



Malawi

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.

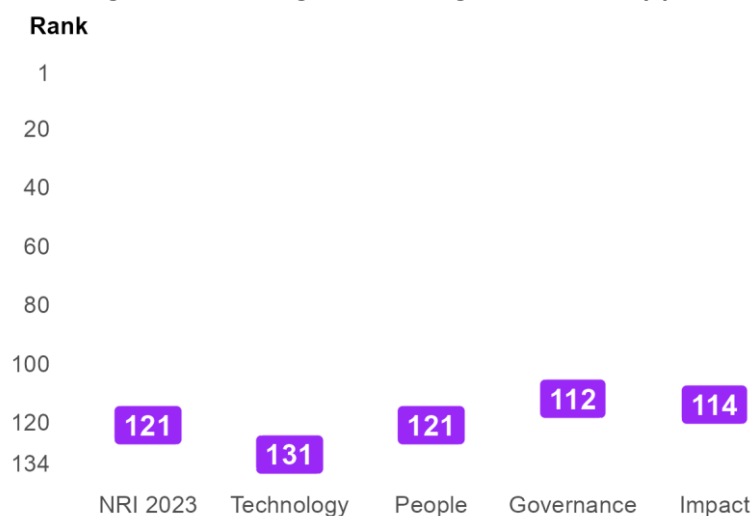
Figure 1: The NRI 2023 model



Global NRI position of Malawi

Malawi ranks 121st out of the 134 economies included in the NRI 2023 (Figure 2). Its main strength relates to Governance. The greatest scope for improvement, meanwhile, concerns Technology.

Figure 2: Malawi 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 Malawi relate to Businesses, SDG Contribution and Inclusion, among others (Table 1). More could be done, though, to improve the economy's performances in the Content, Access and Future Technologies sub-pillars.

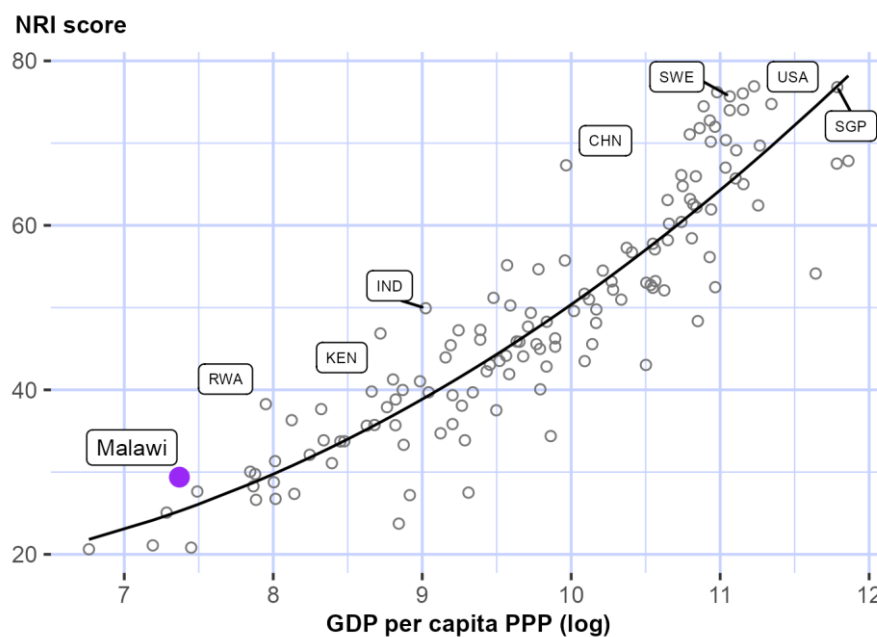
Table 1: Malawi rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Businesses	87	Individuals	119
SDG Contribution	97	Governments	120
Inclusion	111	Economy	122
Trust	112	Content	125
Regulation	112	Access	126
Quality of Life	116	Future Technologies	130

NRI score and income

Figure 3 shows the position of Malawi 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, Malawi is well above the trend line, which suggests that it has a greater network readiness than 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). Malawi belongs to the group of low-income countries, where the best performer is Rwanda (RWA). The top performer of its region-Africa-is Kenya (KEN).

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Performance against its income group and region

Low-income countries

Malawi is ranked 4th in the group of low-income countries (Figure 4, left panel). In terms of pillar performance, it has a score higher than the income group average in three of the four pillars: NRI, People, Governance and Impact. At the sub-pillar level, it outperforms low-income countries in seven of the twelve sub-pillars: Access, Individuals, Businesses, Trust, Inclusion, Quality of Life and SDG Contribution.

