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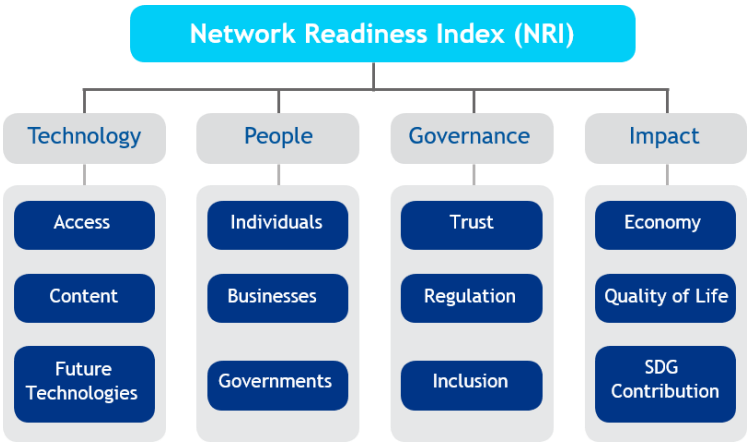
Network Readiness Index 2019 Bangladesh

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.

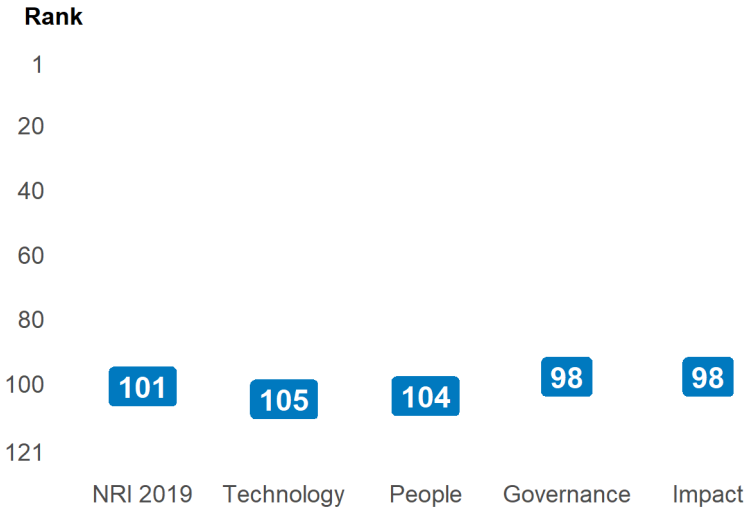
Figure 1: The NRI 2019 model



Global NRI position of Bangladesh

Bangladesh ranks 101st out of the 121 economies included in the NRI 2019 (Figure 2). Its main strength relates to Governance and Impact. The greatest scope for improvement, meanwhile, concerns Technology.

Figure 2: Bangladesh global ranking, overall and by pillar



Performance at sub-pillar level

When it comes to sub-pillars, the strongest showings of Bangladesh relate to Quality of Life, Inclusion and Governments, among others (Table 1). More could be done, though, to improve the economy's performances in the Individuals, Economy and Businesses sub-pillars.

