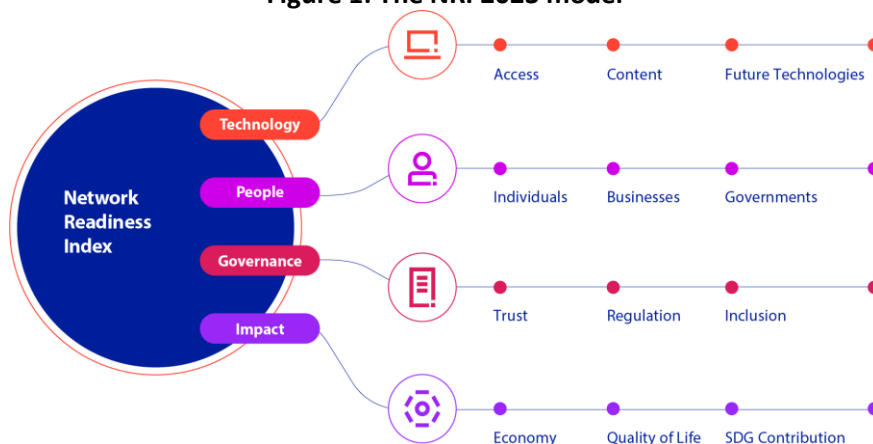




Türkiye

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.

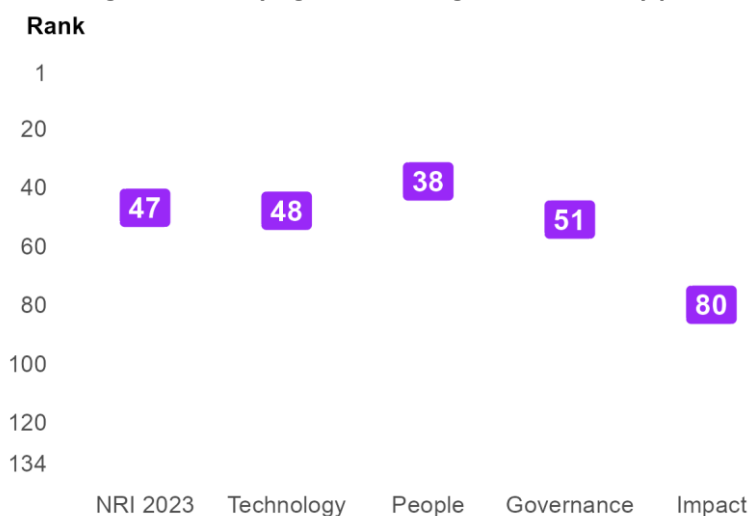
Figure 1: The NRI 2023 model



Global NRI position of Türkiye

Türkiye ranks 47th out of the 134 economies included in the NRI 2023 (Figure 2). Its main strength relates to People. The greatest scope for improvement, meanwhile, concerns Impact.

Figure 2: Türkiye global ranking, overall and by pillar



Network Readiness Index 2023



Performance at sub-pillar level

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

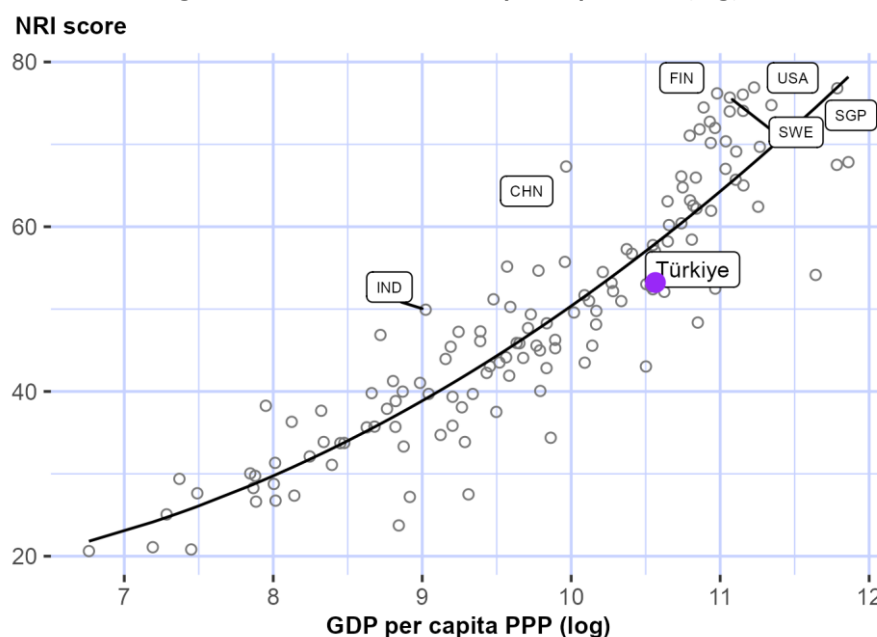
Table 1: Türkiye rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Individuals	19	Content	48
Access	29	Inclusion	56
SDG Contribution	36	Economy	59
Governments	44	Regulation	63
Businesses	45	Future Technologies	65
Trust	45	Quality of Life	117

NRI score and income

Figure 3 shows the position of Türkiye 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, Türkiye is well below the trend line, which suggests that it is underachieving and that one would expect it could raise its network readiness in view of 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). Türkiye belongs to the group of upper-middle-income countries, where the best performer is China (CHN). The top performer of its region-Europe-is Finland (FIN).



