Network Readiness Index 2023

Algeria

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.
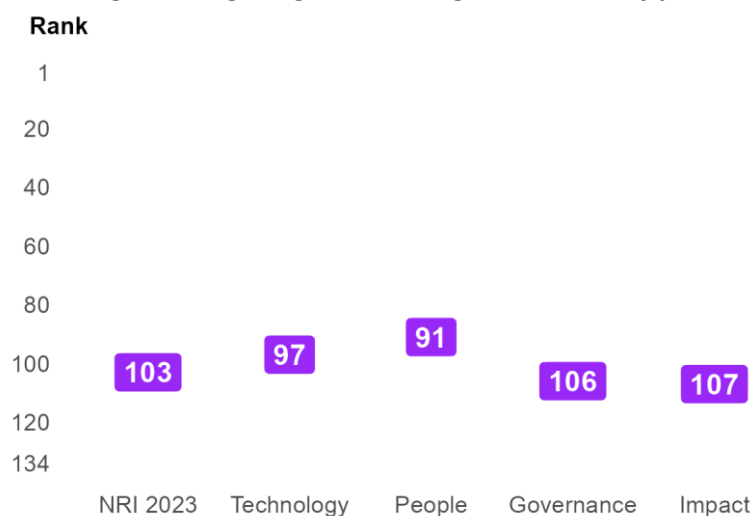
Figure 1: The NRI 2023 model

Global NRI position of Algeria

Algeria ranks 103rd 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: Algeria global ranking, overall and by pillar

Performance at sub-pillar level

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

Table 1: Algeria rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Individuals	62	Inclusion	98
Economy	90	Access	101
Future Technologies	91	Quality of Life	102
Content	92	SDG Contribution	106
Governments	92	Businesses	111
Regulation	96	Trust	117

NRI score and income

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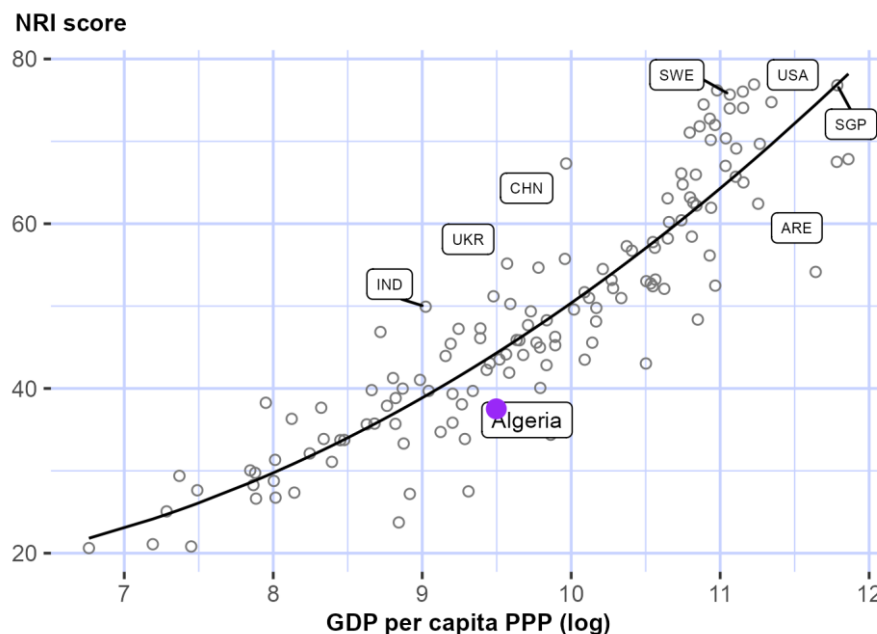
Note: USA = United States (rank: 1), SGP = Singapore (rank: 2), FIN = Finland (3), NLD = Netherlands (4), SWE = Sweden (5), CHN = China (20), IND = India (61). Algeria belongs to the group of lower-middle-income countries, where the best performer is Ukraine (UKR). The top performer of its region-Arab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

Performance against its income group and region

Lower-middle-income countries
Algeria is ranked 23rd 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 one of the four pillars: People. At the sub-pillar level, it outperforms lower-middle-income countries in five of the twelve sub-pillars: Content, Individuals, Governments, Regulation and Inclusion.

Arab States
Algeria is ranked 12th within Arab States (Figure 4, right panel). It lags behind its region in each of the four pillars. With regard to sub-pillars, it trails the regional average in each of them.

