

Korea, Rep.

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 Future Technologies Access Content Network Individuals Businesses Governments Readiness Index 囯 Trust Regulation Inclusion Impact (<u>o</u>) Quality of Life **SDG** Contribution

Global NRI position of Korea, Rep.

Korea, Rep. ranks 7th out of the 134 economies included in the NRI 2023 (Figure 2). Its main strength relates to People. The greatest scope for improvement, meanwhile, concerns Governance.

Figure 2: Korea, Rep. global ranking, overall and by pillar Rank 1 11 17 18 20 40 60 80 100 120 134 NRI 2023 Technology People Impact Governance







Performance at sub-pillar level

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

Table 1: Korea, Rep. rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Individuals	1	Inclusion	17
Businesses	1	Access	23
Governments	1	SDG Contribution	26
Economy	3	Content	30
Future Technologies	8	Quality of Life	40
Trust	10	Regulation	41

NRI score and income

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

NRI score 80 -Korea, Rep SGP 60 -0 [IND 0 40 -0 0 0 0 11 12 GDP per capita PPP (log)

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). Korea, Rep. belongs to the group of high-income countries, where the best performer is United States of America (USA). The top performer of its region-Asia & Pacific-is Singapore (SGP).



Performance against its income group and region

High-income countries

Korea, Rep. is ranked 7th 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 nine of the twelve sub-pillars: Access, Future Technologies, Individuals, Businesses, Governments, Trust, Inclusion, Economy and SDG Contribution.

Asia & Pacific

Korea, Rep. is ranked 2nd within Asia & Pacific (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.

Impact

Governance

People

Republic of Korea

Atia & Pacific

Figure 4: Performance of Korea, Rep. against its income group and region, overall and by pillar

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

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Dimension	Korea, Rep.	High-income countries	Asia & Pacific				
NRI	74.48	64.07	53.28				
Technology	60.10	55.76	47.34				
People	84.11	56.99	48.95				
Governance	80.44	76.81	59.22				
Impact	73.27	66.73	57.62				



Strongest and weakest indicators

The indicators where Korea, Rep. performs particularly well include 1.1.6 Internet access in schools, 1.3.3 Robot density, and 2.1.6 Al talent concentration (Table 3). By contrast, the economy's weakest indicators include 3.2.2 ICT regulatory environment, 4.3.4 SDG 7: Affordable and Clean Energy, and 4.2.2 Freedom to make life choices.

Table 3: Highlight of Strengths and Opportunities for Korea, Rep.

Strongest indicators	Rank	Weakest indicators	Rank
1.1.6 Internet access in schools	1	1.1.1 Mobile tariffs	71
1.3.3 Robot density	1	4.2.2 Freedom to make life choices	100
2.1.6 Al talent concentration	1	4.3.4 SDG 7: Affordable and Clean Energy	101
2.2.5 GERD performed by business enterprise	1	3.2.2 ICT regulatory environment	105
3.2.4 E-commerce legislation	1		
2.3.4 R&D expenditure by governments and higher education	2		
4.1.3 PCT patent applications	2		
2.3.1 Government online services	3		
4.2.4 Healthy life expectancy at birth	3		
2.1.3 Use of virtual social networks	4		
2.1.4 Tertiary enrollment	4		
2.2.2 GERD financed by business enterprise	4		
3.1.4 Internet shopping	5		

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



Rank: 7 (out of 134) Score: 74.48

NRI 2023 At-A-Glance: Korea, Rep.

Network Readiness Index

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	17	60.10	C. Governance pillar	18	80.44
1st sub-pillar: Access	23	75.76	1st sub-pillar: Trust	10	85.10
2nd sub-pillar: Content	30	40.42	2nd sub-pillar: Regulation	41	75.26
3rd sub-pillar: Future Technologies	8	64.12	3rd sub-pillar: Inclusion	17	80.96
B. People pillar	1	84.11	D. Impact pillar	11	73.27
1st sub-pillar: Individuals	1	79.88	1st sub-pillar: Economy	3	65.35
2nd sub-pillar: Businesses	1	82.85	2nd sub-pillar: Quality of Life	40	75.23
3rd sub-pillar: Governments	1	89.59	3rd sub-pillar: SDG Contribution	26	79.22