Performance against its income group and region

Upper-middle-income countries

Türkiye is ranked 6th in the group of upper-middle-income countries (Figure 4, left panel). In terms of pillar performance, it has a score higher than the income group average in three of the four pillars: NRI, Technology, People and Governance. At the sub-pillar level, it outperforms upper-middle-income countries in eleven of the twelve sub-pillars: Access, Content, Future Technologies, Individuals, Businesses, Governments, Trust, Regulation, Inclusion, Economy and SDG Contribution.

Europe

Türkiye is ranked 30th 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 two of the twelve sub-pillars: Access and Individuals.

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

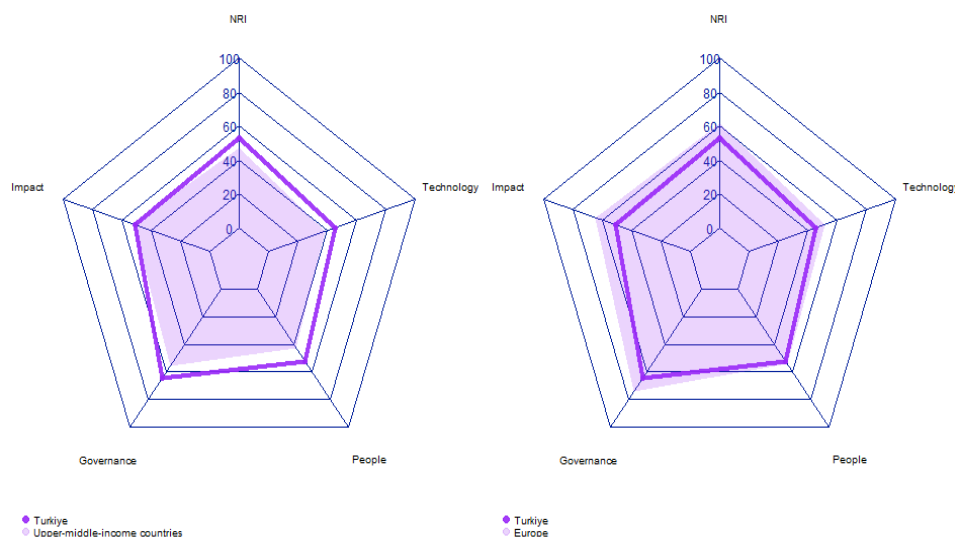


Table 2: Türkiye scores vs. averages of its income group and region, overall and by pillar

Dimension	Türkiye	Upper-middle-income countries	Europe
NRI	53.22	47.35	61.25
Technology	45.29	38.48	51.90
People	52.66	42.59	54.16
Governance	64.31	55.90	74.33
Impact	50.63	52.43	64.61

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Strongest and weakest indicators

The indicators where Türkiye performs particularly well include 3.2.4 E-commerce legislation, 2.1.4 Tertiary enrollment, and 1.1.1 Mobile tariffs (Table 3). By contrast, the economy's weakest indicators include 4.2.2 Freedom to make life choices, 1.3.2 Investment in emerging technologies, and 4.2.1 Happiness.

Table 3: Highlight of Strengths and Opportunities for Türkiye

Strongest indicators	Rank	Weakest indicators	Rank
3.2.4 E-commerce legislation	1	2.1.2 ICT skills in the education system	90
2.1.4 Tertiary enrollment	2	3.3.4 Gender gap in Internet use	90
1.1.1 Mobile tariffs	6	1.3.2 Investment in emerging technologies	105
2.1.1 Mobile broadband internet traffic within the country	11	4.2.1 Happiness	105
4.1.4 Domestic market size	11	4.2.2 Freedom to make life choices	129
2.2.2 GERD financed by business enterprise	12		
1.1.5 International Internet bandwidth	13		
3.1.2 Cybersecurity	16		
3.3.1 E-Participation	18		
4.3.4 SDG 7: Affordable and Clean Energy	19		
1.2.4 AI scientific publications	20		

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

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NRI 2023 At-A-Glance: Türkiye

Network Readiness Index

Rank: 47 (out of 134)

