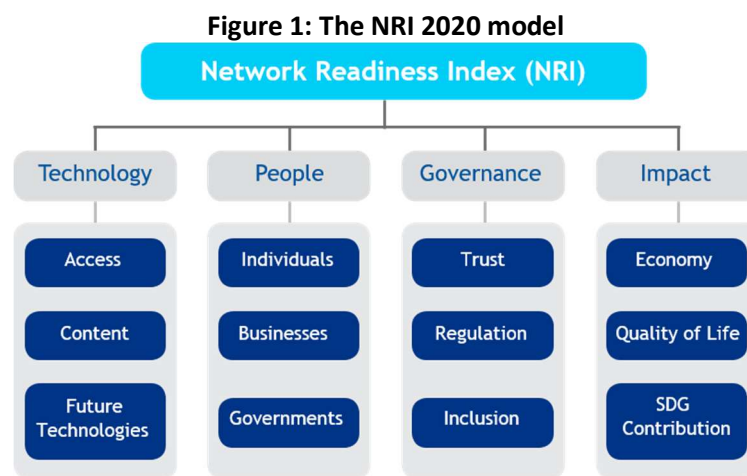


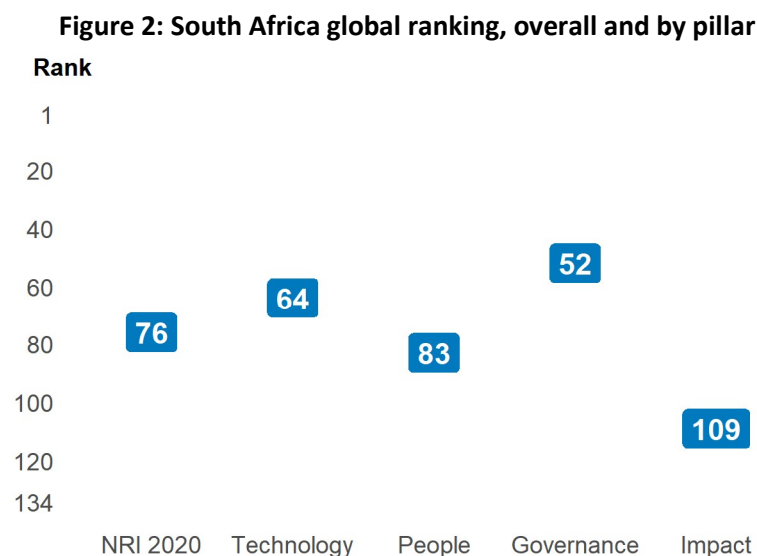
# Network Readiness Index 2020 South Africa

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.



## Global NRI position of South Africa

South Africa ranks 76th 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 Impact.



### Performance at sub-pillar level

When it comes to sub-pillars, the strongest showings of South Africa relate to Future Technologies, Inclusion 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.

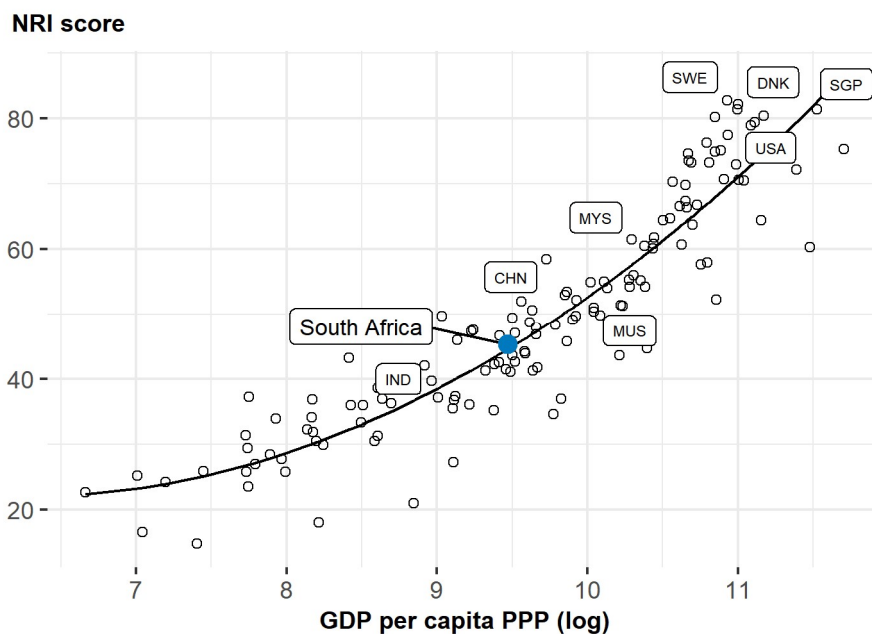
**Table 1: South Africa rankings by sub-pillar**

