



Zambia

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.

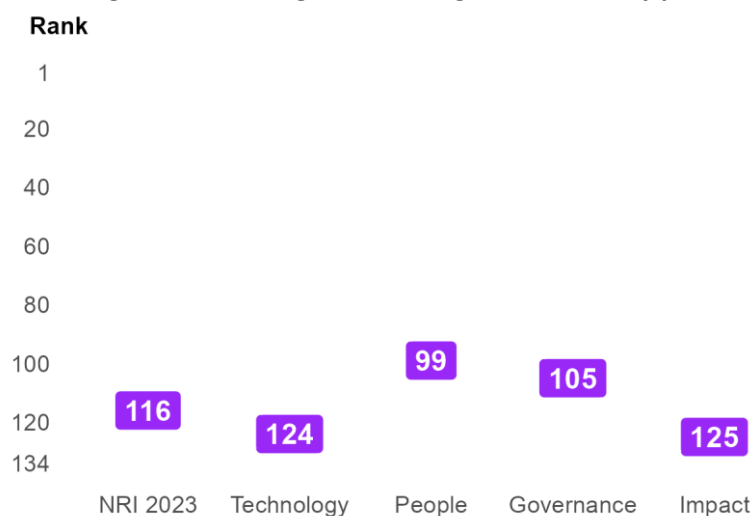
Figure 1: The NRI 2023 model



Global NRI position of Zambia

Zambia ranks 116th 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: Zambia 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 Zambia relate to Businesses, Trust and Regulation, among others (Table 1). More could be done, though, to improve the economy's performances in the Economy, Content and Quality of Life sub-pillars.

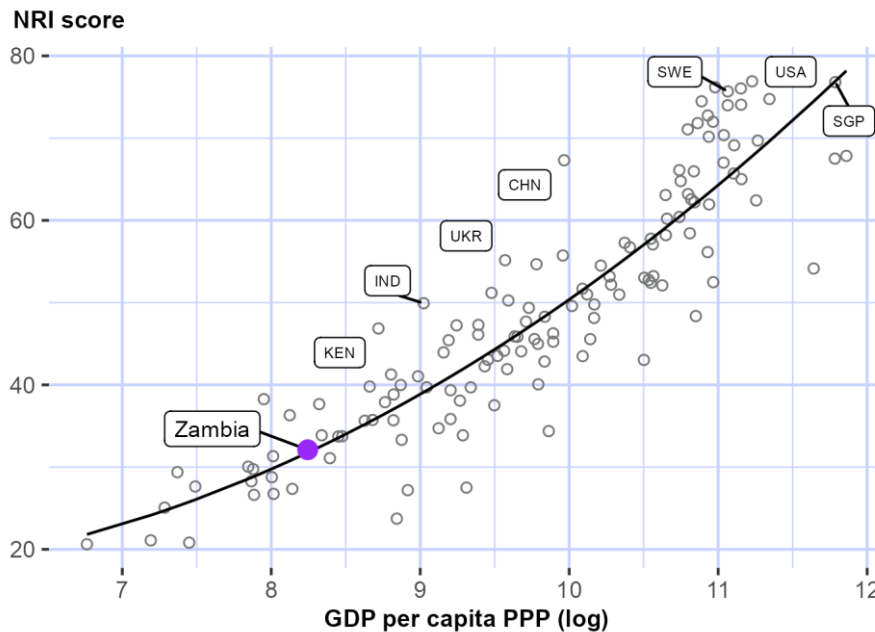
Table 1: Zambia rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Businesses	55	Governments	114
Trust	83	Access	119
Regulation	99	Inclusion	121
SDG Contribution	100	Economy	124
Individuals	108	Content	127
Future Technologies	112	Quality of Life	128

NRI score and income

Figure 3 shows the position of Zambia 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, Zambia 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.

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). Zambia 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

Zambia is ranked 33rd in the group of lower-middle-income countries (Figure 4, left panel). In terms of pillar performance, it has a score below the income group average in each of the four pillars. At the sub-pillar level, it outperforms lower-middle-income countries in three of the twelve sub-pillars: Businesses, Trust and Regulation.