Score: 53.22

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	48	45.29	C. Governance pillar	51	64.31
1st sub-pillar: Access	29	74.78	1st sub-pillar: Trust	45	61.44
2nd sub-pillar: Content	48	28.99	2nd sub-pillar: Regulation	63	66.42
3rd sub-pillar: Future Technologies	65	32.10	3rd sub-pillar: Inclusion	56	65.07
B. People pillar	38	52.66	D. Impact pillar	80	50.63
1st sub-pillar: Individuals	19	57.93	1st sub-pillar: Economy	59	31.12
2nd sub-pillar: Businesses	45	52.86	2nd sub-pillar: Quality of Life	117	45.86
3rd sub-pillar: Governments	44	47.18	3rd sub-pillar: SDG Contribution	36	74.91

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	48	45.29	C. Governance pillar	51	64.31
1st sub-pillar: Access	29	74.78	1st sub-pillar: Trust	45	61.44
1.1.1 Mobile tariffs	6	95.77	3.1.1 Secure Internet servers	46	70.39
1.1.2 Handset prices	70	44.42	3.1.2 Cybersecurity	16	97.45
1.1.3 FTTH/building Internet subscriptions	19	48.55	3.1.3 Online access to financial account	42	43.39
1.1.4 Population covered by at least a 3G mobile network	44	99.92	3.1.4 Internet shopping	58	34.54
1.1.5 International Internet bandwidth	13	85.27	2nd sub-pillar: Regulation	63	66.42
1.1.6 Internet access in schools	NA	NA	3.2.1 Regulatory quality	76	47.75
2nd sub-pillar: Content	48	28.99	3.2.2 ICT regulatory environment	21	93.53
1.2.1 GitHub commits	54	9.75	3.2.3 Regulation of emerging technologies	66	43.64
1.2.2 Internet domain registrations	50	6.82	3.2.4 E-commerce legislation	1	100.00
1.2.3 Mobile apps development	22	75.84	3.2.5 Privacy protection by law content	104	47.18
1.2.4 AI scientific publications	20	23.53	3rd sub-pillar: Inclusion	56	65.07
3rd sub-pillar: Future Technologies	65	32.10	3.3.1 E-Participation	18	77.91
1.3.1 Adoption of emerging technologies	58	49.37	3.3.2 Socioeconomic gap in use of digital payments	85	61.83
1.3.2 Investment in emerging technologies	105	27.50	3.3.3 Availability of local online content	47	69.95

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Indicator	Rank	Score	Indicator	Rank	Score
1.3.3 Robot density	35	6.07	3.3.4 Gender gap in Internet use	90	55.90 ○
1.3.4 Computer software spending	23	45.46	3.3.5 Rural gap in use of digital payments	73	59.78
B. People pillar	38	52.66	D. Impact pillar	80	50.63
<i>1st sub-pillar: Individuals</i>	19	57.93	<i>1st sub-pillar: Economy</i>	59	31.12
2.1.1 Mobile broadband internet traffic within the country	11	45.12 ●	4.1.1 High-tech and medium-high-tech manufacturing	36	36.76
2.1.2 ICT skills in the education system	90	28.26 ○	4.1.2 High-tech exports	85	5.71
2.1.3 Use of virtual social networks	53	68.82	4.1.3 PCT patent applications	31	18.38
2.1.4 Tertiary enrollment	2	77.21 ●	4.1.4 Domestic market size	11	78.62 ●
2.1.5 Adult literacy rate	40	95.55	4.1.5 Prevalence of gig economy	66	39.83
2.1.6 AI talent concentration	10	32.62	4.1.6 ICT services exports	89	7.43
<i>2nd sub-pillar: Businesses</i>	45	52.86	<i>2nd sub-pillar: Quality of Life</i>	117	45.86
2.2.1 Firms with website	66	46.07	4.2.1 Happiness	105	37.46 ○
2.2.2 GERD financed by business enterprise	12	77.22 ●	4.2.2 Freedom to make life choices	129	11.98 ○
2.2.3 Knowledge intensive employment	56	34.54	4.2.3 Income inequality	87	53.02
2.2.4 Annual investment in telecommunication services	20	86.03	4.2.4 Healthy life expectancy at birth	43	80.97
2.2.5 GERD performed by business enterprise	32	20.45	<i>3rd sub-pillar: SDG Contribution</i>	36	74.91
<i>3rd sub-pillar: Governments</i>	44	47.18	4.3.1 SDG 3: Good Health and Well-Being	34	82.57
2.3.1 Government online services	24	84.53	4.3.2 SDG 4: Quality Education	40	52.41
2.3.2 Publication and use of open data	49	33.82	4.3.3 SDG 5: Women's economic opportunity	71	75.22
2.3.3 Government promotion of investment in emerging tech	39	50.19	4.3.4 SDG 7: Affordable and Clean Energy	19	81.29 ●
2.3.4 R&D expenditure by governments and higher education	35	20.19	4.3.5 SDG 11: Sustainable Cities and Communities	32	83.07

NOTE: ● a strength and ○ a weakness.



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