Figure 4: Performance of Algeria against its income group and region, overall and by pillar
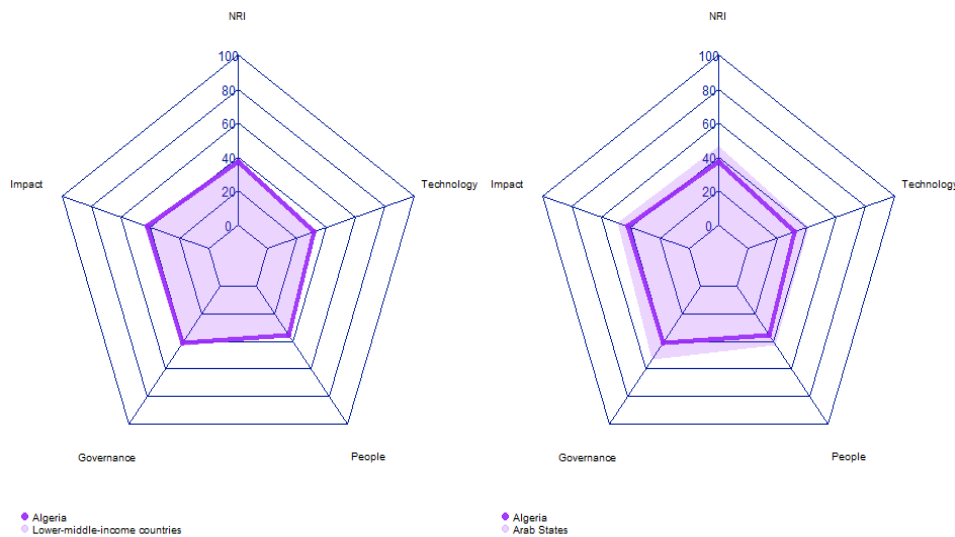
Table 2: Algeria scores vs. averages of its income group and region, overall and by pillar

Dimension	Algeria	Lower-middle-income countries	Arab States
NRI	37.52	38.41	46.59
Technology	31.45	32.12	41.17
People	35.63	34.38	42.66
Governance	41.18	43.27	53.45
Impact	41.82	43.89	49.08

Strongest and weakest indicators

The indicators where Algeria performs particularly well include 3.2.4 E-commerce legislation, 3.3.5 Rural gap in use of digital payments, and 1.2.4 AI scientific publications (Table 3). By contrast, the economy's weakest indicators include 3.2.1 Regulatory quality, 1.3.4 Computer software spending, and 4.2.2 Freedom to make life choices.

Table 3: Highlight of Strengths and Opportunities for Algeria

Strongest indicators	Rank	Weakest indicators	Rank
3.2.4 E-commerce legislation	1	4.3.2 SDG 4: Quality Education	74
3.3.5 Rural gap in use of digital payments	3	3.1.3 Online access to financial account	123
1.2.4 AI scientific publications	28	4.2.2 Freedom to make life choices	125
2.1.1 Mobile broadband internet traffic within the country	32	1.3.4 Computer software spending	126
4.1.5 Prevalence of gig economy	33	3.2.1 Regulatory quality	130
1.1.5 International Internet bandwidth	36		
4.1.4 Domestic market size	40		
2.2.4 Annual investment in telecommunication services	42		
2.3.3 Government promotion of investment in emerging technologies	42		
2.1.2 ICT skills in the education system	45		
4.3.1 SDG 3: Good Health and Well-Being	50		

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

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Portulans Institute · University of Oxford · Saïd Business School

NRI 2023 At-A-Glance: Algeria

Network Readiness Index   Rank: 103 (out of 134)   Score: 37.52

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	97	31.45	C. Governance pillar	106	41.18
1st sub-pillar: Access	101	49.33	1st sub-pillar: Trust	117	19.16
2nd sub-pillar: Content	92	17.83	2nd sub-pillar: Regulation	96	57.26
3rd sub-pillar: Future Technologies	91	27.19	3rd sub-pillar: Inclusion	98	47.11
B. People pillar	91	35.63	D. Impact pillar	107	41.82
1st sub-pillar: Individuals	62	48.35	1st sub-pillar: Economy	90	21.43
2nd sub-pillar: Businesses	111	28.92	2nd sub-pillar: Quality of Life	102	52.69
3rd sub-pillar: Governments	92	29.62	3rd sub-pillar: SDG Contribution	106	51.33

