



Egypt

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.

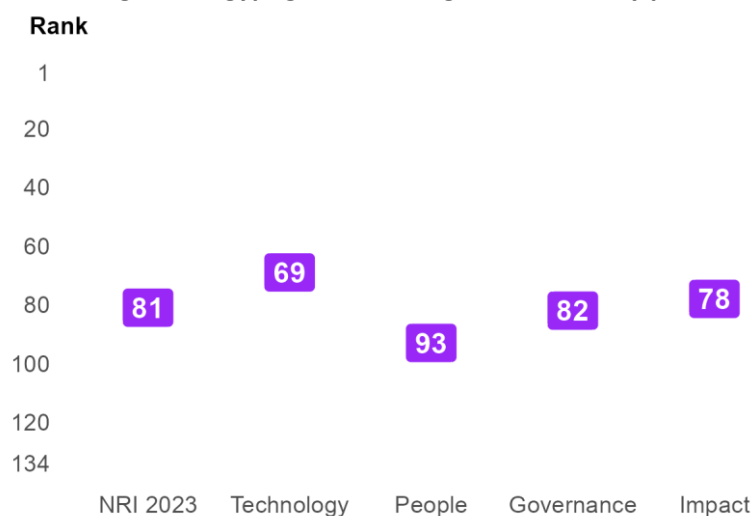
Figure 1: The NRI 2023 model



Global NRI position of Egypt

Egypt ranks 81st 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 People.

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

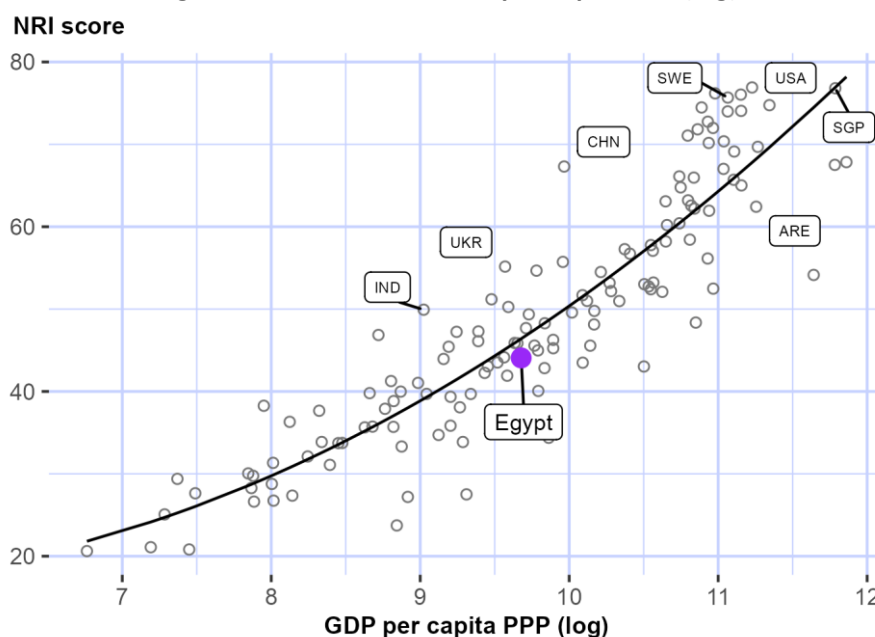
Table 1: Egypt rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Access	47	Future Technologies	88
Economy	50	Regulation	91
Inclusion	74	Individuals	92
Content	75	Trust	94
SDG Contribution	80	Quality of Life	97
Governments	86	Businesses	100

NRI score and income

Figure 3 shows the position of Egypt 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, Egypt 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). Egypt belongs to the group of lower-middle-income countries, where the best performer is Ukraine (UKR). The top performer of its region-Arab States-is United Arab Emirates (ARE).

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Performance against its income group and region

Lower-middle-income countries

Egypt is ranked 9th 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 each of the four pillars. At the sub-pillar level, it outperforms lower-middle-income countries in ten of the twelve sub-pillars: Access, Content, Individuals, Governments, Trust, Regulation, Inclusion, Economy, Quality of Life and SDG Contribution.

