Connecting the Next 49 Percent
Insights from The Inclusive Internet Index 2019

GSR 2019
11 July 2019

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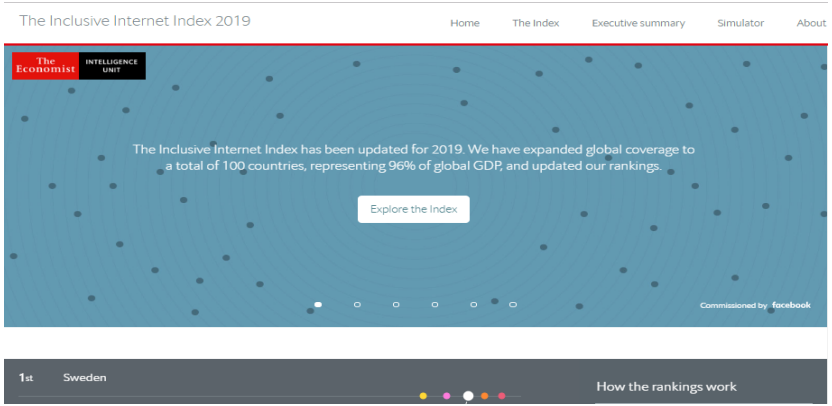
The Inclusive Internet Index (3i)

In-depth look at the global state of Internet connectivity and inclusiveness. This is the third year of the index, designed to build a time series of important data.

3i “Value of the Internet” Survey

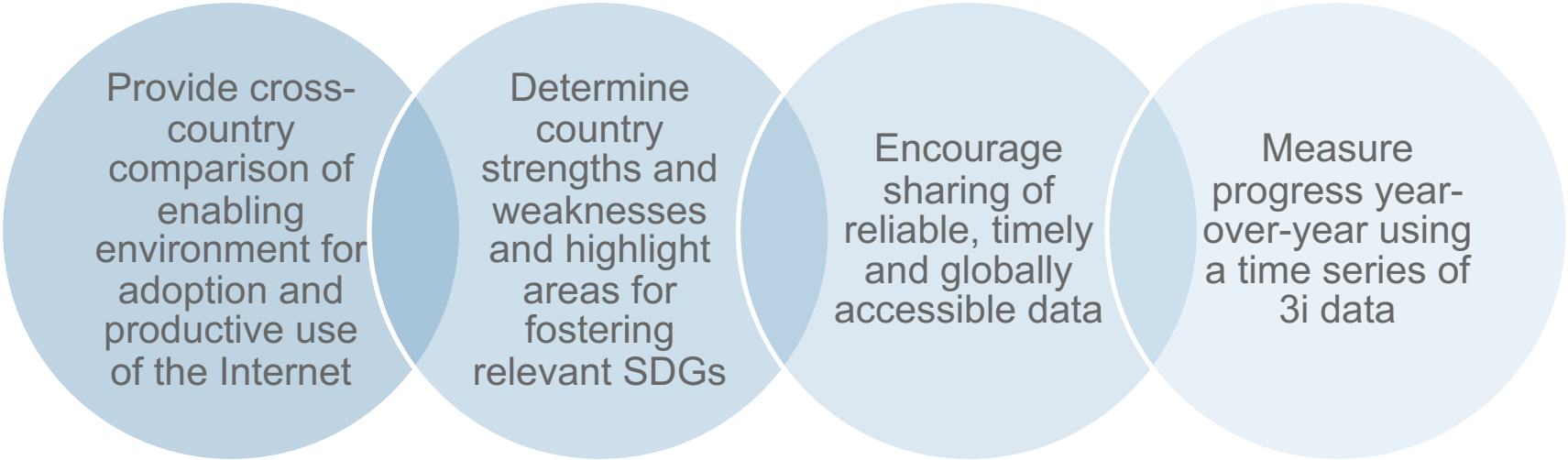
Global survey exploring how the Internet brings value to people’s lives

Project with Economist Intelligence Unit (EIU)

