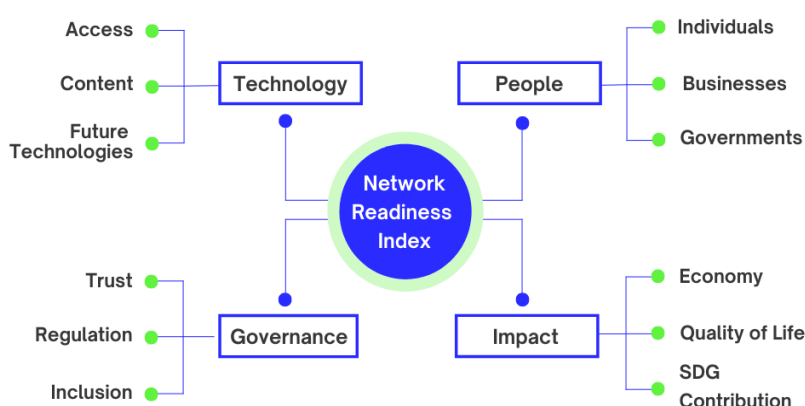


Network Readiness Index 2022

Nepal

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 2022 the NRI Report maps the network-based readiness landscape of 131 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 58 variables.

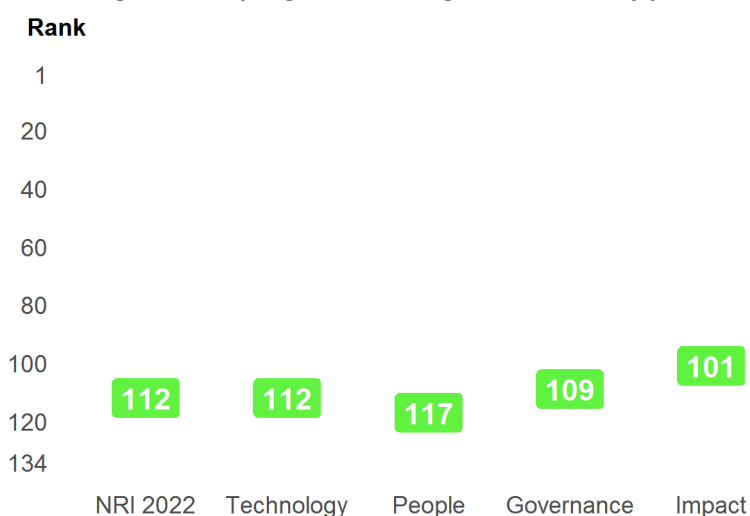
Figure 1: The NRI 2022 model



Global NRI position of Nepal

Nepal ranks 112th out of the 131 economies included in the NRI 2022 (Figure 2). Its main strength relates to Impact. The greatest scope for improvement, meanwhile, concerns People.

Figure 2: Nepal global ranking, overall and by pillar



Performance at sub-pillar level

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

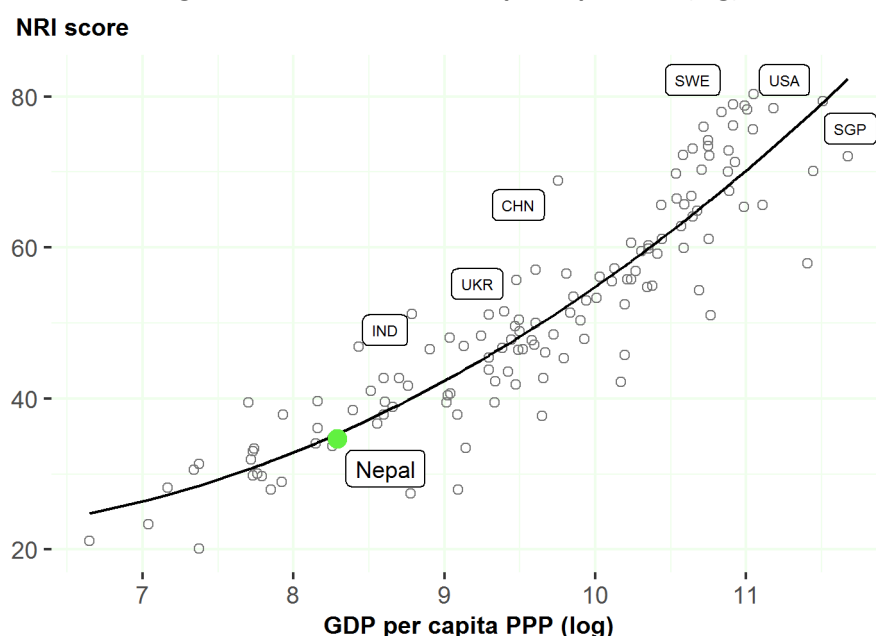
Table 1: Nepal rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Content	88	Inclusion	109
Quality of Life	93	Individuals	111
SDG Contribution	94	Future Technologies	115
Economy	99	Regulation	115
Trust	107	Access	121
Governments	108	Businesses	127

NRI score and income

Figure 3 shows the position of Nepal 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, Nepal is slightly below 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: USA = United States (rank: 1), SGP = Singapore (rank: 2), SWE = Sweden (3), CHN = China (23), IND = India (61). Netherlands (NLD) is ranked 4th. Nepal belongs to the group of lower-middle-income countries, where the best performer is Ukraine (UKR). The top performer of its region-Asia & Pacific-is Singapore (SGP).

