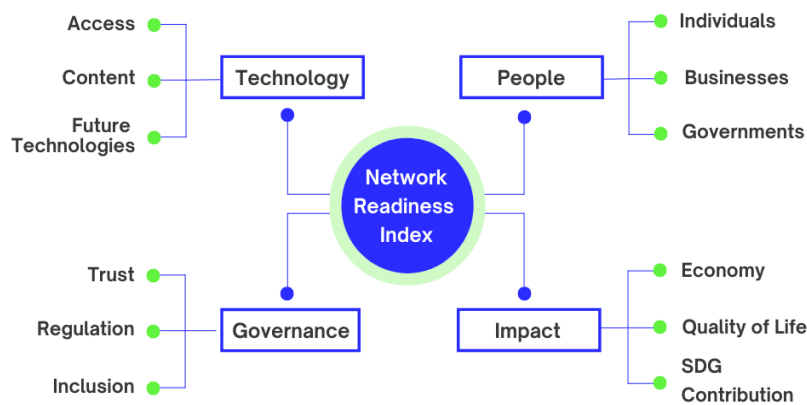


Network Readiness Index 2022

Eswatini

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 2022 the NRI Report maps the network-based readiness landscape of 131 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.

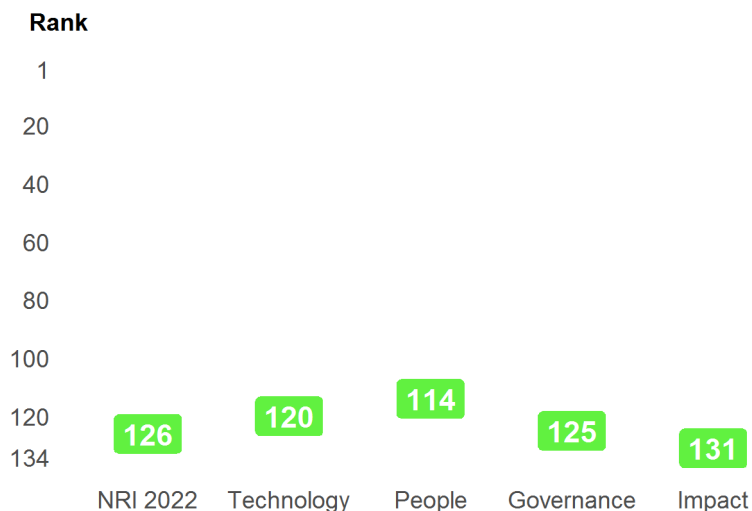
Figure 1: The NRI 2022 model



Global NRI position of Eswatini

Eswatini ranks 126th out of the 131 economies included in the NRI 2022 (Figure 2). Its main strength relates to People. The greatest scope for improvement, meanwhile, concerns Impact.

Figure 2: Eswatini global ranking, overall and by pillar



Performance at sub-pillar level

When it comes to sub-pillars, the strongest showings of Eswatini relate to Individuals, Trust and Access, among others (Table 1). More could be done, though, to improve the economy's performances in the Regulation, Economy and Quality of Life sub-pillars.

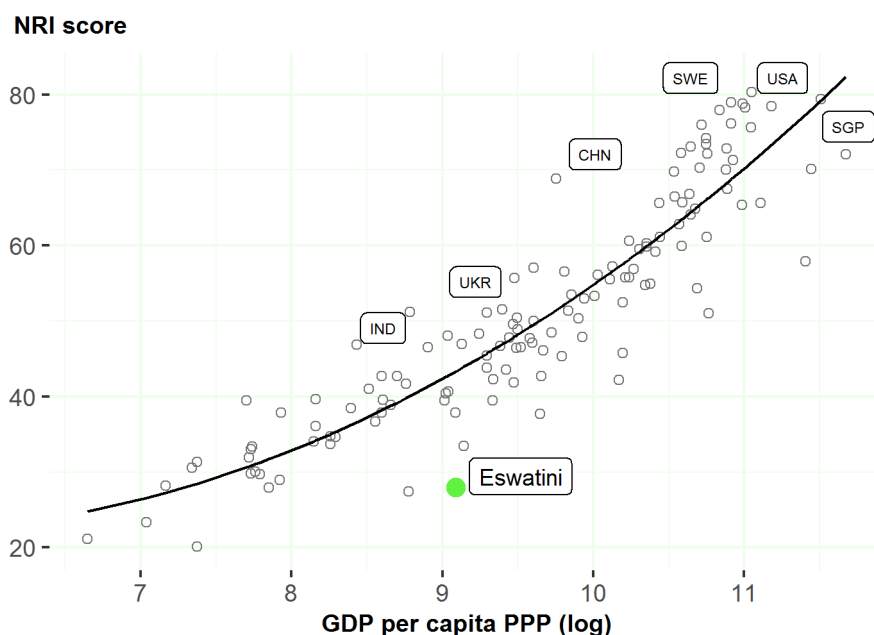
Table 1: Eswatini rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Individuals	98	Governments	120
Trust	104	Future Technologies	121
Access	111	Inclusion	122
Businesses	111	Regulation	125
Content	116	Economy	131
SDG Contribution	116	Quality of Life	131

NRI score and income

Figure 3 shows the position of Eswatini 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, Eswatini is well below the trend line, which suggests that it is underachieving and that one would expect it could raise its network readiness in view of its income level.

