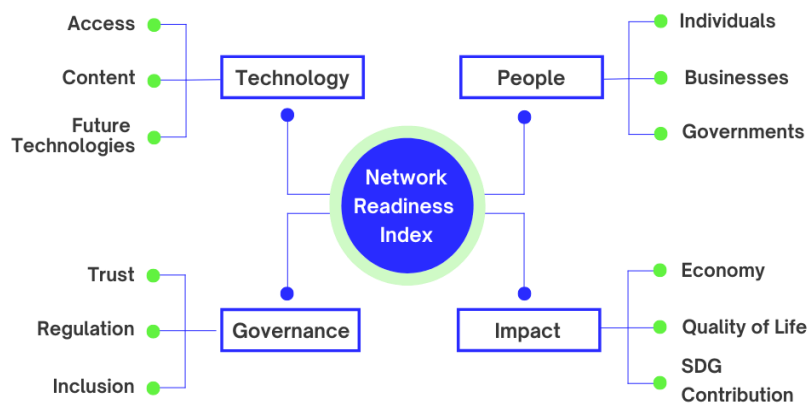


Network Readiness Index 2022

Colombia

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.

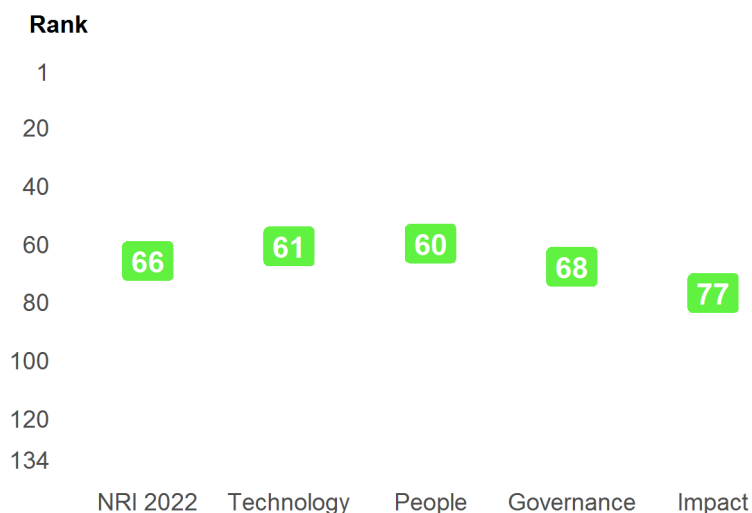
Figure 1: The NRI 2022 model



Global NRI position of Colombia

Colombia ranks 66th 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: Colombia global ranking, overall and by pillar



Performance at sub-pillar level

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

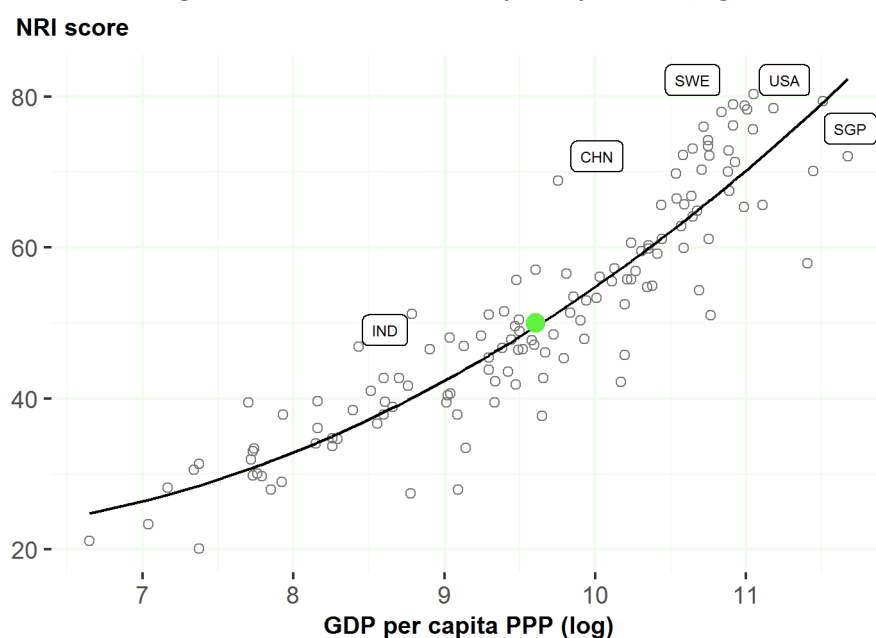
Table 1: Colombia rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Businesses	51	Inclusion	67
SDG Contribution	51	Access	72
Content	53	Individuals	74
Regulation	57	Trust	80
Future Technologies	60	Economy	80
Governments	61	Quality of Life	99

NRI score and income

Figure 3 shows the position of Colombia 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, Colombia 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: USA = United States (rank: 1), SGP = Singapore (rank: 2), SWE = Sweden (3), CHN = China (23), IND = India (61). Netherlands (NLD) is ranked 4th. Colombia belongs to the group of upper-middle-income countries, where the best performer is China (CHN). The top performer of its region-The Americas-is United States of America (USA).

