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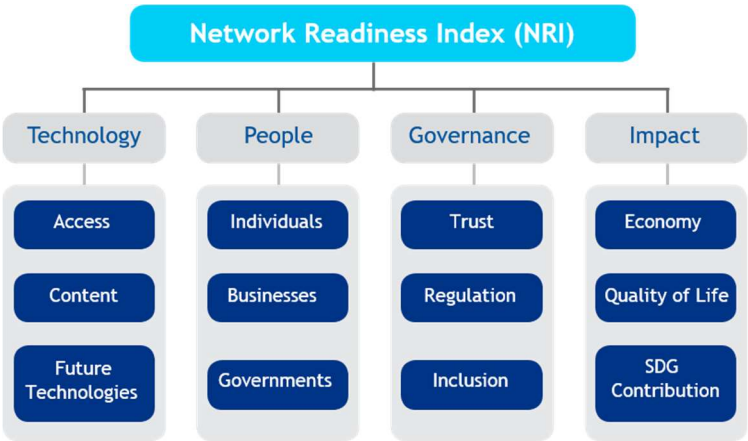
Network Readiness Index 2019 United States

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 2019 the NRI Report maps the network-based readiness landscape of 121 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 62 variables.

Figure 1: The NRI 2019 model



Global NRI position of United States

United States ranks 8th out of the 121 economies included in the NRI 2019 (Figure 2). Its main strength relates to Technology. The greatest scope for improvement, meanwhile, concerns Impact.

Figure 2: United States global ranking, overall and by pillar

Performance at sub-pillar level

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

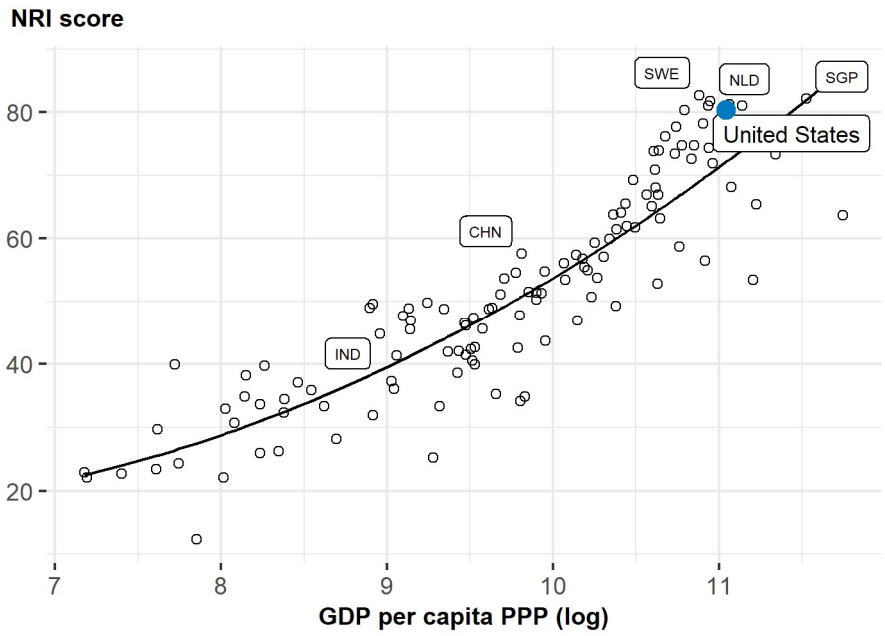
Table 1: United States rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Future Technologies	1	Economy	10
Regulation	1	Trust	11
Content	2	Individuals	16
Inclusion	4	Access	29
Governments	8	SDG Contribution	35
Businesses	9	Quality of Life	40

NRI score and income

Figure 3 shows the position of United States 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, United States is well above the trend line, which suggests that it has a greater network readiness than would be expected given its income level.

Figure 3: NRI score and GDP per capita PPP (log)



Note: SWE = Sweden (rank: 1), SGP = Singapore (2), NLD = Netherlands (3), CHN = China (41), IND = India (79). United States belongs to the group of high-income countries, where the best performer is Sweden (SWE). The top performer of its region—The Americas—is United States.

Performance against its income group and region

High-income countries

United States is ranked 8th in the group of high-income countries (Figure 4, left panel). In terms of pillar performance, it has a score higher than the income group average in each of the four pillars. At the sub-pillar level, it outperforms high-income countries in ten of the twelve sub-pillars: Content, Future Technology, Individuals, Businesses, Governments, Trust, Regulation, Inclusion, Economy and SDG Contribution.

The Americas

United States is ranked 1st within The Americas (Figure 4, right panel). It outperforms its region in each of the four pillars. With regard to sub-pillars, it has a higher score than the regional average in each of the twelve sub-pillars.

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

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

Dimension	United States	High-income countries	The Americas
NRI	80.32	68.12	49.08
Technology	87.32	66.07	43.12
People	73.59	61.07	43.32
Governance	88.74	77.07	57.13
Impact	71.65	68.29	52.73

Strongest and weakest indicators

The indicators where United States performs particularly well include Company investment in emerging technology, Computer software spending, and Software piracy rate (Table 3). By contrast, the economy's weakest indicators include Income inequality, Mobile tariffs, and Online trust and safety.