Figure 3: NRI score and GDP per capita PPP (log)



Note: USA = United States (rank: 1), SGP = Singapore (rank: 2), SWE = Sweden (3), CHN = China (23), IND = India (61). Netherlands (NLD) is ranked 4th. Eswatini belongs to the group of lower-middle-income countries, where the best performer is Ukraine (UKR). The top performer of its region-Africa-is South Africa (ZAF).

Performance against its income group and region

Lower-middle-income countries

Eswatini is ranked 34th 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 trails lower-middle-income countries in all of them.

Africa

Eswatini is ranked 26th within Africa (Figure 4, right panel). It has a score above the regional average in one of the four pillars: people. With regard to sub-pillars, it outperforms the average in Africa in one of the twelve sub-pillars: Individuals.

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

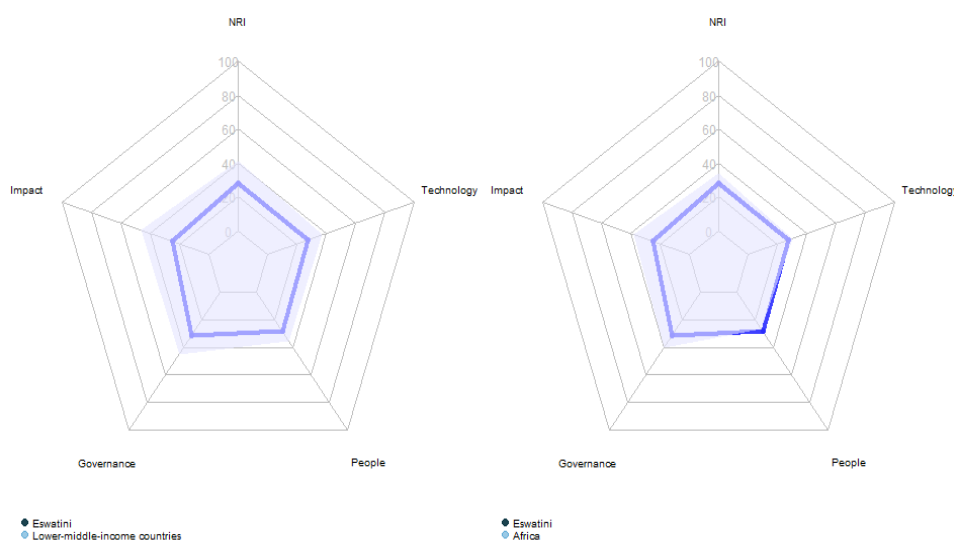


Table 2: Eswatini scores vs. averages of its income group and region, overall and by pillar

Dimension	Eswatini	Lower-middle-income countries	Africa
NRI	27.95	40.94	33.77
Technology	27.57	37.28	29.96
People	28.54	35.42	26.81
Governance	31.11	45.00	40.37
Impact	24.58	46.09	37.94

Strongest and weakest indicators

The indicators where Eswatini performs particularly well include 1.1.6 Internet access in schools, 2.2.1 Firms with website, and 2.2.2 GERD financed by business enterprise (Table 3). By contrast, the economy's weakest indicators include 1.1.5 International Internet bandwidth, 1.3.2 Investment in emerging technologies, and 4.2.4 Healthy life expectancy at birth.

Table 3: Strongest and weakest indicators of Eswatini

Strongest indicators	Rank	Weakest indicators	Rank
1.1.6 Internet access in schools	44	4.1.3 PCT patent applications	99
2.2.1 Firms with website	50	2.3.2 Publication and use of open data	105
2.2.2 GERD financed by business enterprise	64	3.2.4 E-commerce legislation	126
2.1.5 Adult literacy rate	68	1.3.2 Investment in emerging technologies	129
2.3.4 R&D expenditure by governments and higher education	82	4.2.4 Healthy life expectancy at birth	129
2.2.3 Knowledge intensive employment	84	1.1.5 International Internet bandwidth	130
1.1.2 Handset prices	88		
4.3.4 SDG 7: Affordable and Clean Energy	90		
1.1.1 Mobile tariffs	97		
4.3.1 SDG 3: Good Health and Well-Being	98		

NRI 2022 At-A-Glance: Eswatini

Network Readiness Index

Rank: 126 (out of 131)

