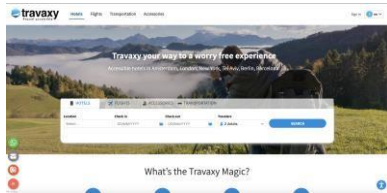
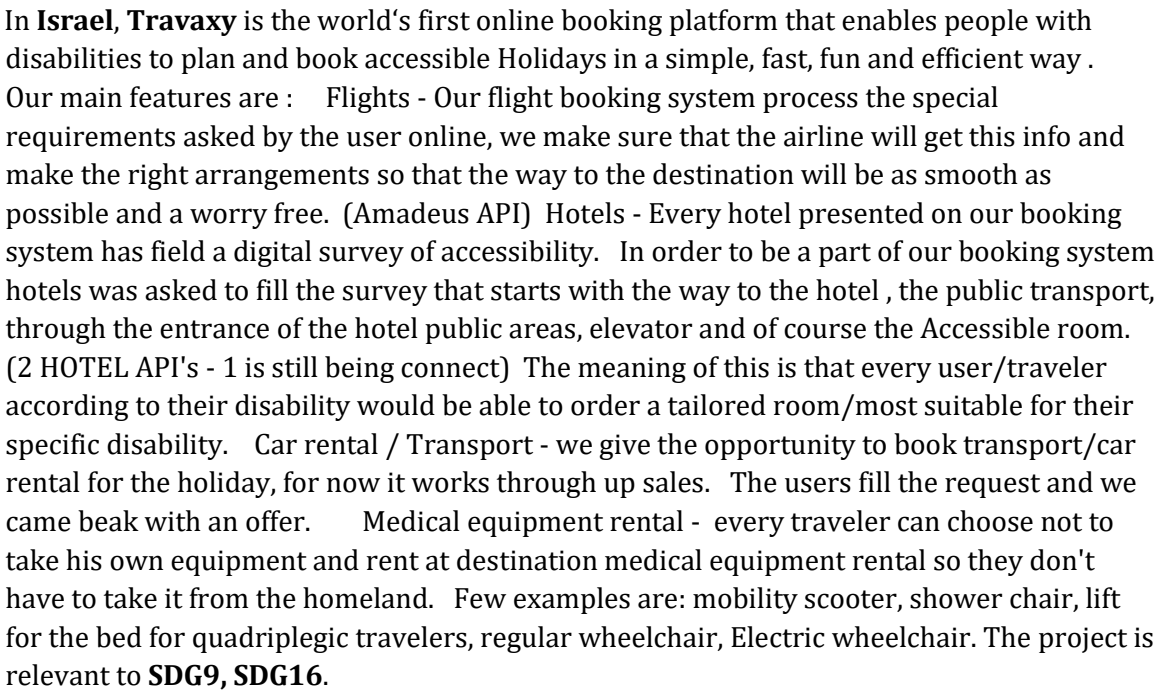
The project is relevant to **SDG1, SDG4, SDG8, SDG16**.



In **Indonesia**, **Suarise** is an Indonesian independent social enterprise to elevate visually impaired people (VIP) ability and skill through digital, online and technology literacy, so that they can be ready-to-work talent in digital era. Suarise focuses on leveraging visually impaired people's capacity by teaching them digital content writing. The training consist of 2 main part: core training and on-the-job training, which takes 6 months in total. All the participant are visually impaired people and the trainings conducted through offline and online method. Online method utilises Youtube live and Google classroom. Another important feature from Suarise is not only in developing sight-loss people's hard skill and soft skill. Suarise also empowers them by distributing talent to project/company that need specific digital skill set, from digital agency, start up, to other social enterprise. Suarise prepare the talents to not only capable in comprehend the writing skill, but also to perform both on site and remote-based working. Besides training, currently Suarise also promote digital accessibility in Indonesia called #TantanganAksesibilitas, calling the inclusivity of digital infrastructure in Indonesia, both from government and private, from websites to mobile applications. The project is relevant to **SDG4, SDG5**.



In **Israel**, **Project Ray** provides mobile & server-based digital solutions for the visually impaired, people with cognitive problems, and the elderly. The solutions address the requirements of users who are not able to use standard accessibility tools (screen reading utilities) because of its complexity - a group of about 75% of the 280 million visually impaired. For them, RAY uniquely provides a simple and intuitive interface that enables a common interaction across any smartphone function PLUS hardware add-ons with four tactile keys that facilitate full control of the different services using physical, touchable buttons. The solution is currently in use by about 20% of the visually impaired people in Israel, where we sell it together with the local mobile carriers. Please note that a market share of 20% in Israel is a unique achievement that is made possible by three major virtues – common interface across the entire phone; availability of tactile keypad to control the device with clickable buttons; the partnership with mobile carriers which have built a significant local awareness. The service includes numerous functions for communication, social interaction, entertainment, personal care, visual recognition, and remote support. The project is relevant to **SDG8**.



In **Italy**, **Rai** has developed a **“Virtual-LIS” platform** with four virtual LIS (Italian Sign Language) interpreters, developed by adopting the latest computer graphics technologies and the use of innovative technologies. This platform allows RAI to manage the entire process of generating new content in LIS for future services for the deaf. It is possible to develop new services for the deaf, both taking into account the technical and socio-cultural implications and involving the ENS (“Ente Nazionale Sordi”, national association of the deaf in Italy) and other associations of LIS Interpreters and the deaf The project is relevant to **SDG3, SDG4**.



WSIS Prizes Contest 2020 Nominee

In **Italy**, UNESCO cultural heritage sites will be finally and fully accessible to the visual impaired and the blinds thanks to a disruptive ICT innovation brought by a creative and cultural enterprise, Tooteko [**THE EU UNESCO4ALL TOUR**]. The technology in use integrates tactile exploration of work art (replicas) with audio data, which is provided by Antenna International, global leader in audio guides for cultural purposes. The art replicas, however, are per se “dumb”, that is why an audio guide or a human guide is necessary to integrate tactile perception with verbal information. We therefore transform tactile models of artworks into speaking models, enabling an interactive and independent exploration by people with visual impairments. The project is relevant to **SDG4, SDG9, SDG10**.



WSIS Prizes Contest 2020 Nominee

In **Italy**, **STAGE platform** with online streaming access in recorded and live mode to cultural events offered by involved CIs in the three end users’ partner countries. The platform also includes short info on offered events, star-based rating systems for users, access by CIs to upload events, history/chronology of the watched events, payment module through Paypal, and a potential new service for a voucher payment system, currently set up as a demo mockup. The STAGE service is based on a two-component platform: video management and distribution and Drupal. The two platforms communicate via REST API. Registration of users (i.e. Cultural Institutions and End Users) is performed on the Drupal platform and the data are communicated to the video platform to keep the two platforms synchronized. The project is relevant to **SDG9, SDG16**.

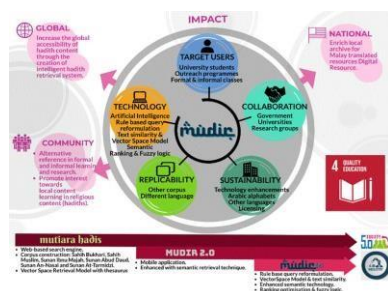


In **Italy**, **Pedius** is available on existing hardwares such as: smartphones, tablets, PC by both Android and Apple systems. Our software uses a combination of the VoIP network, the connections of users and a distributed application to add voice synthesis and speech recognition services. Therefore our main necessities are: VOIP traffic towards the traditional network, cloud server for management, speech recognition algorithms, and

speech synthesis software. From VoIP providers we have chosen Blueface, a company that has shown a strong focus on innovation and the world of the Deaf. Speech recognition is an important cornerstone for our system, the quality of the communication we will be able to offer greatly depends on its own quality. For this reason we have entered into a long-term agreement with Nuance while still maintaining beneficial relationships with other engines. Pedius uses advanced voice recognition and speech synthesis technology, the same used by Google and Siri. The technology used also makes it possible to simultaneously compare the output of multiple voice recognition methods to evaluate the quality of the transcripts obtained and provide the best transcription. In cases of uncertain transcriptions, the app will notify the user of any alternatives or the user may signal the other party to repeat what they have just said. Pedius is able to optimize our dictionary for specific conversations. Pedius is able to be integrated with any existing hardware without requiring any changes, making our solution adaptable to many different standards. The project is relevant to **SDG9**, **SDG16**.



In **Kuwait, Social Intelligence** is a project of Information Age Consulting (Kuwait). This project was developed by Dr. Salah Alnajem, the founder and CEO of Information Age Consulting and the associate professor of Computational Linguistics and Natural Language Processing at Kuwait University. The project consists of a web site and a mobile app (iOS and Android) which provide social media analytics services to the governmental agencies and private sector entities. Social Intelligence allows the user to view trending Twitter tweets, hashtags, media, and images in Kuwait for the last 24 hours (updated every 24 hours) and the last 48 hours. Historic trending Twitter tweets, hashtags, media, and images in Kuwait are also available through our historic archive of Twitter trends in Kuwait which date from 29 March 2014 till today. Our system of Twitter trends utilizes Trendsmap API to collect trending Twitter data for Kuwait. Besides, the user can use our system "Social Intelligence Analyzer" to analyze what has been said about a specific word, phrase, or brand on Twitter and other social media channels in a specific recent time frame or in a historic period. This analysis includes the analysis of content, sentiment, reaction, and audience. To achieve this, the users can use this system as a standalone software or as an add-on to Pulsar TRAC System. Otherwise, the users can utilize our professional analytics and visualization services that provide them with their social media analytics requirement. The analytics results are delivered as interactive infographics and/or interactive dashboards. In addition, Social Intelligence provides live (real-time) and historic listening of social media discussions about specific topics, keywords, and key-phrases in a specific time frame. The listening results are sorted by date and engagement (reaction). Our social media listening

[illegible]

In **Nigeria**, Africa Centre for Citizens Orientation (ACCO) is a registered Nigeria NGO in special consultative status with United Nations Economic and Social Council since 2010 with a mission to engage and equip children, youths, women and persons with disabilities

with the right information and requisite skills to actively participate in public life, promote human rights and contribute meaningfully to developmental processes for the common good of all [**Improving ICT Access for Women and Girls in Nigeria**]. ACCO is out to promote the good and welfare of Africans, most especially women, young people including girls and persons with disabilities based on the principles of freedom, equality and justice, and for the purpose of consolidating the unity and culture of our people. African Centre for Citizens Orientation is a coalition of five community and grassroots organizations namely Women Initiatives Nigeria (WIN), Youth Alliance on ICT for Development, Youth for Youth in Support of Peaceful Elections, Secure Africa - Africa Regional Youth Crime Prevention & Development Conference and Youth Crime Watch Nigeria. ACCO focuses on Citizenship Education; Women's Rights & Gender-Based Violence; Young People's Rights & Access to Information; Community Safety; Human Rights; and ICT for Development & Digital Inclusion. ACCO objectives include but are not limited to empower women and girls, persons with disabilities, children and youth, with educational and economic opportunities to enable them contribute actively to sustainable development; to promote gender equality and women empowerment at all levels and to instill positive values, foster good citizenship and build self-confidence in our young people. We have used Information and Communication Technology tools to empower communities, schools and organizations with beneficiaries including women, girls, students, educators, community leaders and entrepreneurs. The project is relevant to **SDG4, SDG5, SDG9, SDG16**.



WSIS Prizes Contest 2020 Nominee

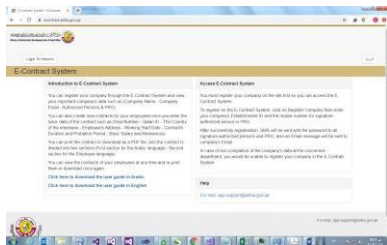
In **Nigeria**, Tech ME is a nonprofit social enterprise leveraging technology to solve social issues. The organization's activities stand on a tripod of STEM education, entrepreneurship, and civic engagement. Established in December 2016, Tech ME began as a project to bridge the technology gender gap in Nigeria. Tech ME was borne out of a passion for technology and impactful social work. Tech ME's target group are youth, girls and women. Since inception, the organization has taught coding to 380 girls attending low-income schools. Tech ME also runs mentorship programs for at-risk teenagers. The organization's coding program, **She Makes A Revolution using Technology (SMART) Girls**, is an afterschool program aimed at developing the interest of girls in computer science by teaching coding and programming classes designed to be hands-on, supportive, enriching and most importantly – fun! Classes are designed to stimulate design, creativity, problem-solving, inventiveness, and learning in participants. The organization assists girls in secondary schools to create Tech Girls Clubs. The club serves as a safe space for girls to learn to code with peers. By having girl students as part of the leadership of the clubs, it gives them a sense of ownership. Tech ME has also implemented ICT entrepreneurship projects to train women and youth living in disadvantaged communities. **ORGANIZATION OBJECTIVES** To empower women and youth economically by equipping them with relevant skills and resources to achieve financial independence. Improved literacy levels among the girls using innovative technology. To ensure higher participation and leadership of women in

the STEM field. Bridge technology gender gap in Nigeria. The project is relevant to **SDG1, SDG4, SDG5**.