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	17	60.10	C. Governance pillar	18	80.44
1st sub-pillar: Access	23	75.76	1st sub-pillar: Trust	10	85.10
1.1.1 Mobile tariffs	71	59.86 0	3.1.1 Secure Internet servers	47	69.34
1.1.2 Handset prices	54	55.03	3.1.2 Cybersecurity	5	98.49
1.1.3 FTTH/building Internet subscriptions	12	59.11	3.1.3 Online access to financial account	9	82.64
1.1.4 Population covered by at least a 3G mobile network	28	99.97	3.1.4 Internet shopping	5	89.91 •
1.1.5 International Internet bandwidth	22	80.61	2nd sub-pillar: Regulation	41	75.26
1.1.6 Internet access in schools	1	100.00 •	3.2.1 Regulatory quality	28	74.44
2nd sub-pillar: Content	30	40.42	3.2.2 ICT regulatory environment	105	66.12 0
1.2.1 GitHub commits	25	46.41	3.2.3 Regulation of emerging technologies	32	64.68
1.2.2 Internet domain registrations	47	8.85	3.2.4 E-commerce legislation	1	100.00 •
1.2.3 Mobile apps development	21	75.94	3.2.5 Privacy protection by law content	52	71.07
1.2.4 Al scientific publications	16	30.49	3rd sub-pillar: Inclusion	17	80.96
3rd sub-pillar: Future Technologies	8	64.12	3.3.1 E-Participation	9	94.19
1.3.1 Adoption of emerging technologies	20	75.40	3.3.2 Socioeconomic gap in use of digital payments	26	93.43
1.3.2 Investment in emerging technologies	34	59.50	3.3.3 Availability of local online content	32	81.01







Indicator	Rank	Score		Indicator	Rank	Score	
1.3.3 Robot density	1	100.00	•	3.3.4 Gender gap in Internet use	43	69.52	
1.3.4 Computer software spending	65	21.58		3.3.5 Rural gap in use of digital payments	57	66.67	
B. People pillar	1	84.11		D. Impact pillar	11	73.27	
1st sub-pillar: Individuals	1	79.88		1st sub-pillar: Economy	3	65.35	
2.1.1 Mobile broadband internet traffic within the country	15	44.36		4.1.1 High-tech and medium-high-tech manufacturing	7	70.83	
2.1.2 ICT skills in the education system	12	81.92		4.1.2 High-tech exports	6	64.53	
2.1.3 Use of virtual social networks	4	87.29	•	4.1.3 PCT patent applications	2	98.56	•
2.1.4 Tertiary enrollment	4	67.32	•	4.1.4 Domestic market size	14	76.85	
2.1.5 Adult literacy rate	23	98.36		4.1.5 Prevalence of gig economy	20	68.31	
2.1.6 Al talent concentration	1	100.00	•	4.1.6 ICT services exports	67	13.03	
2nd sub-pillar: Businesses	1	82.85		2nd sub-pillar: Quality of Life	40	75.23	
2.2.1 Firms with website	33	69.79		4.2.1 Happiness	58	66.91	
2.2.2 GERD financed by business enterprise	4	94.16	•	4.2.2 Freedom to make life choices	100	58.07	0
2.2.3 Knowledge intensive employment	30	60.01		4.2.3 Income inequality	27	79.40	
2.2.4 Annual investment in telecommunication services	10	90.28		4.2.4 Healthy life expectancy at birth	3	96.53	•
2.2.5 GERD performed by business enterprise	1	100.00	•	3rd sub-pillar: SDG Contribution	26	79.22	
3rd sub-pillar: Governments	1	89.59		4.3.1 SDG 3: Good Health and Well-Being	6	96.29	
2.3.1 Government online services	3	98.08	•	4.3.2 SDG 4: Quality Education	6	75.76	
2.3.2 Publication and use of open data	4	94.12		4.3.3 SDG 5: Women's economic opportunity	60	78.76	
2.3.3 Government promotion of investment in emerging tech	10	77.46		4.3.4 SDG 7: Affordable and Clean Energy	101	60.48	0
2.3.4 R&D expenditure by governments and higher education	2	88.70	•	4.3.5 SDG 11: Sustainable Cities and Communities	29	84.81	

NOTE: • a strength and ○ a weakness.



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