

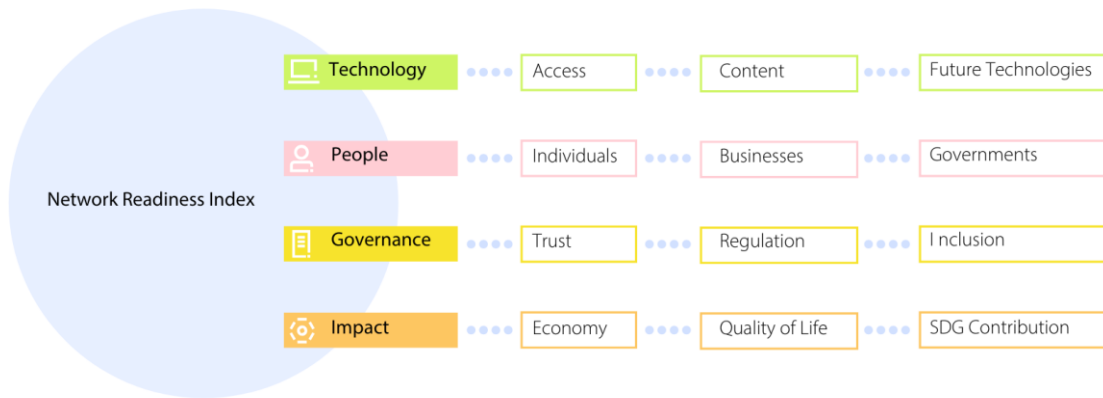
Network Readiness Index 2024



Finland

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 2024 the NRI Report maps the network-based readiness landscape of 133 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 54 variables.

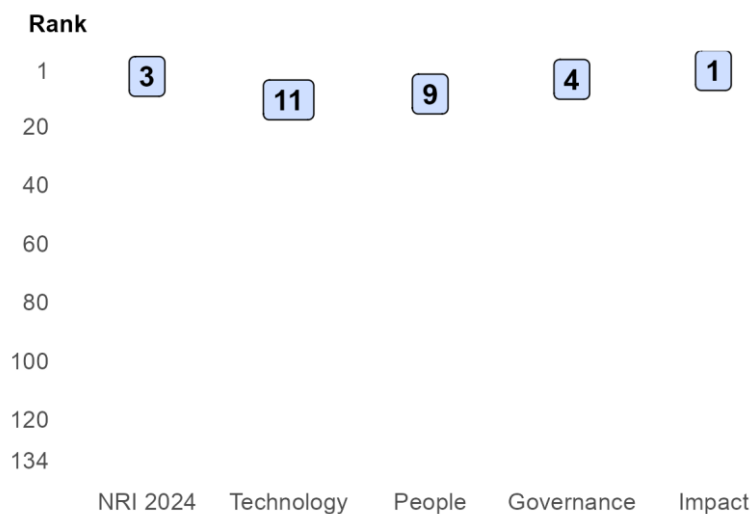
Figure 1: The NRI 2024 model



Global NRI position of Finland

Finland ranks 3rd out of the 133 economies included in the NRI 2024 (Figure 2). Its main strength relates to Impact. The greatest scope for improvement, meanwhile, concerns Technology.

Figure 2: Finland 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 Finland relate to Quality of Life, Economy and Trust, among others (Table 1). More could be done, though, to improve the economy's performances in the Access, SDG Contribution and Individuals sub-pillars.

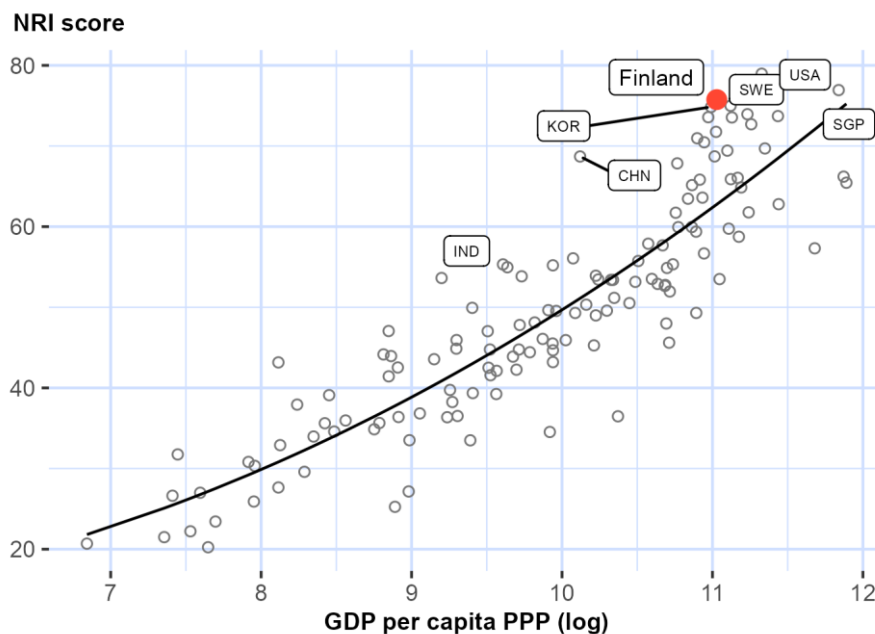
Table 1: Finland rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Quality of Life	1	Future Technologies	9
Economy	3	Businesses	11
Trust	4	Content	12
Regulation	4	Access	19
Inclusion	6	SDG Contribution	24
Governments	7	Individuals	27

