

Network Readiness Index 2020 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 2020 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 60 variables.

Figure 1: The NRI 2020 model **Network Readiness Index (NRI) Technology** People Governance **Impact** Individuals Trust Access **Economy** Quality of Life Content **Businesses** Regulation **SDG Future** Inclusion Governments Contribution Technologies

Global NRI position of Zambia

Zambia ranks 116th out of the 134 economies included in the NRI 2020 (Figure 2). Its main strength relates to Governance. The greatest scope for improvement, meanwhile, concerns Technology.

Rank 1 20 40 60 80 100 103 116 116 120 121 123 134 NRI 2020 Technology People Governance Impact

Figure 2: Zambia global ranking, overall and by pillar



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 Content, Quality of Life and Governments sub-pillars.

Table 1: Zambia rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Businesses	70	Individuals	114
Trust	88	Access	118
Regulation	90	Inclusion	119
SDG Contribution	96	Content	124
Future Technologies	98	Quality of Life	129
Economy	108	Governments	131

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: SWE = Sweden (rank: 1), DNK = Denmark (2), SGP = Singapore (3), CHN = China (40), IND = India (88). USA is ranked 8th. Zambia belongs to the group of lower-middle-income countries, where the best performer is Vietnam (VNM). The top performer of its region-Africa-is Mauritius (MUS).



Performance against its income group and region

Lower-middle-income countries

Zambia is ranked 28th 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 four of the twelve sub-pillars: Businesses, Trust, Regulation and SDG Contribution.

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	30.54	36.72	30.62
Technology	18.76	27.72	21.47
People	27.68	33.88	26.75
Governance	41.95	43.15	39.31
Impact	33.75	42.15	34.94



Strongest and weakest indicators

The indicators where Zambia performs particularly well include e-commerce legislation, Online access to financial account, and Firms with website (Table 3). By contrast, the economy's weakest indicators include Happiness, Government online services, Mobile apps development, Internet users, and Availability of local online content.

Table 3: Top-ranked and bottom-ranked indicators of Zambia

Strongest indicators	Rank	Weakest indicators	Rank
e-commerce legislation	1	Income inequality	119
Online access to financial account	46	Healthy life expectancy at birth	120
Firms with website	56	Internet domain registrations	121
Internet access in schools	65	Tertiary enrollment	123
Freedom to make life choices	70	E-Participation	124
Adult literacy rate	73	Mobile apps development	127
Professionals	73	Internet users	127
Medium and high-tech industry	75	Availability of local online content	127
Ease of doing business	80	Government online services	128
Gender gap in Internet use	80	Happiness	130



NRI 2020 At-A-Glance: Zambia

Network Readiness Index Rank: 116 (out of 134) Score: 30.54

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	123	18.76	C. Governance pillar	103	41.95
1st sub-pillar: Access	118	28.27	1st sub-pillar: Trust	88	30.51
2nd sub-pillar: Content	124	8.15	2nd sub-pillar: Regulation	90	56.75
3rd sub-pillar: Future Technologies	98	19.85	3rd sub-pillar: Inclusion	119	38.59
B. People pillar	116	27.68	D. Impact pillar	121	33.75
1st sub-pillar: Individuals	114	26.88	1st sub-pillar: Economy	108	14.45
2nd sub-pillar: Businesses	70	41.05	2nd sub-pillar: Quality of Life	129	31.90
3rd sub-pillar: Governments	131	15.11	3rd sub-pillar: SDG Contribution	96	54.90

