

Network Readiness Index 2022 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 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.

Individuals Access • Content • Technology People **Businesses Future** Governments **Technologies** Readiness Index **Economy** Trust • Regulation • Governance Impact Quality of Life Inclusion • Contribution

Figure 1: The NRI 2022 model

Global NRI position of Korea, Rep.

Korea, Rep. ranks 9th out of the 131 economies included in the NRI 2022 (Figure 2). Its main strength relates to People. The greatest scope for improvement, meanwhile, concerns Governance.

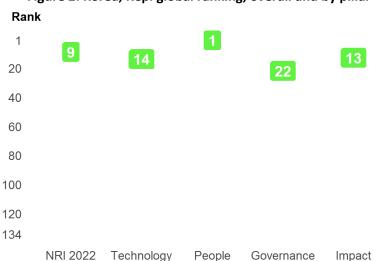


Figure 2: Korea, Rep. global ranking, overall and by pillar



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 SDG Contribution, Regulation and Quality of Life sub-pillars.

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

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Sub-pillar	Rank	Sub-pillar	Rank
Individuals	1	Access	13
Businesses	1	Inclusion	20
Governments	2	Content	25
Economy	2	SDG Contribution	28
Future Technologies	7	Regulation	39
Trust	12	Quality of Life	39

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.

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. 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

Republic of Korea

High-income countries

Korea, Rep. is ranked 9th 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

Rel

Technology
Impact

Governance

People

Governance

People

Feople

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

Republic of Korea
Asia & Pacific

Dimension	Korea, Rep.	High-income countries	Asia & Pacific
NRI	75.95	66.21	55.18
Technology	66.33	60.28	51.78
People	81.58	58.83	50.21
Governance	80.01	76.89	59.66
Impact	75.89	68.86	59.07



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: Strongest and weakest indicators of Korea, Rep.

Strongest indicators	Rank	Weakest indicators	Rank
1.1.6 Internet access in schools	1	4.1.6 ICT services exports	82
1.3.3 Robot density	1	4.2.2 Freedom to make life choices	99
2.1.6 Al talent concentration	1	4.3.4 SDG 7: Affordable and Clean Energy	100
2.2.5 GERD performed by business enterprise	1	3.2.2 ICT regulatory environment	101
2.3.1 Government online services	1		
3.2.4 E-commerce legislation	1		
3.3.1 E-Participation	1		
4.1.3 PCT patent applications	2		
4.2.4 Healthy life expectancy at birth	3		
2.1.4 Tertiary enrollment	4		
2.2.2 GERD financed by business enterprise	4		
2.3.2 Publication and use of open data	4		
4.3.1 SDG 3: Good Health and Well-Being	6		



NRI 2022 At-A-Glance: Korea, Rep.

Network Readiness Index

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
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A. Technology pillar	14	66.33	C. Governance pillar	22	80.01
1st sub-pillar: Access	13	79.56	1st sub-pillar: Trust	12	83.49
2nd sub-pillar: Content	25	55.82	2nd sub-pillar: Regulation	39	74.10
3rd sub-pillar: Future Technologies	7	63.59	3rd sub-pillar: Inclusion	20	82.43
B. People pillar	1	81.58	D. Impact pillar	13	75.89
1st sub-pillar: Individuals	1	75.03	1st sub-pillar: Economy	2	70.99
2nd sub-pillar: Businesses	1	82.69	2nd sub-pillar: Quality of Life	39	76.00
3rd sub-pillar: Governments	2	87.03	3rd sub-pillar: SDG Contribution	28	80.67

Rank: 9 (out of 131) Score: 75.95

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	14	66.33	C. Governance pillar	22	80.01
1st sub-pillar: Access	13	79.56	1st sub-pillar: Trust	12	83.49
1.1.1 Mobile tariffs	50	68.99	3.1.1 Secure Internet servers	47	69.34
1.1.2 Handset prices	42	68.18	3.1.2 Cybersecurity	5	98.49
1.1.3 FTTH/building Internet subscriptions	11	59.30	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	NA	NA
1.1.5 International Internet bandwidth	21	80.92	2nd sub-pillar: Regulation	39	74.10
1.1.6 Internet access in schools	1	100.00 •	3.2.1 Regulatory quality	32	68.53
2nd sub-pillar: Content	25	55.82	3.2.2 ICT regulatory environment	101	66.67 0
1.2.1 GitHub commits	28	36.21	3.2.3 Regulation of emerging technologies	32	64.21
1.2.2 Internet domain registrations	52	6.57	3.2.4 E-commerce legislation	1	100.00 •
1.2.3 Mobile apps development	25	94.17	3.2.5 Privacy protection by law content	52	71.07
1.2.4 Al scientific publications	8	86.34	3rd sub-pillar: Inclusion	20	82.43
3rd sub-pillar: Future Technologies	7	63.59	3.3.1 E-Participation	1	100.00 •
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
1.3.3 Robot density	1	100.00 •	3.3.4 Gender gap in Internet use	45	71.07
1.3.4 Computer software spending	67	19.47	3.3.5 Rural gap in use of digital payments	56	66.67



Indicator	Rank	Score	Indicator	Rank	Score	
B. People pillar	1	81.58	D. Impact pillar	13	75.89	
1st sub-pillar: Individuals	1	75.03	1st sub-pillar: Economy	2	70.99	
2.1.1 Mobile broadband internet traffic within the country	13	42.30	4.1.1 High-tech and medium-high-tech manufacturing	8	74.70	
2.1.2 ICT skills in the education system	11	81.36	4.1.2 High-tech exports	6	87.66	
2.1.3 Use of virtual social networks	9	85.59	4.1.3 PCT patent applications	2	96.89	•
2.1.4 Tertiary enrollment	4	65.88 •	4.1.4 Domestic market size	14	76.66	
2.1.5 Adult literacy rate	NA	NA	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	82	21.73	0
2nd sub-pillar: Businesses	1	82.69	2nd sub-pillar: Quality of Life	39	76.00	
2.2.1 Firms with website	37	69.31	4.2.1 Happiness	49	70.05	
2.2.2 GERD financed by business enterprise	4	94.72	4.2.2 Freedom to make life choices	99	58.00	0
2.2.3 Knowledge intensive employment	32	60.11	4.2.3 Income inequality	29	79.40	
2.2.4 Annual investment in telecommunication services	11	89.33	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	28	80.67	
3rd sub-pillar: Governments	2	87.03	4.3.1 SDG 3: Good Health and Well-Being	6	96.29	•
2.3.1 Government online services	1	100.00 •	4.3.2 SDG 4: Quality Education	6	76.64	
2.3.2 Publication and use of open data	4	94.12 •	4.3.3 SDG 5: Women's economic opportunity	55	78.95	
2.3.3 Government promotion of investment in emerging tech	10	77.45	4.3.4 SDG 7: Affordable and Clean Energy	100	66.67	0
2.3.4 R&D expenditure by governments and higher education	8	76.53	4.3.5 SDG 11: Sustainable Cities and Communities	29	84.81	

NOTE: ● a strength and o a weakness.

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