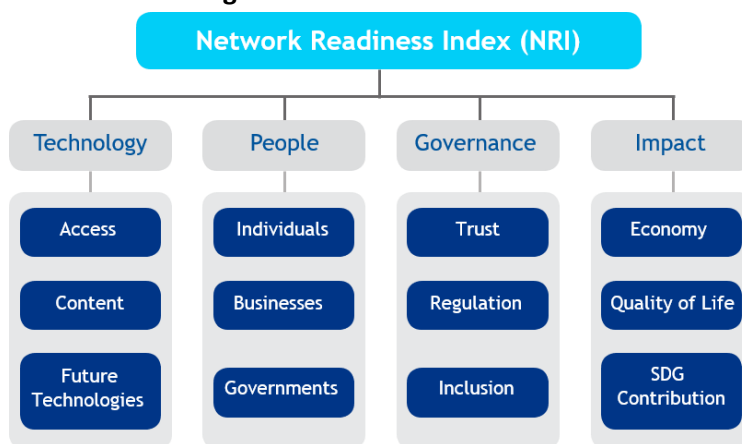


Network Readiness Index 2019

India

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.

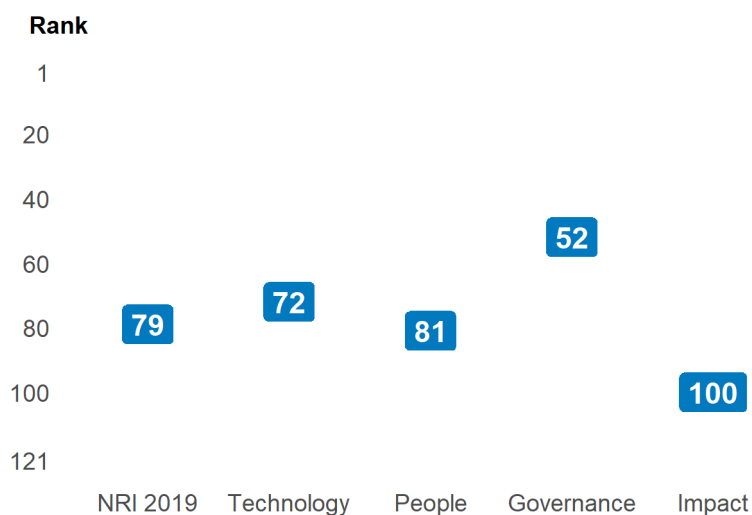
Figure 1: The NRI 2019 model



Global NRI position of India

India ranks 79th out of the 121 economies included in the NRI 2019 (Figure 2). Its main strength relates to Governance. The greatest scope for improvement, meanwhile, concerns Impact.

Figure 2: India global ranking, overall and by pillar



Performance at sub-pillar level

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

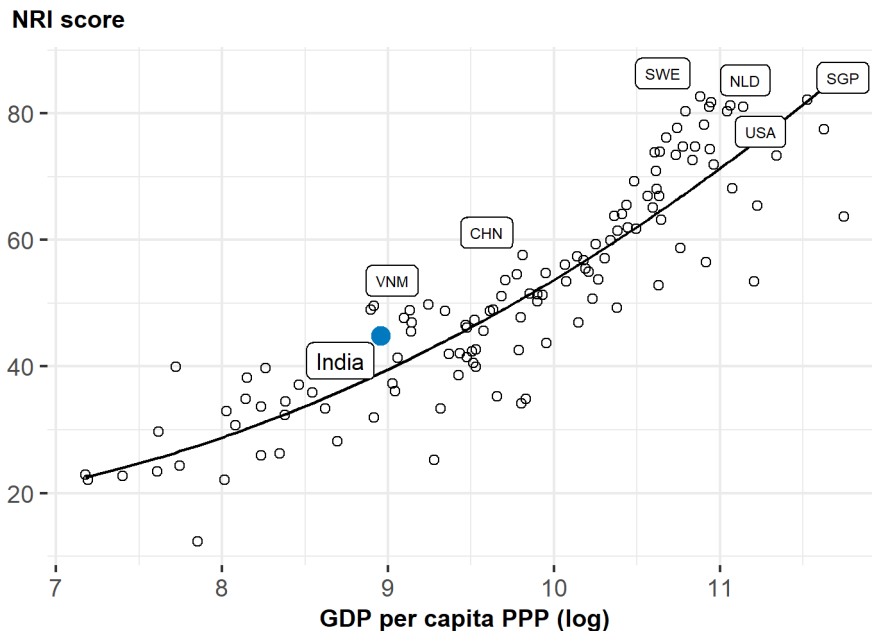
Table 1: India rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Governments	36	Access	73
Future Technologies	46	Content	84
Trust	49	Businesses	87
Inclusion	58	Quality of Life	93
Regulation	59	Individuals	103
Economy	66	SDG Contribution	108

