# Network Readiness Index 2020 Guatemala

The Network Readiness Index (NRI) is one of the leading global indices on the application and impact of information and communication technology (ICT) in economies around the world. In its latest version of 2020 the NRI Report maps the network-based readiness landscape of 134 economies based on their performances in four different pillars: Technology, People, Governance, and Impact. Each of these pillars is itself comprised of three sub-pillars (see Figure 1) that have been populated by a total of 60 variables.

Figure 1: The NRI 2020 model
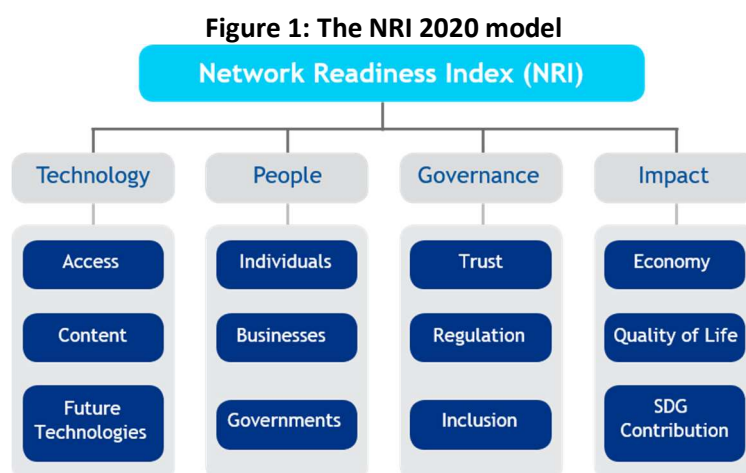
Global NRI position of Guatemala

Guatemala ranks 106th out of the 134 economies included in the NRI 2020 (Figure 2). Its main strength relates to Impact. The greatest scope for improvement, meanwhile, concerns Technology.

Figure 2: Guatemala global ranking, overall and by pillar
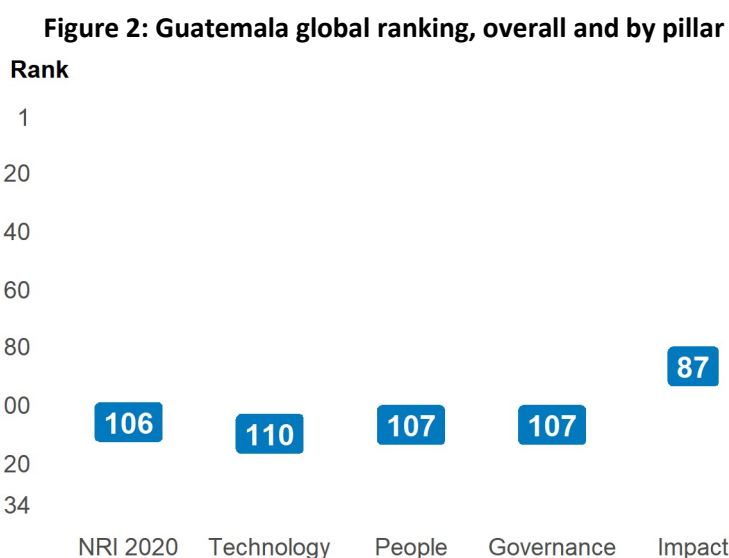
Performance at sub-pillar level

When it comes to sub-pillars, the strongest showings of Guatemala relate to Quality of Life, SDG Contribution and Content, among others (Table 1). More could be done, though, to improve the economy's performances in the Access, Trust and Governments sub-pillars.

Table 1: Guatemala rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Quality of Life	70	Individuals	100
SDG Contribution	82	Regulation	109
Content	97	Economy	109
Future Technologies	97	Access	110
Inclusion	98	Trust	118
Businesses	99	Governments	121

NRI score and income

Figure 3 shows the position of Guatemala in terms of both NRI score and GDP per capita (PPP). The trend line shows the expected NRI score given an economy's income level. As can be seen, Guatemala is well below the trend line, which suggests that it is underachieving and that one would expect it could raise its network readiness in view of its income level.