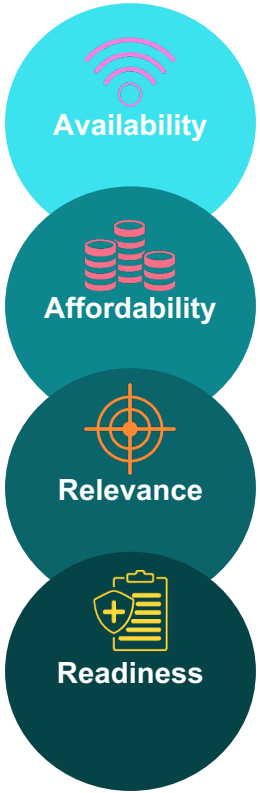


Key Objectives of 3i

Give policymakers & stakeholders a clearer understanding of factors that contribute to widespread and sustainable Internet inclusiveness



53 3i Indicators For Each Country In 2019



• Internet users • Fixed & mobile subscribers • Gender gap in access	• Fixed & mobile speed, latency metrics • Bandwidth capacity • Network coverage (2G, 3G, 4G)	• Wi-fi initiatives • Internet Exchange Points (IXPs) • Electricity access
• Handset cost • Mobile phone cost (prepaid) • Mobile phone cost (postpaid)	• Monthly fixed broadband cost • Average revenue per user (ARPU)	• Wireless operators' market share • Broadband operators' market share
• Basic information in local language • Concentration of websites using ccTLD	• Local language e-gov services • e-content: Finance, Health, Entertainment and e-Commerce	• Value of the Internet for e-content
• Literacy level • Educational attainment • Digital literacy support • Web accessibility • Privacy regulations	• Trust: online privacy, gov't sites, non-gov't sites and social media • e-Commerce safety • Female e-inclusion • Underserved e-inclusion policy	• National broadband strategy • Broadband buildout funding • Spectrum policy • Digital ID system

VIS: How Users Benefit from the Internet

Value for Work and Skills	Global	SSA	MENA	Asia	Europe	Latin America	North America
Internet use frequency (work) (% who use 'several times a day' for work)	48%	40%	51%	58%	46%	47%	42%
Job prospects (% who agree prospects have improved from internet use)	70%	75%	69%	70%	63%	74%	73%
Job search (% who have used internet to look for jobs)	73%	79%	75%	68%	68%	75%	85%
Skills development (% who have used internet to develop new skills for work)	77%	81%	77%	78%	68%	78%	79%
Poor internet connectivity (% who say this is a challenge to developing new skills)	35%	47%	29%	32%	23%	38%	25%

Key Global Findings: 3i 2019

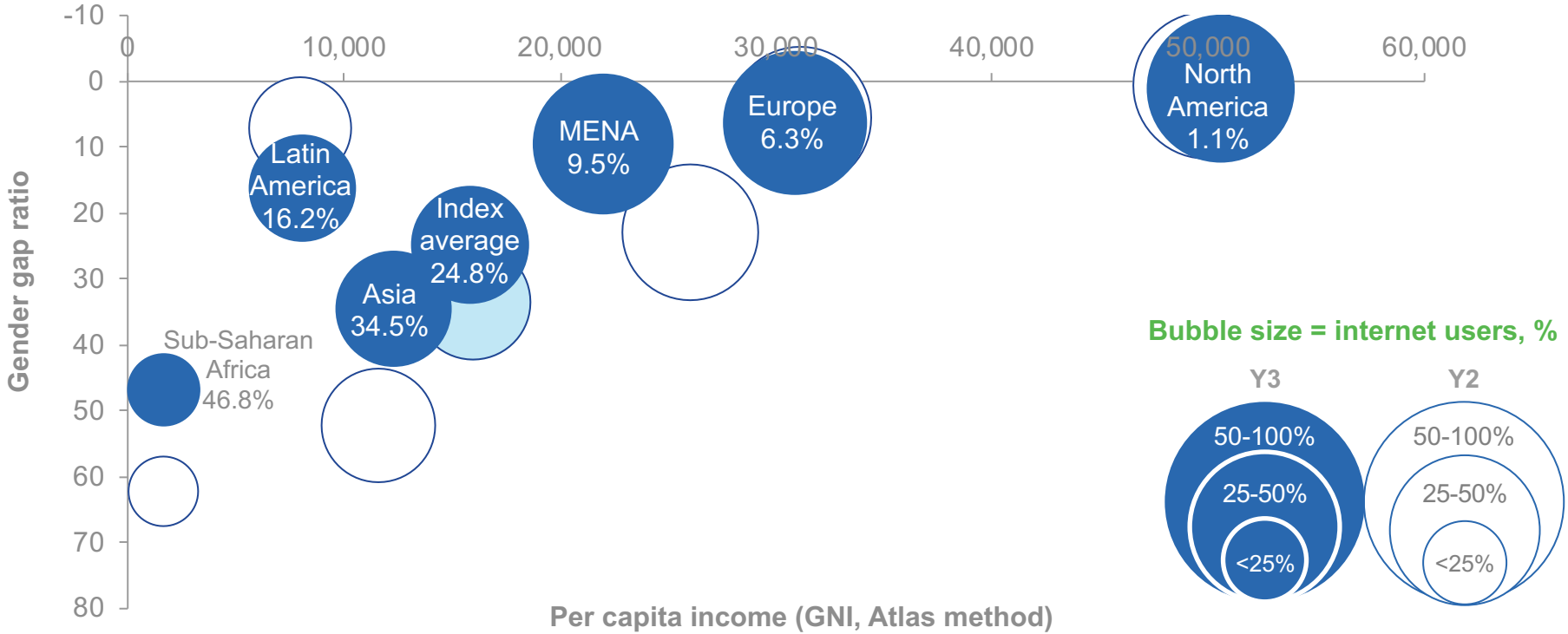
- The digital divide appears to be widening at the bottom of the income pyramid, risking a reversal of past progress
- Yet, gender gaps in Internet access are narrowing globally, led by low and lower middle-income countries
- Mobile broadband subscriptions are stagnating, and mobile data costs relative to income have increased in nearly half of index countries
- Web accessibility standards have improved globally, led by low- and lower middle-income countries
- The Internet is an important tool to improve livelihoods for entrepreneurs, the under-employed and people in low-income countries
- Concerns about online privacy remain high