NRI score and income

Figure 3 shows the position of Finland 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, Finland 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), FIN = Finland (3), SWE = Sweden (4), KOR = Republic of Korea (5), CHN = China (17), and IND = India (49). Finland belongs to the group of high-income countries, where the best performer is United States of America (USA). The top performer of its region-Europe-is Finland (FIN).

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Performance against its income group and region

High-income countries

Finland is ranked 3rd 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 has a higher score than the average of high-income countries in all of them.

Europe

Finland is ranked 1st within Europe (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.

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

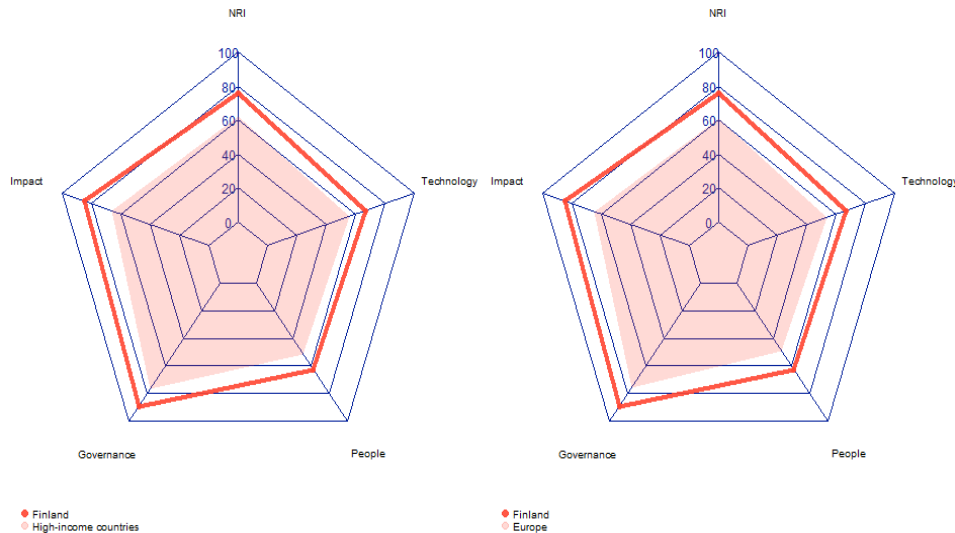


Table 2: Finland scores vs. averages of its income group and region, overall and by pillar

Dimension	Finland	High-income countries	Europe
NRI	75.76	62.50	60.84
Technology	66.63	55.84	53.51
People	62.58	51.81	49.45
Governance	89.37	76.61	75.76
Impact	84.44	65.73	64.63

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Strongest and weakest indicators

The indicators where Finland performs particularly well include 1.1.2 Handset prices, 1.1.6 Internet access in schools, and 2.1.2 ICT skills in the education system (Table 3). By contrast, the economy's weakest indicators include 4.3.4 SDG 7: Affordable and Clean Energy, 1.1.5 International Internet bandwidth, and 1.1.3 FTTH/building Internet subscriptions.

Table 3: Highlight of Strengths and Opportunities for Finland

Strongest indicators	Rank	Weakest indicators	Rank
1.1.2 Handset prices	1	1.3.3 Robot density	21
1.1.6 Internet access in schools	1	2.2.3 Annual investment in telecommunication services	53
2.1.2 ICT skills in the education system	1	1.2.4 AI scientific publications	55
2.2.1 Firms with website	1	4.1.2 Domestic market scale	58
3.2.4 E-commerce legislation	1	3.3.4 Gender gap in Internet use	59
4.1.1 ICT patent applications	1	1.1.3 FTTH/building Internet subscriptions	68
4.2.1 Happiness	1	1.1.5 International Internet bandwidth	89
2.3.1 Government online services	2	4.3.4 SDG 7: Affordable and Clean Energy	95
3.2.3 Regulation of emerging technologies	2		
3.1.3 Online access to financial account	3		
3.2.2 ICT regulatory environment	3		
1.2.1 GitHub commits	4		
4.2.2 Freedom to make life choices	4		
4.3.5 SDG 11: Sustainable Cities and Communities	5		
3.2.1 Regulatory quality	6		
4.1.4 ICT services exports	6		

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

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NRI 2024 At-A-Glance: Finland

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Rank: 3 (out of 133)

