



Tanzania

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.

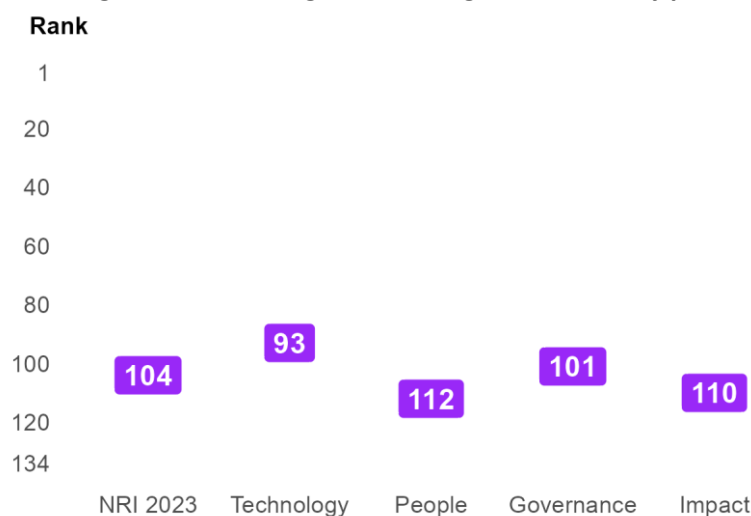
Figure 1: The NRI 2023 model



Global NRI position of Tanzania

Tanzania ranks 104th 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 People.

Figure 2: Tanzania 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 Tanzania relate to Trust, Regulation and Access, among others (Table 1). More could be done, though, to improve the economy's performances in the Individuals, SDG Contribution and Inclusion sub-pillars.

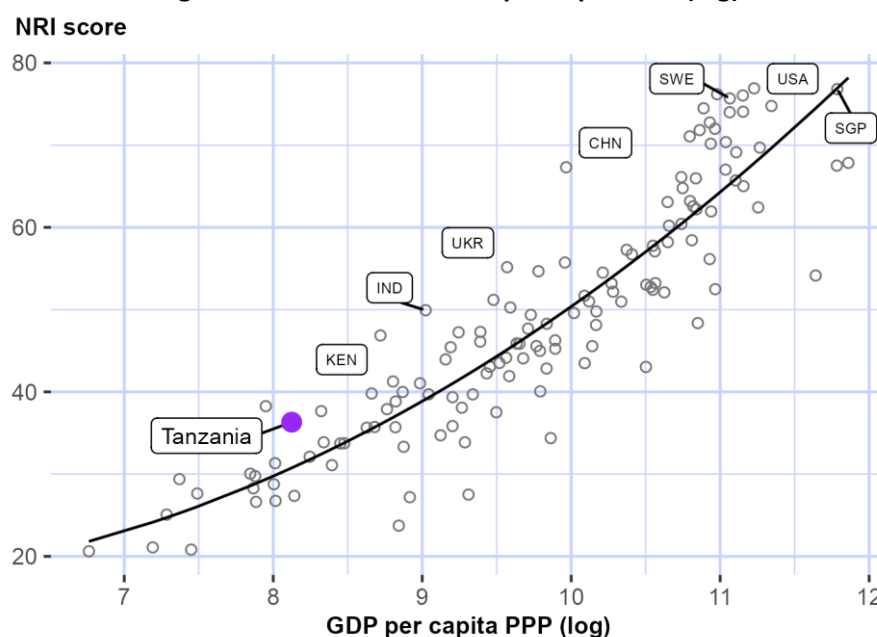
Table 1: Tanzania rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Trust	74	Content	108
Regulation	85	Businesses	108
Access	87	Economy	108
Future Technologies	94	Individuals	114
Governments	98	SDG Contribution	114
Quality of Life	106	Inclusion	120

NRI score and income

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

Tanzania is ranked 24th 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: Governance. At the sub-pillar level, it outperforms lower-middle-income countries in three of the twelve sub-pillars: Access, Trust and Regulation.

