



Kenya

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.

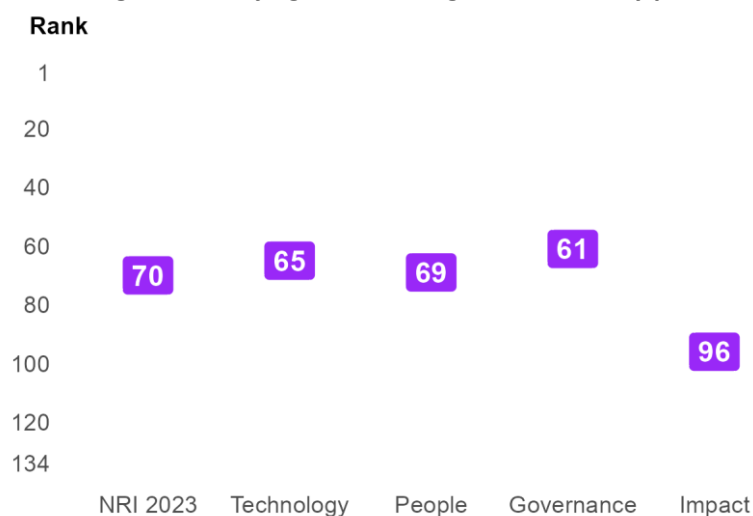
Figure 1: The NRI 2023 model



Global NRI position of Kenya

Kenya ranks 70th out of the 134 economies included in the NRI 2023 (Figure 2). Its main strength relates to Governance. The greatest scope for improvement, meanwhile, concerns Impact.

Figure 2: Kenya global ranking, overall and by pillar



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Performance at sub-pillar level

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

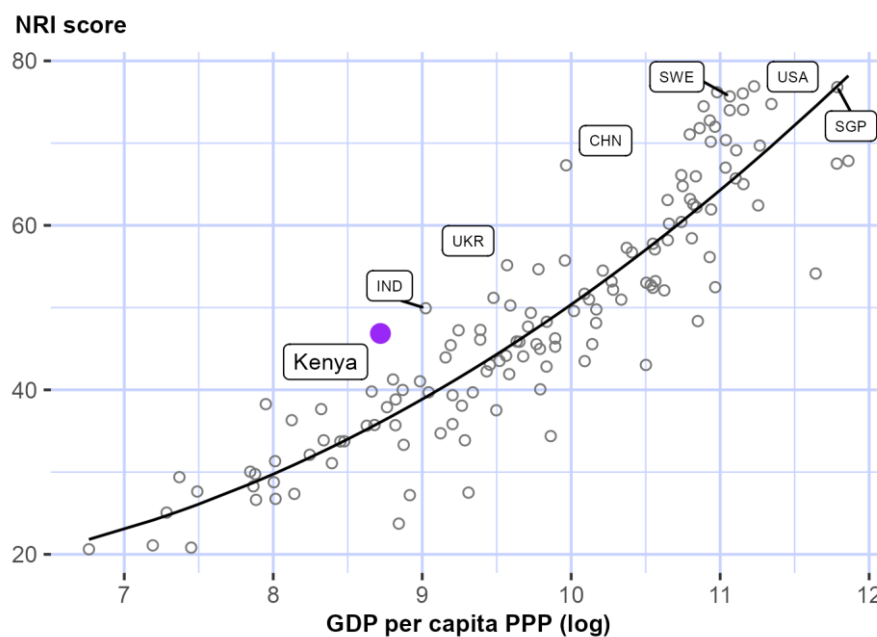
Table 1: Kenya rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Governments	40	Access	76
Future Technologies	43	Inclusion	77
Trust	56	Content	83
Businesses	60	SDG Contribution	85
Regulation	64	Individuals	105
Economy	66	Quality of Life	113

NRI score and income

Figure 3 shows the position of Kenya 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, Kenya 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). Kenya 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).

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Performance against its income group and region

Lower-middle-income countries

Kenya is ranked 6th 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 ten of the twelve sub-pillars: Access, Content, Future Technologies, Businesses, Governments, Trust, Regulation, Inclusion, Economy and SDG Contribution.

Africa

Kenya is ranked 1st within Africa (Figure 4, right panel). It outperforms its region in each of the four pillars. With regard to sub-pillars, it has a higher score than the regional average in each of the twelve sub-pillars.