Score: 75.76

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	11	66.63	C. Governance pillar	4	89.37
1st sub-pillar: Access	19	79.35	1st sub-pillar: Trust	4	90.60
2nd sub-pillar: Content	12	54.90	2nd sub-pillar: Regulation	4	92.48
3rd sub-pillar: Future Technologies	9	65.64	3rd sub-pillar: Inclusion	6	85.03
B. People pillar	9	62.58	D. Impact pillar	1	84.44
1st sub-pillar: Individuals	27	57.76	1st sub-pillar: Economy	3	75.91
2nd sub-pillar: Businesses	11	59.30	2nd sub-pillar: Quality of Life	1	95.77
3rd sub-pillar: Governments	7	70.69	3rd sub-pillar: SDG Contribution	24	81.64

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	11	66.63	C. Governance pillar	4	89.37
<i>1st sub-pillar: Access</i>	19	79.35	<i>1st sub-pillar: Trust</i>	4	90.60
1.1.1 Mobile tariffs	32	79.01	3.1.1 Secure Internet servers	9	90.25
1.1.2 Handset prices	1	100.00	• 3.1.2 Cybersecurity	29	95.75
1.1.3 FTTH/building Internet subscriptions	68	30.14	○ 3.1.3 Online access to financial account	3	95.29
1.1.4 Population covered by at least a 3G mobile network	24	99.88	3.1.4 Internet shopping	13	81.10
1.1.5 International Internet bandwidth	89	67.05	○ <i>2nd sub-pillar: Regulation</i>	4	92.48
1.1.6 Internet access in schools	1	100.00	• 3.2.1 Regulatory quality	6	89.78
<i>2nd sub-pillar: Content</i>	12	54.90	3.2.2 ICT regulatory environment	3	97.62
1.2.1 GitHub commits	4	95.49	• 3.2.3 Regulation of emerging technologies	2	94.98
1.2.2 Internet domain registrations	23	35.57	3.2.4 E-commerce legislation	1	100.00
1.2.3 Mobile apps development	9	78.40	3.2.5 Privacy protection by law content	39	80.04
1.2.4 AI scientific publications	55	10.16	○ <i>3rd sub-pillar: Inclusion</i>	6	85.03
<i>3rd sub-pillar: Future Technologies</i>	9	65.64	3.3.1 E-Participation	6	95.34
1.3.1 Adoption of emerging technologies	7	96.07	3.3.2 Socioeconomic gap in use of digital payments	22	95.97
1.3.2 Investment in emerging technologies	5	87.75	3.3.3 Availability of local online content	13	90.14
1.3.3 Robot density	21	22.35	○ 3.3.4 Gender gap in Internet use	59	66.94
1.3.4 Computer software spending	18	56.38	3.3.5 Rural gap in use of digital payments	13	76.73

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Indicator	Rank	Score	Indicator	Rank	Score
B. People pillar	9	62.58	D. Impact pillar	1	84.44
<i>1st sub-pillar: Individuals</i>	27	57.76	<i>1st sub-pillar: Economy</i>	3	75.91
2.1.1 Mobile broadband internet traffic within the country	32	30.15	4.1.1 ICT patent applications	1	100.00 ●
2.1.2 ICT skills in the education system	1	100.00 ●	4.1.2 Domestic market scale	58	55.83 ○
2.1.3 Use of virtual social networks	18	70.41	4.1.3 Prevalence of gig economy	23	64.83
2.1.4 Adult literacy rate	NA	NA	4.1.4 ICT services exports	6	83.00 ●
2.1.5 AI talent concentration	13	30.47	<i>2nd sub-pillar: Quality of Life</i>	1	95.77
<i>2nd sub-pillar: Businesses</i>	11	59.30	4.2.1 Happiness	1	100.00 ●
2.2.1 Firms with website	1	100.00 ●	4.2.2 Freedom to make life choices	4	96.37 ●
2.2.2 Number of venture capital deals invested in AI	11	40.52	4.2.3 Income inequality	11	90.75
2.2.3 Annual investment in telecommunication services	53	53.75 ○	4.2.4 Healthy life expectancy at birth	19	91.12
2.2.4 Public cloud computing market scale	24	42.93	<i>3rd sub-pillar: SDG Contribution</i>	24	81.64
<i>3rd sub-pillar: Governments</i>	7	70.69	4.3.1 SDG 3: Good Health and Well-Being	10	91.94
2.3.1 Government online services	2	98.15 ●	4.3.2 SDG 4: Quality Education	11	65.26
2.3.2 Data Capabilities	7	71.30	4.3.3 SDG 5: Women's economic opportunity	15	96.58
2.3.3 Government promotion of investment in emerging technologies	29	59.59	4.3.4 SDG 7: Affordable and Clean Energy	95	70.32 ○
2.3.4 R&D expenditure by governments and higher education	10	53.71	4.3.5 SDG 11: Sustainable Cities and Communities	5	96.88 ●

NOTE: ● a strength and ○ a weakness.

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