



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 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.

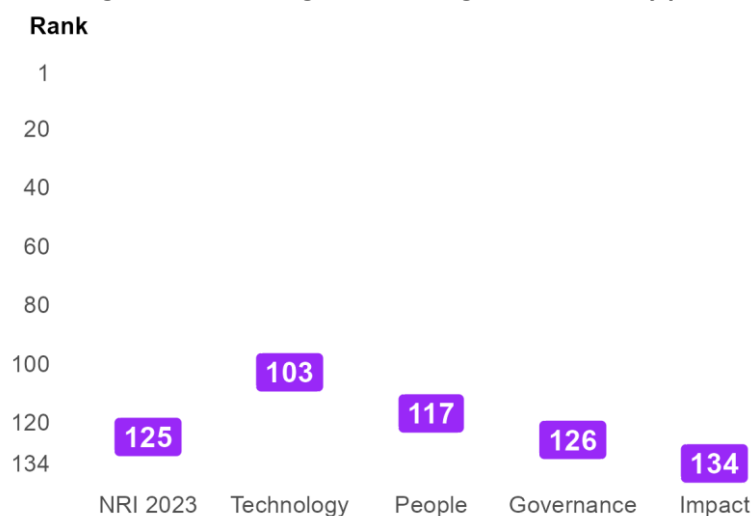
Figure 1: The NRI 2023 model



Global NRI position of Eswatini

Eswatini ranks 125th 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 Impact.

Figure 2: Eswatini 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 Eswatini relate to Content, Individuals and Access, among others (Table 1). More could be done, though, to improve the economy's performances in the Governments, Economy and Quality of Life sub-pillars.

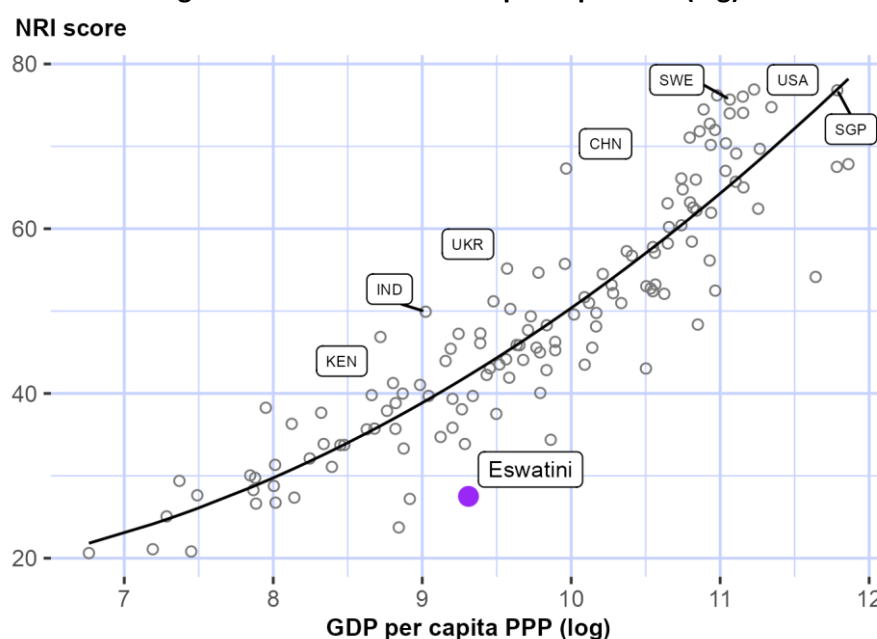
Table 1: Eswatini rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Content	76	SDG Contribution	119
Individuals	97	Future Technologies	122
Access	109	Regulation	126
Businesses	114	Governments	127
Trust	114	Economy	134
Inclusion	119	Quality of Life	134

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), FIN = Finland (3), NLD = Netherlands (4), SWE = Sweden (5), CHN = China (20), IND = India (61). 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 Kenya (KEN).



Performance against its income group and region

Lower-middle-income countries

Eswatini is ranked 37th 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 one of the twelve sub-pillars: Content.