WSIS Prizes Contest 2020 Nominee

In **Qatar**, The Project came as part of State of Qatar program of initiatives to enhance the level of awareness of expatriate workers of their rights according to Qatari Labor Law and other related legislation [**Multi Languages Electronic Labor Contract System**]. An Electronic Labor Contract Management System supporting Multilanguage's (Currently 11 major languages) available through different electronic channels locally and globally, Provide the expatriate workers an authentic way to fully understand their rights of the contractual agreement terms with their potential employees in their native language. The generation of contract narrative in different languages is fully automated based on set predefined templates that can be expanded dynamically to support more languages. The system that started with one channel through Ministry Of Administrative Development, Labor & Social affairs (ADLSA) Public Website. Currently has been expanded through partnership With ministry of Interior (MOI) to a be a part of portfolio of services provided by Qatar VISA CENTER with ultimate goal of streamlining the transparent process of expatriate recruitment end to end through thier physical existence in (6) countries around global . The System through its different services and channels has proved to enhance the recruitment transparency process minimize the cases of disputes and eliminate the intentional manipulation of workers' rights The project is relevant to **SDG4, SDG8**.



In **Saudi Arabia**, it is system to issuing media clearance for internal and external books and publications, theatrical texts, TV series texts, computer software, paintings, maps and magazines [**Books and Publications Clearance System – Electronic Services – The Ministry of Media**]. After that print it electronically. The system targets to serve the authors and the publishing and distribution houses owners. Which allow them to do all the procedures electronically from any place in The Kingdom of Saudi Arabia, then get the clearance within 10 days maximum, in 6 steps. It also allow them to get the license

electronically from the system. The system was self implemented in The Ministry of Media, and integrated electronically with the following government agencies: -Saudi Post. -National Information Center. -National King Fahad Library. The system seeks to facilitate the service submission and save the beneficiaries time, also allow them to finish all the procedures electronically without any physical follow ups and papers. -Since 1\1\2019 to 30\9\2019 more than 20,179 clearances done. The project is relevant to **SDG3, SDG11, SDG12.**

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, Technology today has great importance in our lives and in society development, as it has major role in facilitating human life and increasing efficiency, productivity as well as improving quality of life [Attaa initiative (الرقمي العطاء)]. Technology has become an indispensable foundation in most countries today and it is not luxury anymore. Saudi Arabia is undertaking the largest and most ambitious economic reform and transformation program in its history, where digitization is key enablers of these wideranging reforms. One major challenge lies in building digital skills and addressing digital literacy among citizens where it is necessary to enable them with the proper use and utilization of technology, to improve the soci-economical impact. Internet penetration has improved to reach 93% and our citizens spend on average 6:45 hours online where more than 70% of this time on social media. On the other hand, Arabic-speakers comprise 5.8% of the users on the internet while online Arabic content is less than 0.6%, compared to other languages such as German and Russian where users are less than 2% and online content is around 6%. Thus, we came up with the first specialized voluntary initiative in digital awareness for Arabic speaking, where more than 28 thousand specialized ICT volunteers has joined so far, and beneficiaries exceed 7 million in the first year, with the help of tech specialists who contribute and enrich Arabic technical content and spread the digital culture to bridge the technical knowledge gap of Arabic speakers around the world through multiple tracks:

1. E-learning, A platform has been set up to train the members of the community on various technology subjects where online training contents gets created by experts and published for all Arabic speaking users to benefit from.
2. Conduct Training and hold technical events in all Kingdom's regions through volunteers (later on will be expanded to some Arabic countries).

The project is relevant to **SDG4.**

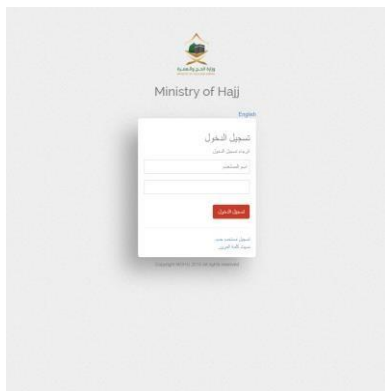


In **Saudi Arabia**, Within the framework of the Ministry of Hajj and Umrah's efforts to improve the experience of Muslims who visit the holy city of Makkah to perform Umrah (Mutamer) and/or to perform Hajj (Pilgrims), the ministry has developed a central

reservation engine for Hajj and Umrah and a central database to enable service providers in the Kingdom of Saudi Arabia to offer their services to Mutamers and Pilgrims across the globe. Accommodation, transportation, catering, tourism, air travel, health insurance, and other services are offered through global and local Online Travel Agencies (OTA's) marketing platforms like Agoda, booking.com, Expedia, Saudi Airlines, Almosfer.com. The Mutamer or Pilgrim can procure all of these services and complete the procedure of visa application request from the OTAs portal that is linked to **MAQAM**. The visa request is channeled through the integrated Unified Electronic Paths for Hajj and Umrah which is linked with the Saudi National Information Center and the Ministry of Foreign Affairs and an electronic copy of the Visa is sent immediately upon issuance to the Mutamer or pilgrim's E-mail. **MAQAM** is designated to facilitate services offering to Mutamers and Pilgrims who are able and willing to use technology and directly attain service by interacting with an OTA platform or be visiting a local agent who will act on their behalf. **MAQAM** objectives are:

1. Control the supply chain for all services provided to pilgrims in accordance with international standards.
2. Enhance the transparency for Mutamer and Pilgrims about the services on the level of content and cost.
3. Ensure the quality of services to be delivered as contracted.
4. Expand the scale of services to cover local and international markets, by integrating MAQAM with other global distribution systems, marketing platforms (OTA's), suppliers, and service providers.

The project is relevant to **SDG16**.



WSIS Prizes Contest 2020 Nominee

In **Serbia**, Main three objectives of this project were: **improving the level of digital literacy and digital competences** of women from rural area, conducting campaign related to raising awareness and increasing use of new technologies and e-services by women. In 2018, the Ministry of Trade, Tourism and Telecommunications announced a public call for non-governmental organisations to participate in the implementation of this project. Allocated budget was 71.500,00 eur. Conditions for participation in the project implementation included organizing and conducting programs for improving digital competences of women from rural areas which should be in accordance with EU Digital Competences Framework. According to the Minister's Decision, eight programs submitted by non-governmental organisations were selected for the project implementation. Selected NGOs have headquarter in different cities in Serbia (Beograd, Priboj, Trstenik, Novi Pazar,

Niš, Topola), so project activities were conducted in all developing Serbian regions. Every selected NGO organization delivered educational training for about 50 rural women (400 educated women in total). All these women who participated were housewives - they do farming, babysitting, housework and etc, so they did not have any basic ICT knowledge and digital competences before. Training included empowering basic digital skills and competences, such as sending e-mails, creating files, creating profile on social media (Facebook), using digital marketing etc. Bearing in mind the fact that most of rural women produce tradition Serbian products (jam, juices, sweets), it was very useful for them to learn how to make digital promotion of traditional products and sell it online. For some of them the most useful training was about using excel program for simply monitoring and management their monthly costs. The most important fact is that five women from Trstenik found a job after after this educational training and started developing their professional careers. The project is relevant to **SDG4, SDG5**.



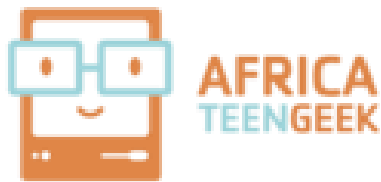
The Bashumi Street Law Show and Bashumi Bashumi Business Shows

In **South Africa, the Bashumi Street Law Show and Bashumi Business Shows** were created in 2016 after a woman shared her story of murders and forced evictions and illegal selling of inherited properties at a women's conference which I had attended. In one instance, a woman had been slaughtered for attempting to challenge her land ownership rights as enshrined in the Constitution. Another woman was forced to marry her deceased husband's brother in order for her and her children to remain in the family home that she and her deceased husband had built together. In the final story, a woman had inherited land from her father. However, this land was taken away from her by her brother and the village chief; and used for economic gains without remunerating her. These stories moved me to do something! I then founded. The Bashumi shows: which is a feminist podcast radio show aimed at empowering the most vulnerable African women (rural women or women subjected to customary marriages) with knowledge in order to challenge the status quo. On one hand, the Bashumi Street Law Show aims to teach the law of inheritance/succession and ownership rights so that women can challenge inheritances being taken away from them or their children. And, on the other hand, the Bashumi Business Show teaches women how to start their own businesses by teaching them how to draft a comprehensive business plan. African women who had been excluded from inheritance, ownership and the economy could now use their newly found knowledge to come together and to defend their integrity. The Bashumi Shows were not just about empowering individuals, it was about the whole community being empowered so that the whole community could stand together to fight injustice. The project is relevant to **SDG4, SDG5, SDG8**.



WSIS Prizes Contest 2020 Nominee

In **South Africa**, **Africa Teen Geeks** has taught 49000 children from disadvantaged communities with 23000 of those being girls. December 2018 it entered into a partnership with the department of basic education to develop and implement a coding and robotics curriculum to be taught from Grade R-9 to public schools which will reach 9 million learners every year. This means that every child in SA irrespective of gender, race & socioeconomic background will have access to tech education and create a pipeline of girls and people of color closing the gender gap and bring racial parity in tech. The project is relevant to **SDG1, SDG16**.



In **Spain**, **Pictogram** is platform based on cloud computing made up by three main pieces of software: Pictogram Communicator, Pictogram Web and Pictogram Analytics. Pictogram Communicator is an augmentative communication device (AAD) based on pictograms. It is designed according to the latest scientific findings in the field: functional and user-specific vocabulary support, motor planning, reactive data entry or language acquisition monitoring. This is especially useful to encourage incidental language learning, observing how other people communicate with us, who act as models. The project is relevant to **SDG4, SDG9**.



In **Tunisia**, The proposed “**audio accessibility for all package**” is a tool for measuring the audio accessibility of public address system for all: normal hearing persons and hearing impaired persons. The for all design takes into consideration the hearing diversity in a public place. This specific speech intelligibility digital meter associated with microphone, predicts the intelligibility of the broadcasted vocal announcement over the loudspeakers, for hearing impaired persons. We developed a software that evaluates in real time an objective measure of speech intelligibility and comfort, for age related hearing impairment in a noisy and reverberant space. The interface displays to the user an objective score “SIMforall” related to the percentage of words recognition in a vocal announcement for different hearing impairment grades (slight, moderate and severe). The project is relevant to **SDG4, SDG9, SDG16**.



Actionline: 9.0

In **Argentina**, **Media Chicas** in 2014/2015 was the first organization founded by 4 women to help other women to strengthen their skills and knowledge in technologies. The vision of Media Chicas in that year was disruptive, implementing innovation methodologies to face the demand of the mark in the digital era, with a vision of the future to train women between 18 and 35 years old that are the domino effect for future adolescent women. Through hackathons, 3-day events in a house, training and research, we can make women learn and feel trust in the network. We understand that the fields of women in technology can help generate a collective force of learning and collaboration. The project is relevant to **SDG5**.

WSIS Prizes Contest 2020 Nominee

In **Argentina**, San Luis is a province located in the center of the Argentine Republic, has a territory of 76,748 km² and a population of 500,000 population [**3.0 Tutorials**]. The provincial government provides free broadband connectivity to the entire population and internet penetration reaches 95%. The main objective of this policy is that San Luis is part of the future and that our society surpasses the stage of consumption of technology and information, to be a generator of content, innovation and technology. Within the process of digital inclusion and maximization of digitalization, it is necessary to promote opportunities of technology training. The government of San Luis has developed different applications with community services in the areas of Health, Safety, Infrastructure and Education. Each of these applications has an explanatory tutorial on its operation and objectives. **Tutorials** are a communication strategy, so that citizens can access simple explanations about each service or application. With a current language we develop two narrative and aesthetic lines of tutorials. A line where the emphasis is on the graphic proposal, step-by-step explanations with 2D graphics and animation, so that it can be understood in any consumption situation: cell phone, tablet or computer and in any of the most used social networks. In the second aesthetic proposal, the emphasis is placed on the narrative resource of the driver: A young "youtuber". With an everyday language, the host offers an experience: he downloads, installs and uses each application, exposes the difficulties, provides advice. Searches and achieves empathizing with our public, conveys the "possibility" as a value: I can, so we can all. It is relaxed, informal, with more colloquial explanations, it appeals to comedy at times, and makes it possible to express itself thoroughly in the explanations that are necessary to highlight, resulting in a "closer position" for the youngest. The project is relevant to **SDG4, SDG5, SDG8, SDG9**.