NRI score and income

Figure 3 shows the position of India 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, India 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). USA is ranked 8th. India 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

India is ranked 6th 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 three of the four pillars: Score, Technology, People and Governance. At the sub-pillar level, it outperforms lower-middle-income countries in nine of the twelve sub-pillars: Access, Content, Future Technology, Businesses, Governments, Trust, Regulation, Inclusion and Economy.

Asia & Pacific

India is ranked 13th within Asia & Pacific (Figure 4, right panel). It has a score above the regional average in one of the four pillars: Governance. With regard to sub-pillars, it outperforms the average in Asia & Pacific in four of the twelve sub-pillars: Governments, Trust, Regulation and Inclusion.

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

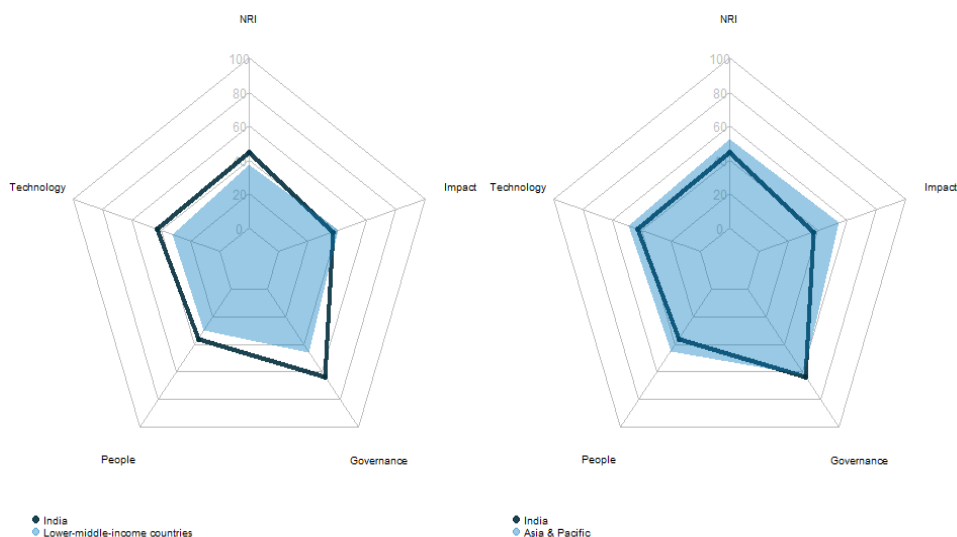


Table 2: India scores vs. averages of its income group and region, overall and by pillar

Dimension	India	Lower-middle-income countries	Asia & Pacific
NRI	44.81	37.18	52.44
Technology	42.76	32.15	48.56
People	35.87	30.04	44.85
Governance	63.66	46.17	61.84
Impact	36.96	40.35	54.50

Strongest and weakest indicators

The indicators where India performs particularly well include Online trust and safety, Government procurement of advanced technology products, and Government online services (Table 3). By contrast, the economy's weakest indicators include Happiness, Pollution, and Active mobile-broadband subscriptions.

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

Strongest indicators	Rank	Weakest indicators	Rank
Online trust and safety	5	Internet access	96
Government procurement of advanced technology products	8	Access to basic services	98
Government online services	9	Internet users	99
E-Participation	15	Internet shopping	99
Legal framework's adaptability to digital business models	26	Healthy life expectancy at birth	99
Company investment in emerging technology	27	Use of virtual social networks	101
Extent of staff training	31	Professionals	103
Freedom to make life choices	32	Active mobile-broadband subscriptions	106
Publication and use of open data	33	Pollution	114
Medium and high-tech industry	33	Happiness	115

NRI 2019 At-A-Glance: India

Network Readiness Index

Rank: 79 (out of 121)

