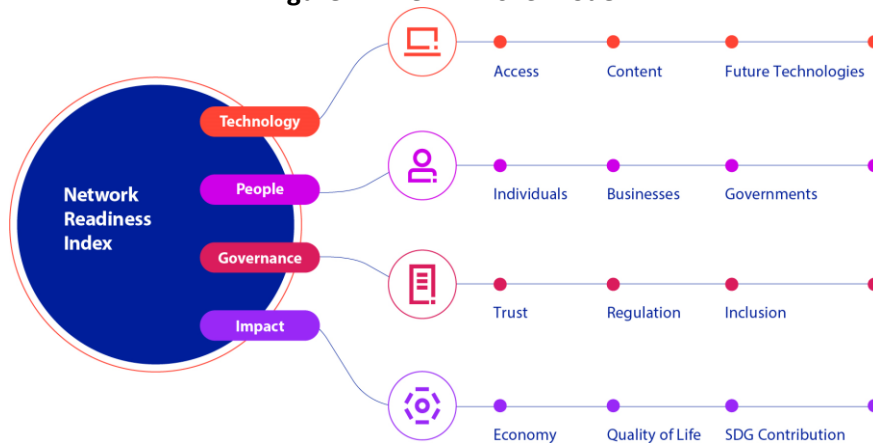# Morocco

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.
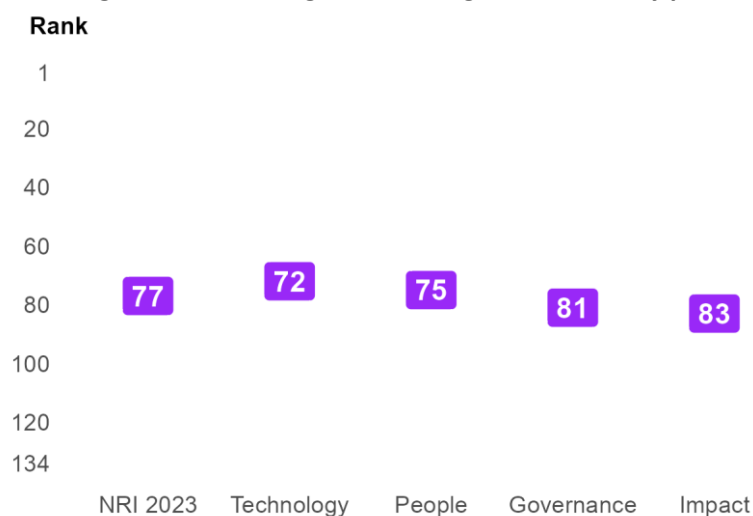
Figure 1: The NRI 2023 model

Global NRI position of Morocco

Morocco ranks 77th out of the 134 economies included in the NRI 2023 (Figure 2). Its main strength relates to Technology. The greatest scope for improvement, meanwhile, concerns Impact.

Figure 2: Morocco global ranking, overall and by pillar

Performance at sub-pillar level

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

Table 1: Morocco rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Regulation	37	Content	71
Economy	55	SDG Contribution	79
Businesses	57	Trust	80
Access	69	Governments	91
Future Technologies	69	Quality of Life	96
Individuals	69	Inclusion	117

NRI score and income

Figure 3 shows the position of Morocco 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, Morocco 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)
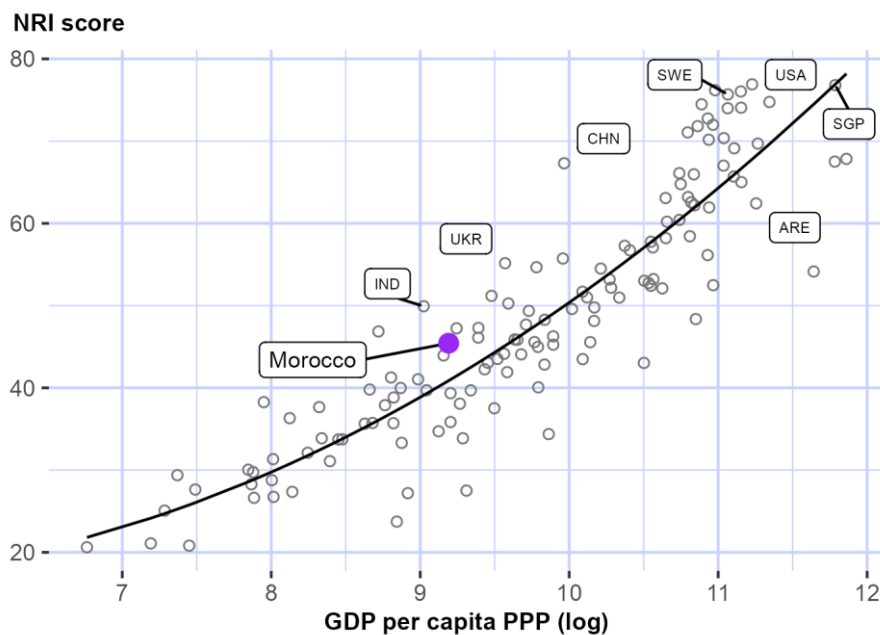
Note: USA = United States (rank: 1), SGP = Singapore (rank: 2), FIN = Finland (3), NLD = Netherlands (4), SWE = Sweden (5), CHN = China (20), IND = India (61). Morocco belongs to the group of lower-middle-income countries, where the best performer is Ukraine (UKR). The top performer of its region-Arab States-is United Arab Emirates (ARE).