Regional Comparison on Key Metrics

Indicator	Global	SSA	MENA	Asia	Europe	Latin America	North America
Internet users (% of households)	52.8	**18.9**	74.8	53.1	81.7	46.7	86.1
Mobile subscribers (per 100 inhabitants; %)	107.1	**79.7**	121.8	115.3	120.6	112.9	104.0
Average mobile download speed (Kbps)	20,545	**7,456**	20,240	22,196	36,991	12,695	43,129
Average mobile upload speed (Kbps)	10,026	**4,986**	10,874	10,911	15,694	7,678	13,703
Average mobile latency (ms)	50.8	**69.9**	41.9	49.2	32.6	54.8	45.2
Network coverage (min. 2G) (% of population)	96.3	**90.9**	99.4	97.3	99.4	97.1	99.7
Network coverage (min. 3G) (% of population)	85.6	**60.4**	98.0	90.6	97.9	93.3	99.7
Network coverage (min. 4G) (% of population)	67.4	**28.5**	83.8	77.8	93.5	64.9	99.1
Gender gap in internet access (% difference between male & female)	26.5	**55.6**	7.2	34.5	6.0	13.6	1.1

Gender Gap in Internet Access

The gender gap in internet access is shrinking globally but progress varies regionally



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Inclusive Internet Index: Asia

Overall rank/100		Availability rank/100		Affordability rank/100		Relevance rank/100		Readiness rank/100	
Singapore	2	Singapore	1	India	10	Vietnam	10	Japan	13
South Korea	9	South Korea	7	Australia	12	Taiwan	=13	Australia	18
Japan	12	Japan	12	Japan	13	Singapore	22	India	20
Australia	15	Taiwan	=15	South Korea	15	Malaysia	23	Malaysia	22
Taiwan	=22	Australia	22	Thailand	30	South Korea	=25	Vietnam	24
Malaysia	34	Thailand	33	Singapore	=33	Australia	28	South Korea	27
Thailand	36	Kazakhstan	35	Mongolia	37	Japan	=29	Taiwan	=28
China	42	China	38	Taiwan	39	Iran	33	Singapore	32
Vietnam	44	Malaysia	=45	Malaysia	40	China	=40	China	33
India	47	Iran	48	Sri Lanka	=43	India	=49	Kazakhstan	38
Kazakhstan	=50	Vietnam	54	Pakistan	=47	Sri Lanka	51	Indonesia	=39
Mongolia	53	Indonesia	=55	Vietnam	53	Mongolia	=52	Nepal	41
Iran	=56	Mongolia	57	China	54	Myanmar	54	Philippines	53
Sri Lanka	58	Philippines	59	Kazakhstan	=56	Thailand	55	Iran	54
Indonesia	63	Sri Lanka	60	Indonesia	61	Kazakhstan	61	Bangladesh	=65
Philippines	66	India	68	Bangladesh	70	Nepal	64	Pakistan	67
Bangladesh	71	Bangladesh	69	Cambodia	=71	Philippines	65	Thailand	72
Nepal	72	Cambodia	71	Myanmar	=71	Pakistan	68	Sri Lanka	75
Cambodia	=74	Nepal	74	Iran	80	Cambodia	73	Myanmar	81
Myanmar	=74	Myanmar	78	Philippines	82	Indonesia	77	Mongolia	85
Pakistan	77	Pakistan	84	Nepal	84	Bangladesh	78	Cambodia	99