Performance against its income group and region

Upper-middle-income countries

Colombia is ranked 15th 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: nri.score, technology and people. At the sub-pillar level, it outperforms upper-middle-income countries in six of the twelve sub-pillars: Content, Future Technologies, Businesses, Governments, Regulation and SDG Contribution.

The Americas

Colombia is ranked 9th within The Americas (Figure 4, right panel). It has a score above the regional average in two of the four pillars: technology and people. With regard to sub-pillars, it outperforms the average in The Americas in seven of the twelve sub-pillars: Access, Content, Future Technologies, Businesses, Governments, Regulation and SDG Contribution.

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

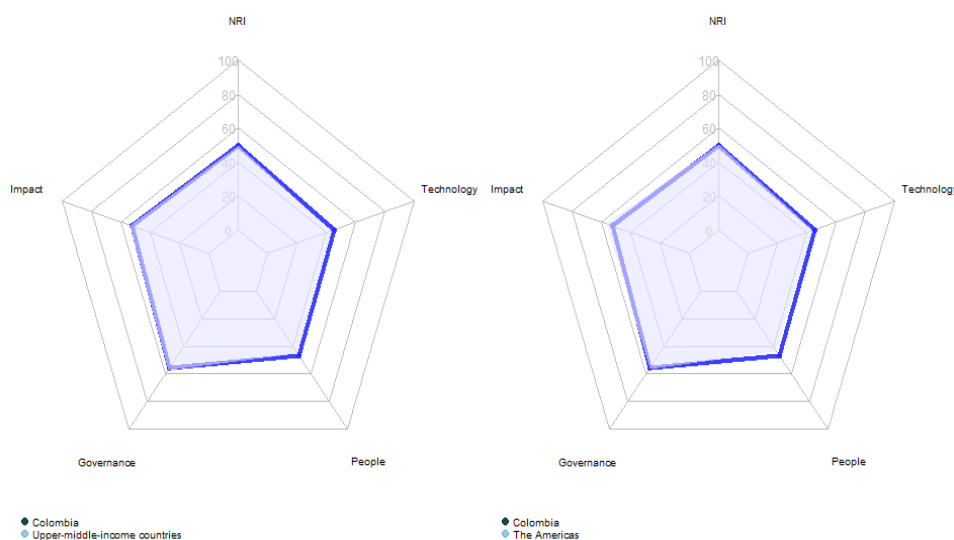


Table 2: Colombia scores vs. averages of its income group and region, overall and by pillar

Dimension	Colombia	Upper-middle-income countries	The Americas
NRI	49.99	49.66	50.09
Technology	45.43	43.11	44.16
People	47.04	44.94	43.67
Governance	55.37	57.08	56.24
Impact	52.11	53.50	56.30

Strongest and weakest indicators

The indicators where Colombia performs particularly well include 1.1.4 Population covered by at least a 3G mobile network, 3.2.4 E-commerce legislation, and 3.3.4 Gender gap in Internet use (Table 3). By contrast, the economy's weakest indicators include 4.2.3 Income inequality, 2.3.4 R&D expenditure by governments and higher education, and 3.3.5 Rural gap in use of digital payments.

Table 3: Strongest and weakest indicators of Colombia

Strongest indicators	Rank	Weakest indicators	Rank
1.1.4 Population covered by at least a 3G mobile network	1	2.1.6 AI talent concentration	37
3.2.4 E-commerce legislation	1	4.3.2 SDG 4: Quality Education	61
3.3.4 Gender gap in Internet use	9	2.3.4 R&D expenditure by governments and higher education	97
1.1.5 International Internet bandwidth	14	3.3.5 Rural gap in use of digital payments	97
4.3.4 SDG 7: Affordable and Clean Energy	17	4.2.3 Income inequality	113
2.3.2 Publication and use of open data	18		
1.1.3 FTTH/building Internet subscriptions	19		
2.2.2 GERD financed by business enterprise	24		
3.3.1 E-Participation	27		
4.1.4 Domestic market size	32		
1.2.2 Internet domain registrations	34		

NRI 2022 At-A-Glance: Colombia

Network Readiness Index

Rank: 66 (out of 131)

