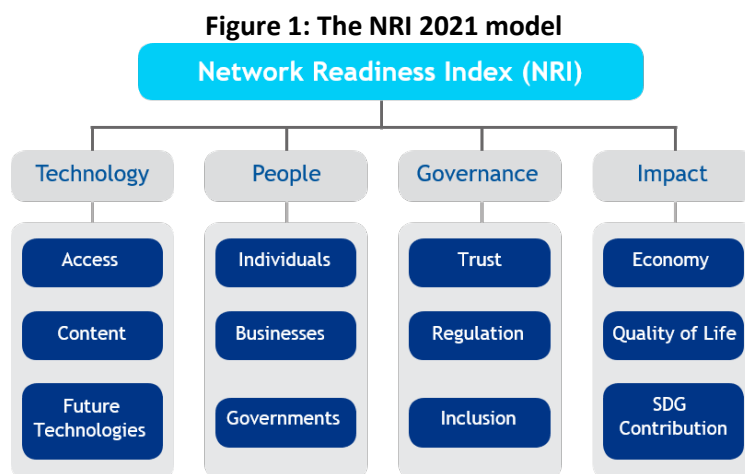


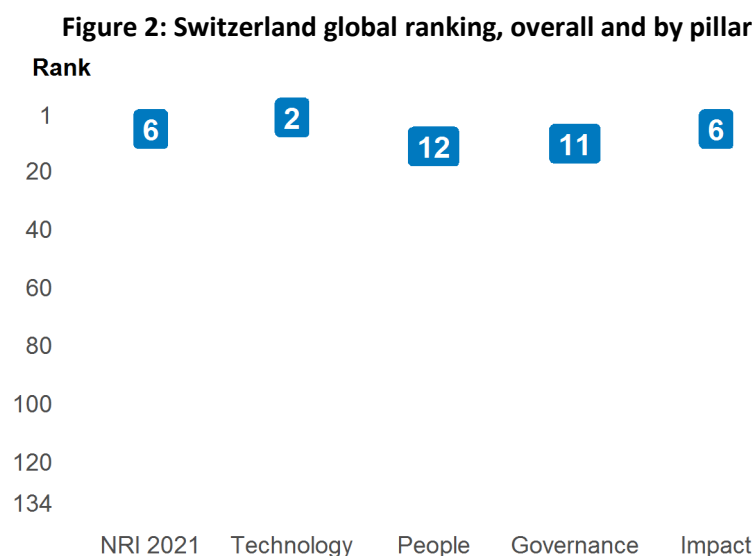
Network Readiness Index 2021 Switzerland

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 2021 the NRI Report maps the network-based readiness landscape of 130 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 60 variables.



Global NRI position of Switzerland

Switzerland ranks 6th out of the 130 economies included in the NRI 2021 (Figure 2). Its main strength relates to Technology. The greatest scope for improvement, meanwhile, concerns People.



Performance at sub-pillar level

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

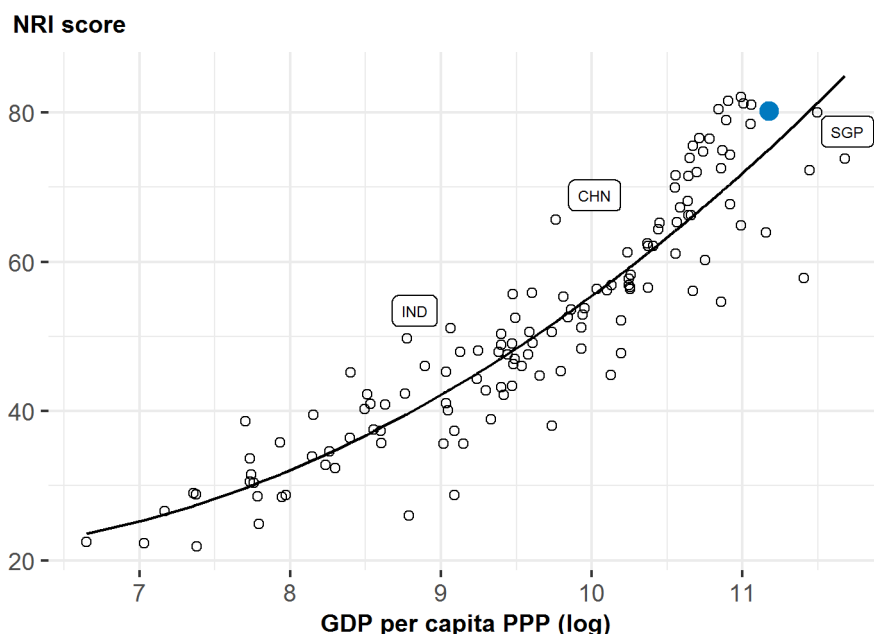
Table 1: Switzerland rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Content	1	Quality of Life	8
Regulation	3	SDG Contribution	8
Businesses	5	Inclusion	15
Future Technologies	6	Trust	16
Economy	7	Governments	17
Access	8	Individuals	35

