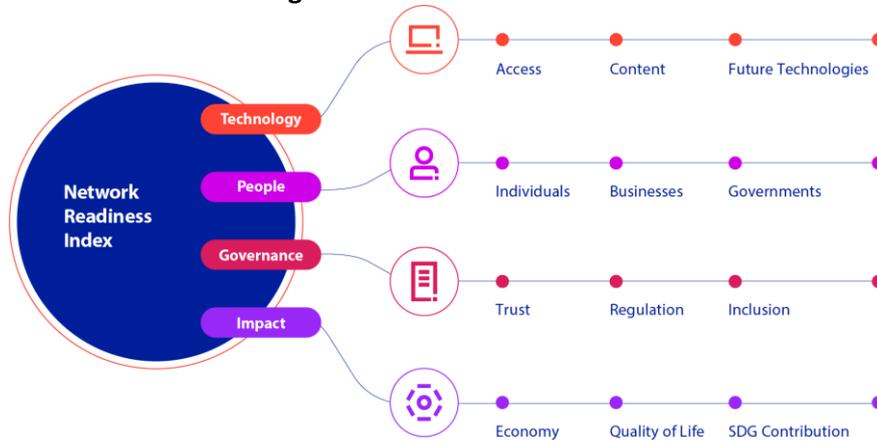




Nicaragua

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.

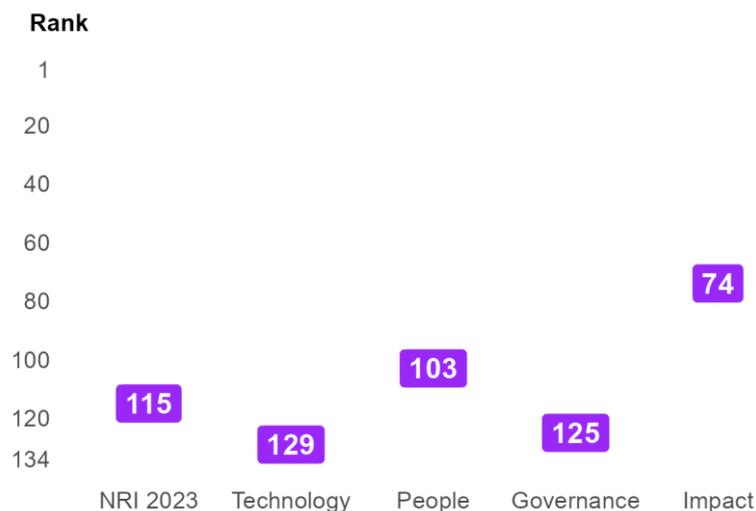
Figure 1: The NRI 2023 model



Global NRI position of Nicaragua

Nicaragua ranks 115th out of the 134 economies included in the NRI 2023 (Figure 2). Its main strength relates to Impact. The greatest scope for improvement, meanwhile, concerns Technology.

Figure 2: Nicaragua 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 Nicaragua relate to SDG Contribution, Quality of Life and Individuals, among others (Table 1). More could be done, though, to improve the economy's performances in the Access, Trust and Future Technologies sub-pillars.

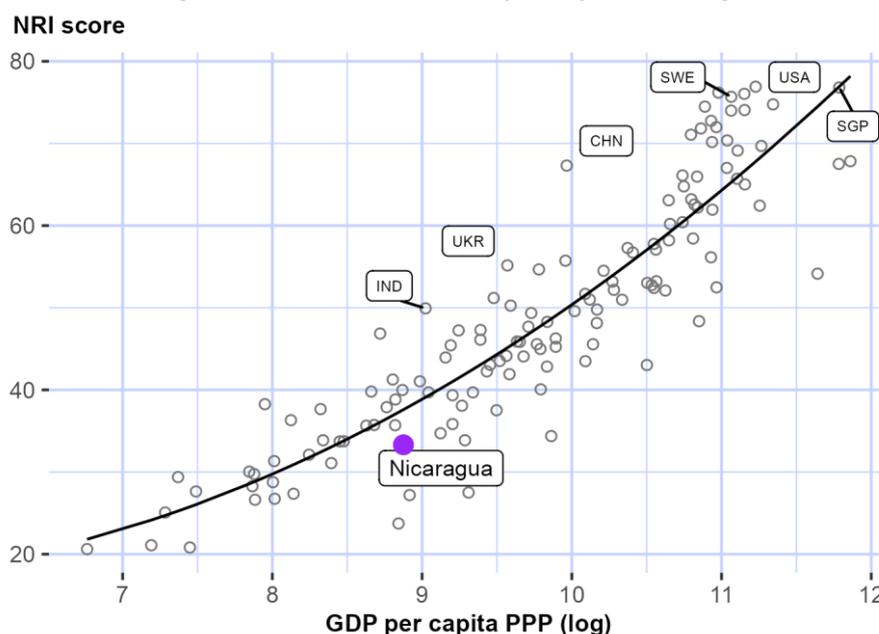
Table 1: Nicaragua rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
SDG Contribution	46	Regulation	117
Quality of Life	61	Inclusion	118
Individuals	79	Content	120
Governments	109	Access	125
Economy	111	Trust	127
Businesses	117	Future Technologies	132

NRI score and income

Figure 3 shows the position of Nicaragua 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, Nicaragua 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). Nicaragua belongs to the group of lower-middle-income countries, where the best performer is Ukraine (UKR). The top performer of its region-The Americas-is United States of America (USA).