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

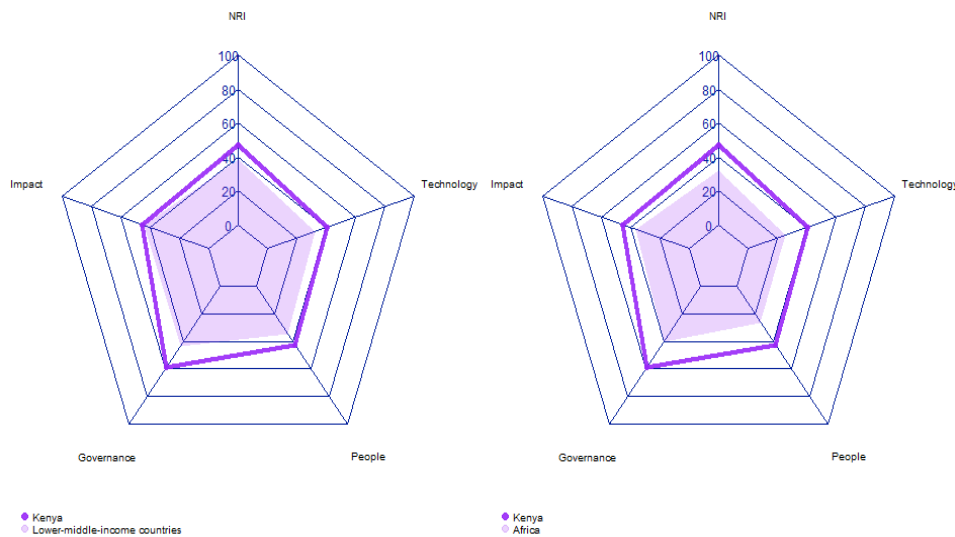


Table 2: Kenya scores vs. averages of its income group and region, overall and by pillar

Dimension	Kenya	Lower-middle-income countries	Africa
NRI	46.86	38.41	32.14
Technology	40.56	32.12	25.14
People	42.93	34.38	26.19
Governance	58.59	43.27	40.44
Impact	45.35	43.89	36.77

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Strongest and weakest indicators

The indicators where Kenya performs particularly well include 3.2.4 E-commerce legislation, 1.1.5 International Internet bandwidth, and 3.1.3 Online access to financial account (Table 3). By contrast, the economy's weakest indicators include 2.1.4 Tertiary enrollment, 4.2.4 Healthy life expectancy at birth, and 2.1.3 Use of virtual social networks.

Table 3: Highlight of Strengths and Opportunities for Kenya

Strongest indicators	Rank	Weakest indicators	Rank
3.2.4 E-commerce legislation	1	3.3.4 Gender gap in Internet use	97
1.1.5 International Internet bandwidth	8	4.2.2 Freedom to make life choices	108
3.1.3 Online access to financial account	18	2.1.3 Use of virtual social networks	109
4.1.6 ICT services exports	23	4.2.4 Healthy life expectancy at birth	110
1.1.3 FTTH/building Internet subscriptions	28	2.1.4 Tertiary enrollment	113
1.3.2 Investment in emerging technologies	32		
3.2.2 ICT regulatory environment	34		
2.3.2 Publication and use of open data	41		
4.1.5 Prevalence of gig economy	41		
2.1.2 ICT skills in the education system	42		
2.1.1 Mobile broadband internet traffic within the country	49		

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

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NRI 2023 At-A-Glance: Kenya

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Rank: 70 (out of 134)

Score: 46.86

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	65	40.56	C. Governance pillar	61	58.59
1st sub-pillar: Access	76	61.50	1st sub-pillar: Trust	56	52.48
2nd sub-pillar: Content	83	19.05	2nd sub-pillar: Regulation	64	66.19
3rd sub-pillar: Future Technologies	43	41.12	3rd sub-pillar: Inclusion	77	57.10
B. People pillar	69	42.93	D. Impact pillar	96	45.35
1st sub-pillar: Individuals	105	33.79	1st sub-pillar: Economy	66	28.09
2nd sub-pillar: Businesses	60	47.04	2nd sub-pillar: Quality of Life	113	48.73
3rd sub-pillar: Governments	40	47.95	3rd sub-pillar: SDG Contribution	85	59.24