Sub-pillar	Rank	Sub-pillar	Rank
Future Technologies	48	Content	71
Inclusion	52	Economy	78
Trust	58	Businesses	81
Regulation	59	SDG Contribution	86
Governments	62	Individuals	97
Access	69	Quality of Life	127

### NRI score and income

Figure 3 shows the position of South Africa 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, South Africa 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. South Africa belongs to the group of upper-middle-income countries, where the best performer is Malaysia (MYS). The top performer of its region-Africa-is Mauritius (MUS).

## Performance against its income group and region

### *Upper-middle-income countries*

South Africa is ranked 24th in the group of upper-middle-income countries (Figure 4, left panel). In terms of pillar performance, it has a score higher than the income group average in two of the four pillars: technology and governance. At the sub-pillar level, it outperforms upper-middle-income countries in six of the twelve sub-pillars: Access, Future Technologies, Governments, Trust, Regulation and Inclusion.

### *Africa*

South Africa is ranked 2nd 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 eleven of the twelve sub-pillars: Access, Content, Future Technologies, Individuals, Businesses, Governments, Trust, Regulation, Inclusion, Economy and SDG Contribution.

**Figure 4: Performance of South Africa against its income group and region, overall and by pillar**



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

Dimension	South Africa	Upper-middle-income countries	Africa
NRI	45.26	47.39	30.62
Technology	40.23	38.42	21.47
People	41.16	46.66	26.75
Governance	60.88	54.31	39.31
Impact	38.80	50.17	34.94

### Strongest and weakest indicators

The indicators where South Africa performs particularly well include e-commerce legislation, Adoption of emerging technologies, and Rural gap in use of digital payments (Table 3). By contrast, the economy's weakest indicators include SDG 7: Affordable and Clean Energy, ICT skills, and Income inequality.

**Table 3: Top-ranked and bottom-ranked indicators of South Africa**

<b>Strongest indicators</b>	<b>Rank</b>	<b>Weakest indicators</b>	<b>Rank</b>
e-commerce legislation	1	Firms with website	94
Adoption of emerging technologies	33	Freedom to make life choices	95
Rural gap in use of digital payments	35	Use of virtual social networks	98
Robot density	36	ICT regulatory environment	99
Secure Internet servers	36	Professionals	101
Investment in emerging technologies	40	International Internet bandwidth	113
SDG 5: Gender Equality	40	Healthy life expectancy at birth	115
Legal framework's adaptability to emerging technologies	41	ICT skills	121
ICT PCT patent applications	44	Income inequality	121
R&D expenditure by businesses	45	SDG 7: Affordable and Clean Energy	122

# NRI 2020 At-A-Glance: South Africa

Network Readiness Index

Rank: 76 (out of 134)

Score: 45.26

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
<b>A. Technology pillar</b>	64	40.23	<b>C. Governance pillar</b>	52	60.88
1st sub-pillar: Access	69	61.79	1st sub-pillar: Trust	58	46.08
2nd sub-pillar: Content	71	27.20	2nd sub-pillar: Regulation	59	68.11
3rd sub-pillar: Future Technologies	48	31.68	3rd sub-pillar: Inclusion	52	68.44
<b>B. People pillar</b>	83	41.16	<b>D. Impact pillar</b>	109	38.80
1st sub-pillar: Individuals	97	40.69	1st sub-pillar: Economy	78	21.27
2nd sub-pillar: Businesses	81	37.48	2nd sub-pillar: Quality of Life	127	34.66
3rd sub-pillar: Governments	62	45.30	3rd sub-pillar: SDG Contribution	86	60.46