Figure 3: NRI score and GDP per capita PPP (log)
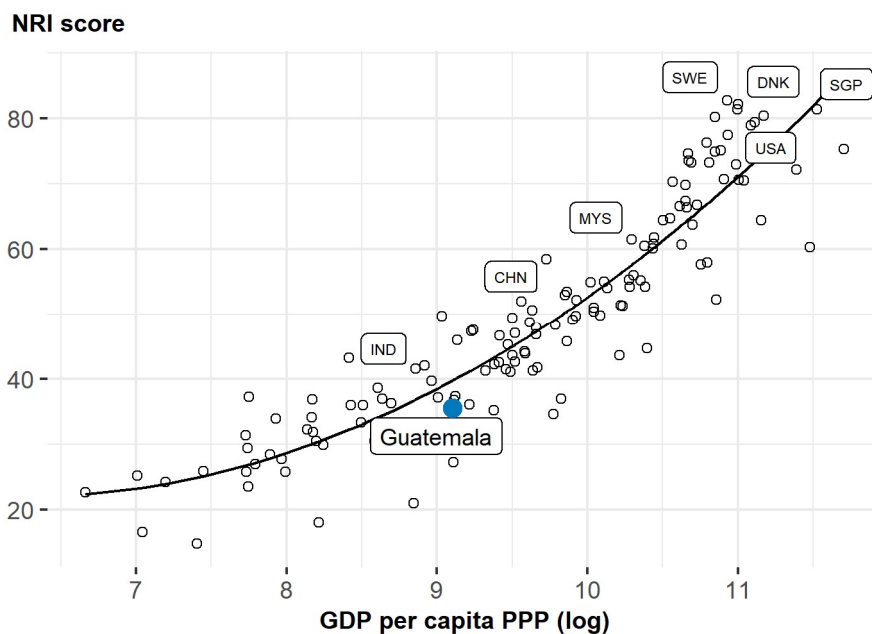
Note: SWE = Sweden (rank: 1), DNK = Denmark (2), SGP = Singapore (3), CHN = China (40), IND = India (88). USA is ranked 8th. Guatemala belongs to the group of upper-middle-income countries, where the best performer is Malaysia (MYS). The top performer of its region-The Americas-is United States (USA).

Performance against its income group and region

Upper-middle-income countries
Guatemala is ranked 34th in the group of upper-middle-income countries (Figure 4, left panel). In terms of pillar performance, it has a score below the income group average in each of the four pillars. At the sub-pillar level, it outperforms upper-middle-income countries in one of the twelve sub-pillars: Quality of Life.

The Americas
Guatemala is ranked 20th within The Americas (Figure 4, right panel). It lags behind its region in each of the four pillars. With regard to sub-pillars, it trails the regional average in each of them.

Figure 4: Performance of Guatemala against its income group and region, overall and by pillar
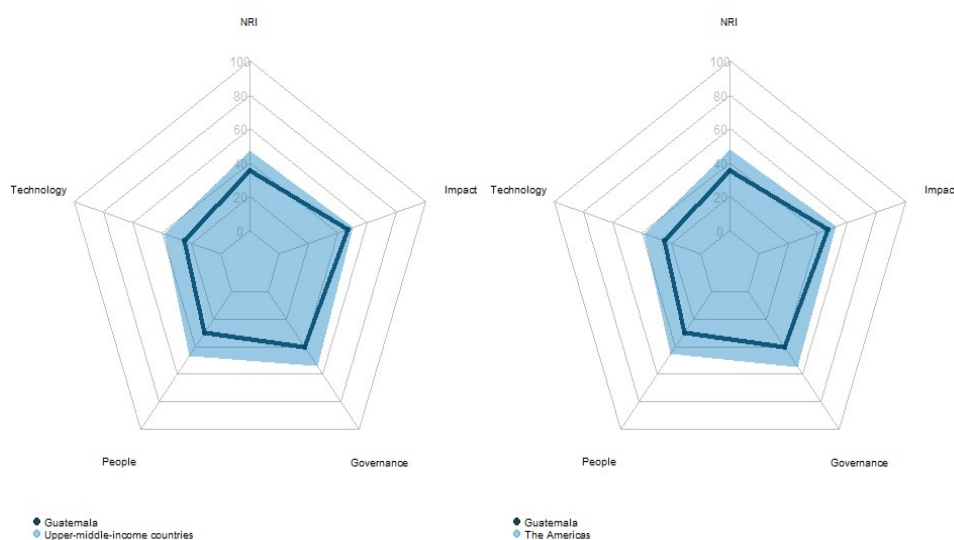

Table 2: Guatemala scores vs. averages of its income group and region, overall and by pillar

Dimension	Guatemala	Upper-middle-income countries	The Americas
NRI	35.51	47.39	47.67
Technology	24.72	38.42	38.26
People	30.17	46.66	45.24
Governance	40.26	54.31	54.59
Impact	46.90	50.17	52.61

Strongest and weakest indicators

The indicators where Guatemala performs particularly well include Freedom to make life choices, Happiness, and Firms with website (Table 3). By contrast, the economy's weakest indicators include Active mobile-broadband subscriptions, ICT regulatory environment, Computer software spending, and ICT skills.