Africa

Eswatini is ranked 23rd within Africa (Figure 4, right panel). It has a score above the regional average in one of the four pillars: Technology. With regard to sub-pillars, it outperforms the average in Africa in three of the twelve sub-pillars: Access, Content and Individuals.

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

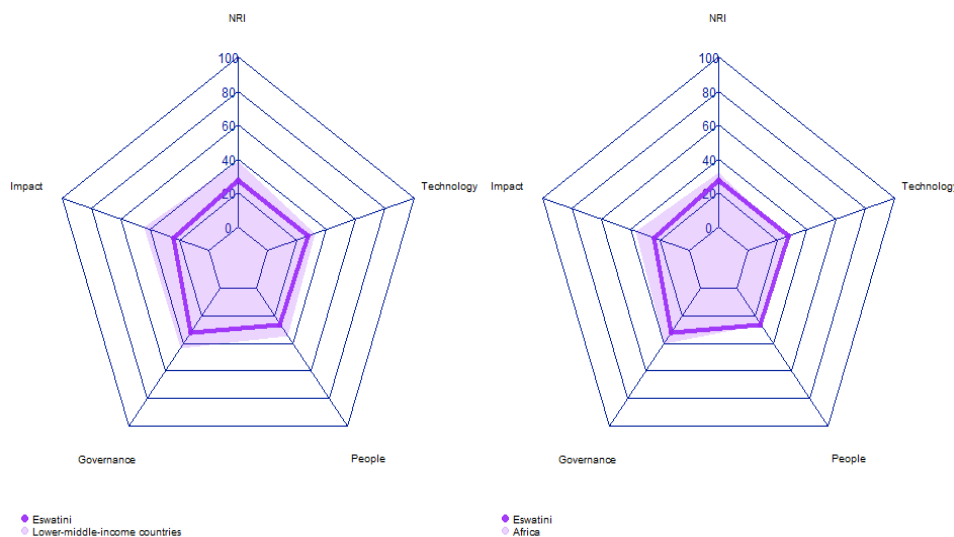


Table 2: Eswatini scores vs. averages of its income group and region, overall and by pillar

Dimension	Eswatini	Lower-middle-income countries	Africa
NRI	27.50	38.41	32.14
Technology	27.80	32.12	25.14
People	26.19	34.38	26.19
Governance	32.00	43.27	40.44
Impact	24.04	43.89	36.77

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Strongest and weakest indicators

The indicators where Eswatini performs particularly well include 1.2.3 Mobile apps development, 2.2.1 Firms with website, and 1.1.6 Internet access in schools (Table 3). By contrast, the economy's weakest indicators include 1.1.5 International Internet bandwidth, 4.2.4 Healthy life expectancy at birth, 1.3.2 Investment in emerging technologies, 3.3.1 E-Participation, 4.1.4 Domestic market size, and 4.3.3 SDG 5: Women's economic opportunity.

Table 3: Highlight of Strengths and Opportunities for Eswatini

Strongest indicators	Rank	Weakest indicators	Rank
1.2.3 Mobile apps development	6	4.1.3 PCT patent applications	99
2.2.1 Firms with website	47	2.3.2 Publication and use of open data	105
1.1.6 Internet access in schools	49	3.2.4 E-commerce legislation	129
1.1.4 Population covered by at least a 3G mobile network	56	1.3.2 Investment in emerging technologies	130
3.3.2 Socioeconomic gap in use of digital payments	57	3.3.1 E-Participation	130
2.2.2 GERD financed by business enterprise	63	4.1.4 Domestic market size	130
2.1.5 Adult literacy rate	67	4.3.3 SDG 5: Women's economic opportunity	130
2.2.3 Knowledge intensive employment	79	4.2.4 Healthy life expectancy at birth	132
4.3.4 SDG 7: Affordable and Clean Energy	81	1.1.5 International Internet bandwidth	134
3.1.4 Internet shopping	93		

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

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NRI 2023 At-A-Glance: Eswatini

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Rank: 125 (out of 134)