Africa

Malawi is ranked 19th within Africa (Figure 4, right panel). It has a score above the regional average in one of the four pillars: Impact. With regard to sub-pillars, it outperforms the average in Africa in four of the twelve sub-pillars: Businesses, Inclusion, Quality of Life and SDG Contribution.

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

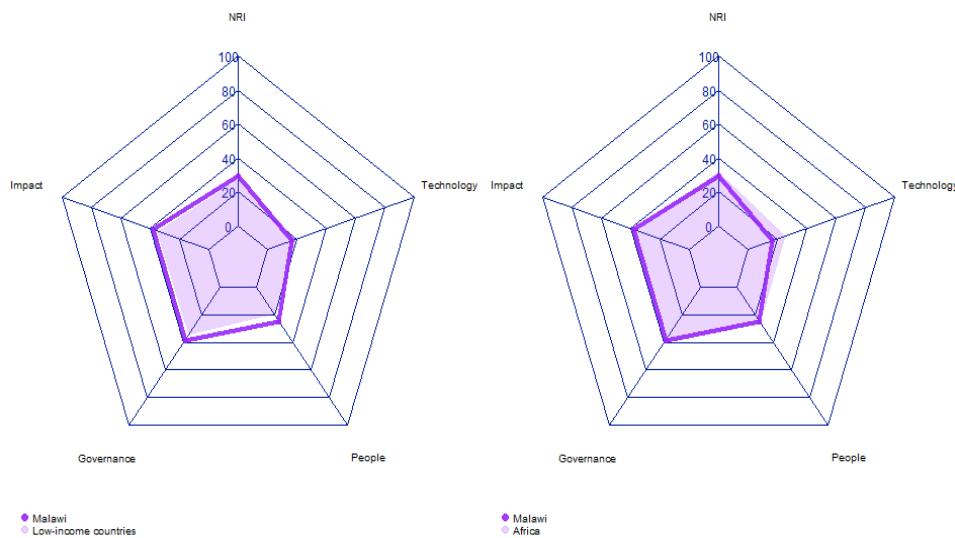


Table 2: Malawi scores vs. averages of its income group and region, overall and by pillar

Dimension	Malawi	Low-income countries	Africa
NRI	29.39	27.19	32.14
Technology	16.42	19.75	25.14
People	24.86	19.57	26.19
Governance	38.35	34.61	40.44
Impact	37.92	34.82	36.77

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Strongest and weakest indicators

The indicators where Malawi performs particularly well include 4.1.6 ICT services exports, 3.2.2 ICT regulatory environment, and 3.1.3 Online access to financial account (Table 3). By contrast, the economy's weakest indicators include 2.1.3 Use of virtual social networks, 2.1.4 Tertiary enrollment, 1.1.2 Handset prices, and 3.3.3 Availability of local online content.

Table 3: Highlight of Strengths and Opportunities for Malawi

Strongest indicators	Rank	Weakest indicators	Rank
4.1.6 ICT services exports	40	4.1.3 PCT patent applications	99
3.2.2 ICT regulatory environment	58	1.3.1 Adoption of emerging technologies	124
3.1.3 Online access to financial account	59	4.1.5 Prevalence of gig economy	125
2.1.2 ICT skills in the education system	69	1.1.1 Mobile tariffs	128
4.2.3 Income inequality	69	1.1.2 Handset prices	129
3.3.5 Rural gap in use of digital payments	72	3.3.3 Availability of local online content	129
2.2.1 Firms with website	74	2.1.4 Tertiary enrollment	130
1.2.4 AI scientific publications	77	2.1.3 Use of virtual social networks	133
3.2.5 Privacy protection by law content	77		
4.3.3 SDG 5: Women's economic opportunity	83		

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

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NRI 2023 At-A-Glance: Malawi

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Rank: 121 (out of 134)

Score: 29.39

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	131	16.42	C. Governance pillar	112	38.35
1st sub-pillar: Access	126	36.20	1st sub-pillar: Trust	112	22.59
2nd sub-pillar: Content	125	1.15	2nd sub-pillar: Regulation	112	49.91
3rd sub-pillar: Future Technologies	130	11.93	3rd sub-pillar: Inclusion	111	42.53
B. People pillar	121	24.86	D. Impact pillar	114	37.92
1st sub-pillar: Individuals	119	21.11	1st sub-pillar: Economy	122	13.42
2nd sub-pillar: Businesses	87	37.26	2nd sub-pillar: Quality of Life	116	46.14
3rd sub-pillar: Governments	120	16.21	3rd sub-pillar: SDG Contribution	97	54.18