Performance against its income group and region

Lower-middle-income countries

Nepal is ranked 31st in the group of lower-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 lower-middle-income countries in two of the twelve sub-pillars: Content and Quality of Life.

Asia & Pacific

Nepal is ranked 21st within Asia & Pacific (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 Nepal against its income group and region, overall and by pillar

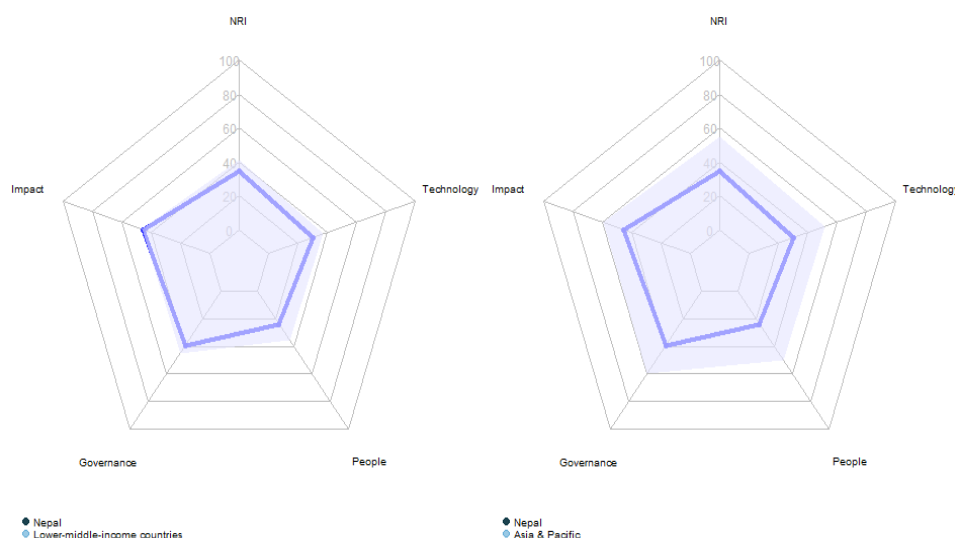


Table 2: Nepal scores vs. averages of its income group and region, overall and by pillar

Dimension	Nepal	Lower-middle-income countries	Asia & Pacific
NRI	34.66	40.94	55.18
Technology	30.36	37.28	51.78
People	23.97	35.42	50.21
Governance	39.15	45.00	59.66
Impact	45.16	46.09	59.07

Strongest and weakest indicators

The indicators where Nepal performs particularly well include 3.2.4 E-commerce legislation, 4.1.6 ICT services exports, and 1.2.4 AI scientific publications (Table 3). By contrast, the economy's weakest indicators include 1.1.2 Handset prices, 1.1.4 Population covered by at least a 3G mobile network, 3.1.3 Online access to financial account, and 4.1.2 High-tech exports.

Table 3: Strongest and weakest indicators of Nepal

Strongest indicators	Rank	Weakest indicators	Rank
3.2.4 E-commerce legislation	1	3.2.3 Regulation of emerging technologies	114
4.1.6 ICT services exports	54	3.1.3 Online access to financial account	116
1.2.4 AI scientific publications	57	4.1.2 High-tech exports	116
4.2.2 Freedom to make life choices	61	1.1.4 Population covered by at least a 3G mobile network	124
3.3.5 Rural gap in use of digital payments	66	1.1.2 Handset prices	127
4.3.3 SDG 5: Women's economic opportunity	74		
4.1.4 Domestic market size	77		
1.2.1 GitHub commits	80		
1.2.3 Mobile apps development	85		
3.1.1 Secure Internet servers	91		

NRI 2022 At-A-Glance: Nepal

Network Readiness Index

Rank: 112 (out of 131)