NRI score and income

Figure 3 shows the position of Switzerland 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, Switzerland 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: NLD = Netherlands (rank: 1), SWE = Sweden (2), DNK = Denmark (3), CHN = China (29), IND = India (67). USA is ranked 4th. Switzerland belongs to the group of high-income countries, where the best performer is Netherlands (NLD). The top performer of its region-Europe-is also Netherlands (NLD).

Performance against its income group and region

High-income countries

Switzerland is ranked 6th 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

Switzerland is ranked 5th 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 Switzerland against its income group and region, overall and by pillar



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

Dimension	Switzerland	High-income countries	Europe
NRI	80.20	67.45	65.45
Technology	82.96	62.99	59.78
People	72.81	62.65	60.83
Governance	84.84	75.52	73.31
Impact	80.19	68.63	67.86

Strongest and weakest indicators

The indicators where Switzerland performs particularly well include 1.1.5 Population covered by at least a 3G mobile network, 1.1.7 Internet access in schools, and 1.2.1 GitHub commits (Table 3). By contrast, the economy's weakest indicators include 1.1.4 SMS sent by population 15-69, 3.3.4 Gender gap in Internet use, and 4.1.4 Growth rate of GDP per person engaged.

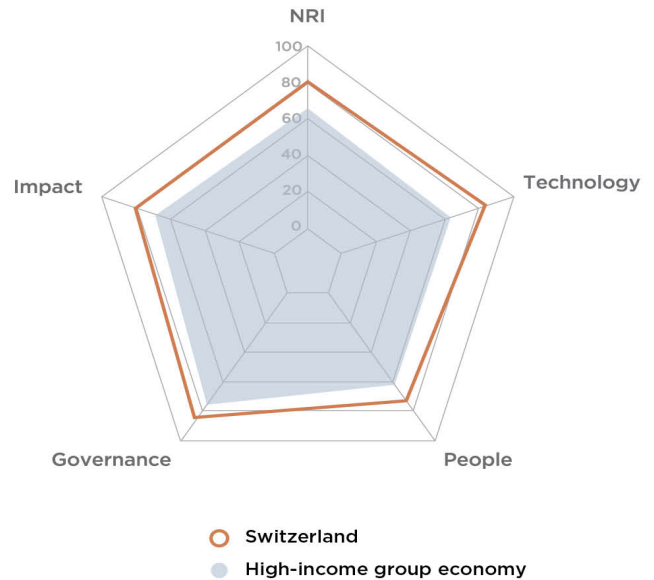
Table 3: Strongest and weakest indicators of Switzerland

Strongest indicators	Rank	Weakest indicators	Rank
1.1.5 Population covered by at least a 3G mobile network	1	2.1.1 Active mobile broadband subscriptions	60
1.1.7 Internet access in schools	1	3.3.4 Gender gap in Internet use	64
1.2.1 GitHub commits	1	4.1.4 Growth rate of GDP per person engaged	64
3.2.4 E-commerce legislation	1	1.1.4 SMS sent by population 15-69	79
1.3.4 Computer software spending	2		
4.1.1 High-tech and medium-high-tech manufacturing	2		
2.2.1 Firms with website	3		
4.1.3 PCT patent applications	3		
1.2.3 Internet domain registrations	4		
1.3.2 Investment in emerging technologies	4		
4.2.1 Happiness	4		
4.2.4 Healthy life expectancy at birth	4		
4.3.5 SDG 11: Sustainable Cities and Communities	4		

Switzerland

Network Readiness Index
 Rank (out of 130) **6** Score **80.20**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	2	82.96
1st sub-pillar: Access	8	89.79
2nd sub-pillar: Content	1	87.08
3rd sub-pillar: Future Technologies	6	72.02
B. People pillar	12	72.81
1st sub-pillar: Individuals	35	71.52
2nd sub-pillar: Businesses	5	76.07
3rd sub-pillar: Governments	17	70.83
C. Governance pillar	11	84.84
1st sub-pillar: Trust	16	79.53
2nd sub-pillar: Regulation	3	91.76
3rd sub-pillar: Inclusion	15	83.24
D. Impact pillar	6	80.19
1st sub-pillar: Economy	7	67.79
2nd sub-pillar: Quality of Life	8	89.14
3rd sub-pillar: SDG Contribution	8	83.63



Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	2	82.96
1st sub-pillar: Access	8	89.79
1.1.1 Mobile tariffs	11	88.00
1.1.2 Handset prices	13	84.25
1.1.3 Households with internet access	25	91.71
1.1.4 SMS sent by population 15-69	79	74.79 ○
1.1.5 Population covered by at least a 3G mobile network	1	100.00 ●
1.1.6 International Internet bandwidth	NA	NA
1.1.7 Internet access in schools	1	100.00 ●
2nd sub-pillar: Content	1	87.08
1.2.1 GitHub commits	1	100.00 ●
1.2.2 Wikipedia edits	16	80.23
1.2.3 Internet domain registrations	*	* ●
1.2.4 Mobile apps development	8	98.70
1.2.5 AI scientific publications	23	63.64
3rd sub-pillar: Future Technologies	6	72.02
1.3.1 Adoption of emerging technologies	6	93.09
1.3.2 Investment in emerging technologies	4	89.43 ●
1.3.3 Robot density	18	44.06
1.3.4 Computer software spending	2	61.49 ●
B. People pillar	12	72.81
1st sub-pillar: Individuals	35	71.52
2.1.1 Active mobile broadband subscriptions	60	75.72 ○
2.1.2 ICT skills	6	85.60
2.1.3 Use of virtual social networks	20	82.12
2.1.4 Tertiary enrollment	48	42.63
2.1.5 Adult literacy rate	NA	NA
2nd sub-pillar: Businesses	5	76.07
2.2.1 Firms with website	3	95.17 ●
2.2.2 GERD financed by business enterprise	6	84.85
2.2.3 Professionals	6	64.46
2.2.4 Technicians and associate professionals	15	73.98
2.2.5 Annual investment in telecommunication services	17	86.64
2.2.6 GERD performed by business enterprise	6	51.35
3rd sub-pillar: Governments	17	70.83
2.3.1 Government online services	36	82.42
2.3.2 Publication and use of open data	19	57.34
2.3.3 Government promotion of investment in emerging tech	27	57.51
2.3.4 R&D expenditure by governments and higher education	5	86.04

Indicator	Rank	Score
C. Governance pillar	11	84.84
1st sub-pillar: Trust	16	79.53
3.1.1 Secure Internet servers	5	93.32
3.1.2 Cybersecurity	50	86.74
3.1.3 Online access to financial account	19	66.23
3.1.4 Internet shopping	15	71.84
2nd sub-pillar: Regulation	3	91.76
3.2.1 Regulatory quality	12	86.46
3.2.2 ICT regulatory environment	20	93.53
3.2.3 Legal framework's adaptability to emerging technologies	5	85.14
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	5	93.67
3rd sub-pillar: Inclusion	15	83.24
3.3.1 E-Participation	18	90.13
3.3.2 Socioeconomic gap in use of digital payments	15	94.74
3.3.3 Availability of local online content	5	95.34
3.3.4 Gender gap in Internet use	64	60.46 ○
3.3.5 Rural gap in use of digital payments	27	75.53
D. Impact pillar	6	80.19
1st sub-pillar: Economy	7	67.79
4.1.1 High-tech and medium-high-tech manufacturing	2	89.60 ●
4.1.2 High-tech exports	24	56.91
4.1.3 PCT patent applications	3	97.75 ●
4.1.4 Growth rate of GDP per person engaged	64	58.48 ○
4.1.5 Prevalence of gig economy	27	66.09
4.1.6 ICT services exports	42	37.90
2nd sub-pillar: Quality of Life	8	89.14
4.2.1 Happiness	4	91.95 ●
4.2.2 Freedom to make life choices	22	92.00
4.2.3 Income inequality	40	77.86
4.2.4 Healthy life expectancy at birth	4	94.74 ●
3rd sub-pillar: SDG Contribution	8	83.63
4.3.1 SDG 3: Good Health and Well-Being	13	90.16
4.3.2 SDG 4: Quality Education	21	66.99
4.3.3 Females employed with advanced degrees	30	66.12
4.3.4 SDG 7: Affordable and Clean Energy	5	95.21
4.3.5 SDG 11: Sustainable Cities and Communities	4	99.68 ●

NOTE: * Indicates confidential data; ● a strength and ○ a weakness.

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