

Nigeria

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 Future Technologies Access Content Network Individuals Businesses Readiness Index 囯 Trust Regulation Inclusion Impact (<u>o</u>) **SDG** Contribution

Global NRI position of Nigeria

Nigeria ranks 106th 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.

Rank 1 20 40 60 80 88 96 100 106 114 116 120 134 NRI 2023 Technology People Impact Governance

Figure 2: Nigeria global ranking, overall and by pillar





Performance at sub-pillar level

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

Table 1: Nigeria rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Businesses	44	Future Technologies	99
Content	69	Regulation	109
Trust	82	Quality of Life	109
Economy	85	Individuals	120
Access	89	Inclusion	131
Governments	95	SDG Contribution	131

NRI score and income

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

NRI score 80 -SGP CHN 60 -UKR 0 IND 0 ĹĸEN Nigeria 40 -0 0 0 0 11 12 GDP per capita PPP (log)

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). Nigeria belongs to the group of lower-middle-income countries, where the best performer is Ukraine (UKR). The top performer of its region-Africa-is Kenya (KEN).



Performance against its income group and region

Lower-middle-income countries

Nigeria is ranked 25th 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: Technology. At the subpillar level, it outperforms lower-middle-income countries in six of the twelve sub-pillars: Access, Content, Businesses, Governments, Trust and Economy.

Africa

Nigeria is ranked 10th within Africa (Figure 4, right panel). It has a score above the regional average in three of the four pillars: NRI, Technology, People and Impact. With regard to sub-pillars, it outperforms the average in Africa in eight of the twelve sub-pillars: Access, Content, Future Technologies, Businesses, Governments, Trust, Economy and Quality of Life.

Impact

Governance

People

Only People

Nigeria

Nigeria

Nigeria

Nigeria

Africa

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

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

Dimension	Nigeria	Lower-middle- income countries	Africa
NRI	35.73	38.41	32.14
Technology	34.42	32.12	25.14
People	33.89	34.38	26.19
Governance	37.40	43.27	40.44
Impact	37.20	43.89	36.77



Strongest and weakest indicators

The indicators where Nigeria performs particularly well include 1.2.4 Al scientific publications, 2.2.4 Annual investment in telecommunication services, and 4.1.4 Domestic market size (Table 3). By contrast, the economy's weakest indicators include 4.3.5 SDG 11: Sustainable Cities and Communities, 4.2.4 Healthy life expectancy at birth, and 3.3.2 Socioeconomic gap in use of digital payments.

Table 3: Highlight of Strengths and Opportunities for Nigeria

Strongest indicators	Rank	Weakest indicators	Rank
1.2.4 Al scientific publications	18	2.2.1 Firms with website	105
2.2.4 Annual investment in telecommunication services	19	3.3.5 Rural gap in use of digital payments	122
4.1.4 Domestic market size	26	3.3.2 Socioeconomic gap in use of digital payments	124
2.2.3 Knowledge intensive employment	34	4.2.4 Healthy life expectancy at birth	125
3.2.2 ICT regulatory environment	45	4.3.5 SDG 11: Sustainable Cities and Communities	131
4.2.3 Income inequality	51		
3.1.2 Cybersecurity	55		
1.1.5 International Internet bandwidth	63		
4.1.2 High-tech exports	67		
1.1.2 Handset prices	69		

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



NRI 2023 At-A-Glance: Nigeria

Network Readiness Index Rank: 106 (out of 134) Score: 35.73

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	88	34.42	C. Governance pillar	114	37.40
1st sub-pillar: Access	89	55.57	1st sub-pillar: Trust	82	35.41
2nd sub-pillar: Content	69	22.29	2nd sub-pillar: Regulation	109	50.62
3rd sub-pillar: Future Technologies	99	25.40	3rd sub-pillar: Inclusion	131	26.17
B. People pillar	96	33.89	D. Impact pillar	116	37.20
1st sub-pillar: Individuals	120	20.71	1st sub-pillar: Economy	85	22.51
2nd sub-pillar: Businesses	44	52.97	2nd sub-pillar: Quality of Life	109	50.53
3rd sub-pillar: Governments	95	28.00	3rd sub-pillar: SDG Contribution	131	38.56