WSIS Prizes Contest 2020 Nominee

In **Bangladesh**, BNNRC believes that gender equality is a core concern of the organizational decree, not being considered as a cross-cutting issue [**Gender Responsive Communication through Community Radios in Bangladesh**]. In this connection, Community Radios constitute a diverse and professional landscape and function as change agents of the people living in rural and remote areas. BNNRC is always giving the highest priority to mainstreaming gender in all CR stations in Bangladesh. All 18 CR stations have been following gender-responsive communication during developing their content. For their outstanding efforts in empowering the community, providing access in media as a platform to raise voice (especially for girls and women) as well as influencing power groups to response, pursue, protect and prevent in reducing gender-based discrimination and injustice in societies. BNNRC strategically introduced a gender equality policy for all CR Stations. The policy not only being followed by the management of all CR Stations (CRSs) but also by the CR broadcasters during program productions and awareness-building activities among their rural audiences. This policy also distributed among the concerned policymakers for strengthening lobby and advocacy in creating a gender-friendly environment of all CR Stations. “Gender Responsive Communication for Community Radio Broadcasters” orientations and workshops for the Community Radio broadcasters helped the Broadcasters in producing and broadcasting gender-responsive content. Considering the power of social media, the youth community broadcasters are also promoting genderresponsive development agendas among their wider communities. The initiative also helped the CR broadcasters, especially women broadcasters to handle all technological barriers and disseminate their program contents through social media in the era of the 4th Industrial Revolution. The project is relevant to **SDG16**.



WSIS Prizes Contest 2020 Nominee

In **Bangladesh**, The Media Sector in Bangladesh has grown considerably over the last 15 years [**Digital Safety and Security for the Journalists in Bangladesh**]. Presently, 44 television channels, 28 FM radios, 32 community radios, 1187 daily newspapers, and more than 100 online news portals are active. Most of the Journalists depend on the Internet and digital communications for research, interaction and news distribution. So it was observed that journalists especially women journalists need training on physical and professional safety. Journalists’ safety and impunity: According to an article report 2014 on Freedom of Expression in Bangladesh, recorded an alarming 106% increase from 2013 in harassment

figures against journalists -with a single conviction. This trend of violence has become increasingly deadly. In 2015, four bloggers were gruesomely murdered within six months, this wave of violence and lack of adequate official response has put Bangladesh to 12th position out of 14 ranked by Committee to Protect Journalists Global Impunity. The report condemning Bangladesh's position in its index identifies spotlight countries like Bangladesh where they said 'killers go free'. Compounding this increasingly hostile operational environment is a sector influenced by corporate ownership and political allegiances. This has resulted in increasing self-censored at the individual journalist and editorial levels. At the same time, digital threats are increasing too, with journalists using technology without basic safeguards. Despite these Challenges, Bangladeshi Media and civil society have demonstrated, through coalition building and advocacy around the Right to Information (RTI) Act 2009, that the government can successfully be engaged on issues related to freedom of speech and information. And, by adopting the array of available cutting edge digital and physical security tools and approaches, professional journalists and bloggers can be empowered to prevent and mitigate threats, giving them space and confidence, they need to work with. The project is relevant to **SDG16**.

WSIS Prizes Contest 2020 Nominee

In **Canada**, The **GMMP(Global Media Monitoring Project)** is a worldwide media monitoring, research and advocacy project implemented collaboratively with women's rights organisations, grassroots groups, media associations, university students and researchers across the world. The research findings are useful for education, policy advocacy, public awareness, gender-equality/women's rights activism, media and communication policy development, among other applications. The GMMP maintains the spotlight on gender inequalities perpetuated in and through the news media, and the demands for change. It updates the data for use in sensitising new generations of journalists, creating awareness in media consumers, and for media policy and practice change advocacy. The project is relevant to **SDG5, SDG16**.



WSIS Prizes Contest 2020 Nominee

In **China**, The informatization and digitalization of the world economy is an inevitable trend. The Chinese government highly values the development of digital economy and takes it as a strategic priority to accelerate the building of a "Digital China". **The Digital China "Pilot project"** is designed to build the most influential brand promotion plan for the Digital China, mainly through activities—both online and offline, and in a way of integration between medias—both traditional and new. The project will offer all walks of life the authoritative development information of Digital China with high quality, establish a platform for communication between the government, enterprises, and the public, as well as explore and promote the excellent practice case of digital transformation and innovation. It could help the general public to better grasp the opportunities in China's digital transformation, facilitate digital transformation for industries, and build momentum for sustainable development of the economy and society powered by digital technology. The project is relevant to **SDG1, SDG4, SDG8, SDG10**.



WSIS Prizes Contest 2020 Nominee

In **Cuba**, The objective of this project is to disseminate and report on what happens in the municipality of Caibarién, to this people and to the rest of the world through live audio [**CMHS Radio Caibarién**]. This project becomes a community radio project, bringing information related to this territory to the world. The principal impact is to be able to communicate to people about different issues at the local, national and international areas, including communication, information technology, society, culture, politics, sports, environment, etc. The project is relevant to **SDG11, SDG13, SDG14, SDG15, SDG16**.



WSIS Prizes Contest 2020 Nominee

In **France**, in 2018 EBU decided to create a regular monthly podcast on technological accessibility innovations and products [**EBU Access Cast**]. While not in itself a 'product', the podcast is the first of its kind entirely by and for visually impaired individuals, which specifically deals with assistive technology. The aim is create a modern, lively tool which can reach a wide audience and speak about new technologies in a language which blind and partially sighted people can immediately understand, as it deals with issues which concern directly this community. 5please note the entry form guidelines state 'Up to five highresolution pictures of the solution' whereas five are in fact rededer obligatory by the form). The podcast not only highlights new innovations and advances, but also tests the limits of existing products, where possible providing hints and solutions to difficulties encountered. It fosters a spirit of community and involvement, thus reducing isolation. By

its international nature it widens the scope of products and solutions which are on the market, helps visually impaired users avoid pitfalls and share the tips and innovations they gain within their own communities. It is therefore both a tool for empowerment and knowledge, which can be adapted and updated to the constantly-changing needs of the market place. We also hope, through this podcast, to reach out to younger members of the visually impaired community who will be future leaders and role-models, and also show that this community is capable of harnessing new communications tools and using them to their own advantage. The project is relevant to **SDG4, SDG9, SDG16**.



WSIS Prizes Contest 2020 Nominee

In **Indonesia, Information Technology Communication Literacy Talkshow** was held to answer the information and editing needs of the older generation or digital urban. This generation is very vulnerable when facing technological security issues, information gaps and hoaxes. In contrast to millennials who are already familiar with information technology, the older generation and people with disabilities experience uncertainty when using technology. The ICT literacy talk show, managed by Madiun ICT volunteers, offers solutions for the public how to use information technology safely, well and healthily. Through radio media that still has broad affordability, and fanatical fans, this talkshow can be a shared learning space to discuss how citizens can intelligently face the impact of information technology. More value from this talkshow program include broadcasters who understand the problem of information technology, supporting music, for this rubric featuring keroncong music that is very well-liked by the older generation, and competent speakers from the community. Listeners can also participate in interactions via telephone, whatsapp, facebook pages. This section, in addition to being transmitted via the 93.0 FM frequency, can also be accessed via the streaming channel: <https://facebook.com/pemkotmadiun/> in order to reach a wider audience. Here are examples,

1. <https://www.facebook.com/pemkotmadiun/videos/524110464837524/>
2. <https://www.facebook.com/pemkotmadiun/videos/418781908849125/> 3.
- <https://www.facebook.com/pemkotmadiun/videos/529558720915131/>

The project is relevant to **SDG11, SDG16**.



WSIS Prizes Contest 2020 Nominee

In **Israel**, The users use an app downloaded from app store. The system includes a Nuc computer installed in the venue together with a wifi network Please meet **GalaPro**, a ground-breaking startup for the entertainment industry. Using advanced sound and speech recognition, GalaPro breaks down language and accessibility limitation for any show, movie, or lecture, immediately and conveniently. GalaPro does this by providing fully-synchronized in-show services including subtitles, dubbing, closed-captioning, audio description and amplification, all directly to the viewer's mobile device via a free app designed specifically to provide a seamless experience in a live environment. GalaPro has now completed its first objective, proving its technological capabilities and business case in the most difficult of markets, New York's Broadway theater district. The project is relevant to **SDG9, SDG16**.



WSIS Prizes Contest 2020 Nominee

In **Italy**, the **Stretch TV** project improves the usability comprehensibility of television programs, slowing them down so as to present them at the optimal speed for the elderly and for those who suffer from sensory and cognitive disabilities. Reviewing a slowed television program can allow many people to enjoy it optimally, better understanding of the content and eliminating the frustration that stems from the fact not fully grasp what is being said. The slowdown is made so as to guarantee the intelligibility, timbre of the voice and quality of speech, maintaining synchronization with the video signal of the television program. Since the intelligibility of a program is extremely subjective, the viewer is offered the choice between different percentages of slowdown. Stretch TV is a service offered by Rai on its RaiPlay video on demand platform applied to TV newscasts. To access this service you need a SmartTV – HbbTV (Hybrid Broadcast Broadband Television) connected to Internet. The viewer can slow down the viewing of television content via a remote control button. Another application of Stretch TV regards the foreign languages in the educational

field, fostering a better understanding of foreign languages and their learning. Listening to a film in a foreign language known, in slow motion, significantly increases the understanding of the dialogues and the history represented. The project is relevant to **SDG3, SDG4, SDG11**.



WSIS Prizes Contest 2020 Nominee

In **Kuwait, 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. In addition, Social Watcher web platform allows the public users to view trending Twitter tweets, hashtags, media, and images in Kuwait for the last 24 hours (data are automatically updated every 24 hours). In this respect, Social Watcher utilizes an application (Social Intelligence) developed by Information Age Consulting (one of the two partners participating in Social Watcher project). The application of Twitter trends utilizes Trendsmap API to collect trending Twitter data for Kuwait. Kuwait Twitter Trends section on Social Watcher web platform, which is available as an open access tool, allows the audience to understand the current trends in Kuwait on Twitter in a dynamic and constantly updated manner. The analytical reports, infographics, and dashboards published on Social Watcher web platform provide an effective tool for the decision makers, media professionals, political analysis, and the public which helps them in understanding public opinion trends and sentiment on social media towards political and economic issues in Kuwait and the change in these trends within a specific timeframe. The project is relevant to **SDG9, SDG16**.

Social Watcher

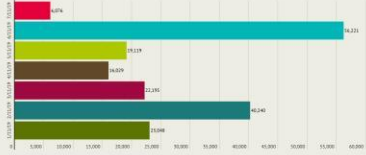
www.watcher.social

لمحة إحصائية

عدد المشاركات المرسومة 182,928

عدد المشاركين في الهاشتاغ 32,288

عدد التفاعلات حسب اليوم



أكثر تفرقة تم النشر بها

سليح محمد الملا @SalehAlmulla

خرجت قبل قليل من مبنى محافظة العاصمة والأمن العام بعد إكمال الإجراء القانوني لإقامة "الوقوف الاحتجاجية".
كل الشكر للأخ المحافظ ومدير الأمن العام على التعاون وحسن الإستقبال والشكر موصول للجهات المعنية بوزارة الداخلية.
نلتقي غداً بإذن الله الساعة 7 مساءً في #ساحة_الإرادة
#بس_مصحت

Translate Tweet

11:25 AM · Nov 5, 2019 · Twitter for iPhone

1.6K Retweets 1.1K Likes

أكثر حساب نشر تفرقات

ناصر السعد المنيلى Almuneefi

35.5K Tweets

ناصر السعد المنيلى @NasserAlsaad12

Democracy is the worst form of government except all the other forms tried (الديمقراطية هي أسوأ أشكال للحكومة ما عدا جميع الأشكال التي تم تجربتها)

kuwait Joined November 2018

151 Following 10.2K Followers

أكثر حساب نشر باعادة التفرقة

الحمد لله الحمدالله

9,212 Tweets

الحمد لله @HRegPC8IV8k26g

Joined October 2019

214 Following 189 Followers

ملاحظات

نشاط تقاعلي ملحوظ تحت وسع #بس_مصحت من حيث العدد الإجمالي المشارك وكثافة المشارك خلال فترة الرصد

تألفت مع رسوم أخرى من بينها #ساحة_الإرادة #أروى_الدم #أسفلت_الفرص

حوالت بعض الحسابات إعادة التوسع عن خلفه الداعي إلى التجمع يوم الأربعاء 6 أكتوبر 2019 في ساحة الإرادة إلى إحصاء أخرى مثل البدون ولسقط الفرص

عدد كبير من المشاركين في الهاشتاغ أعلنوا أنهم يحضرون تجمع يوم الأربعاء في ساحة الإرادة وبعضهم نشر مقطع فيديو للتأكيد

الحصول على تفاصيل أكثر الضغط على أريد info@watcher.social

حساب المراسلة على تويتر socialwatcher.kw

WSIS Prizes Contest 2020 Nominee

In **Malaysia**, the Ministry of Housing and Local Government's (MHLG's) mission is to accomplish the national development agenda through people's housing programmes, municipal and fire services to improve the quality of lives and well-being of the people, guided by the UNESCO's WSIS Action Lines and the United Nations' Sustainable Development Goals, in order to achieve MHLG's vision in "Creating Quality And Sustainable Living Environment In Line With The National Vision". The ministry's effort to ensure effective and efficient management of feedbacks received by MHLG on its media statements has led MHLG to innovate an effective media statement management medium through dynamic dashboard and mobile web application called "**Media Statement Management System**" (e-Media).