Score: 27.95

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	120	27.57	C. Governance pillar	125	31.11
1st sub-pillar: Access	111	44.73	1st sub-pillar: Trust	104	27.15
2nd sub-pillar: Content	116	20.74	2nd sub-pillar: Regulation	125	33.88
3rd sub-pillar: Future Technologies	121	17.26	3rd sub-pillar: Inclusion	122	32.30
B. People pillar	114	28.54	D. Impact pillar	131	24.58
1st sub-pillar: Individuals	98	36.19	1st sub-pillar: Economy	131	6.97
2nd sub-pillar: Businesses	111	28.61	2nd sub-pillar: Quality of Life	131	20.29
3rd sub-pillar: Governments	120	20.81	3rd sub-pillar: SDG Contribution	116	46.46

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	120	27.57	C. Governance pillar	125	31.11
1st sub-pillar: Access	111	44.73	1st sub-pillar: Trust	104	27.15
1.1.1 Mobile tariffs	97	42.34	3.1.1 Secure Internet servers	100	37.51
1.1.2 Handset prices	88	43.13	3.1.2 Cybersecurity	118	16.79
1.1.3 FTTH/building Internet subscriptions	NA	NA	3.1.3 Online access to financial account	NA	NA
1.1.4 Population covered by at least a 3G mobile network	125	75.06	3.1.4 Internet shopping	NA	NA
1.1.5 International Internet bandwidth	130	0.00	2nd sub-pillar: Regulation	125	33.88
1.1.6 Internet access in schools	44	63.11	3.2.1 Regulatory quality	101	26.13
2nd sub-pillar: Content	116	20.74	3.2.2 ICT regulatory environment	111	61.96
1.2.1 GitHub commits	110	0.67	3.2.3 Regulation of emerging technologies	NA	NA
1.2.2 Internet domain registrations	106	0.58	3.2.4 E-commerce legislation	126	0.00
1.2.3 Mobile apps development	111	55.33	3.2.5 Privacy protection by law content	103	47.42
1.2.4 AI scientific publications	82	26.38	3rd sub-pillar: Inclusion	122	32.30
3rd sub-pillar: Future Technologies	121	17.26	3.3.1 E-Participation	104	43.21
1.3.1 Adoption of emerging technologies	114	22.76	3.3.2 Socioeconomic gap in use of digital payments	NA	NA
1.3.2 Investment in emerging technologies	129	11.75	3.3.3 Availability of local online content	124	21.39
1.3.3 Robot density	NA	NA	3.3.4 Gender gap in Internet use	NA	NA
1.3.4 Computer software spending	NA	NA	3.3.5 Rural gap in use of digital payments	NA	NA

Indicator	Rank	Score	Indicator	Rank	Score
B. People pillar	114	28.54	D. Impact pillar	131	24.58
<i>1st sub-pillar: Individuals</i>	98	36.19	<i>1st sub-pillar: Economy</i>	131	6.97
2.1.1 Mobile broadband internet traffic within the country	NA	NA	4.1.1 High-tech and medium-high-tech manufacturing	104	1.47
2.1.2 ICT skills in the education system	109	25.74	4.1.2 High-tech exports	101	4.87
2.1.3 Use of virtual social networks	101	30.48	4.1.3 PCT patent applications	99	0.00 ○
2.1.4 Tertiary enrollment	117	3.42	4.1.4 Domestic market size	127	20.25
2.1.5 Adult literacy rate	68	85.12 ●	4.1.5 Prevalence of gig economy	120	10.17
2.1.6 AI talent concentration	NA	NA	4.1.6 ICT services exports	122	5.09
<i>2nd sub-pillar: Businesses</i>	111	28.61	<i>2nd sub-pillar: Quality of Life</i>	131	20.29
2.2.1 Firms with website	50	61.23 ●	4.2.1 Happiness	NA	NA
2.2.2 GERD financed by business enterprise	64	27.59 ●	4.2.2 Freedom to make life choices	NA	NA
2.2.3 Knowledge intensive employment	84	25.57 ●	4.2.3 Income inequality	114	21.11
2.2.4 Annual investment in telecommunication services	NA	NA	4.2.4 Healthy life expectancy at birth	129	19.48 ○
2.2.5 GERD performed by business enterprise	90	0.04	<i>3rd sub-pillar: SDG Contribution</i>	116	46.46
<i>3rd sub-pillar: Governments</i>	120	20.81	4.3.1 SDG 3: Good Health and Well-Being	98	48.90 ●
2.3.1 Government online services	105	47.27	4.3.2 SDG 4: Quality Education	NA	NA
2.3.2 Publication and use of open data	105	0.00 ○	4.3.3 SDG 5: Women's economic opportunity	126	24.56
2.3.3 Government promotion of investment in emerging tech	104	20.27	4.3.4 SDG 7: Affordable and Clean Energy	90	72.01 ●
2.3.4 R&D expenditure by governments and higher education	82	15.71 ●	4.3.5 SDG 11: Sustainable Cities and Communities	108	40.37

NOTE: ● a strength and ○ a weakness.

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