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	131	16.42	C. Governance pillar	112	38.35
1st sub-pillar: Access	126	36.20	1st sub-pillar: Trust	112	22.59
1.1.1 Mobile tariffs	128	9.48	3.1.1 Secure Internet servers	125	22.35
1.1.2 Handset prices	129	13.05	3.1.2 Cybersecurity	101	35.72
1.1.3 FTTH/building Internet subscriptions	120	4.47	3.1.3 Online access to financial account	59	31.01
1.1.4 Population covered by at least a 3G mobile network	113	94.86	3.1.4 Internet shopping	124	1.29
1.1.5 International Internet bandwidth	120	59.11	2nd sub-pillar: Regulation	112	49.91
1.1.6 Internet access in schools	NA	NA	3.2.1 Regulatory quality	114	31.85
2nd sub-pillar: Content	125	1.15	3.2.2 ICT regulatory environment	58	84.71
1.2.1 GitHub commits	124	0.38	3.2.3 Regulation of emerging technologies	114	5.19
1.2.2 Internet domain registrations	126	0.11	3.2.4 E-commerce legislation	87	66.67
1.2.3 Mobile apps development	NA	NA	3.2.5 Privacy protection by law content	77	61.16
1.2.4 AI scientific publications	77	2.95	3rd sub-pillar: Inclusion	111	42.53
3rd sub-pillar: Future Technologies	130	11.93	3.3.1 E-Participation	90	36.05
1.3.1 Adoption of emerging technologies	124	13.46	3.3.2 Socioeconomic gap in use of digital payments	91	56.69
1.3.2 Investment in emerging technologies	118	19.75	3.3.3 Availability of local online content	129	16.59

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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	111	2.58	3.3.5 Rural gap in use of digital payments	72	60.81 ●
B. People pillar			D. Impact pillar		
<i>1st sub-pillar: Individuals</i>	121	24.86	<i>1st sub-pillar: Economy</i>	114	37.92
2.1.1 Mobile broadband internet traffic within the country	119	21.11	4.1.1 High-tech and medium-high-tech manufacturing	122	13.42
2.1.2 ICT skills in the education system	97	2.21	4.1.2 High-tech exports	NA	NA
2.1.3 Use of virtual social networks	69	46.84 ●	4.1.3 PCT patent applications	87	4.93
2.1.4 Tertiary enrollment	133	1.08 ○	4.1.4 Domestic market size	99	0.00 ○
2.1.5 Adult literacy rate	130	0.05 ○	4.1.5 Prevalence of gig economy	121	33.38
2.1.6 AI talent concentration	94	55.37	4.1.6 ICT services exports	125	3.49 ○
<i>2nd sub-pillar: Businesses</i>			<i>2nd sub-pillar: Quality of Life</i>		
2.2.1 Firms with website	87	37.26	4.2.1 Happiness	40	25.32 ●
2.2.2 GERD financed by business enterprise	116	40.90 ●	4.2.2 Freedom to make life choices	116	46.14
2.2.3 Knowledge intensive employment	NA	NA	4.2.3 Income inequality	125	18.66
2.2.4 Annual investment in telecommunication services	92	1.57	4.2.4 Healthy life expectancy at birth	92	61.42
2.2.5 GERD performed by business enterprise	69	61.56 ●	<i>3rd sub-pillar: SDG Contribution</i>		
<i>3rd sub-pillar: Governments</i>			4.3.1 SDG 3: Good Health and Well-Being	112	42.93
2.3.1 Government online services	97	54.18	4.3.2 SDG 4: Quality Education	113	32.83
2.3.2 Publication and use of open data	NA	NA	4.3.3 SDG 5: Women's economic opportunity	83	71.68 ●
2.3.3 Government promotion of investment in emerging tech	83	71.68 ●	4.3.4 SDG 7: Affordable and Clean Energy	90	66.26
2.3.4 R&D expenditure by governments and higher education	90	66.26	4.3.5 SDG 11: Sustainable Cities and Communities	100	45.96

NOTE: ● a strength and ○ a weakness.

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