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	65	40.56	C. Governance pillar	61	58.59
1st sub-pillar: Access	76	61.50	1st sub-pillar: Trust	56	52.48
1.1.1 Mobile tariffs	92	46.35	3.1.1 Secure Internet servers	86	43.98
1.1.2 Handset prices	109	28.28	3.1.2 Cybersecurity	59	81.38
1.1.3 FTTH/building Internet subscriptions	28	43.90	3.1.3 Online access to financial account	18	66.35
1.1.4 Population covered by at least a 3G mobile network	76	99.34	3.1.4 Internet shopping	73	18.23
1.1.5 International Internet bandwidth	8	89.61	2nd sub-pillar: Regulation	64	66.19
1.1.6 Internet access in schools	NA	NA	3.2.1 Regulatory quality	94	39.54
2nd sub-pillar: Content	83	19.05	3.2.2 ICT regulatory environment	34	89.41
1.2.1 GitHub commits	62	7.94	3.2.3 Regulation of emerging technologies	75	40.52
1.2.2 Internet domain registrations	98	1.00	3.2.4 E-commerce legislation	1	100.00
1.2.3 Mobile apps development	87	59.37	3.2.5 Privacy protection by law content	75	61.49
1.2.4 AI scientific publications	58	7.89	3rd sub-pillar: Inclusion	77	57.10
3rd sub-pillar: Future Technologies	43	41.12	3.3.1 E-Participation	64	56.97
1.3.1 Adoption of emerging technologies	55	50.77	3.3.2 Socioeconomic gap in use of digital payments	70	72.59
1.3.2 Investment in emerging technologies	32	60.00	3.3.3 Availability of local online content	83	51.44

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Indicator	Rank	Score	Indicator	Rank	Score
1.3.3 Robot density	NA	NA	3.3.4 Gender gap in Internet use	97	38.79 ○
1.3.4 Computer software spending	84	12.61	3.3.5 Rural gap in use of digital payments	61	65.69
B. People pillar			D. Impact pillar		
<i>1st sub-pillar: Individuals</i>			<i>1st sub-pillar: Economy</i>		
2.1.1 Mobile broadband internet traffic within the country	49	14.10 ●	4.1.1 High-tech and medium-high-tech manufacturing	80	15.15
2.1.2 ICT skills in the education system	42	57.43 ●	4.1.2 High-tech exports	86	5.42
2.1.3 Use of virtual social networks	109	16.23 ○	4.1.3 PCT patent applications	90	0.66
2.1.4 Tertiary enrollment	113	4.94 ○	4.1.4 Domestic market size	59	55.57
2.1.5 Adult literacy rate	76	76.27	4.1.5 Prevalence of gig economy	41	56.10 ●
2.1.6 AI talent concentration	NA	NA	4.1.6 ICT services exports	23	35.60 ●
<i>2nd sub-pillar: Businesses</i>			<i>2nd sub-pillar: Quality of Life</i>		
2.2.1 Firms with website	71	43.67	4.2.1 Happiness	103	38.98
2.2.2 GERD financed by business enterprise	NA	NA	4.2.2 Freedom to make life choices	108	55.16 ○
2.2.3 Knowledge intensive employment	90	18.00	4.2.3 Income inequality	82	55.78
2.2.4 Annual investment in telecommunication services	53	79.45	4.2.4 Healthy life expectancy at birth	110	45.01 ○
2.2.5 GERD performed by business enterprise	NA	NA	<i>3rd sub-pillar: SDG Contribution</i>		
<i>3rd sub-pillar: Governments</i>			4.3.1 SDG 3: Good Health and Well-Being	102	45.39
2.3.1 Government online services	68	64.87	4.3.2 SDG 4: Quality Education	NA	NA
2.3.2 Publication and use of open data	41	38.24 ●	4.3.3 SDG 5: Women's economic opportunity	80	72.57
2.3.3 Government promotion of investment in emerging tech	57	40.75	4.3.4 SDG 7: Affordable and Clean Energy	100	61.27
2.3.4 R&D expenditure by governments and higher education	NA	NA	4.3.5 SDG 11: Sustainable Cities and Communities	79	57.73

NOTE: ● a strength and ○ a weakness.

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