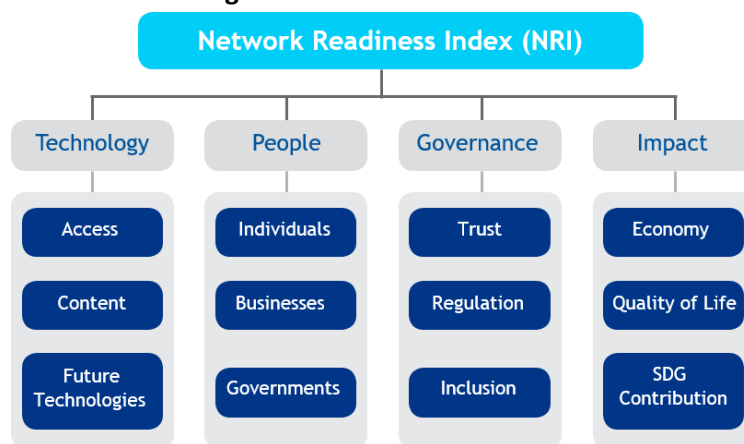


Network Readiness Index 2019

Italy

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 2019 the NRI Report maps the network-based readiness landscape of 121 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 62 variables.

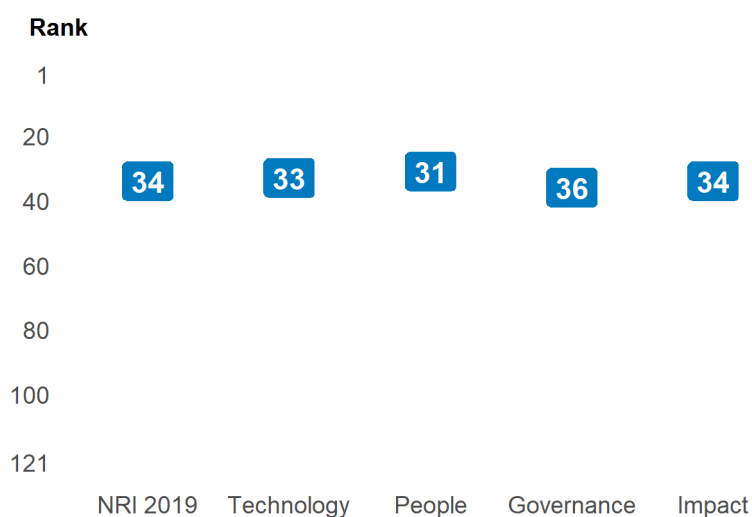
Figure 1: The NRI 2019 model



Global NRI position of Italy

Italy ranks 34th out of the 121 economies included in the NRI 2019 (Figure 2). Its main strength relates to People. The greatest scope for improvement, meanwhile, concerns Governance.

Figure 2: Italy global ranking, overall and by pillar



Performance at sub-pillar level

When it comes to sub-pillars, the strongest showings of Italy relate to Inclusion, Businesses and Future Technologies, among others (Table 1). More could be done, though, to improve the economy's performances in the Access, Individuals and Quality of Life sub-pillars.

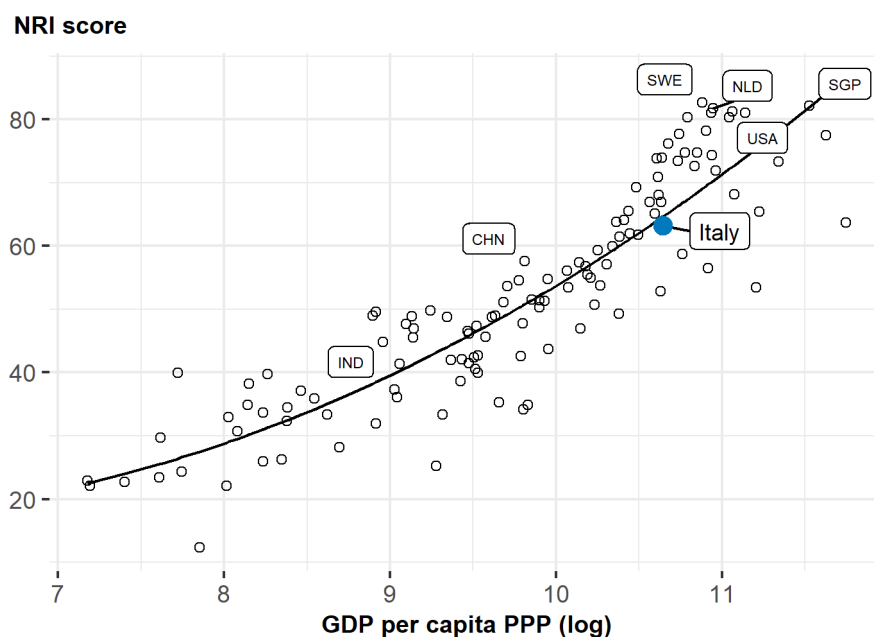
Table 1: Italy rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Inclusion	25	Content	35
Businesses	28	Trust	43
Future Technologies	31	Regulation	43
Economy	31	Access	45
SDG Contribution	31	Individuals	45
Governments	33	Quality of Life	50