Africa

Tanzania is ranked 9th within Africa (Figure 4, right panel). It outperforms its region in each of the four pillars. With regard to sub-pillars, it outperforms the average in Africa in nine of the twelve sub-pillars: Access, Content, Future Technologies, Individuals, Governments, Trust, Regulation, Quality of Life and SDG Contribution.

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

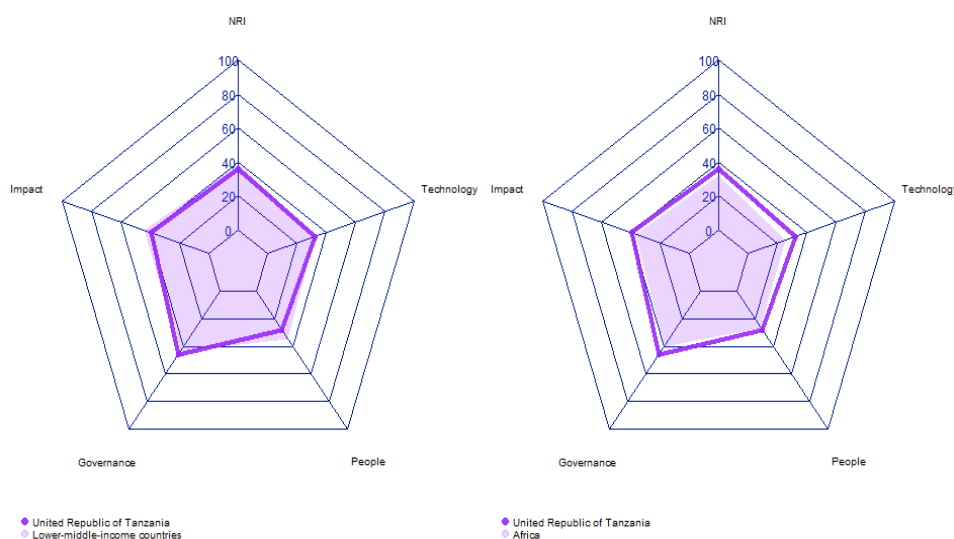


Table 2: Tanzania scores vs. averages of its income group and region, overall and by pillar

Dimension	Tanzania	Lower-middle-income countries	Africa
NRI	36.31	38.41	32.14
Technology	32.02	32.12	25.14
People	27.91	34.38	26.19
Governance	45.77	43.27	40.44
Impact	39.55	43.89	36.77

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Strongest and weakest indicators

The indicators where Tanzania performs particularly well include 3.2.5 Privacy protection by law content, 1.1.3 FTTH/building Internet subscriptions, and 3.1.2 Cybersecurity (Table 3). By contrast, the economy's weakest indicators include 1.3.4 Computer software spending, 2.1.3 Use of virtual social networks, and 2.2.3 Knowledge intensive employment.

Table 3: Highlight of Strengths and Opportunities for Tanzania

Strongest indicators	Rank	Weakest indicators	Rank
3.2.5 Privacy protection by law content	8	4.1.3 PCT patent applications	99
1.1.3 FTTH/building Internet subscriptions	16	3.3.4 Gender gap in Internet use	105
3.1.2 Cybersecurity	45	2.1.3 Use of virtual social networks	126
4.2.2 Freedom to make life choices	47	2.2.3 Knowledge intensive employment	126
3.1.3 Online access to financial account	51	1.3.4 Computer software spending	127
1.3.2 Investment in emerging technologies	59		
2.3.4 R&D expenditure by governments and higher education	61		
2.1.1 Mobile broadband internet traffic within the country	63		
1.2.4 AI scientific publications	64		
4.1.4 Domestic market size	68		

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

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NRI 2023 At-A-Glance: Tanzania

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Rank: 104 (out of 134)