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Performance against its income group and region

Lower-middle-income countries

Nicaragua is ranked 32nd in the group of lower-middle-income countries (Figure 4, left panel). In terms of pillar performance, it has a score higher than the income group average in one of the four pillars: Impact. At the sub-pillar level, it outperforms lower-middle-income countries in three of the twelve sub-pillars: Individuals, Quality of Life and SDG Contribution.

The Americas

Nicaragua is ranked 21st within The Americas (Figure 4, right panel). It lags behind its region in each of the four pillars. With regard to sub-pillars, it outperforms the average in The Americas in two of the twelve sub-pillars: Quality of Life and SDG Contribution.

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

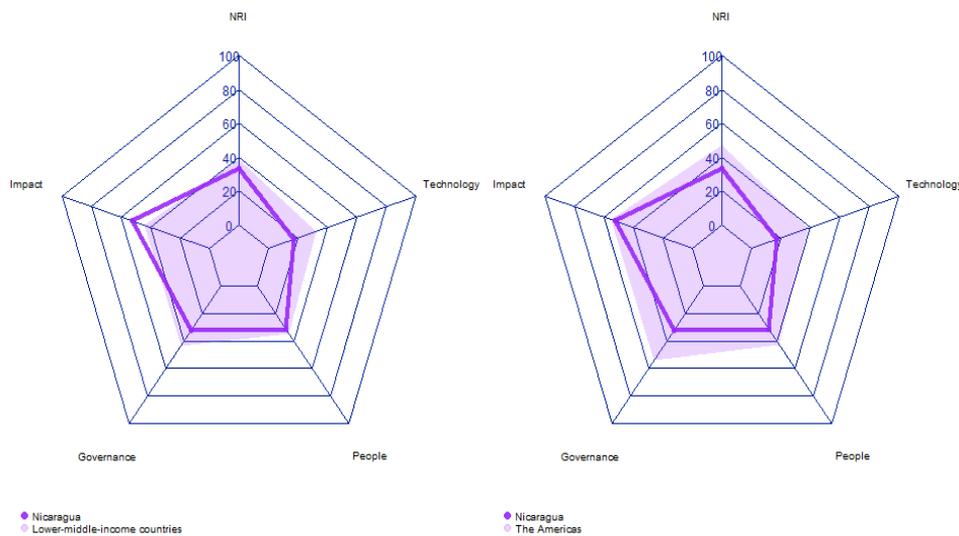


Table 2: Nicaragua scores vs. averages of its income group and region, overall and by pillar

Dimension	Nicaragua	Lower-middle-income countries	The Americas
NRI	33.32	38.41	47.41
Technology	17.13	32.12	38.24
People	31.05	34.38	42.35
Governance	32.60	43.27	54.12
Impact	52.49	43.89	54.93

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Strongest and weakest indicators

The indicators where Nicaragua performs particularly well include 3.2.4 E-commerce legislation, 4.2.2 Freedom to make life choices, and 4.2.1 Happiness (Table 3). By contrast, the economy's weakest indicators include 3.1.2 Cybersecurity, 3.2.5 Privacy protection by law content, and 1.2.3 Mobile apps development.

Table 3: Highlight of Strengths and Opportunities for Nicaragua

Strongest indicators	Rank	Weakest indicators	Rank
3.2.4 E-commerce legislation	1	4.1.3 PCT patent applications	99
4.2.2 Freedom to make life choices	19	3.2.3 Regulation of emerging technologies	116
4.2.1 Happiness	33	1.2.3 Mobile apps development	119
4.1.6 ICT services exports	41	3.2.5 Privacy protection by law content	128
4.3.5 SDG 11: Sustainable Cities and Communities	55	3.1.2 Cybersecurity	130
4.3.3 SDG 5: Women's economic opportunity	56		
4.3.1 SDG 3: Good Health and Well-Being	68		
4.2.4 Healthy life expectancy at birth	72		
3.3.2 Socioeconomic gap in use of digital payments	73		
4.3.4 SDG 7: Affordable and Clean Energy	84		

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

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NRI 2023 At-A-Glance: Nicaragua

Network Readiness Index

Rank: 115 (out of 134)