NRI score and income

Figure 3 shows the position of Italy 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, Italy is slightly below the trend line, which suggests that its network readiness is more or less in line with what would be expected given its income level.

Figure 3: NRI score and GDP per capita PPP (log)



Note: SWE = Sweden (rank: 1), SGP = Singapore (2), NLD = Netherlands (3), CHN = China (41), IND = India (79). USA is ranked 8th. Italy belongs to the group of high-income countries, where the best performer is Sweden (SWE). The top performer of its region—Europe—is also Sweden (SWE).

Performance against its income group and region

High-income countries

Italy is ranked 33rd in the group of high-income countries (Figure 4, left panel). In terms of pillar performance, it has a score below the income group average in each of the four pillars. At the sub-pillar level, it outperforms high-income countries in two of the twelve sub-pillars: Inclusion and SDG Contribution.

Europe

Italy is ranked 23rd within Europe (Figure 4, right panel). It lags behind its region in each of the four pillars. With regard to sub-pillars, it outperforms the average in Europe in four of the twelve sub-pillars: Future Technology, Inclusion, Economy and SDG Contribution.

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



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

Dimension	Italy	High-income countries	Europe
NRI	63.21	68.12	65.20
Technology	61.06	66.07	63.08
People	56.26	61.07	57.50
Governance	71.58	77.07	73.99
Impact	63.93	68.29	66.24

Strongest and weakest indicators

The indicators where Italy performs particularly well include E-commerce legislation, ICT regulatory environment, and Use of clean fuels and technology (Table 3). By contrast, the economy's weakest indicators include Freedom to make life choices, Extent of staff training, and Legal framework's adaptability to digital business models.

Table 3: Top-ranked and bottom-ranked indicators of Italy

Strongest indicators	Rank	Weakest indicators	Rank
E-commerce legislation	1	Company investment in emerging technology	60
ICT regulatory environment	1	Internet access	61
Use of clean fuels and technology	1	Gender gap in internet use	68
Rural gap in use of digital payments	7	Online trust and safety	78
Healthy life expectancy at birth	7	International Internet bandwidth	79
Computer software spending	8	Government procurement of advanced technology products	82
Reading proficiency in schools	8	ICT use and government efficiency	83
Robot density	9	Legal framework's adaptability to digital business models	87
Government online services	9	Extent of staff training	95
Technicians and associate professionals	11	Freedom to make life choices	108

NRI 2019 At-A-Glance: Italy

Network Readiness Index

Rank: 34 (out of 121)

Score: 63.21

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	33	61.06	C. Governance pillar	36	71.58
1st sub-pillar: Access	45	75.63	1st sub-pillar: Trust	43	65.99
2nd sub-pillar: Content	35	61.17	2nd sub-pillar: Regulation	43	71.05
3rd sub-pillar: Future Technologies	31	46.38	3rd sub-pillar: Inclusion	25	77.70
B. People pillar	31	56.26	D. Impact pillar	34	63.93
1st sub-pillar: Individuals	45	60.11	1st sub-pillar: Economy	31	35.16
2nd sub-pillar: Businesses	28	50.67	2nd sub-pillar: Quality of Life	50	65.45
3rd sub-pillar: Governments	33	57.99	3rd sub-pillar: SDG Contribution	31	91.19