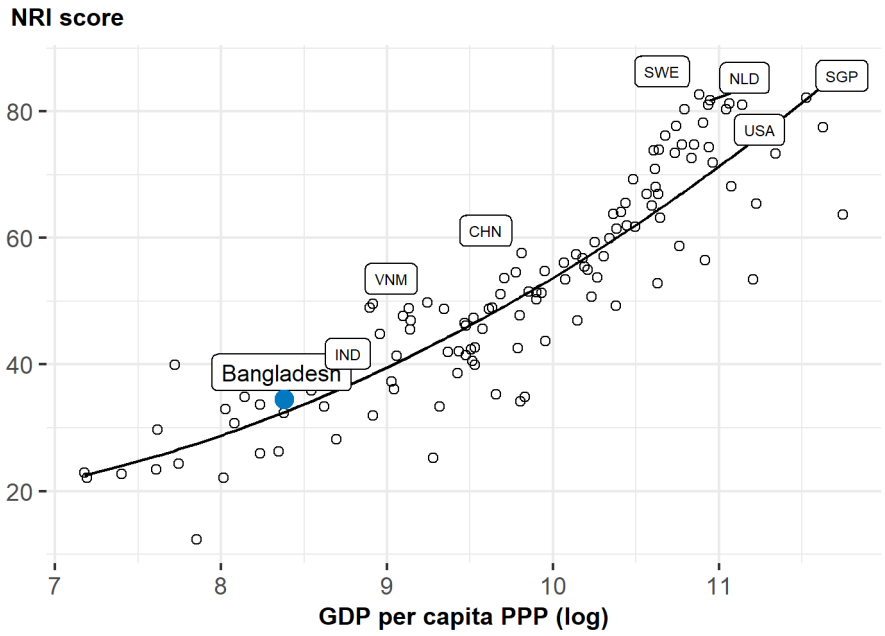
Table 1: Bangladesh rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Quality of Life	59	Trust	105
Inclusion	61	SDG Contribution	105
Governments	67	Regulation	106
Future Technologies	78	Individuals	107
Access	100	Economy	113
Content	103	Businesses	116

NRI score and income

Figure 3 shows the position of Bangladesh 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, Bangladesh is slightly above the trend line, which suggests that its network readiness is more or less in line with what 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). USA is ranked 8th. Bangladesh belongs to the group of lower-middle-income countries, where the best performer is Vietnam (VNM). The top performer of its region—Asia & Pacific—is Singapore (SGP).

Performance against its income group and region

Lower-middle-income countries

Bangladesh is ranked 16th in the group of lower-middle-income countries (Figure 4, left panel). In terms of pillar performance, it has a score higher than the income group average in one of the four pillars: Governance. At the sub-pillar level, it outperforms lower-middle-income countries in four of the twelve sub-pillars: Future Technology, Governments, Inclusion and Quality of Life.

Asia & Pacific

Bangladesh is ranked 17th within Asia & Pacific (Figure 4, right panel). It lags behind its region in each of the four pillars. With regard to sub-pillars, it outperforms the average in Asia & Pacific in one of the twelve sub-pillars: Inclusion.

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

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

Dimension	Bangladesh	Lower-middle-income countries	Asia & Pacific
NRI	34.48	37.18	52.44
Technology	27.67	32.15	48.56
People	25.13	30.04	44.85
Governance	47.78	46.17	61.84
Impact	37.32	40.35	54.50

Strongest and weakest indicators

The indicators where Bangladesh performs particularly well include Rural gap in use of digital payments, Freedom to make life choices, and Income inequality (Table 3). By contrast, the economy's weakest indicators include Internet access, Ease of doing business, and Internet users.

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

Strongest indicators	Rank	Weakest indicators	Rank
Rural gap in use of digital payments	6	Use of clean fuels and technology	107
Freedom to make life choices	28	Internet shopping	111
Income inequality	31	Regulatory quality	111
Mobile tariffs	50	Extent of staff training	113
Government online services	51	High-tech exports	113
E-Participation	51	Pollution	113
Maths proficiency in schools	54	Social safety net protection	114
Reading proficiency in schools	58	Internet users	116
Handset prices	59	Ease of doing business	118
Computer software spending	59	Internet access	120

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NRI 2019 At-A-Glance: Bangladesh

Network Readiness Index Rank: 101 (out of 121) Score: 34.48

Pillar/sub-pillar	Rank	Score
A. Technology pillar	105	27.67
1st sub-pillar: Access	100	37.41
2nd sub-pillar: Content	103	18.03
3rd sub-pillar: Future Technologies	78	27.57
B. People pillar	104	25.13
1st sub-pillar: Individuals	107	22.15
2nd sub-pillar: Businesses	116	9.99
3rd sub-pillar: Governments	67	43.26

Pillar/sub-pillar	Rank	Score
C. Governance pillar	98	47.78
1st sub-pillar: Trust	105	37.16
2nd sub-pillar: Regulation	106	43.31
3rd sub-pillar: Inclusion	61	62.87
D. Impact pillar	98	37.32
1st sub-pillar: Economy	113	6.09
2nd sub-pillar: Quality of Life	59	62.41
3rd sub-pillar: SDG Contribution	105	43.45

The Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar		
1st sub-pillar: Access		
1.1.1 Mobile tariffs	50	69.55
1.1.2 Handset prices	59	46.95
1.1.3 Internet access	120	0.51
1.1.4 4G mobile network coverage	96	58.00
1.1.5 Fixed-broadband subscriptions	90	20.00
1.1.6 International Internet bandwidth	89	63.07
1.1.7 Internet access in schools	64	3.75
2nd sub-pillar: Content		
1.2.1 Digital participation and content creation	*	*
1.2.2 Mobile apps development	107	30.09
1.2.3 Intellectual property receipts	95	0.01
3rd sub-pillar: Future Technologies		
1.3.1 Availability of latest technologies	98	35.28
1.3.2 Company investment in emerging technology	93	23.06
1.3.3 Government procurement of advanced technology products	79	33.77
1.3.4 ICT PCT patent applications	NA	NA
1.3.5 Computer software spending	59	18.18
1.3.6 Robot density	NA	NA
B. People pillar		
1st sub-pillar: Individuals		
2.1.1 Internet users	116	5.79
2.1.2 Active mobile-broadband subscriptions	105	12.93
2.1.3 Use of virtual social networks	103	17.88
2.1.4 Tertiary enrolment	91	14.54
2.1.5 Adult literacy rate	84	59.59
2.1.6 ICT skills	NA	NA
2nd sub-pillar: Businesses		
2.2.1 Firms with website	101	10.00
2.2.2 Internet shopping	111	1.59
2.2.3 Professionals	101	10.74
2.2.4 Technicians and associate professionals	107	7.21
2.2.5 Extent of staff training	113	20.44
2.2.6 R&D expenditure by businesses	NA	NA
3rd sub-pillar: Governments		
2.3.1 Government online services	51	76.15
2.3.2 Publication and use of open data	87	10.57
2.3.3 ICT use and government efficiency	62	43.04
2.3.4 R&D expenditure by governments and higher education	NA	NA

Indicator	Rank	Score
C. Governance pillar		
1st sub-pillar: Trust		
3.1.1 Rule of law	98	38.73
3.1.2 Software piracy rate	97	6.76
3.1.3 Secure Internet servers	95	40.52
3.1.4 Cybersecurity	78	55.48
3.1.5 Online trust and safety	74	44.29
2nd sub-pillar: Regulation		
3.2.1 Regulatory quality	111	33.22
3.2.2 Ease of doing business	118	26.20
3.2.3 Legal framework's adaptability to digital business models	72	39.01
3.2.4 E-commerce legislation	66	75.00
3.2.5 Social safety net protection	114	12.67
3.2.6 ICT regulatory environment	85	73.75
3rd sub-pillar: Inclusion		
3.3.1 E-Participation	51	77.71
3.3.2 Socioeconomic gap in use of digital payments	72	61.43
3.3.3 Availability of local online content	96	32.41
3.3.4 Gender gap in internet use	NA	NA
3.3.5 Rural gap in use of digital payments	6	79.95
D. Impact pillar		
1st sub-pillar: Economy		
4.1.1 Medium and high-tech industry	99	12.20
4.1.2 High-tech exports	113	0.58
4.1.3 PCT patent applications	NA	NA
4.1.4 Labour productivity per employee	96	5.49
2nd sub-pillar: Quality of Life		
4.2.1 Happiness	105	30.03
4.2.2 Freedom to make life choices	28	86.35
4.2.3 Income inequality	31	80.53
4.2.4 Healthy life expectancy at birth	90	52.75
3rd sub-pillar: SDG Contribution		
4.3.1 Access to basic services	101	63.89
4.3.2 Pollution	113	40.63
4.3.3 Road safety	64	60.62
4.3.4 Reading proficiency in schools	58	46.84
4.3.5 Maths proficiency in schools	54	33.18
4.3.6 Use of clean fuels and technology	107	15.56

* Confidential data

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