Performance against its income group and region

Lower-middle-income countries
Morocco is ranked 7th in the group of lower-middle-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 lower-middle-income countries in eleven of the twelve sub-pillars: Access, Content, Future Technologies, Individuals, Businesses, Governments, Trust, Regulation, Economy, Quality of Life and SDG Contribution.

Arab States
Morocco is ranked 8th within Arab States (Figure 4, right panel). It has a score above the regional average in one of the four pillars: Impact. With regard to sub-pillars, it outperforms the average in Arab States in five of the twelve sub-pillars: Content, Businesses, Regulation, Economy and SDG Contribution.

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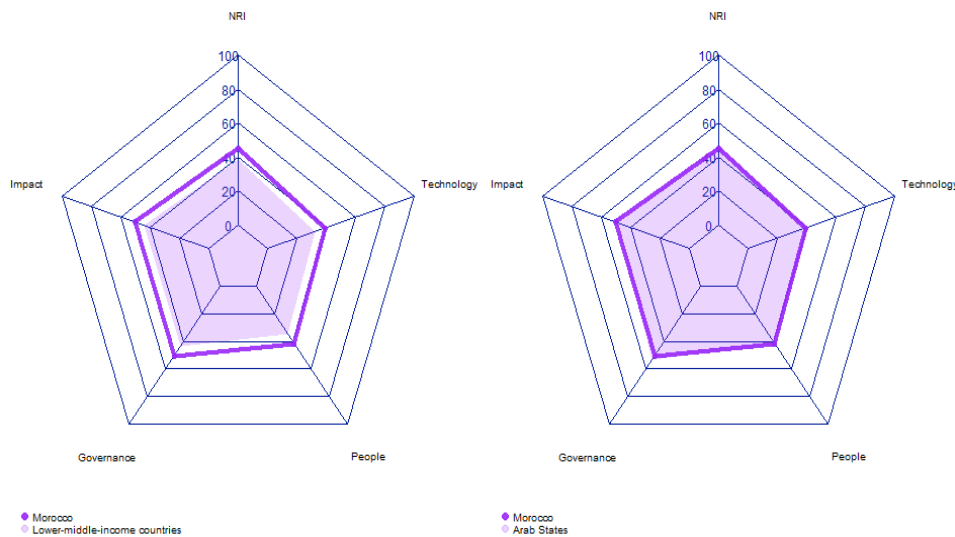

Table 2: Morocco scores vs. averages of its income group and region, overall and by pillar

Dimension	Morocco	Lower-middle-income countries	Arab States
NRI	45.43	38.41	46.59
Technology	39.20	32.12	41.17
People	41.59	34.38	42.66
Governance	50.46	43.27	53.45
Impact	50.47	43.89	49.08

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Strongest and weakest indicators

The indicators where Morocco performs particularly well include 3.2.4 E-commerce legislation, 1.1.5 International Internet bandwidth, and 4.1.1 High-tech and medium-high-tech manufacturing (Table 3). By contrast, the economy's weakest indicators include 3.3.5 Rural gap in use of digital payments, 3.1.3 Online access to financial account, 2.2.3 Knowledge intensive employment, and 3.3.1 E-Participation.

Table 3: Highlight of Strengths and Opportunities for Morocco

Strongest indicators	Rank	Weakest indicators	Rank
3.2.4 E-commerce legislation	1	4.3.2 SDG 4: Quality Education	72
1.1.5 International Internet bandwidth	21	2.2.3 Knowledge intensive employment	111
4.1.1 High-tech and medium-high-tech manufacturing	23	3.3.1 E-Participation	111
2.1.1 Mobile broadband internet traffic within the country	26	3.1.3 Online access to financial account	124
1.2.4 AI scientific publications	27	3.3.5 Rural gap in use of digital payments	126
4.1.6 ICT services exports	29		
4.3.4 SDG 7: Affordable and Clean Energy	40		
1.1.3 FTTH/building Internet subscriptions	43		
3.2.5 Privacy protection by law content	46		
2.2.4 Annual investment in telecommunication services	48		
1.1.4 Population covered by at least a 3G mobile network	50		