Arab States

Egypt is ranked 9th within Arab States (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 Arab States in five of the twelve sub-pillars: Access, Content, Regulation, Economy and SDG Contribution.

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

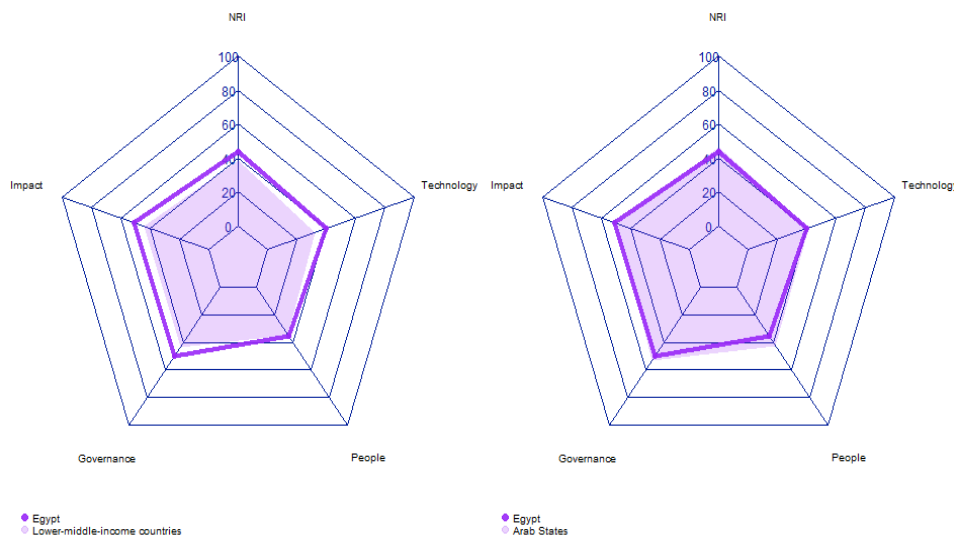


Table 2: Egypt scores vs. averages of its income group and region, overall and by pillar

Dimension	Egypt	Lower-middle-income countries	Arab States
NRI	44.07	38.41	46.59
Technology	39.94	32.12	41.17
People	35.37	34.38	42.66
Governance	50.25	43.27	53.45
Impact	50.73	43.89	49.08

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Strongest and weakest indicators

The indicators where Egypt performs particularly well include 3.2.4 E-commerce legislation, 4.1.5 Prevalence of gig economy, and 1.1.5 International Internet bandwidth (Table 3). By contrast, the economy's weakest indicators include 3.1.3 Online access to financial account, 4.3.3 SDG 5: Women's economic opportunity, and 3.1.4 Internet shopping.

Table 3: Highlight of Strengths and Opportunities for Egypt

Strongest indicators	Rank	Weakest indicators	Rank
3.2.4 E-commerce legislation	1	1.3.3 Robot density	54
4.1.5 Prevalence of gig economy	7	4.2.1 Happiness	115
1.1.5 International Internet bandwidth	18	3.1.4 Internet shopping	120
4.1.4 Domestic market size	18	3.1.3 Online access to financial account	125
2.2.4 Annual investment in telecommunication services	21	4.3.3 SDG 5: Women's economic opportunity	125
1.2.4 AI scientific publications	24		
1.1.1 Mobile tariffs	29		
3.1.2 Cybersecurity	30		
4.2.3 Income inequality	31		
3.3.3 Availability of local online content	35		
1.1.3 FTTH/building Internet subscriptions	36		

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

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NRI 2023 At-A-Glance: Egypt

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Rank: 81 (out of 134)

Score: 44.07

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	69	39.94	C. Governance pillar	82	50.25
1st sub-pillar: Access	47	70.59	1st sub-pillar: Trust	94	32.79
2nd sub-pillar: Content	75	21.48	2nd sub-pillar: Regulation	91	59.85
3rd sub-pillar: Future Technologies	88	27.74	3rd sub-pillar: Inclusion	74	58.11
B. People pillar	93	35.37	D. Impact pillar	78	50.73
1st sub-pillar: Individuals	92	40.96	1st sub-pillar: Economy	50	34.10
2nd sub-pillar: Businesses	100	32.43	2nd sub-pillar: Quality of Life	97	57.88
3rd sub-pillar: Governments	86	32.73	3rd sub-pillar: SDG Contribution	80	60.22