Score: 27.50

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	103	27.80	C. Governance pillar	126	32.00
1st sub-pillar: Access	109	44.97	1st sub-pillar: Trust	114	21.17
2nd sub-pillar: Content	76	21.17	2nd sub-pillar: Regulation	126	36.47
3rd sub-pillar: Future Technologies	122	17.26	3rd sub-pillar: Inclusion	119	38.35
B. People pillar	117	26.19	D. Impact pillar	134	24.04
1st sub-pillar: Individuals	97	37.57	1st sub-pillar: Economy	134	6.56
2nd sub-pillar: Businesses	114	28.43	2nd sub-pillar: Quality of Life	134	20.29
3rd sub-pillar: Governments	127	12.56	3rd sub-pillar: SDG Contribution	119	45.25

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	103	27.80	C. Governance pillar	126	32.00
1st sub-pillar: Access	109	44.97	1st sub-pillar: Trust	114	21.17
1.1.1 Mobile tariffs	111	29.66	3.1.1 Secure Internet servers	101	37.37
1.1.2 Handset prices	100	32.39	3.1.2 Cybersecurity	120	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	56	99.71	3.1.4 Internet shopping	93	9.36
1.1.5 International Internet bandwidth	134	0.00	2nd sub-pillar: Regulation	126	36.47
1.1.6 Internet access in schools	49	63.11	3.2.1 Regulatory quality	103	36.44
2nd sub-pillar: Content	76	21.17	3.2.2 ICT regulatory environment	114	62.00
1.2.1 GitHub commits	116	0.75	3.2.3 Regulation of emerging technologies	NA	NA
1.2.2 Internet domain registrations	103	0.73	3.2.4 E-commerce legislation	129	0.00
1.2.3 Mobile apps development	6	83.10	3.2.5 Privacy protection by law content	102	47.42
1.2.4 AI scientific publications	126	0.11	3rd sub-pillar: Inclusion	119	38.35
3rd sub-pillar: Future Technologies	122	17.26	3.3.1 E-Participation	130	12.79
1.3.1 Adoption of emerging technologies	115	22.76	3.3.2 Socioeconomic gap in use of digital payments	57	80.87
1.3.2 Investment in emerging technologies	130	11.75	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	NA	NA
1.3.4 Computer software spending	NA	NA	3.3.5 Rural gap in use of digital payments	NA	NA
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	NA	NA
2.1.2 ICT skills in the education system	NA	NA	4.1.2 High-tech exports	124	0.37
2.1.3 Use of virtual social networks	105	24.63	4.1.3 PCT patent applications	99	0.00 ○
2.1.4 Tertiary enrollment	121	2.72	4.1.4 Domestic market size	130	21.20 ○
2.1.5 Adult literacy rate	67	85.36 ●	4.1.5 Prevalence of gig economy	120	10.17
2.1.6 AI talent concentration	NA	NA	4.1.6 ICT services exports	126	1.08
<i>2nd sub-pillar: Businesses</i>			<i>2nd sub-pillar: Quality of Life</i>		
2.2.1 Firms with website	47	61.23 ●	4.2.1 Happiness	NA	NA
2.2.2 GERD financed by business enterprise	63	27.63 ●	4.2.2 Freedom to make life choices	NA	NA
2.2.3 Knowledge intensive employment	79	24.83 ●	4.2.3 Income inequality	113	21.11
2.2.4 Annual investment in telecommunication services	NA	NA	4.2.4 Healthy life expectancy at birth	132	19.48 ○
2.2.5 GERD performed by business enterprise	89	0.03	<i>3rd sub-pillar: SDG Contribution</i>		
<i>3rd sub-pillar: Governments</i>			4.3.1 SDG 3: Good Health and Well-Being	100	48.90
2.3.1 Government online services	125	25.29	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	130	23.89 ○
2.3.3 Government promotion of investment in emerging tech	104	20.31	4.3.4 SDG 7: Affordable and Clean Energy	81	67.85 ●
2.3.4 R&D expenditure by governments and higher education	83	4.64	4.3.5 SDG 11: Sustainable Cities and Communities	111	40.37

NOTE: ● a strength and ○ a weakness.

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