Score: 36.31

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	93	32.02	C. Governance pillar	101	45.77
1st sub-pillar: Access	87	56.19	1st sub-pillar: Trust	74	40.25
2nd sub-pillar: Content	108	13.38	2nd sub-pillar: Regulation	85	61.76
3rd sub-pillar: Future Technologies	94	26.48	3rd sub-pillar: Inclusion	120	35.28
B. People pillar	112	27.91	D. Impact pillar	110	39.55
1st sub-pillar: Individuals	114	26.55	1st sub-pillar: Economy	108	16.81
2nd sub-pillar: Businesses	108	30.36	2nd sub-pillar: Quality of Life	106	51.95
3rd sub-pillar: Governments	98	26.81	3rd sub-pillar: SDG Contribution	114	49.90

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	93	32.02	C. Governance pillar	101	45.77
1st sub-pillar: Access	87	56.19	1st sub-pillar: Trust	74	40.25
1.1.1 Mobile tariffs	108	32.44	3.1.1 Secure Internet servers	117	28.75
1.1.2 Handset prices	101	32.17	3.1.2 Cybersecurity	45	90.41
1.1.3 FTTH/building Internet subscriptions	16	53.07	3.1.3 Online access to financial account	51	35.69
1.1.4 Population covered by at least a 3G mobile network	114	94.47	3.1.4 Internet shopping	105	6.16
1.1.5 International Internet bandwidth	82	68.78	2nd sub-pillar: Regulation	85	61.76
1.1.6 Internet access in schools	NA	NA	3.2.1 Regulatory quality	107	35.44
2nd sub-pillar: Content	108	13.38	3.2.2 ICT regulatory environment	74	80.00
1.2.1 GitHub commits	122	0.43	3.2.3 Regulation of emerging technologies	77	35.58
1.2.2 Internet domain registrations	120	0.19	3.2.4 E-commerce legislation	87	66.67
1.2.3 Mobile apps development	106	46.62	3.2.5 Privacy protection by law content	8	91.12
1.2.4 AI scientific publications	64	6.30	3rd sub-pillar: Inclusion	120	35.28
3rd sub-pillar: Future Technologies	94	26.48	3.3.1 E-Participation	111	25.58
1.3.1 Adoption of emerging technologies	88	37.57	3.3.2 Socioeconomic gap in use of digital payments	104	52.28
1.3.2 Investment in emerging technologies	59	41.50	3.3.3 Availability of local online content	95	44.71

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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	105	0.00 ○
1.3.4 Computer software spending	127	0.38 ○	3.3.5 Rural gap in use of digital payments	85	53.84
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	63	10.17 ●	4.1.1 High-tech and medium-high-tech manufacturing	96	6.62
2.1.2 ICT skills in the education system	79	39.39	4.1.2 High-tech exports	102	2.80
2.1.3 Use of virtual social networks	126	4.59 ○	4.1.3 PCT patent applications	99	0.00 ○
2.1.4 Tertiary enrollment	117	3.45	4.1.4 Domestic market size	68	51.56 ●
2.1.5 Adult literacy rate	78	75.15	4.1.5 Prevalence of gig economy	70	38.08
2.1.6 AI talent concentration	NA	NA	4.1.6 ICT services exports	117	1.77
<i>2nd sub-pillar: Businesses</i>			<i>2nd sub-pillar: Quality of Life</i>		
2.2.1 Firms with website	102	15.13	4.2.1 Happiness	121	23.50
2.2.2 GERD financed by business enterprise	NA	NA	4.2.2 Freedom to make life choices	47	80.15 ●
2.2.3 Knowledge intensive employment	126	0.78 ○	4.2.3 Income inequality	79	56.53
2.2.4 Annual investment in telecommunication services	86	75.16	4.2.4 Healthy life expectancy at birth	107	47.63
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	117	29.80
2.3.1 Government online services	104	41.42	4.3.2 SDG 4: Quality Education	NA	NA
2.3.2 Publication and use of open data	69	22.06	4.3.3 SDG 5: Women's economic opportunity	76	73.45
2.3.3 Government promotion of investment in emerging tech	73	34.67	4.3.4 SDG 7: Affordable and Clean Energy	108	55.27
2.3.4 R&D expenditure by governments and higher education	61	9.09 ●	4.3.5 SDG 11: Sustainable Cities and Communities	110	41.06

NOTE: ● a strength and ○ a weakness.

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