E-Media fulfils the National Blue Ocean Strategy's (NBOS's) criteria to highly impact and improve 2-way communication between media practitioners and MHLG, and saving RM320,742.00 of government expenses . It enables citizen-centric public service delivery using the "No Wrong Door" policy approach by making it easy for media practitioners to obtain feedbacks on media statements from the relevant responsible personnel in MHLG. eMedia was developed in-house; comprises of a dashboard for management and monitoring of feedbacks on media statements and a mobile web application; and is accessible anywhere, any time. The project is relevant to **SDG1, SDG3, SDG5, SDG6, SDG9, SDG11, SDG12, SDG16**.

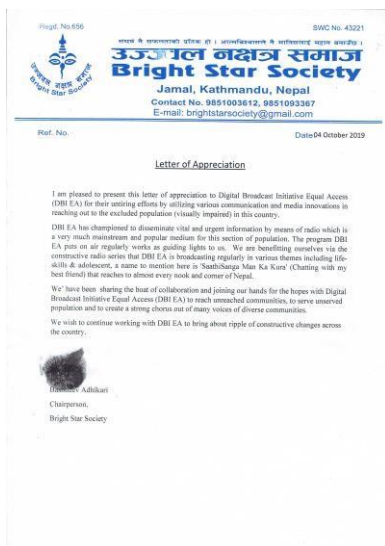


WSIS Prizes Contest 2020 Nominee

In **Mexico**, **Luchadoras** has an online community of 100K followers, being 83% women mainly between 25 and 34 years old in countries like Mexico, Argentina, Spain, Colombia, Chile, Peru, Ecuador and the U.S. They've been awarded by Mexico City Prize and Mexico City Human Rights Commission for their work as digital project dedicated to advance gender equality and make visible on the online space the work of women. Their most successful video pieces have been played online go from 6K to 60K times. Their website reaches between 15K and 24K people a month. These statistics reflect increasing audiences interested and exposed to creative content on topics about women's work and rights produced entirely by Luchadoras team in Mexico. The project is relevant to **SDG4, SDG5, SDG8**.

WSIS Prizes Contest 2020 Nominee

In **Nepal (Republic of)**, **SSMK (Saathi Sanga Manka Kura)** is a 45 minute weekly radio activity that targets adolescents and youth population, that was initiated in 2001 and later housed at DBI EA in 2004. Each week the young presenters of SSMK 'talk' to young people through this show with the aim of equipping them with the life skills to support them in making sound decisions on matters relating to their lives, empowering them to deal with their everyday problems and to tackle with peer-pressure and stigmatization. The goal of SSMK is to inform, educate and capacitate adolescents in the survival, protection, participation and development of the rights of children, adolescents and women for social change. The project operates with three principles: partnership, participation and decentralization. The project has partnered with over 300 community radio stations across Nepal to produce and broadcast radio programs for adolescents to date. Over 100 youth radio producers have been trained in life skills and radio techniques. SSMK maintains a strong presence in social media with almost 30,000 followers on Facebook. Efforts are on to expand user engagement on YouTube, Twitter and Instagram with an aim of increasing audience participation and to ensure that the content is relevant to adolescents across country. As part of the project's efforts to effectively reach and impact its target population, it runs simultaneous programs in regional languages, produced and broadcast locally by community-based radios. Each week SSMK receives over hundreds of responses from audience in the form of SMS, IVR, Facebook message, comments etc. Similarly, over 36,000 audience engage with SSMK every week. National Demographic Health Survey and other media surveys have confirmed that SSMK is the most popular programme among Nepalese youth. Currently 58% of existing radio stations broadcast SSMK in addition to the National Network. SSMK has touched lives of thousands of Nepalese adolescents, resulting a wellinformed middle-aged Nepalese generation benefiting from its radio content. The project is relevant to **SDG1, SDG2, SDG3, SDG4, SDG5, SDG6, SDG7, SDG8, SDG10, SDG11, SDG13, SDG16, SDG17.**



Voices of Women Media

WSIS Prizes Contest 2020 Nominee

In **Nepal (Republic of)**, **VOW Media** wants to contribute to a world where women enjoy their basic rights and live with dignity, equality, and justice. It is a non-profit organization

that is committed to providing women from marginalized communities with innovative media and technology tools to enable them to voice their own lives, to empower them and strengthen their voices. The advancement of women's leadership capabilities can be fostered by the creation of a positive self-image and a stronger sense of identity through the use of art, media, and education. We believe that through reflecting on and personalizing women's individual experiences we can stop violence inflicted on women, change social norms and fight against discrimination. Our work focuses specifically on strengthening feminist voices, right to technology, right to mobility, young women's leadership & transitional justice. We also run various campaigns and educational outreach programs which plays a role in contributing to cultural & social change in our communities. VOW Media believe that she can use culture to change culture. To strengthen young girls and provide opportunities for women to lead, we must consider education, reproductive health, economic justice, access to technology, right to mobility and the impact of sexual and domestic violence. The project is relevant to **SDG5, SDG9, SDG16**.



ROBOTICS4KIDS STEAM EDUCATION PROJECT

WSIS Prizes Contest 2020 Nominee

In **Nigeria, Robotics4Kids STEAM education project** was initiated by BIGT Infotech Solutions Limited to solve the challenges created by the dearth in technological innovation in Nigeria and Africa. The mission is to ignite the passion for ICT and Technology in pupils as young as 4 to give them technology insight from an early age. This would secure Africa's next generation. The pupils learn innovative skills, Digital skills and taught to have an entrepreneurial and leadership mindset. The focus is to reach elementary, Junior Secondary and Senior secondary schools with the initiative and training programs. This sets the pace and engineers other activities that re-aligns the pupils to think in an innovative manner solving Africa's problems with skills the learn from the classrooms. Activities of the initiative includes integrating STEAM skills and programs into their regular curriculum, creating a competitive idea driven environment where they can experiment using critical thinking and problem-solving analytical skills. Research has proven that children who are exposed to STEM Education at an early age will be prepared to understand STEM concepts in their latter and academic career. As the world focus shifts towards STEM, government policy makers and educators have realized that by providing the right tools to the child to succeed in STEM, it is providing them a big advantage in their future. The project is relevant to **SDG9, SDG16**.



ChaakuMan

In **Pakistan, ChaakuMan**, is a game, which was made against the stabbings of women that took place in Karachi, Pakistan in 2017. The game's aim is to provide women a support, motivation and encouragement to stand against the atrocities against women and promote

self defence. It is a Pac-Man inspired game where the players gets to choose from women characters and avoids a stabber chasing them and can fight back through collectables. The project is relevant to **SDG5, SDG16**.



Government Media Analysis Service

WSIS Prizes Contest 2020 Nominee

In **Qatar**, **Government Media Analysis Service** is one of the Government shared services that is offered to ministries and government departments in order to enable them to listen to and analyze any public eContent over the internet. There are 170 million resources including all social media platforms, newspapers websites, news agencies, blogs, magazines, research centers, libraries and many others. In addition, since Qatar is a diverse community of many nationalities, and dealing openly with the globe, the service offers its capabilities in 70 languages. Government departments now can proactively determine the users' satisfaction about their provisioned services, identify any opportunity to enhance their current services or introduce new services, based on users' public discussions. They can also respond to users' complaints, even if the user doesn't approach the right complaints channel (such as email or call center). Qatari embassies are able to track and analyze news about Qatar in their presence countries. Qatari universities are able to monitor research progress in specific areas, and many others can utilize the service for different use cases. The project is relevant to **SDG5, SDG9, SDG12, SDG16**.

MOTC Launches Government Cloud, Media Analytics Services

Doha - Qatar
Saturday, April 26, 2020



The Ministry of Transport and Communications (MOTC) has launched the Government Cloud Service in association with MESA and the Media Analytics Service, ending both of them to a list of shared services MOTC provides to government entities within the framework of Qatar Digital Government 2020.

The first is a government cloud based infrastructure as a Service (IaaS). It utilizes dedicated government network and focuses on delivering the service over a private and highly secure environment for government entities. This helps those entities to reduce cost on connectivity as well as improve agility. Through the cloud, self-service portal, IT administrators can create virtual servers in minutes in compliance with MOTC to be compliant with global systems and standards.

Media Analytics Service allows government entities to monitor, follow and analyze what is being published about them on social media and traditional electronic media, thus helping them monitor information and relevant published topics, follow up their initiatives, measure public opinion, interact with them and identify potential crises. In addition, it will also help them in the preparation of the necessary reports in this regard easily and through dashboards provided by MOTC to service subscribers.

"We are glad to launch these two new services as part of MOTC's plans for achieving the strategic objectives of the Qatar Digital Government 2020 Strategy, which aims to create efficiency in government administration, maximize opportunities to make better use of public funds in accordance with the Qatar National Vision 2030 that aims to ensure fast and reliable accessibility to information technology with reduced operational and capital expenditures," said MOTC assistant undersecretary of Government Information Technology Sector Mr. Hassan Jassem Al-Sayed.

"The Government Cloud Service will provide a standardized virtual server that takes responsibility for configuration and operations of government entities' operating system (OS), software and databases," he added. Procuring, storage, network, and other fundamental computing resources are now provided where entities can deploy and run arbitrary software, which can include operating systems and applications.

"MOTC also provides the Media Analytics Service to government entities," he said. "To allow them to follow up and analyze what's being published about them on media, social media and the traditional electronic media, thus helping them to have instant follow-up of public opinion and deal with it properly. This eventually, helps enhance interaction and online engagement between the public and government entities."

Ananke - digital platform empowering women through awareness, education & advocacy

WSIS Prizes Contest 2020 Nominee

In **United Arab Emirates**, **Ananke** is a digital platform empowering women through awareness, advocacy and education. It was launched in 2014 as a digital media entity documenting women's achievements, showcasing them as role models for aspiring women and girls to emulate; as well as a forum highlighting issues with a gender lens. Our in-depth articles, news and interviews focus on women's economic empowerment and shed light on topics from women's health, tech to the SDGs. Ananke also publishes special editions. Our

previous editions have focused topics including: Day of the Girl, Gender-based Violence, Women's Day and Human Rights. These digital edition are free to read on the ISSUU platform and can be viewed: <https://issuu.com/anankemag> Ananke's vision is to lift women by ensuring equal participation in the technology revolution. In 2016, Ananke launched its groundbreaking digital internship program which is a home-based and selfpaced initiative. The internship program started with one participant from Morocco and has so far mentored and trained over 40 girls from Kenya, Nigeria, Pakistan, India, UAE, US, Morocco, Australia, China, Belarus, Tanzania, Kenya, Russia, Denmark, and Bangladesh. Ananke's digital internship program not only aims at leveraging tech to empower women by offering access, meaningful engagement and safe online space; it is also intersectional as the interns belong to different ethnicities, religions, race, and having different vocations (lawyers, engineers, human rights advocates and teachers). Ananke seeks to create

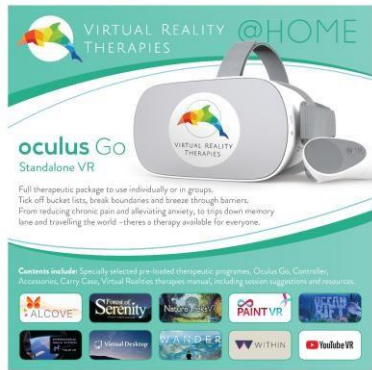
powerful transformative force for socioeconomic development by having conversations on creative economy. Our wide array of digital activities focuses offering expertise, fostering relationships through collaboration and hence enabling learning. In short, Ananke ensures not just women's participation in the creative economy, it builds empowerment on the pillars of inclusive discussions, in-depth research and an intersectional conversation advocating human rights. The project is relevant to **SDG4, SDG5, SDG16**.



VR therapies including hydrotherapy

WSIS Prizes Contest 2020 Nominee

In **United Kingdom, VR therapies** is an innovative and new social enterprise, created for kids with special-needs & adults with disabilities. Through the magic of VR, I get to take those too poorly to walk swimming with dolphins, children undergoing chemotherapy to explore space... Sharing these experiences with them as a Nurse has been amazing. Therapeutic VR is the use of virtual reality technology for psychological and/or physical therapy. Those receiving VR therapy navigate through different environments, which can be anything from the middle of the ocean, to different galaxies. It is only limited by our imagination. This should be available to everyone – not just those already in the hospital, rich, or physically-able.. but those who would benefit most, yet currently are the least likely to access it. The project is relevant to **SDG9, SDG16**.