The N	letwork Readiness Index in detail			
Indica	tor	Rank	Score	In
A. Te	chnology pillar	123	18.76	C
1st su	b-pillar: Access	118	28.27	1
1.1.1	Mobile tariffs	112	35.21	3
1.1.2	Handset prices	103	29.32	3
1.1.3	Internet access	113	17.47	3
1.1.4	4G mobile network coverage	106	43.41	3
1.1.5	Fixed-broadband subscriptions	104	6.65	2
1.1.6	International Internet bandwidth	107	60.02	3
1.1.7	Internet access in schools	65	5.81	3
2nd s	ub-pillar: Content	124	8.15	3
1.2.1	GitHub commits	115	0.31	3
1.2.2	Wikipedia edits	110	13.17	3
1.2.3	Internet domain registrations	*	*	3
1.2.4	Mobile apps development	127	19.03	3
3rd sı	ıb-pillar: Future Technologies	98	19.85	3
1.3.1	Adoption of emerging technologies	114	25.44	3
1.3.2	Investment in emerging technologies	91	31.39	3
1.3.3	ICT PCT patent applications	NA	NA	3
1.3.4	Computer software spending	109	2.72	
1.3.5	Robot density	NA	NA	1
B. Pe	ople pillar	116	27.68	4
1st su	b-pillar: Individuals	114	26.88	4
2.1.1	Internet users	127	12.00	4
2.1.2	Active mobile-broadband subscriptions	92	21.40	4
2.1.3	Use of virtual social networks	116	11.34	4
2.1.4	Tertiary enrollment	123	2.42	2
2.1.5	Adult literacy rate	73	82.97	4
2.1.6	ICT skills	113	31.17	4
2nd s	ub-pillar: Businesses	70	41.05	4
2.2.1	Firms with website	56	57.47	4
2.2.2	Ease of doing business	80	64.92	3
2.2.3	Professionals	73	21.10	4
2.2.4	Technicians and associate professionals	93	18.65	4
2.2.5	Business use of digital tools	104	43.11	4
2.2.6	R&D expenditure by businesses	NA	NA	4
3rd sı	ıb-pillar: Governments	131	15.11	
2.3.1	Government online services	128	23.63	
2.3.2	Publication and use of open data	102	3.82	
2.3.3	Government promotion of investment in emerging tech	108	17.87	
2.3.4	R&D expenditure by governments and higher education	NA	NA	
* Confide	ntial data			

Indicator	Rank	Score
C. Governance pillar	103	41.95
1st sub-pillar: Trust	88	30.51
3.1.1 Secure Internet servers	115	28.72
3.1.2 Cybersecurity	90	46.37
3.1.3 Online access to financial account	46	40.46
3.1.4 Internet shopping	86	6.50
2nd sub-pillar: Regulation	90	56.75
3.2.1 Regulatory quality	101	41.67
3.2.2 ICT regulatory environment	97	70.28
3.2.3 Legal framework's adaptability to emerging technologies	109	15.07
3.2.4 e-commerce legislation	1	100.00
3.2.5 Privacy protection by law content	NA	NA
3rd sub-pillar: Inclusion	119	38.59
3.3.1 E-Participation	124	28.39
3.3.2 Socioeconomic gap in use of digital payments	94	49.51
3.3.3 Availability of local online content	127	21.37
3.3.4 Gender gap in Internet use	80	40.88
3.3.5 Rural gap in use of digital payments	97	52.80
D. Impact pillar	121	33.75
1st sub-pillar: Economy	108	14.45
4.1.1 Medium and high-tech industry	75	26.74
4.1.2 High-tech exports	104	4.38
4.1.3 PCT patent applications	NA	NA
4.1.4 Labor productivity per employee	104	6.66
4.1.5 Prevalence of gig economy	112	20.04
2nd sub-pillar: Quality of Life	129	31.90
4.2.1 Happiness	130	12.06
4.2.2 Freedom to make life choices	70	74.14
4.2.3 Income inequality	119	15.21
4.2.4 Healthy life expectancy at birth	120	26.21
3rd sub-pillar: SDG Contribution	96	54.90
4.3.1 SDG 3: Good Health and Well-Being	107	40.98
4.3.2 SDG 4: Quality Education	NA	NA
4.3.3 SDG 5: Gender Equality	85	68.29
4.3.4 SDG 7: Affordable and Clean Energy	115	55.42

^{*} Confidential data



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