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar			C. Governance pillar		
<i>1st sub-pillar: Access</i>			<i>1st sub-pillar: Trust</i>		
1.1.1 Mobile tariffs	15	86.45	3.1.1 Rule of law	49	58.96
1.1.2 Handset prices	24	65.86	3.1.2 Software piracy rate	32	62.16
1.1.3 Internet access	61	69.81	3.1.3 Secure Internet servers	34	80.32
1.1.4 4G mobile network coverage	24	99.00	3.1.4 Cybersecurity	27	89.69
1.1.5 Fixed-broadband subscriptions	54	73.12	3.1.5 Online trust and safety	78	38.81
1.1.6 International Internet bandwidth	79	65.30	<i>2nd sub-pillar: Regulation</i>		
1.1.7 Internet access in schools	37	69.88	3.2.1 Regulatory quality	40	66.20
<i>2nd sub-pillar: Content</i>			3.2.2 Ease of doing business	54	75.39
1.2.1 Digital participation and content creation	*	*	3.2.3 Legal framework's adaptability to digital business models	87	33.18
1.2.2 Mobile apps development	30	79.04	3.2.4 E-commerce legislation	1	100.00
1.2.3 Intellectual property receipts	21	4.15	3.2.5 Social safety net protection	47	51.53
<i>3rd sub-pillar: Future Technologies</i>			3.2.6 ICT regulatory environment	1	100.00
1.3.1 Availability of latest technologies	46	62.26	<i>3rd sub-pillar: Inclusion</i>		
1.3.2 Company investment in emerging technology	60	36.10	3.3.1 E-Participation	15	94.91
1.3.3 Government procurement of advanced technology products	82	32.38	3.3.2 Socioeconomic gap in use of digital payments	22	92.79
1.3.4 ICT PCT patent applications	26	33.87	3.3.3 Availability of local online content	37	66.30
1.3.5 Computer software spending	8	54.55	3.3.4 Gender gap in internet use	68	54.74
1.3.6 Robot density	9	59.11	3.3.5 Rural gap in use of digital payments	7	79.77
B. People pillar			D. Impact pillar		
<i>1st sub-pillar: Individuals</i>			<i>1st sub-pillar: Economy</i>		
2.1.1 Internet users	53	71.88	4.1.1 Medium and high-tech industry	22	54.80
2.1.2 Active mobile-broadband subscriptions	36	36.28	4.1.2 High-tech exports	58	14.63
2.1.3 Use of virtual social networks	49	58.42	4.1.3 PCT patent applications	24	17.04
2.1.4 Tertiary enrolment	43	45.01	4.1.4 Labour productivity per employee	24	54.17
2.1.5 Adult literacy rate	15	98.73	<i>2nd sub-pillar: Quality of Life</i>		
2.1.6 ICT skills	38	50.36	4.2.1 Happiness	27	72.05
<i>2nd sub-pillar: Businesses</i>			4.2.2 Freedom to make life choices	108	28.11
2.2.1 Firms with website	33	68.51	4.2.3 Income inequality	49	72.63
2.2.2 Internet shopping	17	70.45	4.2.4 Healthy life expectancy at birth	7	89.01
2.2.3 Professionals	42	38.34	<i>3rd sub-pillar: SDG Contribution</i>		
2.2.4 Technicians and associate professionals	11	76.96	4.3.1 Access to basic services	34	98.82
2.2.5 Extent of staff training	95	28.53	4.3.2 Pollution	41	89.22
2.2.6 R&D expenditure by businesses	23	21.21	4.3.3 Road safety	17	90.94
<i>3rd sub-pillar: Governments</i>			4.3.4 Reading proficiency in schools	8	98.64
2.3.1 Government online services	9	94.62	4.3.5 Maths proficiency in schools	25	69.50
2.3.2 Publication and use of open data	20	55.93	4.3.6 Use of clean fuels and technology	1	100.00
2.3.3 ICT use and government efficiency	83	36.24			
2.3.4 R&D expenditure by governments and higher education	35	45.19			

* Confidential data

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