“Portray Her: Representations of Women STEM Characters in Media,”

WSIS Prizes Contest 2020 Nominee

In **United States**, the **Geena Davis Institute on Gender in Media** in partnership with Lyda Hill Philanthropies conducted and published the major new research study, “Portray Her: Representations of Women STEM Characters in Media.” The first-of-its-kind study included an extensive ten-year content analysis of science, technology, engineering, and math (STEM) characters in entertainment media and a nationally representative survey of girls and young women. These two methods assessed how STEM professions are represented in media, and how these representations (and messages from society more broadly) affect girls’ perceptions of and participation in STEM. The study finds that media is influential in shaping attitudes toward STEM, but content producers continue to disproportionately represent STEM characters as white men, especially leading characters. It also demonstrates the profound role that media plays in shaping young people’s aspirations and career paths and the responsibility that content producers have in improving media representations of STEM characters when it comes to gender and race. The report, which largely targets entertainment industry content creators, includes concrete recommendations for improving media representations of STEM characters when it comes to gender and race as a way to directly increase girls and women’s future participation in STEM education and careers. The project is relevant to **SDG5**, **SDG16**.



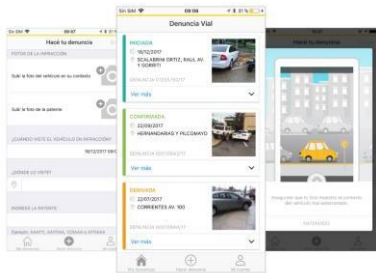
Actionline: 10.0

Denuncia Vial (traffic complaints)

WSIS Prizes Contest 2020 Nominee

In **Argentina**, “**Denuncia Vial**” (**traffic complaints**) is a mobile app that aims to strengthen collaboration that includes neighbors in conflict resolution to help improve the City of Buenos Aires. The application is integrated with miBA login, a unique authentication system for citizens that allows them to access multiple services developed by the Government of the City of Buenos Aires. Based on Law 451, residents of the City of Buenos Aires can photographically register certain traffic infractions and send them through the app. Once the photographs are uploaded, they are analyzed and for those considered valid, the

corresponding fines are issued. This project complements the continuous controls carried out by traffic agents at critical points, traffic safety cameras and vehicles. In turn, the application allows residents to expedite complaints of certain traffic violations that are very frequent in the City of Buenos Aires. These complaints are confidential and citizens have access to the complaints records and can check their status. The application was first published in 2016 and since then, new versions with continuous improvements have been released. During 2019, the app continues to be updated with cutting-edge technologies and we are currently working on a new improvement regarding the process of uploading complaints to increase users' satisfaction and experience. The project is relevant to **SDG16**.



Escuela TIC Familia

WSIS Prizes Contest 2020 Nominee

In **Colombia**, **Telefónica**, through the Telefónica Foundation, has developed the Escuela TIC Familia program, aimed at training parents on ICT, entrepreneurial and employment skills in order to help productivity as well as assist parents and caretakers in being effective stewards of their children's digital experiences and interactions. We are also about to deploy a cohort aimed exclusively at mothers and female caretakers. This responds to Telefónica's commitment to help people and communities adapt and acquire the skills they need not just for short-term employability, but also for the jobs of the future. In many areas of Colombia, the digital divide persists not only due to the lack or poor quality of connectivity, but also due to the lack of skills in adult populations who are too young to be out of the job market, and too old to be considered "digital natives". This is especially true when looking at ICT use not only for recreational or quotidian uses, but specifically at the use of ICTs for productive means, be it anything from a simple webpage for a commercial establishment or more complex uses, such as IoT for agricultural production. Telefónica is also sure that digital tools don't have to separate generations within a family, and can instead bring it closer together. But one of the most important factors in technology bringing families together is that caretakers and children can share their experiences in the digital world. This is also key to ensuring that caretakers are informed stewards of their children's digital experience, that they have the tools to help their children navigate the digital world safely and prudently. For adults, knowing how to use the technological tools available allows for new collaborative projects, whether they be as a family, or as a community. This leads to content creation and information sharing, which can help strengthen community bonds. The project is relevant to **SDG4, SDG5, SDG8**.



Mujeres en STEM Visibilization

WSIS Prizes Contest 2020 Nominee

In **Colombia**, Linda Patiño is an engaged journalist that addresses gender issues in technology field. As part of the Take Back The Tech Campaign she was a 25under25 awardee of ISOC in 2016. Sharing the interest for communities from her work as subeditor of Technology in the largest newspaper of Colombia she makes news reports, chronicles and deep investigation on topics related with digital rights, and special focus on women in STEM. As part of the WINN network of Accenture her goal is to share publications and several special reports on the topic. For the future, she is gathering women stories around the word about her roles in ICT sector to publish a future book. She also works as a teacher in the school of journalism, where she teaches about digital rights and safety. She gives workshops and conferences. Her audience is youth communities, girls, other female journalists and general readers. The project is relevant to **SDG5, SDG16**.



Sistema Integrado de Servicio a la Ciudadanía

WSIS Prizes Contest 2020 Nominee

In **Colombia**, **The Integrated Citizen Service System** is a citizen service strategy that brings the community closer to the educational services offer in Bogotá easy, without intermediary, travels and rows. We are convinced that by facilitating the access to education trust is generated, the sector is transformed and students and parents' quality of life is improved. This was achieved through the integration of four aspects: service channels physical and technological infrastructures were modernized, virtualization of educational procedures and services, decentralization of support towards educational establishments and personal leadership and digital update of public servants. The results of this strategy

are the elimination of rows to access to services, since citizens can schedule an appointment through the website at any school or user support center and from any device with internet; know in real time the status of requirements; request more than 50 procedures and online services; trained more than 2.000 public servants in digital tools and 100.000 digitally literate families. This impacts citizens in terms of dignifying access to fundamental rights such as education, contributing to its quality, to transparency in the access of information and services in the sector, to reduction of the risk of corruption by not having intermediaries in the processes, to reduction of fiscal and natural resources by technical and technologically rationalizing the portfolio of services and to the government commitment to advance in the digital literacy of an increasingly aware citizens of their rights. The project is relevant to **SDG16**.



White paper : mixity and digital efficiency

WSIS Prizes Contest 2020 Nominee

In **France**, "**Digital Ladies & Allies**" aims to promote diversity in tech by increasing the number and the visibility of women in this industry, from their early age, through multiple initiatives in France and abroad. Thanks to the collective power of influence of the members, our ambition is to drive change towards a more inclusive tech industry with a positive impact for humanity and our future. We have compiled proposals and best practices from more than 150 tech experts to reduce inequalities and increase number and visibility for women in tech launched last 06 March with the French government . We have set up a network with many associations working in common areas The project is relevant to **SDG4, SDG5, SDG16**.

ICT and Media: Efficient tools for youth to Counter Violent Extremism

WSIS Prizes Contest 2020 Nominee

In **Ghana**, The Internet and ICT has become embedded in every aspect of our day- to-day lives and the way we interact with others. Notwithstanding the positive impact of the internet and ICT on peoples lives, it is also being negatively used for bigotry, racism, exclusion, xenophobia and discriminatory thoughts and values. Fake news, misinformation, deception, hoaxes, propaganda and satire are used to package false information as authentic to influence the youth to radical ideology and violent motives. In Ghana, about 87.1% (Ahiabenu, 2018) of newsrooms report their stories from social media or user- generated content, this makes the media houses more susceptible to fake news. We believe that the Internet is the one of the platforms the youth are recruited because it is used as a tool for both active and passive communication and outreach. Attacking or pulling down their sites could be a temporary solution, but not a permanent one. To counter those radical activities and violent promoting sites, **Ghana Investment Fund for Electronic Communications**

(GIFEC) believes that one should start from the bottom; Education, Media and Information Literacy (MIL) and empowerment of young people to do it by themselves, which will be the most efficient tool to counter and fight such extreme ideologies and radical narratives. This project aims at countering the propaganda of the radical groups and their ideology by providing counter narratives to diminish their extremism ideas and cut the road on increase on negative societal peer influence.

- 300 young leaders (50% women) have received training on active citizenship, ICT, technical Media know-how and researching techniques.
- 300 young leaders are equipped with the necessary technical and knowledge skills and able to launch online “No Hatred words campaign”. The project is relevant to **SDG1, SDG4, SDG9, SDG16, SDG17**.



Digital Shakti

WSIS Prizes Contest 2020 Nominee

In **India**, **Digital shakti** was undertaken in partnership with Facebook and the National Commission for Women. In Phase 1 of the project, workshops on Digital Literacy and Online Safety were conducted for women across 6 states in various schools and colleges. We sensitised over 60,000 adolescent girls and women on the various cyber-crime committed against females and also the appropriate course of action to be taken in such cases. Through these workshops, many participants spoke about their problems and also felt the need to have more such discussions. Revenge pornography is a very important module in our sessions. The participants are taken through the entire process of content removal (DMCA content take-down), and also other redressal mechanisms including reporting to authorities and within social media platforms. These workshops have been proven essential as not only are women targeted online more than men, it has also been seen that though literacy rates are improving, digital literacy is still not as high as it should be. With the successful completion of phase 1 from June '18 to , we plan to launch Phase 2 of the project very soon. We will be visiting 12 states and plan to speak to around 1 lakh women. The project is relevant to **SDG5**.

#AgenDamai

WSIS Prizes Contest 2020 Nominee

In **Indonesia**, **Agen Damai** is a collaborative digital campaign that aimed to create a peaceful narrative in the digital platforms, by ‘flooding’ it (mostly social media) with positive content, in order to debunk the rapid spread of negative contents. The digital

campaign was run for eight weeks, and it consisted of several core activities, such as (1) creating positive digital contents, (2) establishing a positive content creator community which we called as #AgenDamai (Agent of Peace), (3) setting up regular Whatsapp digital discussions on several issues relating to the rapid spread of negative contents, (4) inaugurating content-creation competition, and (5) and establishing regular talk shows that related to the issue of managing digital content. With the aim to raise the number of positive content being spread on the digital platforms, we have reached out to more than 400 #AgenDamai who had been actively participating and contributing to fill up the digital platforms with any forms of positive content. The content outputs were quite diverse, ranging from academic articles, comics, videos, and photos that are related to the proliferation of peaceful narratives on digital platforms. We also had more 27.000 engagements and impressions on digital platforms, and when we do an exit survey on this campaign, 97% of the contributors now understand why they should produce positive contents on digital platforms, and the know-how behind its creation process. The project is relevant to **SDG4**.



Miss Lambe Hoax – Government’s Counter Hoax Program

WSIS Prizes Contest 2020 Nominee

In **Indonesia**, **Miss Lambe Hoax** is an icon that is created by MCIT. Miss Lambe Hoax becomes government's brand ambassador to fight against hoax/disinformation. Every week, Miss Lambe Hoax will greet netizen to explain about hoax that is being viral in society. Miss Lambe Hoax is one of the excellent programs that is released by MCIT to overcome hoax/disinformation using audio-video format and published widely using MCIT's social media account and other government information channels. The concept of Miss Lambe Hoax itself, presenting a girl using mask that is fussy and fun, explaining the real fact from hoax issue. How she explains about an issue, is using a way that is acceptable and enjoyable for netizen to follow. So that, the information and explanation of an issue can be absorb and received effectively. The project is relevant to **SDG16**.



Anti Hoax Public Campaign

WSIS Prizes Contest 2020 Nominee

In **Indonesia**, objectives of **Mafindo** include:

- To educate public about digital literacy
- To enhance the public awareness about hoax and disinformation

Result achieved:

- The public awareness about hoax keep increasing.
- More institutions making partnership with Mafindo since its established.
- Hoax Buster Tools, app created by Mafindo to help public to report a hoax, to filter out unverified news source and to debunk hoax from mobile, has been downloading 10k+ since its launched in 2018.
- Mafindo forum in FB Group, Forum Anti Fitnah Hasut dan Hoax now has 75k+ impact generated
- Most of the people that attend or join in Mafindo event such as seminary, workshop or public campaign enhance their awareness about hoax and digital literacy
- Pre and post test/quiz in Mafindo events indicates improvement about digital literacy for the most of participants. The project is relevant to **SDG16, SDG17**.



Klik Dengan Bijak

WSIS Prizes Contest 2020 Nominee

In **Malaysia, Klik Dengan Bijak Programme** takes a holistic approach on awareness and education on internet safety and security by promoting a shared culture or responsibility with families, schools, industry, government and others in the community, all playing their part to promote positive use of the internet. The programme hopes to:- a) Generate literate users of technology and new media content (internet savvy); b) Create a sense of responsibility among internet users to be ethical and sensitive to other users; c) Educate internet users about the importance of self-regulation; and d) Create a safe environment for the users of the internet. The programme incorporates the values enshrined in Malaysia's Rukun Negara (National Principles) and its main themes are to promote safety, security and responsibility amongst internet users. The project is relevant to **SDG3, SDG4, SDG11, SDG16**.