Score: 33.32

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	129	17.13	C. Governance pillar	125	32.60
1st sub-pillar: Access	125	36.30	1st sub-pillar: Trust	127	14.06
2nd sub-pillar: Content	120	6.27	2nd sub-pillar: Regulation	117	44.90
3rd sub-pillar: Future Technologies	132	8.82	3rd sub-pillar: Inclusion	118	38.83
B. People pillar	103	31.05	D. Impact pillar	74	52.49
1st sub-pillar: Individuals	79	44.28	1st sub-pillar: Economy	111	16.04
2nd sub-pillar: Businesses	117	26.68	2nd sub-pillar: Quality of Life	61	69.55
3rd sub-pillar: Governments	109	22.19	3rd sub-pillar: SDG Contribution	46	71.87

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	129	17.13	C. Governance pillar	125	32.60
1st sub-pillar: Access	125	36.30	1st sub-pillar: Trust	127	14.06
1.1.1 Mobile tariffs	118	24.51	3.1.1 Secure Internet servers	105	35.91
1.1.2 Handset prices	117	22.69	3.1.2 Cybersecurity	130	7.40 ○
1.1.3 FTTH/building Internet subscriptions	95	16.46	3.1.3 Online access to financial account	120	5.71
1.1.4 Population covered by at least a 3G mobile network	124	88.27	3.1.4 Internet shopping	102	7.23
1.1.5 International Internet bandwidth	122	56.80	2nd sub-pillar: Regulation	117	44.90
1.1.6 Internet access in schools	73	9.04	3.2.1 Regulatory quality	116	30.72
2nd sub-pillar: Content	120	6.27	3.2.2 ICT regulatory environment	99	68.82
1.2.1 GitHub commits	105	1.78	3.2.3 Regulation of emerging technologies	116	3.12 ○
1.2.2 Internet domain registrations	89	1.49	3.2.4 E-commerce legislation	1	100.00 ●
1.2.3 Mobile apps development	119	21.49 ○	3.2.5 Privacy protection by law content	128	21.82 ○
1.2.4 AI scientific publications	121	0.31	3rd sub-pillar: Inclusion	118	38.83
3rd sub-pillar: Future Technologies	132	8.82	3.3.1 E-Participation	115	23.26
1.3.1 Adoption of emerging technologies	NA	NA	3.3.2 Socioeconomic gap in use of digital payments	73	71.20 ●
1.3.2 Investment in emerging technologies	126	13.25	3.3.3 Availability of local online content	107	34.38

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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	102	4.39	3.3.5 Rural gap in use of digital payments	113	26.49
B. People pillar			D. Impact pillar		
<i>1st sub-pillar: Individuals</i>	79	44.28	<i>1st sub-pillar: Economy</i>	111	16.04
2.1.1 Mobile broadband internet traffic within the country	NA	NA	4.1.1 High-tech and medium-high-tech manufacturing	77	16.35
2.1.2 ICT skills in the education system	NA	NA	4.1.2 High-tech exports	108	1.96
2.1.3 Use of virtual social networks	90	45.55	4.1.3 PCT patent applications	99	0.00 ○
2.1.4 Tertiary enrollment	101	11.03	4.1.4 Domestic market size	110	36.58
2.1.5 Adult literacy rate	77	76.26	4.1.5 Prevalence of gig economy	NA	NA
2.1.6 AI talent concentration	NA	NA	4.1.6 ICT services exports	41	25.30 ●
<i>2nd sub-pillar: Businesses</i>	117	26.68	<i>2nd sub-pillar: Quality of Life</i>	61	69.55
2.2.1 Firms with website	85	35.35	4.2.1 Happiness	33	75.14 ●
2.2.2 GERD financed by business enterprise	NA	NA	4.2.2 Freedom to make life choices	19	89.78 ●
2.2.3 Knowledge intensive employment	91	18.00	4.2.3 Income inequality	100	42.21
2.2.4 Annual investment in telecommunication services	NA	NA	4.2.4 Healthy life expectancy at birth	72	71.08 ●
2.2.5 GERD performed by business enterprise	NA	NA	<i>3rd sub-pillar: SDG Contribution</i>	46	71.87
<i>3rd sub-pillar: Governments</i>	109	22.19	4.3.1 SDG 3: Good Health and Well-Being	68	68.44 ●
2.3.1 Government online services	101	42.63	4.3.2 SDG 4: Quality Education	NA	NA
2.3.2 Publication and use of open data	NA	NA	4.3.3 SDG 5: Women's economic opportunity	56	80.53 ●
2.3.3 Government promotion of investment in emerging tech	NA	NA	4.3.4 SDG 7: Affordable and Clean Energy	84	67.27 ●
2.3.4 R&D expenditure by governments and higher education	104	1.75	4.3.5 SDG 11: Sustainable Cities and Communities	55	71.25 ●

NOTE: ● a strength and ○ a weakness.

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