## The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
<b>A. Technology pillar</b>	64	40.23	<b>C. Governance pillar</b>	52	60.88
1st sub-pillar: Access	69	61.79	1st sub-pillar: Trust	58	46.08
1.1.1 Mobile tariffs	63	64.43	3.1.1 Secure Internet servers	36	76.38
1.1.2 Handset prices	47	55.16	3.1.2 Cybersecurity	57	69.77
1.1.3 Internet access	73	61.73	3.1.3 Online access to financial account	67	28.13
1.1.4 4G mobile network coverage	65	90.32	3.1.4 Internet shopping	74	10.05
1.1.5 Fixed-broadband subscriptions	80	41.30	2nd sub-pillar: Regulation	59	68.11
1.1.6 International Internet bandwidth	113	57.78	3.2.1 Regulatory quality	60	55.20
1.1.7 Internet access in schools	NA	NA	3.2.2 ICT regulatory environment	99	69.88
2nd sub-pillar: Content	71	27.20	3.2.3 Legal framework's adaptability to emerging technologies	41	51.13
1.2.1 GitHub commits	58	4.77	3.2.4 e-commerce legislation	1	100.00
1.2.2 Wikipedia edits	83	33.93	3.2.5 Privacy protection by law content	46	64.33
1.2.3 Internet domain registrations	*	*	3rd sub-pillar: Inclusion	52	68.44
1.2.4 Mobile apps development	67	63.11	3.3.1 E-Participation	56	74.07
3rd sub-pillar: Future Technologies	48	31.68	3.3.2 Socioeconomic gap in use of digital payments	52	74.94
1.3.1 Adoption of emerging technologies	33	64.29	3.3.3 Availability of local online content	90	49.81
1.3.2 Investment in emerging technologies	40	51.83	3.3.4 Gender gap in Internet use	NA	NA
1.3.3 ICT PCT patent applications	44	11.30	3.3.5 Rural gap in use of digital payments	35	74.94
1.3.4 Computer software spending	48	23.65	<b>D. Impact pillar</b>	109	38.80
1.3.5 Robot density	36	7.36	1st sub-pillar: Economy	78	21.27
<b>B. People pillar</b>	83	41.16	4.1.1 Medium and high-tech industry	64	31.04
1st sub-pillar: Individuals	97	40.69	4.1.2 High-tech exports	76	10.08
2.1.1 Internet users	87	55.17	4.1.3 PCT patent applications	47	1.30
2.1.2 Active mobile-broadband subscriptions	66	29.27	4.1.4 Labor productivity per employee	62	28.34
2.1.3 Use of virtual social networks	98	36.08	4.1.5 Prevalence of gig economy	85	35.60
2.1.4 Tertiary enrollment	91	15.87	2nd sub-pillar: Quality of Life	127	34.66
2.1.5 Adult literacy rate	70	83.35	4.2.1 Happiness	93	46.03
2.1.6 ICT skills	121	24.43	4.2.2 Freedom to make life choices	95	61.79
2nd sub-pillar: Businesses	81	37.48	4.2.3 Income inequality	121	0.00
2.2.1 Firms with website	94	30.77	4.2.4 Healthy life expectancy at birth	115	30.83
2.2.2 Ease of doing business	79	65.07	3rd sub-pillar: SDG Contribution	86	60.46
2.2.3 Professionals	101	12.95	4.3.1 SDG 3: Good Health and Well-Being	73	67.21
2.2.4 Technicians and associate professionals	57	36.99	4.3.2 SDG 4: Quality Education	NA	NA
2.2.5 Business use of digital tools	49	70.45	4.3.3 SDG 5: Gender Equality	40	80.02
2.2.6 R&D expenditure by businesses	45	8.66	4.3.4 SDG 7: Affordable and Clean Energy	122	49.28
3rd sub-pillar: Governments	62	45.30			
2.3.1 Government online services	54	73.94			
2.3.2 Publication and use of open data	46	34.43			
2.3.3 Government promotion of investment in emerging tech	83	31.77			
2.3.4 R&D expenditure by governments and higher education	45	41.05			

\* Confidential data

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