The Network Readiness Index in detail

Indicator	Rank	Score		Indicator	Rank	Score	
A. Technology pillar	97	31.45		**C. Governance pillar**	106	41.18	
1st sub-pillar: Access	101	49.33		*1st sub-pillar: Trust*	117	19.16	
1.1.1 Mobile tariffs	76	57.75		3.1.1 Secure Internet servers	114	30.92	
1.1.2 Handset prices	104	30.61		3.1.2 Cybersecurity	105	32.79	
1.1.3 FTTH/building Internet subscriptions	72	26.39		3.1.3 Online access to financial account	123	4.16	○
1.1.4 Population covered by at least a 3G mobile network	75	99.36		3.1.4 Internet shopping	98	8.78	
1.1.5 International Internet bandwidth	36	76.49	●	*2nd sub-pillar: Regulation*	96	57.26	
1.1.6 Internet access in schools	79	5.39		3.2.1 Regulatory quality	130	23.15	○
2nd sub-pillar: Content	92	17.83		3.2.2 ICT regulatory environment	111	64.12	
1.2.1 GitHub commits	113	0.95		3.2.3 Regulation of emerging technologies	NA	NA	
1.2.2 Internet domain registrations	115	0.32		3.2.4 E-commerce legislation	1	100.00	●
1.2.3 Mobile apps development	102	50.98		3.2.5 Privacy protection by law content	114	41.77	
1.2.4 AI scientific publications	28	19.05	●	*3rd sub-pillar: Inclusion*	98	47.11	
3rd sub-pillar: Future Technologies	91	27.19		3.3.1 E-Participation	122	20.94	
1.3.1 Adoption of emerging technologies	65	47.15		3.3.2 Socioeconomic gap in use of digital payments	116	41.78	
1.3.2 Investment in emerging technologies	86	34.00		3.3.3 Availability of local online content	91	47.84	

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Indicator	Rank	Score	
1.3.3 Robot density	NA	NA	
1.3.4 Computer software spending	126	0.43	○
B. People pillar	91	35.63	
1st sub-pillar: Individuals	62	48.35	
2.1.1 Mobile broadband internet traffic within the country	32	27.02	●
2.1.2 ICT skills in the education system	45	56.62	●
2.1.3 Use of virtual social networks	87	49.07	
2.1.4 Tertiary enrollment	63	34.44	
2.1.5 Adult literacy rate	79	74.61	
2.1.6 AI talent concentration	NA	NA	
2nd sub-pillar: Businesses	111	28.92	
2.2.1 Firms with website	NA	NA	
2.2.2 GERD financed by business enterprise	80	8.34	
2.2.3 Knowledge intensive employment	80	24.62	
2.2.4 Annual investment in telecommunication services	42	81.81	●
2.2.5 GERD performed by business enterprise	75	0.91	
3rd sub-pillar: Governments	92	29.62	
2.3.1 Government online services	116	30.85	
2.3.2 Publication and use of open data	NA	NA	
2.3.3 Government promotion of investment in emerging tech	42	48.56	●
2.3.4 R&D expenditure by governments and higher education	59	9.45	

Indicator	Rank	Score	
3.3.4 Gender gap in Internet use	98	34.99	
3.3.5 Rural gap in use of digital payments	3	89.99	●
D. Impact pillar	107	41.82	
1st sub-pillar: Economy	90	21.43	
4.1.1 High-tech and medium-high-tech manufacturing	102	2.88	
4.1.2 High-tech exports	114	1.49	
4.1.3 PCT patent applications	79	1.23	
4.1.4 Domestic market size	40	61.99	●
4.1.5 Prevalence of gig economy	33	59.59	●
4.1.6 ICT services exports	123	1.42	
2nd sub-pillar: Quality of Life	102	52.69	
4.2.1 Happiness	87	53.28	
4.2.2 Freedom to make life choices	125	30.61	○
4.2.3 Income inequality	NA	NA	
4.2.4 Healthy life expectancy at birth	59	74.19	
3rd sub-pillar: SDG Contribution	106	51.33	
4.3.1 SDG 3: Good Health and Well-Being	50	76.52	●
4.3.2 SDG 4: Quality Education	74	11.28	○
4.3.3 SDG 5: Women's economic opportunity	124	39.82	
4.3.4 SDG 7: Affordable and Clean Energy	97	61.99	
4.3.5 SDG 11: Sustainable Cities and Communities	64	67.05	

NOTE: ● a strength and ○ a weakness.

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