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	69	39.94	C. Governance pillar	82	50.25
1st sub-pillar: Access	47	70.59	1st sub-pillar: Trust	94	32.79
1.1.1 Mobile tariffs	29	79.18	3.1.1 Secure Internet servers	115	29.76
1.1.2 Handset prices	60	52.03	3.1.2 Cybersecurity	30	95.40
1.1.3 FTTH/building Internet subscriptions	36	39.08	3.1.3 Online access to financial account	125	3.38
1.1.4 Population covered by at least a 3G mobile network	46	99.90	3.1.4 Internet shopping	120	2.61
1.1.5 International Internet bandwidth	18	82.05	2nd sub-pillar: Regulation	91	59.85
1.1.6 Internet access in schools	45	71.28	3.2.1 Regulatory quality	97	38.16
2nd sub-pillar: Content	75	21.48	3.2.2 ICT regulatory environment	64	84.12
1.2.1 GitHub commits	96	2.57	3.2.3 Regulation of emerging technologies	84	32.47
1.2.2 Internet domain registrations	107	0.54	3.2.4 E-commerce legislation	1	100.00
1.2.3 Mobile apps development	85	60.36	3.2.5 Privacy protection by law content	110	44.51
1.2.4 AI scientific publications	24	22.44	3rd sub-pillar: Inclusion	74	58.11
3rd sub-pillar: Future Technologies	88	27.74	3.3.1 E-Participation	95	33.73
1.3.1 Adoption of emerging technologies	48	54.92	3.3.2 Socioeconomic gap in use of digital payments	114	42.95
1.3.2 Investment in emerging technologies	75	37.00	3.3.3 Availability of local online content	35	78.61

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Indicator	Rank	Score	Indicator	Rank	Score
1.3.3 Robot density	54	0.12	3.3.4 Gender gap in Internet use	72	65.51
1.3.4 Computer software spending	72	18.94	3.3.5 Rural gap in use of digital payments	51	69.77
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	37	20.87	4.1.1 High-tech and medium-high-tech manufacturing	56	27.11
2.1.2 ICT skills in the education system	48	55.84	4.1.2 High-tech exports	88	4.90
2.1.3 Use of virtual social networks	96	37.83	4.1.3 PCT patent applications	77	1.55
2.1.4 Tertiary enrollment	75	27.00	4.1.4 Domestic market size	18	71.90
2.1.5 Adult literacy rate	90	63.26	4.1.5 Prevalence of gig economy	7	85.17
2.1.6 AI talent concentration	NA	NA	4.1.6 ICT services exports	65	13.96
<i>2nd sub-pillar: Businesses</i>			<i>2nd sub-pillar: Quality of Life</i>		
2.2.1 Firms with website	78	38.01	4.2.1 Happiness	115	31.08
2.2.2 GERD financed by business enterprise	83	4.86	4.2.2 Freedom to make life choices	97	59.58
2.2.3 Knowledge intensive employment	62	32.60	4.2.3 Income inequality	31	78.14
2.2.4 Annual investment in telecommunication services	21	85.97	4.2.4 Healthy life expectancy at birth	93	62.73
2.2.5 GERD performed by business enterprise	76	0.70	<i>3rd sub-pillar: SDG Contribution</i>		
<i>3rd sub-pillar: Governments</i>			4.3.1 SDG 3: Good Health and Well-Being	71	68.03
2.3.1 Government online services	86	52.81	4.3.2 SDG 4: Quality Education	NA	NA
2.3.2 Publication and use of open data	82	13.24	4.3.3 SDG 5: Women's economic opportunity	125	30.09
2.3.3 Government promotion of investment in emerging tech	43	47.77	4.3.4 SDG 7: Affordable and Clean Energy	58	74.13
2.3.4 R&D expenditure by governments and higher education	42	17.09	4.3.5 SDG 11: Sustainable Cities and Communities	58	68.63

NOTE: ● a strength and ○ a weakness.

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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>