MIV (Malaysia ICT Volunteers) with School

WSIS Prizes Contest 2020 Nominee

In **Malaysia**, **The MIV with School** is a program that Malaysian Communications & Multimedia Commission (MCMC) collaborated with the Ministry of Education Malaysia (MOE) where train the trainer workshops on the positive, safe and ethical internet usage are organized for teachers in primary and secondary schools, head of schools and MOE officials. It supports the Malaysian education system and leverage on ICTs to scale up quality of learning across Malaysia and achieve the Government's aspiration of producing Malaysian students for the requirements of the 21st century. This program is implemented at national level and from its first inception in 2016 until November 2019, 1,611 participants have participated as MIV volunteers and 487 MOE officials attended the MIV with School Workshops. In total, 2,098 people have been trained and benefited from these workshops that were conducted in Kuala Lumpur, Selangor, Perak, Negeri Sembilan, Terengganu, Penang, Kedah, Sarawak, Johor, Sabah and Kelantan. In total, the MIV volunteers have successfully reached out to 198,606 audiences including students, parents, colleague, families and local communities through various platforms, programs and social network sites to reach to a wider audience. This program aspires to develop digital champions, increase digital literacy, promote digital inclusion and produce digital citizens who will use ICTs at the optimum level. The project is relevant to **SDG3, SDG4, SDG5, SDG10, SDG16**.



Conectadas

WSIS Prizes Contest 2020 Nominee

In **Mexico**, **CONECTADAS** is a network of female leaders in telecommunications, broadcasting and ICT, which is born out of their common concern noticing the scarce inclusion and participation of women in management positions and decision-making, not only in the private sector, but also in academia, public authorities, the judiciary and civil society organizations related to electronic communications. CONECTADAS' main objective is to help build the necessary conditions to allow for an increasing number of women to reach the C-Suite level in all the organizations that make up the digital ecosystem, so that they directly intervene in the decisions that are made in the sector. By making decisionmaking diverse and inclusive across the organizations that make up this sector, the participation of women can bring a positive change in a more direct and rapid way. To attain this, we work to raise awareness of the benefits of building more inclusive organizations and give guidance on the most effective strategies to achieve it, where women's talent crystallizes in companies, authorities, universities, research centers and

civil associations that are more productive, competitive, successful and socially responsible. CONECTADAS' target audience is composed of the organizations that make up the digital ecosystem -especially female leaders and professionals-, in a multi-stakeholder approach (private and public companies, authorities, academia, NGOs), but it is also linked to feminist groups, legislators and international organizations. Its major activities are: visibility actions for women (publications, congresses and forums, lectures); mentoring; data gathering and analysis; advising organizations for gender inclusion; strategic alliances. The project is relevant to **SDG5, SDG8, SDG16**.



Intersectional Accessibility

WSIS Prizes Contest 2020 Nominee

In **Norway, Oslo Metropolitan University (OsloMet)** is Norway's third largest university and is unique in a national context due to its wide range of professional programs and a strong focus on social welfare and value creation in Norway and Europe. OsloMet is already a leading institution in areas such as health, welfare, education, youth, and unemployment. In its overarching research strategy, OsloMet highlights both interdisciplinary, regional and international cooperation. The university creates value for society by developing knowledge that contributes to improved social welfare. This research provides insights into the activities, frameworks, and conditions of sectors and occupational fields in a society that is continually changing. The Faculty of Technology, Art and Design conducts research in a number of areas that are closely related to universal design and sustainable development. These programs qualify graduates for work in multi-professional teams as innovators and entrepreneurs that can develop technology that is sustainable and socially responsible. The Faculty offers a Master program in Universal Design of information and communications technology as well as a Ph.D. program in Digital Engineering. The Faculty works in close collaboration with the public and private sector, including Norwegian regional governments, business and industry and national and international research institutions, to support the implementation of universal design of ICT law, policy, and practice. The research that forms the basis of this nomination emerged from a Masters thesis project led by Rannveig A. Skjerve. As a research project, the principal audience is academics and academic institutions. However, as an action research project, Skjerve's results provide a unique opportunity to inform both public policy and ICT industry practices. For example, Skjerve has made a substantive contribution to the EQUALS inaugural report titled "Taking stock: Data and evidence on gender equality in digital access, skills and leadership". The project is relevant to **SDG5, SDG9, SDG16**.



Social Responsibility Bank

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia, The Social Responsibility Bank (SRB)** is an electronic system that aims to frame the social responsibility institutionally; to deposit IAU employee's contributions in varied channels of social responsibility in the form of bank assets and simultaneously calculate the IAU's actual, equivalent and estimated abilities and resources invested in the University channels of social responsibility objectively throughout the year. SRB objectives focus on direct the future trajectory of the university's community services in a sustainable manner, it also aims to enhance orientation to electronically automate all community service-related milestones, standardization of formats and mechanism of action, leading to paperless environment. SRB establishes social responsibility related-database; improve the efficiency and speed of data retrieval. SRB as system facilitates linking the system users with the decision-makers. In addition, it secures balance and integration between the contributors of social responsibility. It provides flexible method of documenting the efforts of the university staff in social responsibility. Channels of Social Responsibility Bank include: 1) social curricular activities, 2) Social Extra-Curricula Activities, 3) Scientific Research 4) Social Studies, 5) Community Service; 6) Sustainable Developmental Projects. Some statistics since the start of the project: Number of events: 1190 Number of beneficiaries from community services: 6928021 Beneficiaries Number of hours in community service: 430222.90 Hours Number of shareholders in community service: 6479 The project is relevant to **SDG5, SDG9, SDG10, SDG12, SDG16, SDG17**.



e-Donation Application

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia, The e-Donation application** is an appealing and intuitive web-based solution that allows Saudi Aramco employees to provide any amount of donations to various charities of their choice. This application is integrated with the payroll and financial

systems, thereby allowing seamless end-to-end processing from contribution collection, to payments, and then to the charities.

The project is relevant to **SDG3, SDG4**.



BRIDGIT

WSIS Prizes Contest 2020 Nominee

In **Sweden, Reach for Change Foundation** is a children's rights non-profit organization, headquartered in Sweden, with the mission to unleash the power of social entrepreneurship to create a world where all children reach their full potential in accordance with Agenda 2030. We do this by identifying promising local social entrepreneurs with social innovations operating from a child's rights perspective and targeting at least one of the Sustainable Development Goals (SDG). We develop the capacity of these social entrepreneurs, in 18 different countries across the globe, to scale solutions to improve the living conditions and outcomes of children and youth. Our programs (e.g. incubators and accelerators) support to develop and scale local innovators and their innovations through the design thinking process of identifying needs, testing the innovation, capacity-building, network connections and seed funding. In 2018, we supported 156 social entrepreneurs globally, 68% of which scaled their impact that year to reach more youth and children. Through activities of the social entrepreneurs, they reached a total of 341,620 children and youth with 66% of those innovations being led by female entrepreneurs. In 2018, we initiated a thematic program called BRIDGIT (Bridging the Digital Divide), which arose as a result of particular challenges our female social tech entrepreneurs were facing. All of the women in this program have tech solutions for solving a pressing issue for children or youth, and/or are encouraging more young girls to join a path towards a STEM career. These entrepreneurs, more so than the others in our portfolio struggle for financial sustainability and scaling. The BRIDGIT program is a way to further develop these innovations and female innovators to gain further traction towards impact The project is relevant to **SDG1, SDG5, SDG8, SDG16**.



Glitch

WSIS Prizes Contest 2020 Nominee

In **United Kingdom**, Online gender based abuse is a huge barrier that prevents women from participating fully in public life. **Glitch** was founded in 2017 by Seyi Akiwowo, after she faced horrendous online abuse when a video of her speech at the European Parliament went viral. Glitch wants to see an increase in digital citizenship for all, across all online platforms and to instil the beliefs: that our online community is as real as our offline one and we should all be working together to make it a better place. Glitch believe that online abuse, in all its forms, is a vehicle to divide society and spread fear. This is why Glitch believes it's crucial that we work together to fix the glitch and eradicate online abuse. All work is upheld by three pillars: 1) Raising awareness, through campaigning and providing free information and resources, Gitch raise;s awareness of the scope of online abuse and its negative impact on individuals and society, particularly marginalised communities, and of how we can all help fix the glitch. 2) Advocacy work with social media companies on how to make their online platforms safer and to decision makers to ensure that rights are protected and access to justice is equal. Glitch has been praised in UK parliament twice and In 2018 and 2019 were invited by the UN Human Rights Council to advocate on behalf of those who have experienced online abuse, showcase our solutions and put pressure on governments to take action. 3) Action, Glitch's programmatic work consists of Digital Citizenship Workshop and Digital Resilience Training. In just two years supporters like you have enabled Glitch to deliver Digital Citizenship Workshops. In one of these, 86% of the young people surveyed said they would behave differently online as a result of the information they learned from us. Glitch also delivers Digital Resilience training. These are tailored for one-to-one consultations and group workshops for women in all forms of public life. The project is relevant to **SDG5**.



State of the Community Survey

WSIS Prizes Contest 2020 Nominee

In **United States**, Each year, Portland Women in Technology (PDXWIT) captures important data about the tech industry, independent of company, group or association affiliation. **State of the Community Survey's** goal is to deeply understand what it is like for people in the community and to identify themes that need to be addressed. This year, we found current tech industry power structures have defined and funded diversity and inclusion initiatives that benefit white and cis individuals, and workplace harassment is an ongoing issue. We encouraged people to use this data to propel action, though we understand not everyone is in a position to do so. In those situations, we suggested the following: As a company leader, particularly a leader from the dominant group (white and cis), use this data to set change

into motion. Folks in this category make up the majority of individuals with influence and power in the tech industry, and the ability to make meaningful change will be up to you. As an individual, particularly those within the dominant group (white and cis), use this data to educate those around you. If you feel safe and comfortable, talk to your leaders, co-workers and friends. Look for ways you can contribute to meaningful change and provide support. Most importantly, amplify and uplift folks who are not a part of the dominant group. As an individual who is currently experiencing marginalization, oppression and/or harassment, we want you to know you are not alone. We understand it may not be possible to take outward action. If possible, document your experiences as it may be possible to take action later. The project is relevant to **SDG8**.

Digital Grassroots Ambassadors Program

WSIS Prizes Contest 2020 Nominee

In **Zambia, Digital Grassroots (DIGRA)** is a youth and female led initiative aimed at promoting internet governance awareness in order to promote digital inclusion in underserved communities. We work with young people between the ages of 14 and 29 through the Digital Grassroots Ambassadors program. The program enables young people to learn about digital rights and Internet governance issues and how they can be part of the solution. **THE AMBASSADORS PROGRAM** In 2018, we hosted three cohorts of the DIGRA Ambassadors program. The third cohort was hosted in French to reach to the Francophone youth. In 2018 alone, we reached over 1000 people in 40 communities, trained over 300 youth in digital literacy, mentored at least 100 young people by matching them to experts in Internet Governance. Through capacity building from our program, our ambassadors hosted at least 10 Internet Governance workshops/trainings with support from partners. **COMMUNITY LEADERS** In 2019, we created a Community Leaders program to train our Ambassadors on Community Leadership in Internet Governance. In our pilot cohort, we focused on countries where young people are facing digital rights abuses. This June, we are training more Ambassadors in cohort 4 of our program, where we received more than 800 applications for 100 slots. **OBJECTIVES** Digital grassroots responds to the existing gap of youth participation in issues related to Internet Governance. Through our Ambassadors program, we build the capacity of youth to be internet leaders in their communities. **ACTIVITIES**

Our activities include:

Digital Grassroots Ambassadors program (4 weeks internet literacy training. 4 weeks mentorship)

Community Leaders program (4 weeks leadership study and community engagement. 4 week mentorship)

Research and reports including Communique: Youth Resolutions In Internet Governance
Edutainment Games including Digital Rights Monopoly

Youth in Internet Governance events including Schools of Internet Governance, and Youth Coalitions in Internet Governance. The project is relevant to **SDG5, SDG16**.



Actionline: 11.0

Pilot Project for the development of R&D Centres in IoT

WSIS Prizes Contest 2020 Nominee

In **Argentina**, The goal of **Pilot Project for the development of R&D Centres in IoT** is to instill the Culture of Innovation in IoT implementing R&D Centres in IoT to increase the country productivity, encourage the Academia and Small and Medium-sized Enterprises (SMEs) participation in standards development at ITU (BSG) and promote investments by private-sector companies. The main result of this project is the formation of an alliance between the Faculties, Business Chambers, Technology SMEs, service operators and provincial and municipal governments. This alliance is set to be the users of the products and services developed by each R&D Centre. The impact generated by this association allow the development of projects in the community to which each R&D Centre belongs, thus forming a local IoT development ecosystem. The project began as a pilot project in three Regional faculties of the UTN and is spreading through the 33 branches that this University has across the length and breadth of Argentina. The results and experiences will be shared with other Universities within the framework of the Argentine Universities Project in the ITU in order to replicate them. It will be a tool to elaborate a National IoT Plan and a base to replicate this experience through the Academy of the Americas Region. The project is relevant to **SDG1, SDG3, SDG4, SDG6, SDG7, SDG8, SDG9, SDG10, SDG11, SDG12, SDG13, SDG14, SDG15, SDG17**.