Score: 34.66

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	112	30.36	C. Governance pillar	109	39.15
1st sub-pillar: Access	121	42.01	1st sub-pillar: Trust	107	24.51
2nd sub-pillar: Content	88	30.65	2nd sub-pillar: Regulation	115	46.94
3rd sub-pillar: Future Technologies	115	18.43	3rd sub-pillar: Inclusion	109	46.01
B. People pillar	117	23.97	D. Impact pillar	101	45.16
1st sub-pillar: Individuals	111	27.84	1st sub-pillar: Economy	99	22.08
2nd sub-pillar: Businesses	127	18.50	2nd sub-pillar: Quality of Life	93	58.60
3rd sub-pillar: Governments	108	25.56	3rd sub-pillar: SDG Contribution	94	54.81

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	112	30.36	C. Governance pillar	109	39.15
1st sub-pillar: Access	121	42.01	1st sub-pillar: Trust	107	24.51
1.1.1 Mobile tariffs	94	44.09	3.1.1 Secure Internet servers	91	42.63
1.1.2 Handset prices	127	17.15	3.1.2 Cybersecurity	97	44.02
1.1.3 FTTH/building Internet subscriptions	NA	NA	3.1.3 Online access to financial account	116	6.34
1.1.4 Population covered by at least a 3G mobile network	124	75.16	3.1.4 Internet shopping	97	5.06
1.1.5 International Internet bandwidth	93	64.52	2nd sub-pillar: Regulation	115	46.94
1.1.6 Internet access in schools	68	9.13	3.2.1 Regulatory quality	112	22.40
2nd sub-pillar: Content	88	30.65	3.2.2 ICT regulatory environment	118	57.65
1.2.1 GitHub commits	80	3.29	3.2.3 Regulation of emerging technologies	114	4.47
1.2.2 Internet domain registrations	96	1.00	3.2.4 E-commerce legislation	1	100.00
1.2.3 Mobile apps development	85	71.55	3.2.5 Privacy protection by law content	97	50.19
1.2.4 AI scientific publications	57	46.77	3rd sub-pillar: Inclusion	109	46.01
3rd sub-pillar: Future Technologies	115	18.43	3.3.1 E-Participation	113	34.56
1.3.1 Adoption of emerging technologies	107	27.45	3.3.2 Socioeconomic gap in use of digital payments	94	52.44
1.3.2 Investment in emerging technologies	106	26.25	3.3.3 Availability of local online content	108	34.38
1.3.3 Robot density	NA	NA	3.3.4 Gender gap in Internet use	NA	NA
1.3.4 Computer software spending	114	1.59	3.3.5 Rural gap in use of digital payments	66	62.65

Indicator	Rank	Score	Indicator	Rank	Score
B. People pillar	117	23.97	D. Impact pillar	101	45.16
<i>1st sub-pillar: Individuals</i>	111	27.84	<i>1st sub-pillar: Economy</i>	99	22.08
2.1.1 Mobile broadband internet traffic within the country	111	0.45	4.1.1 High-tech and medium-high-tech manufacturing	94	6.47
2.1.2 ICT skills in the education system	100	30.77	4.1.2 High-tech exports	116	1.48 ○
2.1.3 Use of virtual social networks	99	41.29	4.1.3 PCT patent applications	NA	NA
2.1.4 Tertiary enrollment	103	7.99	4.1.4 Domestic market size	77	46.94 ●
2.1.5 Adult literacy rate	93	58.71	4.1.5 Prevalence of gig economy	107	22.09
2.1.6 AI talent concentration	NA	NA	4.1.6 ICT services exports	54	33.41 ●
<i>2nd sub-pillar: Businesses</i>	127	18.50	<i>2nd sub-pillar: Quality of Life</i>	93	58.60
2.2.1 Firms with website	105	19.18	4.2.1 Happiness	98	43.51
2.2.2 GERD financed by business enterprise	NA	NA	4.2.2 Freedom to make life choices	61	75.02 ●
2.2.3 Knowledge intensive employment	98	17.82	4.2.3 Income inequality	NA	NA
2.2.4 Annual investment in telecommunication services	NA	NA	4.2.4 Healthy life expectancy at birth	97	57.28
2.2.5 GERD performed by business enterprise	NA	NA	<i>3rd sub-pillar: SDG Contribution</i>	94	54.81
<i>3rd sub-pillar: Governments</i>	108	25.56	4.3.1 SDG 3: Good Health and Well-Being	106	40.67
2.3.1 Government online services	114	38.18	4.3.2 SDG 4: Quality Education	NA	NA
2.3.2 Publication and use of open data	80	14.71	4.3.3 SDG 5: Women's economic opportunity	74	72.81 ●
2.3.3 Government promotion of investment in emerging tech	101	23.80	4.3.4 SDG 7: Affordable and Clean Energy	99	67.34
2.3.4 R&D expenditure by governments and higher education	NA	NA	4.3.5 SDG 11: Sustainable Cities and Communities	110	38.42

NOTE: ● a strength and ○ a weakness.

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