



Mongolia

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 2023 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 58 variables.

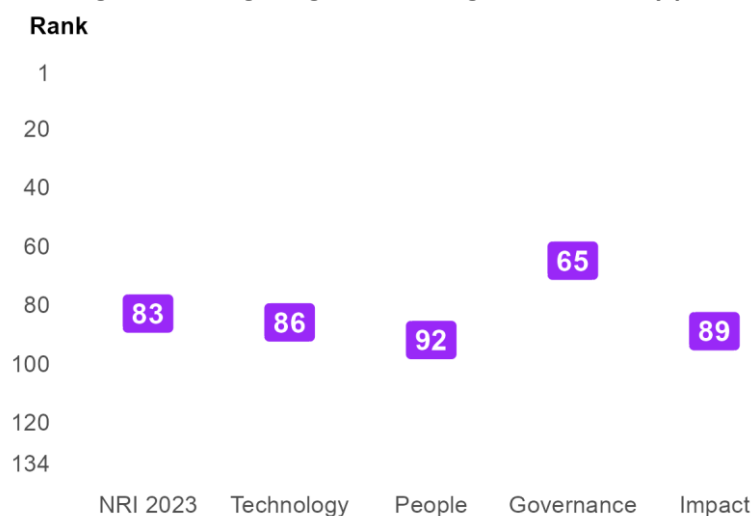
Figure 1: The NRI 2023 model



Global NRI position of Mongolia

Mongolia ranks 83rd out of the 134 economies included in the NRI 2023 (Figure 2). Its main strength relates to Governance. The greatest scope for improvement, meanwhile, concerns People.

Figure 2: Mongolia global ranking, overall and by pillar



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Performance at sub-pillar level

When it comes to sub-pillars, the strongest showings of Mongolia relate to Inclusion, Individuals and Trust, among others (Table 1). More could be done, though, to improve the economy's performances in the Future Technologies, Regulation and Businesses sub-pillars.

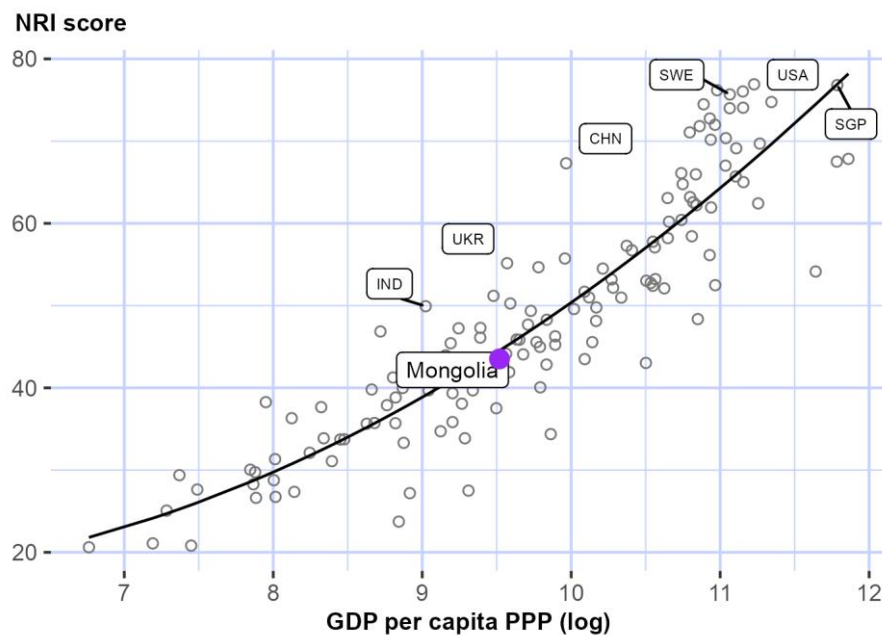
Table 1: Mongolia rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Inclusion	51	Content	96
Individuals	60	Governments	97
Trust	66	Economy	98
Access	74	Future Technologies	101
SDG Contribution	74	Regulation	101
Quality of Life	85	Businesses	105

NRI score and income

Figure 3 shows the position of Mongolia 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, Mongolia 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), FIN = Finland (3), NLD = Netherlands (4), SWE = Sweden (5), CHN = China (20), IND = India (61). Mongolia 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).

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Performance against its income group and region

Lower-middle-income countries

Mongolia is ranked 11th 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 each of the four pillars. At the sub-pillar level, it outperforms lower-middle-income countries in eight of the twelve sub-pillars: Access, Content, Individuals, Trust, Regulation, Inclusion, Quality of Life and SDG Contribution.