Implementation of U4SSC KPIs in the City of Santa Fe

WSIS Prizes Contest 2020 Nominee

In Argentina, Digitalization and rapid urbanization are global trends that demand responses. **Santa Fe** has partnered with the U4SSC to evaluate the city's implementation of smart technologies. The objectives of this project were: 1) assess the impacts of ICTs in the city; and 2) measure its progress in reaching the SDGs. The U4SSC KPIs measure the role of ICTs in the three key dimensions of a city; environment; economic; and society and culture. Each indicator is uniquely connected to one or multiple SDG targets, allowing the city to determine which targets it has or has not achieved. The U4SSC KPIs are powerful benchmarking tools that have allowed the city planners to analyze the ways in which ICTs

have improved the city according to the parameters set in the 2030 Agenda. The results are comparable and measurable data that have assisted Bizerte in adjusting its priorities and informed the city's policymakers to make better environmental and sustainability decisions. The project is relevant to **SDG11**.



The CEPIS DiversIT Charter

WSIS Prizes Contest 2020 Nominee

In **Belgium**, **The DiversIT Charter** is a roadmap and structured programme of activities that IT Associations, Companies, Educational Establishments and other bodies (hereafter called 'organisations') can take to establish a supporting environment for Women in IT professions. The activities are in three main stages (Bronze, Silver and Gold) with themes of activity at each stage. Signatories to the charter commit to engage in with the charter and undertake the activities of each stage in order to progress their work on gender diversity in IT. The successive steps or stages are outlined within the DiversIT Charter supporting documentation and progressively allow organisations to build support for attracting and retaining women working in technology roles.

The key themes are: • Creating a women's group • Activity in support of Women Organisation • Actions to increase the number of female role models • Monitoring Activities for insight • Working Links to other associations groups and Academia • Activities to increase the numbers of girls / young women in technology • KPIs to drive activity. The concept allows for best practice to flow from countries where there is currently much activity for attracting and retaining women in IT to those countries where less has been done to date. The project is relevant to **SDG5**.

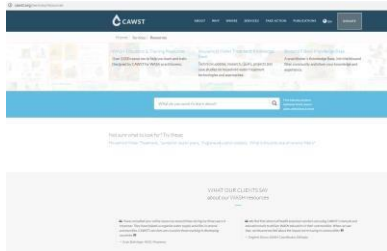


Household Water Treatment and Safe Storage Knowledge Base

WSIS Prizes Contest 2020 Nominee

In **Canada**, **CAWST's Household Water Treatment and Safe Storage (HWTS) Knowledge Base** is an interactive, user-friendly, web-based resource centre and mobile app which provides access to open content downloadable HWTS education and training resources with most of the resources available in English, Spanish and French, adapted for multiple world regions and contexts. It is available at no cost to users, putting technical HWTS expertise within reach of water, sanitation and hygiene practitioners in low- to middle-income countries around the world. Users can obtain practical, useful information on context-appropriate point-of-use water treatment technologies, approaches and modes of implementation and also share their experiences. The platform builds their capacity to promote correct, consistent and sustained use of these technologies in households and communities to improve health outcomes. To optimize the availability of this information,

the HWTs Knowledge Base is available online and is also accessible to those working in areas without connectivity with the launch of the HWTs Knowledge Base off-line first mobile app. Country Focus pages provide information on the enabling environment for HWTs in specific countries. The platform has a significant global reach with over 29,000 unique users from 200 countries and territories. The platform is accessed by over 4,000 users monthly and has garnered recognition from leading advisors in the water, sanitation and hygiene sector. The project is relevant to **SDG1, SDG3, SDG4, SDG5, SDG6, SDG10**.



Scratchers Cuba

WSIS Prizes Contest 2020 Nominee

In **Cuba**, **scratchers Cuba** as part of the Third Improvement of the National Education System, transformations in the curricula are being carried out in primary education. One of them is programming in the school curriculum, with the implementation of the Scratch language. The Scratch computer tool allows you to create games, interactive stories and multimedia animations using a visual programming environment. Thanks to its use, students can easily learn mathematical and computer concepts. The objectives of the Scratchers Cuba project include: Stimulate in children and adolescents the skills of algorithmization, computational thinking and computer programming, enhance female inclusion in computer science, motivate children and adolescents to study for careers related to Computer Science and Computer Science, train teaching staff to strengthen the process of teaching computer learning from the primary level with the requirements demanded by the current transformations. The Scratchers Cuba project has collaborated with Scratch communities in Mexico and Colombia through summoned programming competitions resulting in winning female representatives among the participants. The project is relevant to **SDG4, SDG5, SDG16, SDG17**.



IST-Africa Institute

WSIS Prizes Contest 2020 Nominee

In **Ireland**, Founded in 2002, **IST-Africa** focuses on strengthening ministry policy and strategy capacity as it relates to Innovation, Science and Technology, supporting a research culture in universities focused on addressing societal challenges at national and regional level, and encouraging public and education and research sector organisations to host Innovation Spaces to support entrepreneurship (including social entrepreneurship).. ISTAfrica has helped African universities secure over €200 million in research funding over the last ten years. Supported by European Commission and African Union Commission, ISTAfrica is a member of UN Sustainable Development Solutions Network and recognized by ITU as a WSIS 2018 Prizes Champion. The project is relevant to **SDG1, SDG2, SDG3, SDG4, SDG5, SDG6, SDG7, SDG8, SDG9, SDG10, SDG11, SDG16, SDG17**.



Movimiento STEM

WSIS Prizes Contest 2020 Nominee

In **Mexico**, **Movimiento STEM** (Science, technology, engineering and mathematics) is a non-profit association that seeks to promote in Mexico and Latin America, STEM education, future jobs and innovation, with social and inclusive vision. We are the leader of the STEM Ecosystem in Mexico, an initiative endorsed by Global STEM Alliance and STEM Learning Ecosystems, and at the moment the only initiative endorsed in Latin America. STEM is a global trend that promotes the teaching of science, technology, engineering and mathematics as pillars for sustainable development and social welfare. STEM is beyond grouping these subjects. It is a movement that develops in a deep way the scientific and mathematical thought. We propose a solution-based learning of problems with social and inclusive vision. Drives the careers of the future and develops indispensable skills to compete in the working world of the 21st century. The STEM competencies that we develop and certify are those that the World Economic Forum considers as the most relevant to compete in the 21st century, and are: critical thinking, problem solving, creativity, communication, collaboration, data literacy, computation and computer science. The project is relevant to **SDG1, SDG5, SDG8, SDG16**.



MSGEEK Africa Competition

WSIS Prizes Contest 2020 Nominee

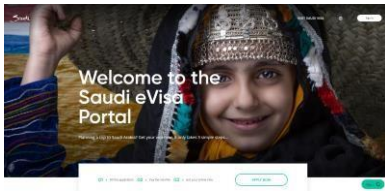
In **Rwanda**, **MSGEEK Africa** competition that started 6 years ago as MS Geek Rwanda for 2 years then expanded to then 22 Smart Africa member states in partnership with its Secretariat located in Kigali, the capital city of Rwanda. MS Geek Africa 2019 brought girls from African Union member states with amazing ideas that solve community problems; the winner Josephine Ndeye had an application that helps reduce maternity death in her country Republic Democratic of Congo and Africa. Organization targets every African girl with aim of inspiring girls to do sciences at school, use it as an enabler for every other domain of life and importantly consider careers in STEM. The project is relevant to **SDG4, SDG5, SDG9**.



Visit Saudi and eVisa

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, Tourism gives people opportunity to live and work where you want, the opportunity to empower communities, to promote sustainable growth. More importantly, it allows people to be proud of their roots, their heritage and their country. This can only have a positive impact on society and benefit all. Saudi Arabia has opened its doors to the world with its new tourist eVisa. Through the fast and easy-to-use online portal offering global connectivity, international visitors now can get an online tourist visa within 5 to 7 minutes only. Saudi Arabia is developing our tourism offering sustainably, protecting our rural communities. Saudi Arabia is developing our tourism offering sustainably, protecting our rural communities; it is an important opportunity for Saudi Arabia to learn from the global community to make our growth sustainable. The key objectives behind of the tourism eVisa initiative are to support and facilitate tourism growth as well as process improvement by making visitor visa issuing and entry process faster, simpler and more efficient; The autogrant facility enables the system to automatically grant visas \ travel authorisations to individuals who meet the required criteria without the need for manual handling of the application and paperless government. Opening Saudi Arabia to tourism is a key milestone in the implementation of Vision 2030, which seeks to diversify the country's economy and reduce its dependence on oil. The country is preparing to welcome tourists from around the globe by investing in new international events, such as concerts, sporting activities, etc. as well as constructing new attractions, like the mega-theme park near Riyadh, that is aiming to draw in crowds of up to 1.5 million visitors a year. The tourist visa allows for a stay in of up to 3 months per entry, with visitors able to spend up to 90 days a year in Saudi Arabia. The visa is valid for one year, with multiple entries. The project is relevant to **SDG8, SDG9, SDG17**.



Arabic Union Catalog

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, **The Arabic Union Catalog (AUC)** is a non-profit cooperative organization that seeks to serve the Arab culture and knowledge institutions in a collaborative environment between Arab libraries and information centers through a cloud platform that unifies the artistic work practices within Arab libraries and adopts international standards in Bibliographic Cataloging, as well as building Authority Files and Digital Content. The AUC aims to collect Arab intellectual production - from within and outside the Arab world - into a single standard bibliographic database, whereas researchers can access the Arabic digital content of institutions and libraries in the Arab world and around the world. AUC keens to introduce the Arab and Islamic culture, and support its presence at the global level, as well as establishing knowledge networking between Arab and international institutions and libraries through its cloud platform within a collaborative environment. The AUC launched a clear vision for the development of practices and standards in the characterization of Arab knowledge and has since successfully responded to the challenges of developing technical processing practices for Arab information vessels. In the course of AUC journey over the past 13 years, it has built a standard database based on global standards to share resources, reduce costs, standardize cataloging and classification, and guide researchers to information resources location. The AUC continuously seeks to expand its services to include a pioneering and innovative package of integrated knowledge solutions to enable cultural and knowledge institutions to meet the requirements of the knowledge era in light of the accelerating scientific and technological developments and the increasing needs of its users, enhancing its contribution to the community, enhancing its role as the first knowledge facility, and enhancing its ability to provide efficient and effective services that meet the aspirations of the knowledge society's beneficiaries. The project is relevant to **SDG17**.

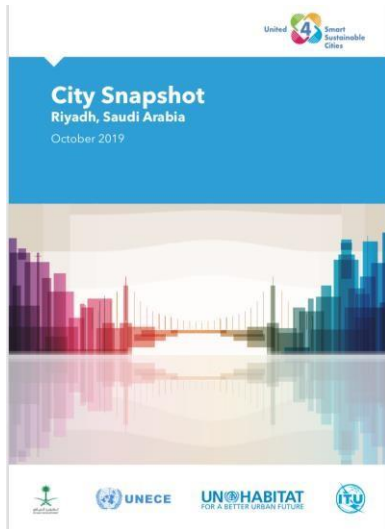


Implementation of U4SSC KPIs in the City of Riyadh

WSIS Prizes Contest 2020 Nominee

In **Saudi Arabia**, The Saudi Arabia's Vision 2030 programme defines a set of ambitious goals and targets that aim to improve the quality of life of citizens, diversity its economy, increase employment, enhance government effectiveness, enable social responsibility and more. Accordingly, **Implementation of U4SSC KPIs in the City of Riyadh** has begun to leverage ICTs in order to realize the visions set in the 2030 programme. In the early 2019, the city decided to partner with U4SSC in piloting the Key Performance Indicators for Smart Sustainable Cities. The objectives of this project were two-folded. First, it is to assess the impacts of ICTs in the city. And second, it is to measure its progress in reaching the SDGs. The U4SSC KPIs measure the role of ICTs in the three key dimensions of a city; environment;

economic; and society and culture. Each indicator is uniquely connected to one or multiple SDG targets, allowing the city to determine which targets it has or has not achieved. The U4SSC KPIs are powerful benchmarking tools that have allowed the city planners to analyze the ways in which ICTs have improved the city according to the parameters set in the 2030 Agenda. The results are comparable and measurable data that have assisted Riyadh in adjusting its priorities and informed the city's policymakers to make better environmental, economic and sustainability decisions. The project is relevant to **SDG11**.



African Digital Libraries to Enhance Access and the Safeguarding of African Scientific, Literary and Cultural Heritage

WSIS Prizes Contest 2020 Nominee

In **Senegal**, Book is the medium of transmission of knowledge par excellence as well as a vector of dissemination of information and culture. The availability of well-furnished libraries is a necessary component of access to knowledge and quality education. In Africa, the majority of cities, schools and universities do not have enough libraries or have insufficient documentation, especially regarding African contents. For the last 10 years, **African Digital Libraries to Enhance Access and the Safeguarding of African Scientific, Literary and Cultural Heritage** has been digitizing, saving and making accessible the African literary, scientific and cultural heritage for Africans and for the rest of the world, to ensure its transmission to future generations. More than 3,000 titles, in French and English, from more than 95 publishers on a variety of domains (literature, social sciences, law, youth, culture, etc.) are available. The project is about providing digital libraries both online and offline with eReaders and mobile application. Digitization of African books and their regrouping into large digital libraries is the solution implemented by NENA to enhance access and the safeguarding of African scientific, literary and cultural heritage. The project is relevant to **SDG4**.



