

Argentina

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 Future Technologies Access Content Network Individuals Businesses Governments Readiness Index 囯 Trust Regulation Inclusion Impact (<u>o</u>) Quality of Life **SDG** Contribution

Global NRI position of Argentina

Argentina ranks 61st 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.

Rank 1 20 40 53 59 61 60 64 71 80 100 120 134 NRI 2023 Technology Impact People Governance

Figure 2: Argentina global ranking, overall and by pillar





Performance at sub-pillar level

When it comes to sub-pillars, the strongest showings of Argentina relate to Governments, Inclusion and Economy, among others (Table 1). More could be done, though, to improve the economy's performances in the Trust, Future Technologies and Individuals sub-pillars.

Table 1: Argentina rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Governments	49	Businesses	66
Inclusion	49	SDG Contribution	66
Economy	53	Regulation	68
Content	60	Trust	69
Quality of Life	63	Future Technologies	82
Access	65	Individuals	86

NRI score and income

Figure 3 shows the position of Argentina 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, Argentina 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.

NRI score 80 -USA SGP 00 CHN 60 -0 IND Argentina 40 -0 0 8 12 9 11 GDP per capita PPP (log)

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). Argentina 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

Argentina is ranked 12th 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 each of the four pillars. At the sub-pillar level, it outperforms upper-middle-income countries in ten of the twelve sub-pillars: Access, Content, Businesses, Governments, Trust, Regulation, Inclusion, Economy, Quality of Life and SDG Contribution.

The Americas

Argentina is ranked 7th within The Americas (Figure 4, right panel). It outperforms its region in each of the four pillars. With regard to sub-pillars, it outperforms the average in The Americas in eight of the twelve sub-pillars: Access, Content, Businesses, Governments, Trust, Inclusion, Economy and Quality of Life.

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

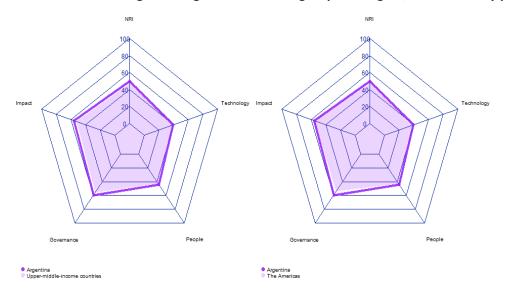


Table 2: Argentina scores vs. averages of its income group and region, overall and by pillar

Dimension	Argentina	Upper-middle- income countries	The Americas
NRI	49.78	47.35	47.41
Technology	39.53	38.48	38.24
People	44.28	42.59	42.35
Governance	59.48	55.90	54.12
Impact	55.82	52.43	54.93



Strongest and weakest indicators

The indicators where Argentina performs particularly well include 3.2.4 E-commerce legislation, 2.1.4 Tertiary enrollment, and 2.3.2 Publication and use of open data (Table 3). By contrast, the economy's weakest indicators include 3.2.1 Regulatory quality, 3.1.2 Cybersecurity, and 4.2.3 Income inequality.

Table 3: Highlight of Strengths and Opportunities for Argentina

Strongest indicators	Rank	Weakest indicators	Rank
3.2.4 E-commerce legislation	1	2.1.6 Al talent concentration	44
2.1.4 Tertiary enrollment	5	4.3.2 SDG 4: Quality Education	66
2.3.2 Publication and use of open data	23	4.2.3 Income inequality	88
1.1.3 FTTH/building Internet subscriptions	27	3.1.2 Cybersecurity	95
4.1.4 Domestic market size	28	3.2.1 Regulatory quality	105
2.2.4 Annual investment in telecommunication services	29		
2.1.3 Use of virtual social networks	34		
2.2.1 Firms with website	35		
3.3.4 Gender gap in Internet use	35		
2.3.1 Government online services	38		
4.2.1 Happiness	40		

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



NRI 2023 At-A-Glance: Argentina

Network Readiness Index Rank: 61 (out of 134) Score: 49.78

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	71	39.53	C. Governance pillar	59	59.48
1st sub-pillar: Access	65	65.18	1st sub-pillar: Trust	69	43.62
2nd sub-pillar: Content	60	24.37	2nd sub-pillar: Regulation	68	65.12
3rd sub-pillar: Future Technologies	82	29.04	3rd sub-pillar: Inclusion	49	69.69
B. People pillar	64	44.28	D. Impact pillar	53	55.82
1st sub-pillar: Individuals	86	42.83	1st sub-pillar: Economy	53	33.64
2nd sub-pillar: Businesses	66	44.96	2nd sub-pillar: Quality of Life	63	69.28
3rd sub-pillar: Governments	49	45.07	3rd sub-pillar: SDG Contribution	66	64.54

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score	
A. Technology pillar	71	39.53	C. Governance pillar	59	59.48	
1st sub-pillar: Access	65	65.18	1st sub-pillar: Trust	69	43.62	
1.1.1 Mobile tariffs	50	71.25	3.1.1 Secure Internet servers	49	65.53	
1.1.2 Handset prices	73	43.99	3.1.2 Cybersecurity	95	49.24	0
1.1.3 FTTH/building Internet subscriptions	27	44.07 •	3.1.3 Online access to financial account	76	22.93	
1.1.4 Population covered by at least a 3G mobile network	72	99.51	3.1.4 Internet shopping	53	36.76	
1.1.5 International Internet bandwidth	48	74.56	2nd sub-pillar: Regulation	68	65.12	
1.1.6 Internet access in schools	51	57.73	3.2.1 Regulatory quality	105	35.64	0
2nd sub-pillar: Content	60	24.37	3.2.2 ICT regulatory environment	73	82.94	
1.2.1 GitHub commits	49	14.91	3.2.3 Regulation of emerging technologies	77	35.58	
1.2.2 Internet domain registrations	57	5.21	3.2.4 E-commerce legislation	1	100.00	•
1.2.3 Mobile apps development	58	68.49	3.2.5 Privacy protection by law content	50	71.46	
1.2.4 Al scientific publications	49	8.86	3rd sub-pillar: Inclusion	49	69.69	
3rd sub-pillar: Future Technologies	82	29.04	3.3.1 E-Participation	51	63.95	
1.3.1 Adoption of emerging technologies	51	51.97	3.3.2 Socioeconomic gap in use of digital payments	54	81.47	
1.3.2 Investment in emerging technologies	85	34.50	3.3.3 Availability of local online content	59	64.18	





