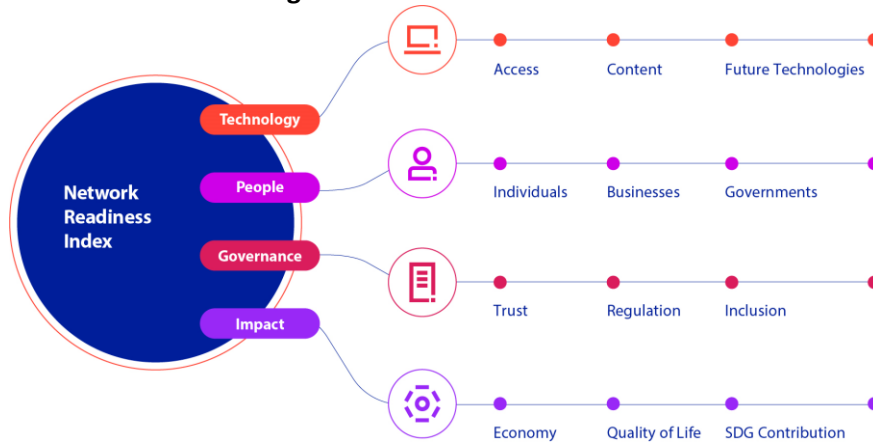




Sweden

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.

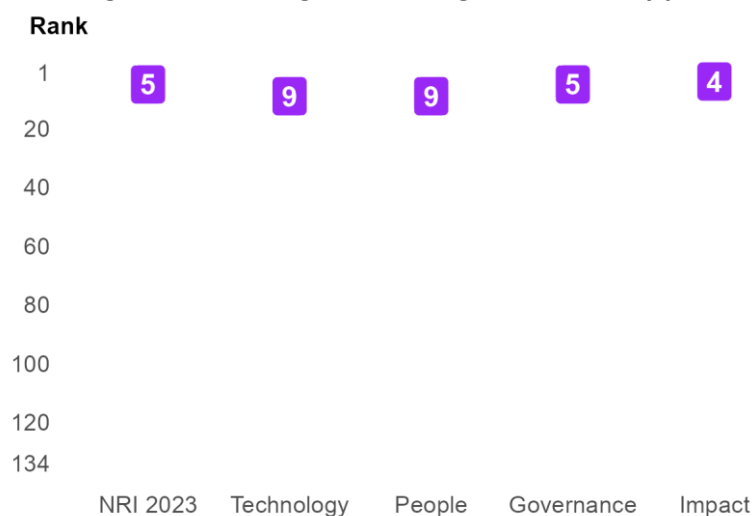
Figure 1: The NRI 2023 model



Global NRI position of Sweden

Sweden ranks 5th out of the 134 economies included in the NRI 2023 (Figure 2). Its main strength relates to Impact. The greatest scope for improvement, meanwhile, concerns Technology and People.

Figure 2: Sweden 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 Sweden relate to Businesses, Future Technologies and Quality of Life, among others (Table 1). More could be done, though, to improve the economy's performances in the Inclusion, Access and Individuals sub-pillars.

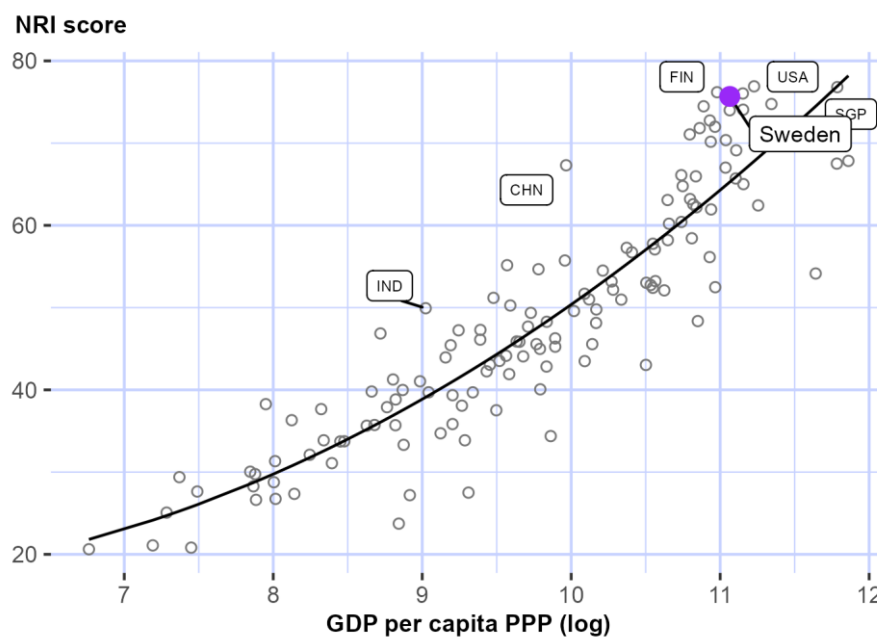
Table 1: Sweden rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Businesses	2	Economy	7
Future Technologies	3	Governments	9
Quality of Life	4	Content	11
SDG Contribution	4	Inclusion	11
Trust	5	Access	35
Regulation	6	Individuals	52

NRI score and income

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

Sweden is ranked 5th 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 eleven of the twelve sub-pillars: Access, Content, Future Technologies, Businesses, Governments, Trust, Regulation, Inclusion, Economy, Quality of Life and SDG Contribution.