Inclusive Internet Index: SSA

Overall rank/100		Availability rank/100		Affordability rank/100		Relevance rank/100		Readiness rank/100	
South Africa	=50	South Africa	51	Nigeria	28	Kenya	=35	South Africa	4
Kenya	64	Kenya	70	South Africa	31	Uganda	44	Botswana	55
Nigeria	65	Ghana	72	Cameroon	=47	Nigeria	47	Rwanda	60
Ghana	70	Botswana	75	Kenya	50	Ghana	66	Tanzania	61
Cameroon	76	Rwanda	76	Tanzania	55	Tanzania	69	Uganda	63
Rwanda	=79	Senegal	77	Ghana	=62	Namibia	75	Ethiopia	64
Tanzania	=79	Côte d'Ivoire	79	Côte d'Ivoire	65	Cameroon	76	Ghana	69
Botswana	81	Nigeria	80	Rwanda	=74	Angola	79	Zambia	70
Côte d'Ivoire	82	Cameroon	81	Angola	=78	South Africa	80	Namibia	71
Senegal	83	Namibia	82	Senegal	=78	Liberia	81	Mozambique	=73
Namibia	84	Zambia	83	Botswana	81	Benin	83	Nigeria	=73
Uganda	85	Tanzania	85	Zambia	83	Botswana	84	Senegal	76
Zambia	86	Benin	86	Namibia	85	Burkina Faso	85	Benin	77
Angola	87	Angola	87	Guinea	86	Madagascar	86	Malawi	78
Benin	88	Ethiopia	88	Mozambique	87	Rwanda	87	Mali	82
Ethiopia	89	Sudan	89	Benin	88	Ethiopia	88	Guinea	83
Sudan	90	Uganda	90	Sudan	89	Sudan	89	Cameroon	86
Mali	91	Madagascar	91	Burkina Faso	=91	Côte d'Ivoire	90	Kenya	87
Madagascar	92	Mali	92	Uganda	=91	Congo (DRC)	91	Madagascar	88
Burkina Faso	93	Sierra Leone	93	Mali	93	Sierra Leone	93	Côte d'Ivoire	89
Mozambique	94	Burkina Faso	94	Madagascar	94	Malawi	94	Burkina Faso	93
Guinea	95	Guinea	=95	Ethiopia	=95	Mali	95	Angola	94
Liberia	96	Mozambique	=95	Sierra Leone	=95	Zambia	96	Liberia	95
Sierra Leone	97	Malawi	97	Liberia	97	Senegal	97	Niger	96
Malawi	98	Niger	98	Malawi	98	Mozambique	98	Sudan	97
Niger	99	Liberia	99	Niger	99	Niger	99	Congo (DRC)	98
Congo (DRC)	100	Congo (DRC)	100	Congo (DRC)	100	Guinea	100	Sierra Leone	100