Indicator	Rank	Score		Indicator	Rank	Score	
1.3.3 Robot density	40	3.31	 	3.3.4 Gender gap in Internet use	35	70.43	•
1.3.4 Computer software spending	47	26.37		3.3.5 Rural gap in use of digital payments	53	68.43	
B. People pillar	64	44.28		D. Impact pillar	53	55.82	
1st sub-pillar: Individuals	86	42.83		1st sub-pillar: Economy	53	33.64	
2.1.1 Mobile broadband internet traffic within the country	43	17.62		4.1.1 High-tech and medium-high-tech manufacturing	44	34.21	
2.1.2 ICT skills in the education system	56	54.00		4.1.2 High-tech exports	82	7.78	
2.1.3 Use of virtual social networks	34	75.27	•	4.1.3 PCT patent applications	NA	NA	
2.1.4 Tertiary enrollment	5	65.10	•	4.1.4 Domestic market size	28	68.79	•
2.1.5 Adult literacy rate	NA	NA		4.1.5 Prevalence of gig economy	81	35.17	
2.1.6 Al talent concentration	44	2.15	0	4.1.6 ICT services exports	47	22.28	
2nd sub-pillar: Businesses	66	44.96		2nd sub-pillar: Quality of Life	63	69.28	
2.2.1 Firms with website	35	69.09	•	4.2.1 Happiness	40	72.70	•
2.2.2 GERD financed by business enterprise	62	28.98		4.2.2 Freedom to make life choices	65	75.00	
2.2.3 Knowledge intensive employment	51	36.74		4.2.3 Income inequality	88	52.76	0
2.2.4 Annual investment in telecommunication services	29	84.98	•	4.2.4 Healthy life expectancy at birth	49	76.66	
2.2.5 GERD performed by business enterprise	53	5.02		3rd sub-pillar: SDG Contribution	66	64.54	
3rd sub-pillar: Governments	49	45.07		4.3.1 SDG 3: Good Health and Well-Being	54	73.93	
2.3.1 Government online services	38	78.88	•	4.3.2 SDG 4: Quality Education	66	24.86	0
2.3.2 Publication and use of open data	23	57.35	•	4.3.3 SDG 5: Women's economic opportunity	85	70.80	
2.3.3 Government promotion of investment in emerging tech	72	34.85		4.3.4 SDG 7: Affordable and Clean Energy	45	76.08	
2.3.4 R&D expenditure by governments and higher education	60	9.19		4.3.5 SDG 11: Sustainable Cities and Communities	44	77.02	

NOTE: \bullet a strength and o a weakness.



Sources

Dutta, S., & Lanvin, B. (eds.) (2022). The Network Readiness Index 2022: Benchmarking the Future of the Network Economy. Washington DC: Portulans Institute.

Berry, B. (2019). berryFunctions: Function Collection Related to Plotting and Hydrology. R package version 1.18.2. URL: https://CRAN.R-project.org/package=berryFunctions

Dutta, S., & Lanvin, B. (eds.) (2019). The Network Readiness Index 2019: Towards a Future-Ready Society. Washington DC: Portulans Institute.

Dutta, S., & Lanvin, B. (eds.) (2020). The Network Readiness Index 2020: Fostering Digital Transformation in a post-COVID Global Economy. Washington DC: Portulans Institute.

Dutta, S., & Lanvin, B. (eds.) (2021). The Network Readiness Index 2021: Shaping the Global Recovery. How digital technologies can make the post-COVID world more equal. Washington DC: Portulans Institute.

Gohel, D. (2019). officer: Manipulation of Microsoft Word and PowerPoint Documents. R package version 0.3.6. URL: https://CRAN.R-project.org/package=officer

Gohel, D. (2019). flextable: Functions for Tabular Reporting. R package version 0.5.6. URL: https://CRAN.R-project.org/package=flextable

Milton Bache, S. & Wickham, H. (2014). magrittr: A Forward-Pipe Operator for R. R package version 1.5. URL: https://CRAN.R-project.org/package=magrittr

Nakazawa, M. (2019). fmsb: Functions for Medical Statistics Book with some Demographic Data. R package version 0.7.0. URL: https://CRAN.R-project.org/package=fmsb

R Core Team (2018). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL: https://www.R-project.org/.

Slowikowski, K. (2019). ggrepel: Automatically Position Non-Overlapping Text Labels with 'ggplot2'. R package version 0.8.1. URL: https://CRAN.R-project.org/package=ggrepel

Wickham, H. (2007). Reshaping Data with the reshape Package. Journal of Statistical Software, 21(12), 1-20. URL: http://www.jstatsoft.org/v21/i12/.

Wickham, H. (2016). ggplot2: Elegant Graphics for Data Analysis. Springer-Verlag. New York.

Wickham et al., (2019). Welcome to the tidyverse. Journal of Open Source Software, 4(43), 1686, URL: https://doi.org/10.21105/joss.01686