Africa

Zambia is ranked 14th within Africa (Figure 4, right panel). It has a score above the regional average in two of the four pillars: People and Governance. With regard to sub-pillars, it outperforms the average in Africa in five of the twelve sub-pillars: Individuals, Businesses, Trust, Regulation and SDG Contribution.

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

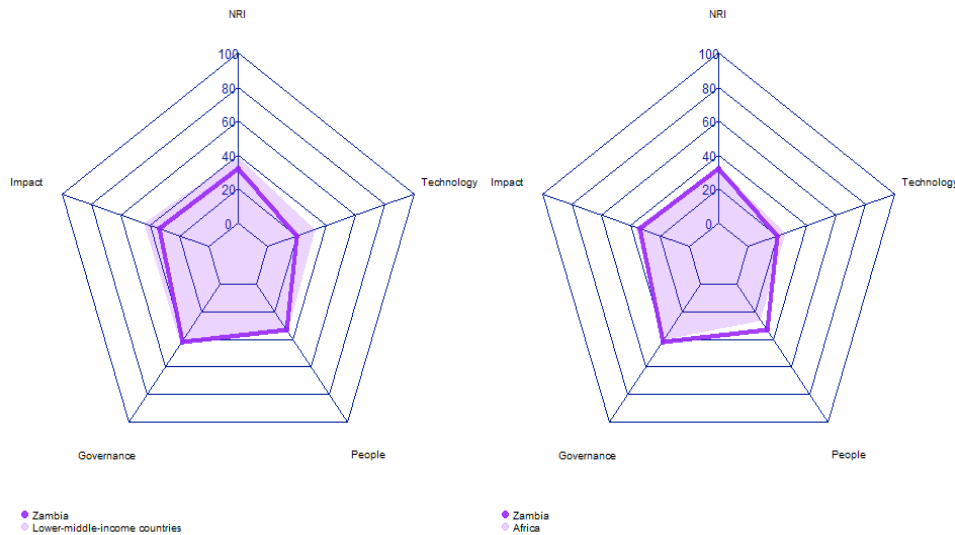


Table 2: Zambia scores vs. averages of its income group and region, overall and by pillar

Dimension	Zambia	Lower-middle-income countries	Africa
NRI	32.11	38.41	32.14
Technology	20.20	32.12	25.14
People	33.12	34.38	26.19
Governance	41.54	43.27	40.44
Impact	33.56	43.89	36.77

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Strongest and weakest indicators

The indicators where Zambia performs particularly well include 3.2.4 E-commerce legislation, 3.1.3 Online access to financial account, and 2.2.1 Firms with website (Table 3). By contrast, the economy's weakest indicators include 4.2.1 Happiness, 2.1.4 Tertiary enrollment, and 4.2.3 Income inequality.

Table 3: Highlight of Strengths and Opportunities for Zambia

Strongest indicators	Rank	Weakest indicators	Rank
3.2.4 E-commerce legislation	1	4.1.3 PCT patent applications	99
3.1.3 Online access to financial account	45	2.3.2 Publication and use of open data	100
2.2.1 Firms with website	52	4.2.3 Income inequality	114
3.2.5 Privacy protection by law content	56	2.1.4 Tertiary enrollment	128
4.2.2 Freedom to make life choices	59	4.2.1 Happiness	129
2.1.5 Adult literacy rate	70		
4.3.3 SDG 5: Women's economic opportunity	76		
4.3.5 SDG 11: Sustainable Cities and Communities	78		
3.1.2 Cybersecurity	80		
1.1.4 Population covered by at least a 3G mobile network	91		

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

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NRI 2023 At-A-Glance: Zambia

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Rank: 116 (out of 134)