Inclusive Internet Index: Latin America

Overall rank/100		Availability rank/100		Affordability rank/100		Relevance rank/100		Readiness rank/100	
Chile	16	Chile	30	Chile	7	Uruguay	=16	Chile	2
Brazil	31	Argentina	39	Brazil	11	Brazil	=18	Costa Rica	3
Argentina	33	Brazil	44	Costa Rica	25	Chile	24	Dominican Republic	=10
Colombia	35	Uruguay	=45	Argentina	27	Mexico	=25	Argentina	14
Mexico	45	Colombia	49	El Salvador	29	Ecuador	=37	Mexico	19
Costa Rica	46	Mexico	50	Colombia	32	Argentina	42	Colombia	21
Uruguay	48	Dominican Republic	=52	Panama	36	Colombia	43	Peru	31
Ecuador	54	Ecuador	58	Peru	41	Costa Rica	48	Panama	=34
Panama	55	Peru	61	Mexico	56	Guatemala	57	Brazil	50
Peru	=56	Panama	62	Ecuador	59	Dominican Republic	58	Uruguay	51
El Salvador	59	Guatemala	63	Guatemala	64	Peru	60	Ecuador	=58
Dominican Republic	61	El Salvador	=64	Uruguay	73	Venezuela	62	Jamaica	62
Guatemala	67	Jamaica	=64	Jamaica	76	El Salvador	63	Guatemala	90
Jamaica	68	Costa Rica	66	Dominican Republic	77	Panama	67	Venezuela	91
Venezuela	78	Venezuela	73	Venezuela	90	Jamaica	=70	El Salvador	92

Inclusive Internet Index: MENA

Overall rank/100		Availability rank/100		Affordability rank/100		Relevance rank/100		Readiness rank/100	
Israel	17	Israel	=25	Israel	6	Israel	=35	Qatar	1
Qatar	37	Qatar	=25	Kuwait	16	Saudi Arabia	=37	Oman	=28
Kuwait	38	UAE	27	Tunisia	45	Oman	=40	Saudi Arabia	=39
Saudi Arabia	39	Kuwait	31	Saudi Arabia	49	UAE	45	Israel	44
UAE	43	Saudi Arabia	37	Jordan	60	Qatar	=49	UAE	48
Oman	49	Oman	41	Qatar	=62	Jordan	56	Jordan	=58
Jordan	52	Jordan	=42	Algeria	=66	Tunisia	=70	Morocco	=65
Tunisia	60	Morocco	47	Morocco	=66	Morocco	72	Kuwait	68
Morocco	62	Tunisia	=52	UAE	=66	Kuwait	74	Tunisia	79
Egypt	69	Egypt	=55	Egypt	69	Egypt	82	Algeria	80
Algeria	73	Algeria	67	Oman	=74	Algeria	92	Egypt	84

Country Briefing: Peru

Peru index performance

Category	Global rank/100	LatAm rank/15
Overall	=56	10
(1) Availability	61	9
(2) Affordability	41	8
(3) Relevance	60	11
(4) Readiness	31	7

Peru: Largest YoY changes

Indicator	% change
+ Average fixed broadband download speed	+111.2%
+ Average fixed broadband upload speed	+99.6%

Peru: strengths

Sub-category	Global rank/100	LatAm rank/15
(4.2) Trust & Safety	13	4
(4.3) Policy	=40	7
(2.2) Competitive Environment	41	8

Peru: areas for improvement

Sub-category	Global rank/100	LatAm rank/15
(1.1) Usage	64	11
(1.4) Electricity	63	12
(1.3) Infrastructure	63	10

Peru: Gender gap

Indicator	Value
– Change in gender gap (percentage points)	+1.0
Women's access quartiles:	3rd

VIS: Users' Concerns

Privacy & trust	Global	SSA	MENA	Asia	Europe	Latin America	North America
Confidence (% who are confident online activity is private)	48%	45%	41%	54%	45%	56%	48%
Privacy concerns (% who say privacy concerns have limited internet use)	92%	94%	92%	92%	89%	95%	95%
Identify theft (% who say fear of PI theft affects online shopping)	54%	53%	52%	57%	48%	62%	62%
Government website/apps (% who trust information from this source)	51%	55%	56%	52%	43%	52%	37%

Market and Policy Challenges in Changing Environment

Digital transformation of telecom industry: Shift from voice-centric to data-centric business models

Benefits of competition and new technology vs. old revenue models

Balancing safety, security and privacy

Regulation no longer fit for purpose—avoiding counterproductive consequences (e.g., Internet shutdowns)

Policies for Inclusion in Dynamic Environment

Need new frameworks that support innovation, investment, new business models, competition that (re)align economics with incentives, complexity and competition

Supply side: policies (not just regulation) that lower costs, speed deployment—e.g., more spectrum/reduce cost

Demand side: policies that foster relevance and readiness; e.g., local content/language, eGov services, eCommerce, new apps, low cost/free apps; skills

Global data for global business models, export of apps and services and global supply chain; competition enables less regulation that is sensible, appropriate, proportionate to close gaps, promote growth, investment and innovation

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