Asia & Pacific

Mongolia is ranked 15th 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 Mongolia against its income group and region, overall and by pillar

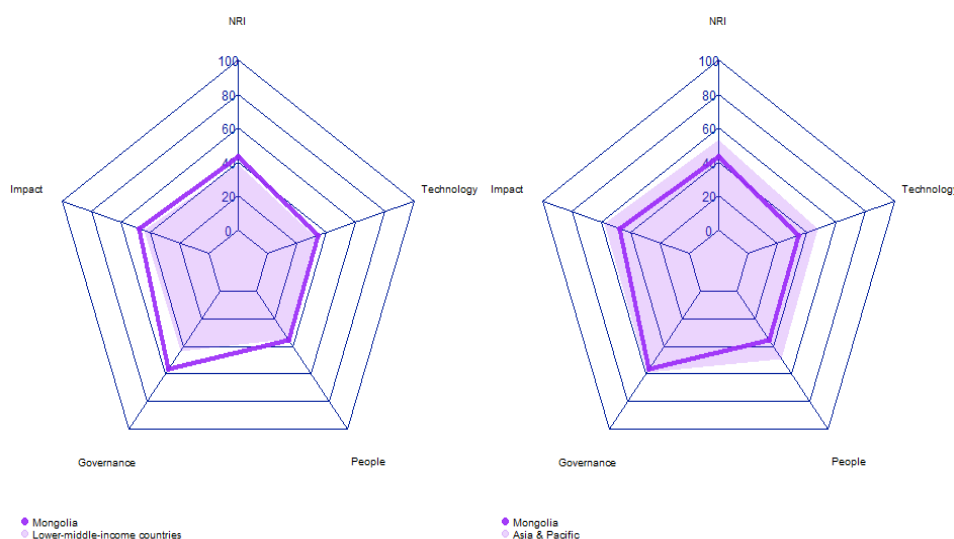


Table 2: Mongolia scores vs. averages of its income group and region, overall and by pillar

Dimension	Mongolia	Lower-middle-income countries	Asia & Pacific
NRI	43.52	38.41	53.28
Technology	34.56	32.12	47.34
People	35.51	34.38	48.95
Governance	56.46	43.27	59.22
Impact	47.53	43.89	57.62

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Strongest and weakest indicators

The indicators where Mongolia performs particularly well include 1.1.4 Population covered by at least a 3G mobile network, 3.3.2 Socioeconomic gap in use of digital payments, and 4.1.2 High-tech exports (Table 3). By contrast, the economy's weakest indicators include 1.3.1 Adoption of emerging technologies, 4.1.1 High-tech and medium-high-tech manufacturing, and 2.1.2 ICT skills in the education system.

Table 3: Highlight of Strengths and Opportunities for Mongolia

Strongest indicators	Rank	Weakest indicators	Rank
1.1.4 Population covered by at least a 3G mobile network	1	2.2.5 GERD performed by business enterprise	83
3.3.2 Socioeconomic gap in use of digital payments	6	3.2.4 E-commerce legislation	87
4.1.2 High-tech exports	18	2.1.2 ICT skills in the education system	97
2.1.5 Adult literacy rate	19	4.1.1 High-tech and medium-high-tech manufacturing	104
3.3.5 Rural gap in use of digital payments	32	1.3.1 Adoption of emerging technologies	112
3.1.3 Online access to financial account	36		
4.2.3 Income inequality	36		
2.1.4 Tertiary enrollment	39		
4.3.3 SDG 5: Women's economic opportunity	39		
3.1.4 Internet shopping	44		

Note: For the full list of strengths and weaknesses, see At-A-Glance table.

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NRI 2023 At-A-Glance: Mongolia

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Rank: 83 (out of 134)

Score: 43.52

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	86	34.56	C. Governance pillar	65	56.46
1st sub-pillar: Access	74	62.29	1st sub-pillar: Trust	66	44.89
2nd sub-pillar: Content	96	17.31	2nd sub-pillar: Regulation	101	56.11
3rd sub-pillar: Future Technologies	101	24.07	3rd sub-pillar: Inclusion	51	68.39
B. People pillar	92	35.51	D. Impact pillar	89	47.53
1st sub-pillar: Individuals	60	48.66	1st sub-pillar: Economy	98	18.93
2nd sub-pillar: Businesses	105	30.98	2nd sub-pillar: Quality of Life	85	62.69
3rd sub-pillar: Governments	97	26.90	3rd sub-pillar: SDG Contribution	74	60.97