Europe

Sweden is ranked 3rd 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 Sweden against its income group and region, overall and by pillar

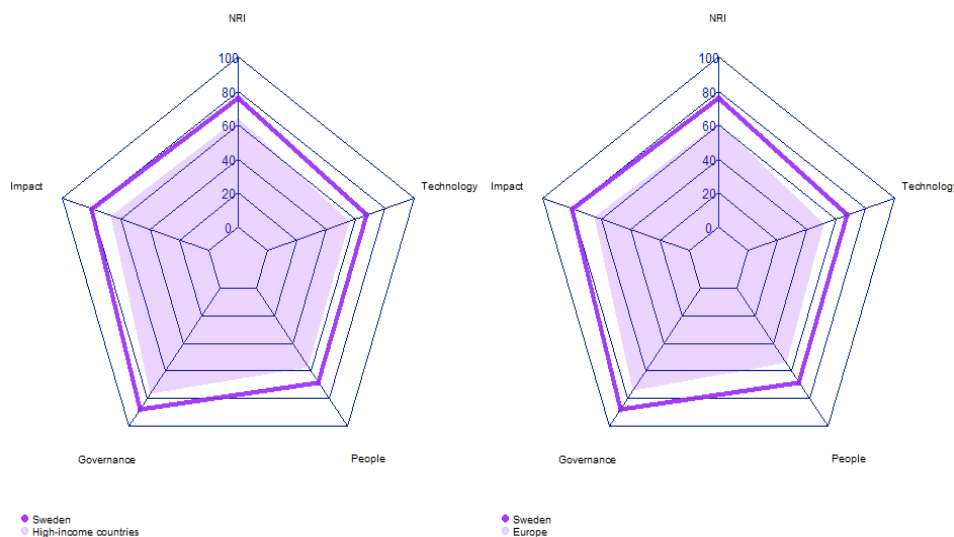


Table 2: Sweden scores vs. averages of its income group and region, overall and by pillar

Dimension	Sweden	High-income countries	Europe
NRI	75.68	64.07	61.25
Technology	67.21	55.76	51.90
People	68.23	56.99	54.16
Governance	87.74	76.81	74.33
Impact	79.52	66.73	64.61

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Strongest and weakest indicators

The indicators where Sweden performs particularly well include 1.1.4 Population covered by at least a 3G mobile network, 3.2.4 E-commerce legislation, and 3.3.3 Availability of local online content (Table 3). By contrast, the economy's weakest indicators include 1.1.5 International Internet bandwidth, 4.3.4 SDG 7: Affordable and Clean Energy, and 3.2.2 ICT regulatory environment.

Table 3: Highlight of Strengths and Opportunities for Sweden

Strongest indicators	Rank	Weakest indicators	Rank
1.1.4 Population covered by at least a 3G mobile network	1	2.1.6 AI talent concentration	21
3.2.4 E-commerce legislation	1	3.2.2 ICT regulatory environment	45
3.3.3 Availability of local online content	1	4.3.4 SDG 7: Affordable and Clean Energy	66
4.3.3 SDG 5: Women's economic opportunity	1	1.1.5 International Internet bandwidth	70
1.3.2 Investment in emerging technologies	3		
2.2.3 Knowledge intensive employment	3		
4.3.1 SDG 3: Good Health and Well-Being	3		
4.3.5 SDG 11: Sustainable Cities and Communities	3		
2.3.4 R&D expenditure by governments and higher education	4		
3.1.3 Online access to financial account	4		
3.1.4 Internet shopping	4		
4.1.3 PCT patent applications	4		
4.2.1 Happiness	5		

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

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NRI 2023 At-A-Glance: Sweden

Network Readiness Index

Rank: 5 (out of 134)