Score: 32.11

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	124	20.20	C. Governance pillar	105	41.54
1st sub-pillar: Access	119	40.23	1st sub-pillar: Trust	83	35.00
2nd sub-pillar: Content	127	0.86	2nd sub-pillar: Regulation	99	56.68
3rd sub-pillar: Future Technologies	112	19.51	3rd sub-pillar: Inclusion	121	32.94
B. People pillar	99	33.12	D. Impact pillar	125	33.56
1st sub-pillar: Individuals	108	31.41	1st sub-pillar: Economy	124	12.62
2nd sub-pillar: Businesses	55	48.29	2nd sub-pillar: Quality of Life	128	34.67
3rd sub-pillar: Governments	114	19.67	3rd sub-pillar: SDG Contribution	100	53.40

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	124	20.20	C. Governance pillar	105	41.54
1st sub-pillar: Access	119	40.23	1st sub-pillar: Trust	83	35.00
1.1.1 Mobile tariffs	110	32.15	3.1.1 Secure Internet servers	116	29.25
1.1.2 Handset prices	98	33.02	3.1.2 Cybersecurity	80	68.33
1.1.3 FTTH/building Internet subscriptions	107	10.00	3.1.3 Online access to financial account	45	40.46
1.1.4 Population covered by at least a 3G mobile network	91	98.48	3.1.4 Internet shopping	122	1.97
1.1.5 International Internet bandwidth	112	61.92	2nd sub-pillar: Regulation	99	56.68
1.1.6 Internet access in schools	77	5.81	3.2.1 Regulatory quality	100	37.11
2nd sub-pillar: Content	127	0.86	3.2.2 ICT regulatory environment	96	69.06
1.2.1 GitHub commits	119	0.65	3.2.3 Regulation of emerging technologies	112	7.79
1.2.2 Internet domain registrations	125	0.12	3.2.4 E-commerce legislation	1	100.00
1.2.3 Mobile apps development	NA	NA	3.2.5 Privacy protection by law content	56	69.44
1.2.4 AI scientific publications	90	1.80	3rd sub-pillar: Inclusion	121	32.94
3rd sub-pillar: Future Technologies	112	19.51	3.3.1 E-Participation	90	36.05
1.3.1 Adoption of emerging technologies	114	25.44	3.3.2 Socioeconomic gap in use of digital payments	122	36.39
1.3.2 Investment in emerging technologies	93	31.25	3.3.3 Availability of local online content	126	21.39

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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	94	47.05
1.3.4 Computer software spending	117	1.83	3.3.5 Rural gap in use of digital payments	116	23.83
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	NA	NA	4.1.1 High-tech and medium-high-tech manufacturing	89	10.77
2.1.2 ICT skills in the education system	NA	NA	4.1.2 High-tech exports	106	2.22
2.1.3 Use of virtual social networks	117	10.36	4.1.3 PCT patent applications	99	0.00 ○
2.1.4 Tertiary enrollment	128	0.94 ○	4.1.4 Domestic market size	94	41.54
2.1.5 Adult literacy rate	70	82.93 ●	4.1.5 Prevalence of gig economy	112	18.90
2.1.6 AI talent concentration	NA	NA	4.1.6 ICT services exports	113	2.32
<i>2nd sub-pillar: Businesses</i>			<i>2nd sub-pillar: Quality of Life</i>		
2.2.1 Firms with website	52	57.19 ●	4.2.1 Happiness	129	13.57 ○
2.2.2 GERD financed by business enterprise	NA	NA	4.2.2 Freedom to make life choices	59	76.23 ●
2.2.3 Knowledge intensive employment	104	12.83	4.2.3 Income inequality	114	14.82 ○
2.2.4 Annual investment in telecommunication services	89	74.86	4.2.4 Healthy life expectancy at birth	124	34.04
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	105	43.17
2.3.1 Government online services	108	38.26	4.3.2 SDG 4: Quality Education	NA	NA
2.3.2 Publication and use of open data	100	2.94 ○	4.3.3 SDG 5: Women's economic opportunity	76	73.45 ●
2.3.3 Government promotion of investment in emerging tech	108	17.80	4.3.4 SDG 7: Affordable and Clean Energy	127	38.01
2.3.4 R&D expenditure by governments and higher education	NA	NA	4.3.5 SDG 11: Sustainable Cities and Communities	78	58.98 ●

NOTE: ● a strength and ○ a weakness.

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