Table 3: Top-ranked and bottom-ranked indicators of Guatemala

Strongest indicators	Rank	Weakest indicators	Rank
Freedom to make life choices	30	Technicians and associate professionals	111
Happiness	38	International Internet bandwidth	112
Firms with website	59	R&D expenditure by governments and higher education	112
Internet access in schools	62	Online access to financial account	113
Publication and use of open data	63	Mobile tariffs	118
Handset prices	64	Government promotion of investment in emerging technologies	119
Medium and high-tech industry	67	Computer software spending	120
SDG 11: Sustainable Cities and Communities	69	ICT skills	120
Internet users	71	ICT regulatory environment	125
Investment in emerging technologies	72	Active mobile-broadband subscriptions	126

NRI 2020 At-A-Glance: Guatemala

Network Readiness Index   Rank: 106 (out of 134)   Score: 35.51

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	110	24.72	C. Governance pillar	107	40.26
1st sub-pillar: Access	110	34.53	1st sub-pillar: Trust	118	19.18
2nd sub-pillar: Content	97	19.74	2nd sub-pillar: Regulation	109	50.49
3rd sub-pillar: Future Technologies	97	19.91	3rd sub-pillar: Inclusion	98	51.11
B. People pillar	107	30.17	D. Impact pillar	87	46.90
1st sub-pillar: Individuals	100	38.61	1st sub-pillar: Economy	109	14.30
2nd sub-pillar: Businesses	99	31.31	2nd sub-pillar: Quality of Life	70	64.25
3rd sub-pillar: Governments	121	20.59	3rd sub-pillar: SDG Contribution	82	62.16

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	110	24.72	**C. Governance pillar**	107	40.26
1st sub-pillar: Access	110	34.53	*1st sub-pillar: Trust*	118	19.18
1.1.1 Mobile tariffs	118	29.41	3.1.1 Secure Internet servers	102	36.27
1.1.2 Handset prices	64	46.42	3.1.2 Cybersecurity	110	26.33
1.1.3 Internet access	106	23.40	3.1.3 Online access to financial account	113	7.65
1.1.4 4G mobile network coverage	108	40.35	3.1.4 Internet shopping	87	6.47
1.1.5 Fixed-broadband subscriptions	NA	NA	*2nd sub-pillar: Regulation*	109	50.49
1.1.6 International Internet bandwidth	112	58.48	3.2.1 Regulatory quality	85	47.11
1.1.7 Internet access in schools	62	9.12	3.2.2 ICT regulatory environment	125	48.85
2nd sub-pillar: Content	97	19.74	3.2.3 Legal framework's adaptability to emerging technologies	82	30.99
1.2.1 GitHub commits	95	1.35	3.2.4 e-commerce legislation	77	75.00
1.2.2 Wikipedia edits	92	26.31	3.2.5 Privacy protection by law content	NA	NA
1.2.3 Internet domain registrations	*	*	*3rd sub-pillar: Inclusion*	98	51.11
1.2.4 Mobile apps development	97	48.99	3.3.1 E-Participation	100	48.15
3rd sub-pillar: Future Technologies	97	19.91	3.3.2 Socioeconomic gap in use of digital payments	89	53.69
1.3.1 Adoption of emerging technologies	78	41.14	3.3.3 Availability of local online content	102	38.74
1.3.2 Investment in emerging technologies	72	37.54	3.3.4 Gender gap in Internet use	NA	NA
1.3.3 ICT PCT patent applications	82	0.00	3.3.5 Rural gap in use of digital payments	73	63.86
1.3.4 Computer software spending	120	0.95	**D. Impact pillar**	87	46.90
1.3.5 Robot density	NA	NA	*1st sub-pillar: Economy*	109	14.30
B. People pillar	107	30.17	4.1.1 Medium and high-tech industry	67	28.43
1st sub-pillar: Individuals	100	38.61	4.1.2 High-tech exports	82	9.32
2.1.1 Internet users	71	64.27	4.1.3 PCT patent applications	83	0.03
2.1.2 Active mobile-broadband subscriptions	126	5.08	4.1.4 Labor productivity per employee	90	12.86
2.1.3 Use of virtual social networks	85	44.33	4.1.5 Prevalence of gig economy	109	20.84
2.1.4 Tertiary enrollment	92	15.44	*2nd sub-pillar: Quality of Life*	70	64.25
2.1.5 Adult literacy rate	78	75.94	4.2.1 Happiness	38	70.15
2.1.6 ICT skills	120	26.58	4.2.2 Freedom to make life choices	30	89.36
2nd sub-pillar: Businesses	99	31.31	4.2.3 Income inequality	110	37.89
2.2.1 Firms with website	59	56.31	4.2.4 Healthy life expectancy at birth	85	59.60
2.2.2 Ease of doing business	88	57.24	*3rd sub-pillar: SDG Contribution*	82	62.16
2.2.3 Professionals	102	12.93	4.3.1 SDG 3: Good Health and Well-Being	103	44.26
2.2.4 Technicians and associate professionals	111	10.57	4.3.2 SDG 4: Quality Education	NA	NA
2.2.5 Business use of digital tools	88	50.73	4.3.3 SDG 5: Gender Equality	88	66.15
2.2.6 R&D expenditure by businesses	89	0.07	4.3.4 SDG 7: Affordable and Clean Energy	74	76.08
3rd sub-pillar: Governments	121	20.59	.	.	.
2.3.1 Government online services	102	49.70			
2.3.2 Publication and use of open data	63	23.72			
2.3.3 Government promotion of investment in emerging tech	119	8.94			
2.3.4 R&D expenditure by governments and higher education	112	0.00			

* Confidential data

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