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	86	34.56	C. Governance pillar	65	56.46
1st sub-pillar: Access	74	62.29	1st sub-pillar: Trust	66	44.89
1.1.1 Mobile tariffs	60	63.74	3.1.1 Secure Internet servers	59	59.48
1.1.2 Handset prices	87	38.40	3.1.2 Cybersecurity	113	24.90
1.1.3 FTTH/building Internet subscriptions	51	33.12	3.1.3 Online access to financial account	36	46.58
1.1.4 Population covered by at least a 3G mobile network	1	100.00	3.1.4 Internet shopping	44	48.61
1.1.5 International Internet bandwidth	88	67.83	2nd sub-pillar: Regulation	101	56.11
1.1.6 Internet access in schools	46	70.66	3.2.1 Regulatory quality	82	44.89
2nd sub-pillar: Content	96	17.31	3.2.2 ICT regulatory environment	76	79.41
1.2.1 GitHub commits	68	6.14	3.2.3 Regulation of emerging technologies	88	30.65
1.2.2 Internet domain registrations	82	1.98	3.2.4 E-commerce legislation	87	66.67
1.2.3 Mobile apps development	86	59.47	3.2.5 Privacy protection by law content	82	58.95
1.2.4 AI scientific publications	94	1.65	3rd sub-pillar: Inclusion	51	68.39
3rd sub-pillar: Future Technologies	101	24.07	3.3.1 E-Participation	57	59.31
1.3.1 Adoption of emerging technologies	112	25.94	3.3.2 Socioeconomic gap in use of digital payments	6	99.34
1.3.2 Investment in emerging technologies	92	33.00	3.3.3 Availability of local online content	97	42.55
1.3.3 Robot density	NA	NA	3.3.4 Gender gap in Internet use	69	66.57

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Indicator	Rank	Score	Indicator	Rank	Score
1.3.4 Computer software spending	82	13.28	3.3.5 Rural gap in use of digital payments	32	74.19 ●
B. People pillar	92	35.51	D. Impact pillar	89	47.53
<i>1st sub-pillar: Individuals</i>	60	48.66	<i>1st sub-pillar: Economy</i>	98	18.93
2.1.1 Mobile broadband internet traffic within the country	77	7.11	4.1.1 High-tech and medium-high-tech manufacturing	104	2.59 ○
2.1.2 ICT skills in the education system	97	23.57 ○	4.1.2 High-tech exports	18	39.70 ●
2.1.3 Use of virtual social networks	55	68.72	4.1.3 PCT patent applications	67	2.58
2.1.4 Tertiary enrollment	39	45.01 ●	4.1.4 Domestic market size	112	36.54
2.1.5 Adult literacy rate	19	98.88 ●	4.1.5 Prevalence of gig economy	92	29.65
2.1.6 AI talent concentration	NA	NA	4.1.6 ICT services exports	110	2.53
<i>2nd sub-pillar: Businesses</i>	105	30.98	<i>2nd sub-pillar: Quality of Life</i>	85	62.69
2.2.1 Firms with website	89	32.35	4.2.1 Happiness	70	63.90
2.2.2 GERD financed by business enterprise	77	10.01	4.2.2 Freedom to make life choices	101	57.00
2.2.3 Knowledge intensive employment	50	39.12	4.2.3 Income inequality	36	76.13 ●
2.2.4 Annual investment in telecommunication services	96	73.20	4.2.4 Healthy life expectancy at birth	102	53.74
2.2.5 GERD performed by business enterprise	83	0.20 ○	<i>3rd sub-pillar: SDG Contribution</i>	74	60.97
<i>3rd sub-pillar: Governments</i>	97	26.90	4.3.1 SDG 3: Good Health and Well-Being	91	57.38
2.3.1 Government online services	78	58.70	4.3.2 SDG 4: Quality Education	NA	NA
2.3.2 Publication and use of open data	NA	NA	4.3.3 SDG 5: Women's economic opportunity	39	86.73 ●
2.3.3 Government promotion of investment in emerging tech	105	19.80	4.3.4 SDG 7: Affordable and Clean Energy	110	53.97
2.3.4 R&D expenditure by governments and higher education	99	2.21	4.3.5 SDG 11: Sustainable Cities and Communities	101	45.81

NOTE: ● a strength and ○ a weakness.

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