Score: 44.81

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	72	42.76	C. Governance pillar	52	63.66
1st sub-pillar: Access	73	59.14	1st sub-pillar: Trust	49	61.89
2nd sub-pillar: Content	84	32.97	2nd sub-pillar: Regulation	59	64.61
3rd sub-pillar: Future Technologies	46	36.16	3rd sub-pillar: Inclusion	58	64.49
B. People pillar	81	35.87	D. Impact pillar	100	36.96
1st sub-pillar: Individuals	103	28.35	1st sub-pillar: Economy	66	19.37
2nd sub-pillar: Businesses	87	22.60	2nd sub-pillar: Quality of Life	93	52.39
3rd sub-pillar: Governments	36	56.67	3rd sub-pillar: SDG Contribution	108	39.11

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar			C. Governance pillar		
<i>1st sub-pillar: Access</i>			<i>1st sub-pillar: Trust</i>		
1.1.1 Mobile tariffs	38	74.13	3.1.1 Rule of law	59	53.93
1.1.2 Handset prices	55	49.67	3.1.2 Software piracy rate	50	44.59
1.1.3 Internet access	96	20.39	3.1.3 Secure Internet servers	84	44.65
1.1.4 4G mobile network coverage	54	94.00	3.1.4 Cybersecurity	49	76.75
1.1.5 Fixed-broadband subscriptions	68	53.11	3.1.5 Online trust and safety	5	89.50
1.1.6 International Internet bandwidth	84	63.55	<i>2nd sub-pillar: Regulation</i>		
1.1.7 Internet access in schools	NA	NA	3.2.1 Regulatory quality	82	47.37
<i>2nd sub-pillar: Content</i>			3.2.2 Ease of doing business	59	72.19
1.2.1 Digital participation and content creation	*	*	3.2.3 Legal framework's adaptability to digital business models	26	63.98
1.2.2 Mobile apps development	81	51.10	3.2.4 E-commerce legislation	66	75.00
1.2.3 Intellectual property receipts	48	0.79	3.2.5 Social safety net protection	43	54.42
<i>3rd sub-pillar: Future Technologies</i>			3.2.6 ICT regulatory environment	84	74.71
1.3.1 Availability of latest technologies	70	50.48	<i>3rd sub-pillar: Inclusion</i>		
1.3.2 Company investment in emerging technology	27	61.27	3.3.1 E-Participation	15	94.91
1.3.3 Government procurement of advanced technology products	8	78.31	3.3.2 Socioeconomic gap in use of digital payments	85	50.15
1.3.4 ICT PCT patent applications	52	7.63	3.3.3 Availability of local online content	60	55.11
1.3.5 Computer software spending	59	18.18	3.3.4 Gender gap in internet use	NA	NA
1.3.6 Robot density	52	1.09	3.3.5 Rural gap in use of digital payments	77	57.80
B. People pillar			D. Impact pillar		
<i>1st sub-pillar: Individuals</i>			<i>1st sub-pillar: Economy</i>		
2.1.1 Internet users	99	27.43	4.1.1 Medium and high-tech industry	33	49.44
2.1.2 Active mobile-broadband subscriptions	106	12.93	4.1.2 High-tech exports	51	17.06
2.1.3 Use of virtual social networks	101	21.00	4.1.3 PCT patent applications	61	0.49
2.1.4 Tertiary enrolment	83	20.06	4.1.4 Labour productivity per employee	86	10.50
2.1.5 Adult literacy rate	83	60.31	<i>2nd sub-pillar: Quality of Life</i>		
2.1.6 ICT skills	NA	NA	4.2.1 Happiness	115	15.84
<i>2nd sub-pillar: Businesses</i>			4.2.2 Freedom to make life choices	32	83.79
2.2.1 Firms with website	69	39.33	4.2.3 Income inequality	52	71.84
2.2.2 Internet shopping	99	3.63	4.2.4 Healthy life expectancy at birth	99	38.10
2.2.3 Professionals	103	8.93	<i>3rd sub-pillar: SDG Contribution</i>		
2.2.4 Technicians and associate professionals	93	16.96	4.3.1 Access to basic services	98	68.49
2.2.5 Extent of staff training	31	59.90	4.3.2 Pollution	114	32.87
2.2.6 R&D expenditure by businesses	49	6.85	4.3.3 Road safety	92	37.81
<i>3rd sub-pillar: Governments</i>			4.3.4 Reading proficiency in schools	67	24.54
2.3.1 Government online services	9	94.62	4.3.5 Maths proficiency in schools	60	26.47
2.3.2 Publication and use of open data	33	42.80	4.3.6 Use of clean fuels and technology	94	44.44
2.3.3 ICT use and government efficiency	36	58.16			
2.3.4 R&D expenditure by governments and higher education	54	31.10			

* Confidential data

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