Score: 75.68

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	9	67.21	C. Governance pillar	5	87.74
1st sub-pillar: Access	35	73.75	1st sub-pillar: Trust	5	90.26
2nd sub-pillar: Content	11	55.42	2nd sub-pillar: Regulation	6	89.29
3rd sub-pillar: Future Technologies	3	72.45	3rd sub-pillar: Inclusion	11	83.68
B. People pillar	9	68.23	D. Impact pillar	4	79.52
1st sub-pillar: Individuals	52	50.68	1st sub-pillar: Economy	7	59.79
2nd sub-pillar: Businesses	2	81.23	2nd sub-pillar: Quality of Life	4	91.71
3rd sub-pillar: Governments	9	72.80	3rd sub-pillar: SDG Contribution	4	87.07

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	9	67.21	C. Governance pillar	5	87.74
1st sub-pillar: Access	35	73.75	1st sub-pillar: Trust	5	90.26
1.1.1 Mobile tariffs	13	88.33	3.1.1 Secure Internet servers	24	82.96
1.1.2 Handset prices	31	70.26	3.1.2 Cybersecurity	33	94.45
1.1.3 FTTH/building Internet subscriptions	34	39.67	3.1.3 Online access to financial account	4	93.08
1.1.4 Population covered by at least a 3G mobile network	1	100.00	3.1.4 Internet shopping	4	90.56
1.1.5 International Internet bandwidth	70	70.50	2nd sub-pillar: Regulation	6	89.29
1.1.6 Internet access in schools	NA	NA	3.2.1 Regulatory quality	8	89.19
2nd sub-pillar: Content	11	55.42	3.2.2 ICT regulatory environment	45	87.06
1.2.1 GitHub commits	12	70.22	3.2.3 Regulation of emerging technologies	15	79.48
1.2.2 Internet domain registrations	14	56.82	3.2.4 E-commerce legislation	1	100.00
1.2.3 Mobile apps development	10	80.43	3.2.5 Privacy protection by law content	9	90.74
1.2.4 AI scientific publications	36	14.23	3rd sub-pillar: Inclusion	11	83.68
3rd sub-pillar: Future Technologies	3	72.45	3.3.1 E-Participation	32	72.10
1.3.1 Adoption of emerging technologies	5	96.31	3.3.2 Socioeconomic gap in use of digital payments	16	96.66
1.3.2 Investment in emerging technologies	3	92.00	3.3.3 Availability of local online content	1	100.00
1.3.3 Robot density	6	46.92	3.3.4 Gender gap in Internet use	18	73.65

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Indicator	Rank	Score	Indicator	Rank	Score
1.3.4 Computer software spending	19	54.56	3.3.5 Rural gap in use of digital payments	20	75.98
B. People pillar	9	68.23	D. Impact pillar	4	79.52
<i>1st sub-pillar: Individuals</i>	52	50.68	<i>1st sub-pillar: Economy</i>	7	59.79
2.1.1 Mobile broadband internet traffic within the country	35	21.93	4.1.1 High-tech and medium-high-tech manufacturing	14	59.44
2.1.2 ICT skills in the education system	17	75.57	4.1.2 High-tech exports	37	25.02
2.1.3 Use of virtual social networks	23	77.71	4.1.3 PCT patent applications	4	90.47 ●
2.1.4 Tertiary enrollment	17	55.21	4.1.4 Domestic market size	38	63.26
2.1.5 Adult literacy rate	NA	NA	4.1.5 Prevalence of gig economy	18	68.90
2.1.6 AI talent concentration	21	22.96 ○	4.1.6 ICT services exports	15	51.62
<i>2nd sub-pillar: Businesses</i>	2	81.23	<i>2nd sub-pillar: Quality of Life</i>	4	91.71
2.2.1 Firms with website	5	93.91	4.2.1 Happiness	5	94.46 ●
2.2.2 GERD financed by business enterprise	13	77.21	4.2.2 Freedom to make life choices	7	94.02
2.2.3 Knowledge intensive employment	3	88.61 ●	4.2.3 Income inequality	16	85.68
2.2.4 Annual investment in telecommunication services	31	84.68	4.2.4 Healthy life expectancy at birth	11	92.69
2.2.5 GERD performed by business enterprise	6	61.73	<i>3rd sub-pillar: SDG Contribution</i>	4	87.07
<i>3rd sub-pillar: Governments</i>	9	72.80	4.3.1 SDG 3: Good Health and Well-Being	3	96.42 ●
2.3.1 Government online services	13	88.97	4.3.2 SDG 4: Quality Education	14	68.77
2.3.2 Publication and use of open data	14	70.59	4.3.3 SDG 5: Women's economic opportunity	1	100.00 ●
2.3.3 Government promotion of investment in emerging tech	17	71.42	4.3.4 SDG 7: Affordable and Clean Energy	66	72.18 ○
2.3.4 R&D expenditure by governments and higher education	4	60.21 ●	4.3.5 SDG 11: Sustainable Cities and Communities	3	97.98 ●

NOTE: ● a strength and ○ a weakness.

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