Innovactoras

WSIS Prizes Contest 2020 Nominee

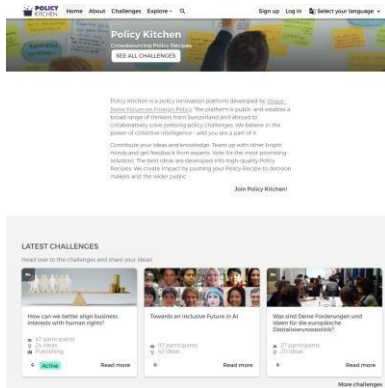
In **Spain**, “**Innovactoras**” started as a social responsibility project of Happennn. Today it is a platform of innovators women from different realities of the 21st : science, technology, business, education and society. 51 North and South references (16 countries) are already inspiring innovation around the world Objectives: Organizations to have inspiring and current examples of women in STEAM careers, to encourage innovation in their environments. Connects, promotes and supports women innovators. Award a prize to a young Innovactora every year. 100 inspiring Innovactoras of 25 countries by 2020. Sustainable with public private funds The project is relevant to **SDG4, SDG5, SDG16**.



Policy Kitchen

WSIS Prizes Contest 2020 Nominee

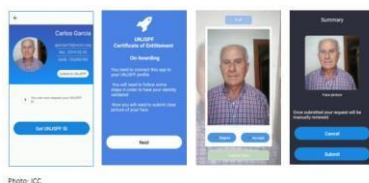
In **Switzerland**, **Policy Kitchen** is a policy crowdsourcing methodology developed by foraus – Swiss Forum on Foreign Policy. It enables a diverse network of thinkers to cocreate policy recipes to pressing global challenges. The methodology is built on a crowd innovation platform, physical workshops, and a support process to bring the best recipes to impact. Policy Kitchen is public and allows for bottom-up participation in the political process. Any person, irrespective of background or location, can participate and contribute ideas. To ensure a high level of expertise, we partner with experts and professionals of various sectors (science, government, international organizations, NPO, business, etc). Collaborations with the Open Think Tank Network and other partners allow us to scale participation internationally. In just 1 year, it has generated 10 challenges, hosted 30 workshops, counted with more than 550 participants and produced 180 ideas to tackle issues such as Inclusion in Artificial Intelligence, Biodiversity loss, alignment between Business and Human Rights and more. The code for Policy Kitchen is made available as open-source software. We encourage and support other actors in using participative methods in their respective domains. Contact us, we’re happy to help. The project is relevant to **SDG16, SDG17**.



UNJSPF Digital Identities for Its Beneficiaries

WSIS Prizes Contest 2020 Nominee

In **Switzerland**, UNJSPF has taken the leap into emerging technologies to streamline service delivery to clients, the 205,000 retired UN staff around the globe. Spearheaded by Dino Cataldo Dell'Accio, CIO, UNJSPF, this is part of the Fund's journey towards digital transformation, leveraging technology to update manual processes and streamline systems. The Fund's Certificate of Entitlement (CE) certifies that retiree beneficiaries are who they say they are, are still living, and still reside at their registered locations. This has been a cumbersome and manual process that has been prone to error. The Fund together with the UN International Computing Centre, with the partnership of Hyperledger open source blockchain solutions, has created a solution to automate and make immutable the CE process with blockchain, biometrics and a mobile app. The project team created and completed a Proof of Concept prototype demonstrating technology applied to overcome issues with the CE without introducing risks to hamper the flow of entitlements. The pilot was a success and approved at the Annual UNJSPF Board Meeting. Now the Fund is beginning to implement the solution, first with food Agencies in Rome, including WFP, IFAD and FAO, attesting to the cost savings and process streamlining with these innovative digital solutions. The project is relevant to **SDG8, SDG9, SDG12, SDG13**.



A+ Alliance

WSIS Prizes Contest 2020 Nominee

In **Switzerland**, particularly urgent given the scale at which Automated Decision-Making (ADM) systems are being deployed Affirmative Action for Algorithms (A+) is needed in order to correct real life bias and barriers that prevent women from achieving full participation and rights in the present, and in the future we invent. **The A+ Alliance** is comprised of concerned technology leaders, government agencies, nonprofits, and academics committed to gender equality in ADM. This global movement has thus far developed: resources and algorithms for the public and private sector to use to ensure gender equality in ADM; resource library including a first of its kind report focused on gender, AI and ADM; free resources and algorithms for individuals and organisations to use

to support gender equality in ADM; and a website and global media campaign. The A+ Alliance focuses on awareness raising and advocacy for algorithm accountability in framework discussions being held multilaterally and implementing low cost targeted pilots across geographies on the municipal level. The pilots use cutting edge technology to create algorithmic interventions to solve real world problems with technology, not only check for bias and are tailored to women and girls and the acute and diverse threats they face. The project is relevant to **SDG1, SDG2, SDG3, SDG4, SDG5, SDG6, SDG7, SDG8, SDG9, SDG10, SDG11, SDG12, SDG13, SDG14, SDG15, SDG16, SDG17.**



Arab-African e-Certification Authorities Network

WSIS Prizes Contest 2020 Nominee

In **Tunisia**, The tremendous technological development must go in pair with the implementation of strong security tools on the technical level and the setting up of strong and flexible regulatory frameworks on the legal level being able to provide the required safety for the new forms of transactions on local, regional and international levels. Within this scope and given to its strong conviction that regional and international cooperation is crucial to keep up with the tremendous change and evolution in ICT sector and to face challenges, the Arab ICT Organization (AICTO) launched the project "**Arab-African eCertification Authorities Network (AAECANET)**". AAECANET is a Multistakeholder Network for e-trust in the Arab & African Regions having the specificity to be open internationally to all interested stakeholders. Its vision is "Better interregional collaboration on e-Trust for better trustworthy digital economies based on Laws Harmonization & Digital Trust services Interoperability".

So far, within the scope of this project we have achieved many actions :

- 2 editions of the « Interregional PKI & e-Trust Forum » (Oman – 2017 – Tunisia 2019)
- Membership of 9 Countries
- 3 Specialized working groups
- Training sessions
- White Book "PKI roadmap"
- Study on the "reality and prospects for e-trust in the Arab and African regions"

project is relevant to **SDG9, SDG11, SDG17.**



The First City to Implement the U4SSC KPIs – Dubai, UAE

WSIS Prizes Contest 2020 Nominee

In **United Arab Emirates**, In 2015, the Smart Dubai Office decided to partner with the U4SSC in piloting the **U4SSC Key Performance Indicators (KPIs) for Smart Sustainable Cities**. The objectives of this project were: 1) assess the impacts of ICTs in the city; and 2) measure its progress in reaching the SDGs. The U4SSC KPIs consist of 91 indicators that measure the role of ICTs in the three key dimensions of a city; environment; economic; and society and culture. Each indicator is uniquely connected to one or multiple SDG targets, allowing the city to determine which targets it has or has not achieved. The U4SSC KPIs are powerful benchmarking tools that have allowed the city planners of Dubai to analyze the ways in which ICTs have improved the city according to the parameters set in the 2030 Agenda. The results are comparable and measurable data that have assisted Dubai in adjusting its priorities and informed the city's policymakers to make better environmental and sustainability decisions and to unlock the full potential of ICTs. The project has also disseminated best practices of Dubai in implementing smart projects at the international level, allowing other cities to learn from the city and establishing new foundations for further collaboration on the SDGs. The project is relevant to **SDG11**.



MentorNations: IoT 4 Youth - Tunisia

WSIS Prizes Contest 2020 Nominee

In **United States**, **MentorNations** believes that digital literacy is a human right. As a youthrun and youth-led organization with operations in Tunisia, Bangladesh, and Pakistan, the team empowers young people to transform their lives through technology. With a primary focus on Tunisia, youth volunteers teach mobile application development, IoT, robotics, technology entrepreneurship and funds hackathon winners to launch their own tech companies. All mentors, speakers, classes, and leaders are made up with at least 50% women and girls. Each year, we run thousands of camps, and our premier camp is funded by the American Embassy in Tunisia where 35-40 young people (always at least 50% girls) between the ages of fourteen and twenty two from all regions across the country spend 30 days in the capital learning mobile application development, IoT powered by microbit, and entrepreneurship. Participants sleepover in the capital and also learn team building, goal setting, marketing, human resource management, and failure. The outcome of all of our camps are a functional mobile application launched in the app store, a functional IoT solution, and a business plan for the company. We have been featured on national and regional news outlets for our work to empower young women and girls to transform their lives through technology. In a country where some regions experience upward of 57% unemployment, a harsh digital divide, and challenges with increasing the number of women in tech, our program provides the very skills that empower young women and girls with the tools they need to compete in the 21st century economy. The project is relevant to **SDG5**.

Electronic Government Network of Latin America and the Caribbean

WSIS Prizes Contest 2020 Nominee

In Uruguay, The Electronic Government Network of Latin America and the Caribbean, GEALC Network, is the creation of a group formed by e-government authorities from the countries of Latin America and the Caribbean. This composition is transformed into a unique instrument to promote horizontal cooperation, support for the elaboration of citizen-centred e-government policies, the training of public officials, knowledge of key aspects of the construction of a national strategy for e-government, and the exchange of solutions and experts among the countries of the region. The general objective of the GEALC network is to support e-government policies that put the citizen and specially the most vulnerable population in the centre. Stand out, among other achievements: A reference environment for more than 60 high public officials responsible for boosting the e-government in the countries of the region. Annual meetings to establish priorities and to know experiences Repository of information and documents updated daily and available online, with public access, through this platform, which, at the moment, has become the main online reference in the region in this subject (www.redgealc.net). It includes a subportal for each country in the region with its strategies, state of the art, legislation and news in e-government A database with almost 300 experts on electronic government. Leadership of the eLAC process-working group on e-government driven by the countries of the region that conform it. The project is relevant to **SDG17**.



Stocktaking Report Conclusion – WSIS 2020

Conclusion

The International Telecommunication Union (ITU) remains committed to the World Summit on the Information Society (WSIS) process, and to implementation of the WSIS goals beyond 2020. ITU recognizes and highly appreciates the extremely valuable contributions made by stakeholders to enable the continuation of WSIS monitoring and reporting. There can be no doubt whatsoever that, in today's fastmoving world, innovation and efficiency are vital to success. Accordingly, the WSIS Stocktaking 2020 Report shares with you the most recent updates and success stories in the WSIS stocktaking process.

The Web 2.0 WSIS Stocktaking Platform continues to foster implementation of the WSIS outcomes and to facilitate exchange of information among more than 300 000 members representing governments, the private sector, international organizations, civil society, and other stakeholders. As the Web 2.0 platform

continues to flourish, so does the promotion of social development and economic growth through ICTs. We continue to maintain and improve the WSIS Stocktaking Database, which contains close to 800 entries this year. This encouraging outcome reinforces stakeholders' belief in and commitment to the WSIS Stocktaking process and their desire to share best practices.

Regular reporting on WSIS Stocktaking is the outcome of the Tunis phase of the Summit, launched to serve as a valuable tool for assisting with the WSIS follow-up. Since 2005, regular reporting has been a key tool for monitoring the progress of ICT initiatives and projects.

WSIS stocktaking has been evolving to be the unique global process for collecting information on actions implemented within WSIS framework, aligning the WSIS process with the 2030 Agenda for Sustainable Development, highlighting the crosscutting contribution of ICTs to the SDGs. The United Nations Economic and Social Council (ECOSOC) resolution 2015/26 on "Assessment of the progress made in the implementation of and follow-up to the outcomes of the World Summit on the Information Society", which reiterates the importance of sharing best practices at the global level and recognizes excellence in the implementation of the projects and initiatives that further the goals of the World Summit, encourages all stakeholders to nominate their projects for the annual World Summit project prizes, as an integral part of the WSIS Stocktaking process, while noting the report on the WSIS success stories.

We are also pleased to announce the launch of a new and innovative interface, which will make it easier to search all WSIS-related activities. All stakeholders benefit from the sharing of interesting case studies, by the undoubtedly facilitation of the transfer of knowledge, experiences, and models for project implementation. The WSIS platform helps to create partnerships, provide greater visibility, and add value to ICT projects all around the world. The many and varied stakeholders who have implemented innovative projects and contributed to the success of the WSIS Stocktaking process deserve our sincere gratitude. ITU announces an official call for updates and new entries and urges these stakeholders, along with all Member States, international organizations, the private sector, and civil society, to continue submitting such contributions in the future as WSIS pursues the ongoing stocktaking process. We trust that readers will find this report insightful, and sincerely hope that it will inspire them to participate in the construction of a broader and more inclusive information society for all.