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

NRI 2023 At-A-Glance: Morocco

Network Readiness Index   Rank: 77 (out of 134)   Score: 45.43

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	72	39.20	C. Governance pillar	81	50.46
1st sub-pillar: Access	69	63.79	1st sub-pillar: Trust	80	36.19
2nd sub-pillar: Content	71	22.15	2nd sub-pillar: Regulation	37	76.17
3rd sub-pillar: Future Technologies	69	31.66	3rd sub-pillar: Inclusion	117	39.00
B. People pillar	75	41.59	D. Impact pillar	83	50.47
1st sub-pillar: Individuals	69	46.80	1st sub-pillar: Economy	55	32.19
2nd sub-pillar: Businesses	57	47.60	2nd sub-pillar: Quality of Life	96	58.96
3rd sub-pillar: Governments	91	30.37	3rd sub-pillar: SDG Contribution	79	60.26

The Network Readiness Index in detail

Indicator	Rank	Score		Indicator	Rank	Score	
A. Technology pillar	72	39.20		**C. Governance pillar**	81	50.46	
1st sub-pillar: Access	69	63.79		*1st sub-pillar: Trust*	80	36.19	
1.1.1 Mobile tariffs	95	45.02		3.1.1 Secure Internet servers	75	48.60	
1.1.2 Handset prices	80	41.05		3.1.2 Cybersecurity	58	82.10	
1.1.3 FTTH/building Internet subscriptions	43	36.93	●	3.1.3 Online access to financial account	124	3.56	○
1.1.4 Population covered by at least a 3G mobile network	50	99.84	●	3.1.4 Internet shopping	88	10.50	
1.1.5 International Internet bandwidth	21	80.87	●	*2nd sub-pillar: Regulation*	37	76.17	
1.1.6 Internet access in schools	41	79.02		3.2.1 Regulatory quality	78	46.85	
2nd sub-pillar: Content	71	22.15		3.2.2 ICT regulatory environment	57	85.29	
1.2.1 GitHub commits	85	3.37		3.2.3 Regulation of emerging technologies	NA	NA	
1.2.2 Internet domain registrations	88	1.51		3.2.4 E-commerce legislation	1	100.00	●
1.2.3 Mobile apps development	76	63.47		3.2.5 Privacy protection by law content	46	72.54	●
1.2.4 AI scientific publications	27	20.25	●	*3rd sub-pillar: Inclusion*	117	39.00	
3rd sub-pillar: Future Technologies	69	31.66		3.3.1 E-Participation	111	25.58	○
1.3.1 Adoption of emerging technologies	91	37.16		3.3.2 Socioeconomic gap in use of digital payments	111	44.22	
1.3.2 Investment in emerging technologies	82	35.00		3.3.3 Availability of local online content	68	60.10	

Indicator	Rank	Score	
1.3.3 Robot density	NA	NA	
1.3.4 Computer software spending	61	22.82	
B. People pillar	75	41.59	
1st sub-pillar: Individuals	69	46.80	
2.1.1 Mobile broadband internet traffic within the country	26	30.37	●
2.1.2 ICT skills in the education system	47	56.31	
2.1.3 Use of virtual social networks	83	52.69	
2.1.4 Tertiary enrollment	73	27.49	
2.1.5 Adult literacy rate	86	67.14	
2.1.6 AI talent concentration	NA	NA	
2nd sub-pillar: Businesses	57	47.60	
2.2.1 Firms with website	59	53.03	
2.2.2 GERD financed by business enterprise	NA	NA	
2.2.3 Knowledge intensive employment	111	8.79	○
2.2.4 Annual investment in telecommunication services	48	80.97	●
2.2.5 GERD performed by business enterprise	NA	NA	
3rd sub-pillar: Governments	91	30.37	
2.3.1 Government online services	102	41.66	
2.3.2 Publication and use of open data	77	16.18	
2.3.3 Government promotion of investment in emerging tech	80	33.27	
2.3.4 R&D expenditure by governments and higher education	NA	NA	

Indicator	Rank	Score	
3.3.4 Gender gap in Internet use	73	65.12	
3.3.5 Rural gap in use of digital payments	126	0.00	○
D. Impact pillar	83	50.47	
1st sub-pillar: Economy	55	32.19	
4.1.1 High-tech and medium-high-tech manufacturing	23	53.43	●
4.1.2 High-tech exports	83	7.71	
4.1.3 PCT patent applications	58	4.53	
4.1.4 Domestic market size	54	56.97	
4.1.5 Prevalence of gig economy	66	39.83	
4.1.6 ICT services exports	29	30.66	●
2nd sub-pillar: Quality of Life	96	58.96	
4.2.1 Happiness	100	41.73	
4.2.2 Freedom to make life choices	75	69.93	
4.2.3 Income inequality	76	59.05	
4.2.4 Healthy life expectancy at birth	89	65.13	
3rd sub-pillar: SDG Contribution	79	60.26	
4.3.1 SDG 3: Good Health and Well-Being	58	72.84	
4.3.2 SDG 4: Quality Education	72	13.80	○
4.3.3 SDG 5: Women's economic opportunity	99	65.49	
4.3.4 SDG 7: Affordable and Clean Energy	40	77.10	●
4.3.5 SDG 11: Sustainable Cities and Communities	53	72.07	

NOTE: ● a strength and ○ a weakness.

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