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	88	34.42	C. Governance pillar	114	37.40
1st sub-pillar: Access	89	55.57	1st sub-pillar: Trust	82	35.41
1.1.1 Mobile tariffs	96	44.76	3.1.1 Secure Internet servers	107	34.23
1.1.2 Handset prices	69	45.92 •	3.1.2 Cybersecurity	55	84.49 •
1.1.3 FTTH/building Internet subscriptions	89	20.16	3.1.3 Online access to financial account	80	19.70
1.1.4 Population covered by at least a 3G mobile network	111	95.22	3.1.4 Internet shopping	117	3.23
1.1.5 International Internet bandwidth	63	71.81 •	2nd sub-pillar: Regulation	109	50.62
1.1.6 Internet access in schools	NA	NA	3.2.1 Regulatory quality	123	28.53
2nd sub-pillar: Content	69	22.29	3.2.2 ICT regulatory environment	45	87.06 •
1.2.1 GitHub commits	83	3.90	3.2.3 Regulation of emerging technologies	105	18.70
1.2.2 Internet domain registrations	108	0.49	3.2.4 E-commerce legislation	87	66.67
1.2.3 Mobile apps development	82	60.84	3.2.5 Privacy protection by law content	90	52.16
1.2.4 Al scientific publications	18	23.91 •	3rd sub-pillar: Inclusion	131	26.17
3rd sub-pillar: Future Technologies	99	25.40	3.3.1 E-Participation	104	29.07
1.3.1 Adoption of emerging technologies	75	43.17	3.3.2 Socioeconomic gap in use of digital payments	124	33.24 o
1.3.2 Investment in emerging technologies	115	22.75	3.3.3 Availability of local online content	117	27.40







Indicator	Rank	Score		Indicator	Rank	Score	
1.3.3 Robot density	NA	NA		3.3.4 Gender gap in Internet use	NA	NA	
1.3.4 Computer software spending	88	10.29		3.3.5 Rural gap in use of digital payments	122	14.97	0
B. People pillar	96	33.89		D. Impact pillar	116	37.20	
1st sub-pillar: Individuals	120	20.71		1st sub-pillar: Economy	85	22.51	
2.1.1 Mobile broadband internet traffic within the country	72	7.52		4.1.1 High-tech and medium-high-tech manufacturing	NA	NA	
2.1.2 ICT skills in the education system	87	30.21		4.1.2 High-tech exports	67	11.52	•
2.1.3 Use of virtual social networks	114	11.34		4.1.3 PCT patent applications	96	0.13	
2.1.4 Tertiary enrollment	108	6.33		4.1.4 Domestic market size	26	69.32	•
2.1.5 Adult literacy rate	97	48.14		4.1.5 Prevalence of gig economy	92	29.65	
2.1.6 Al talent concentration	NA	NA		4.1.6 ICT services exports	116	1.92	
2nd sub-pillar: Businesses	44	52.97		2nd sub-pillar: Quality of Life	109	50.53	
2.2.1 Firms with website	105	14.79	0	4.2.1 Happiness	102	39.56	
2.2.2 GERD financed by business enterprise	NA	NA		4.2.2 Freedom to make life choices	99	58.45	
2.2.3 Knowledge intensive employment	34	57.66	•	4.2.3 Income inequality	51	70.10	•
2.2.4 Annual investment in telecommunication services	19	86.47	•	4.2.4 Healthy life expectancy at birth	125	34.00	0
2.2.5 GERD performed by business enterprise	NA	NA		3rd sub-pillar: SDG Contribution	131	38.56	
3rd sub-pillar: Governments	95	28.00		4.3.1 SDG 3: Good Health and Well-Being	121	26.65	
2.3.1 Government online services	93	47.50		4.3.2 SDG 4: Quality Education	NA	NA	
2.3.2 Publication and use of open data	73	19.12		4.3.3 SDG 5: Women's economic opportunity	115	52.21	
2.3.3 Government promotion of investment in emerging tech	110	17.38		4.3.4 SDG 7: Affordable and Clean Energy	113	52.10	
2.3.4 R&D expenditure by governments and higher education	NA	NA		4.3.5 SDG 11: Sustainable Cities and Communities	131	23.29	0

NOTE: • a strength and o a weakness.



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