Score: 49.99

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	61	45.43	C. Governance pillar	68	55.37
1st sub-pillar: Access	72	61.77	1st sub-pillar: Trust	80	36.41
2nd sub-pillar: Content	53	40.41	2nd sub-pillar: Regulation	57	65.84
3rd sub-pillar: Future Technologies	60	34.12	3rd sub-pillar: Inclusion	67	63.87
B. People pillar	60	47.04	D. Impact pillar	77	52.11
1st sub-pillar: Individuals	74	46.18	1st sub-pillar: Economy	80	28.40
2nd sub-pillar: Businesses	51	48.98	2nd sub-pillar: Quality of Life	99	57.02
3rd sub-pillar: Governments	61	45.94	3rd sub-pillar: SDG Contribution	51	70.91

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	61	45.43	C. Governance pillar	68	55.37
1st sub-pillar: Access	72	61.77	1st sub-pillar: Trust	80	36.41
1.1.1 Mobile tariffs	91	45.43	3.1.1 Secure Internet servers	76	47.93
1.1.2 Handset prices	55	60.83	3.1.2 Cybersecurity	87	63.08
1.1.3 FTTH/building Internet subscriptions	19	44.26	3.1.3 Online access to financial account	85	17.15
1.1.4 Population covered by at least a 3G mobile network	1	100.00	3.1.4 Internet shopping	69	17.47
1.1.5 International Internet bandwidth	14	84.89	2nd sub-pillar: Regulation	57	65.84
1.1.6 Internet access in schools	56	35.21	3.2.1 Regulatory quality	55	49.60
2nd sub-pillar: Content	53	40.41	3.2.2 ICT regulatory environment	67	82.35
1.2.1 GitHub commits	60	6.89	3.2.3 Regulation of emerging technologies	55	47.37
1.2.2 Internet domain registrations	34	20.21	3.2.4 E-commerce legislation	1	100.00
1.2.3 Mobile apps development	92	68.22	3.2.5 Privacy protection by law content	99	49.88
1.2.4 AI scientific publications	31	66.33	3rd sub-pillar: Inclusion	67	63.87
3rd sub-pillar: Future Technologies	60	34.12	3.3.1 E-Participation	27	86.42
1.3.1 Adoption of emerging technologies	67	46.99	3.3.2 Socioeconomic gap in use of digital payments	88	55.54
1.3.2 Investment in emerging technologies	67	38.75	3.3.3 Availability of local online content	78	53.85
1.3.3 Robot density	NA	NA	3.3.4 Gender gap in Internet use	9	77.89
1.3.4 Computer software spending	71	16.62	3.3.5 Rural gap in use of digital payments	97	45.66

Indicator	Rank	Score	Indicator	Rank	Score
B. People pillar	60	47.04	D. Impact pillar	77	52.11
<i>1st sub-pillar: Individuals</i>	74	46.18	<i>1st sub-pillar: Economy</i>	80	28.40
2.1.1 Mobile broadband internet traffic within the country	35	19.87	4.1.1 High-tech and medium-high-tech manufacturing	63	24.46
2.1.2 ICT skills in the education system	67	44.67	4.1.2 High-tech exports	64	24.02
2.1.3 Use of virtual social networks	37	75.95	4.1.3 PCT patent applications	60	4.69
2.1.4 Tertiary enrollment	58	35.77	4.1.4 Domestic market size	32	65.62 ●
2.1.5 Adult literacy rate	45	94.41	4.1.5 Prevalence of gig economy	81	35.17
2.1.6 AI talent concentration	37	6.43 ○	4.1.6 ICT services exports	86	16.42
<i>2nd sub-pillar: Businesses</i>	51	48.98	<i>2nd sub-pillar: Quality of Life</i>	99	57.02
2.2.1 Firms with website	43	67.36	4.2.1 Happiness	82	55.40
2.2.2 GERD financed by business enterprise	24	66.06 ●	4.2.2 Freedom to make life choices	79	67.75
2.2.3 Knowledge intensive employment	34	58.60	4.2.3 Income inequality	113	22.11 ○
2.2.4 Annual investment in telecommunication services	NA	NA	4.2.4 Healthy life expectancy at birth	35	82.82
2.2.5 GERD performed by business enterprise	57	3.90	<i>3rd sub-pillar: SDG Contribution</i>	51	70.91
<i>3rd sub-pillar: Governments</i>	61	45.94	4.3.1 SDG 3: Good Health and Well-Being	37	81.88
2.3.1 Government online services	48	75.76	4.3.2 SDG 4: Quality Education	61	31.72 ○
2.3.2 Publication and use of open data	18	64.71 ●	4.3.3 SDG 5: Women's economic opportunity	70	74.56
2.3.3 Government promotion of investment in emerging tech	65	37.89	4.3.4 SDG 7: Affordable and Clean Energy	17	90.06 ●
2.3.4 R&D expenditure by governments and higher education	97	5.42 ○	4.3.5 SDG 11: Sustainable Cities and Communities	48	76.31

NOTE: ● a strength and ○ a weakness.

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