Table 3: Top-ranked and bottom-ranked indicators of United States

Strongest indicators	Rank	Weakest indicators	Rank
Company investment in emerging technology	1	Internet access	36
Computer software spending	1	Fixed-broadband subscriptions	37
Software piracy rate	1	Healthy life expectancy at birth	37
Legal framework's adaptability to digital business models	1	Socioeconomic gap in use of digital payments	40
E-commerce legislation	1	Rural gap in use of digital payments	40
Use of clean fuels and technology	1	Road safety	51
Intellectual property receipts	2	Freedom to make life choices	61
Government procurement of advanced technology products	2	Online trust and safety	68
Extent of staff training	2	Mobile tariffs	70
Government online services	2	Income inequality	79

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NRI 2019 At-A-Glance: United States

Network Readiness Index Rank: 8 (out of 121) Score: 80.32

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	1	87.32	C. Governance pillar	4	88.74
1st sub-pillar: Access	29	81.41	1st sub-pillar: Trust	11	85.64
2nd sub-pillar: Content	2	93.27	2nd sub-pillar: Regulation	1	93.18
3rd sub-pillar: Future Technologies	1	87.27	3rd sub-pillar: Inclusion	4	87.39
B. People pillar	8	73.59	D. Impact pillar	20	71.65
1st sub-pillar: Individuals	16	69.08	1st sub-pillar: Economy	10	55.12
2nd sub-pillar: Businesses	9	71.64	2nd sub-pillar: Quality of Life	40	69.15
3rd sub-pillar: Governments	8	80.04	3rd sub-pillar: SDG Contribution	35	90.68

The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar		
1st sub-pillar: Access		
1.1.1 Mobile tariffs	70	60.72
1.1.2 Handset prices	4	85.02
1.1.3 Internet access	36	82.76
1.1.4 4G mobile network coverage	12	99.80
1.1.5 Fixed-broadband subscriptions	37	87.49
1.1.6 International Internet bandwidth	34	72.67
1.1.7 Internet access in schools	NA	NA
2nd sub-pillar: Content		
1.2.1 Digital participation and content creation	*	*
1.2.2 Mobile apps development	6	93.95
1.2.3 Intellectual property receipts	2	77.13
3rd sub-pillar: Future Technologies		
1.3.1 Availability of latest technologies	6	96.12
1.3.2 Company investment in emerging technology	1	100.00
1.3.3 Government procurement of advanced technology products	2	89.56
1.3.4 ICT PCT patent applications	7	73.85
1.3.5 Computer software spending	1	100.00
1.3.6 Robot density	8	64.06
B. People pillar		
1st sub-pillar: Individuals		
2.1.1 Internet users	24	86.21
2.1.2 Active mobile-broadband subscriptions	7	55.93
2.1.3 Use of virtual social networks	27	69.85
2.1.4 Tertiary enrolment	8	64.33
2.1.5 Adult literacy rate	NA	NA
2.1.6 ICT skills	NA	NA
2nd sub-pillar: Businesses		
2.2.1 Firms with website	30	70.42
2.2.2 Internet shopping	7	90.33
2.2.3 Professionals	15	58.16
2.2.4 Technicians and associate professionals	24	61.88
2.2.5 Extent of staff training	2	97.05
2.2.6 R&D expenditure by businesses	8	51.98
3rd sub-pillar: Governments		
2.3.1 Government online services	2	98.46
2.3.2 Publication and use of open data	4	81.62
2.3.3 ICT use and government efficiency	9	82.23
2.3.4 R&D expenditure by governments and higher education	19	57.85

Indicator	Rank	Score
C. Governance pillar		
1st sub-pillar: Trust		
3.1.1 Rule of law	19	86.48
3.1.2 Software piracy rate	1	100.00
3.1.3 Secure Internet servers	6	94.65
3.1.4 Cybersecurity	2	99.45
3.1.5 Online trust and safety	68	47.64
2nd sub-pillar: Regulation		
3.2.1 Regulatory quality	16	86.17
3.2.2 Ease of doing business	6	95.10
3.2.3 Legal framework's adaptability to digital business models	1	100.00
3.2.4 E-commerce legislation	1	100.00
3.2.5 Social safety net protection	11	88.02
3.2.6 ICT regulatory environment	34	89.77
3rd sub-pillar: Inclusion		
3.3.1 E-Participation	5	98.08
3.3.2 Socioeconomic gap in use of digital payments	40	79.64
3.3.3 Availability of local online content	3	97.91
3.3.4 Gender gap in internet use	NA	NA
3.3.5 Rural gap in use of digital payments	40	73.90
D. Impact pillar		
1st sub-pillar: Economy		
4.1.1 Medium and high-tech industry	16	61.01
4.1.2 High-tech exports	22	35.80
4.1.3 PCT patent applications	11	46.73
4.1.4 Labour productivity per employee	7	76.94
2nd sub-pillar: Quality of Life		
4.2.1 Happiness	21	79.68
4.2.2 Freedom to make life choices	61	68.55
4.2.3 Income inequality	79	56.58
4.2.4 Healthy life expectancy at birth	37	71.79
3rd sub-pillar: SDG Contribution		
4.3.1 Access to basic services	20	99.50
4.3.2 Pollution	9	98.12
4.3.3 Road safety	51	69.69
4.3.4 Reading proficiency in schools	16	96.84
4.3.5 Maths proficiency in schools	15	79.94
4.3.6 Use of clean fuels and technology	1	100.00

* Confidential data

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