

Network Readiness Index 2025

With support from:



Ghana

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 2025 the NRI Report maps the network-based readiness landscape of 127 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 53 variables.

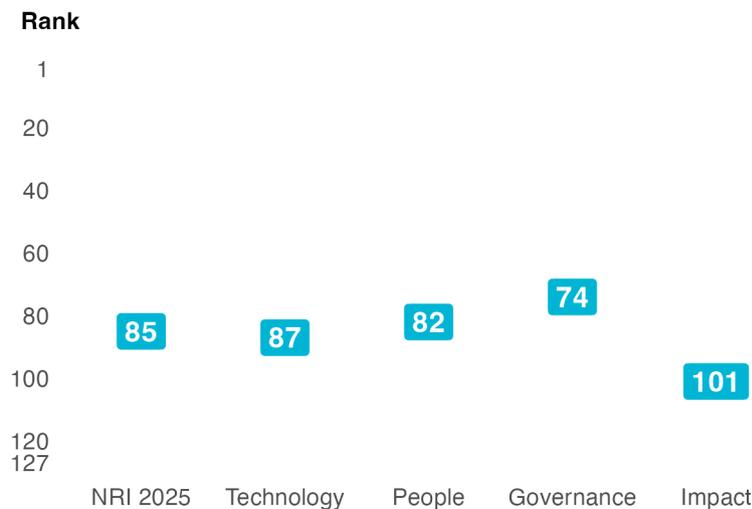
Figure 1: The NRI 2025 model



Global NRI position of Ghana

Ghana ranks 85 out of the 127 economies included in the NRI 2025 (Figure 2). Its main strength relates to Governance. The greatest scope for improvement, meanwhile, concerns Impact.

Figure 2: Ghana global ranking, overall and by pillar



Performance at sub-pillar level

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

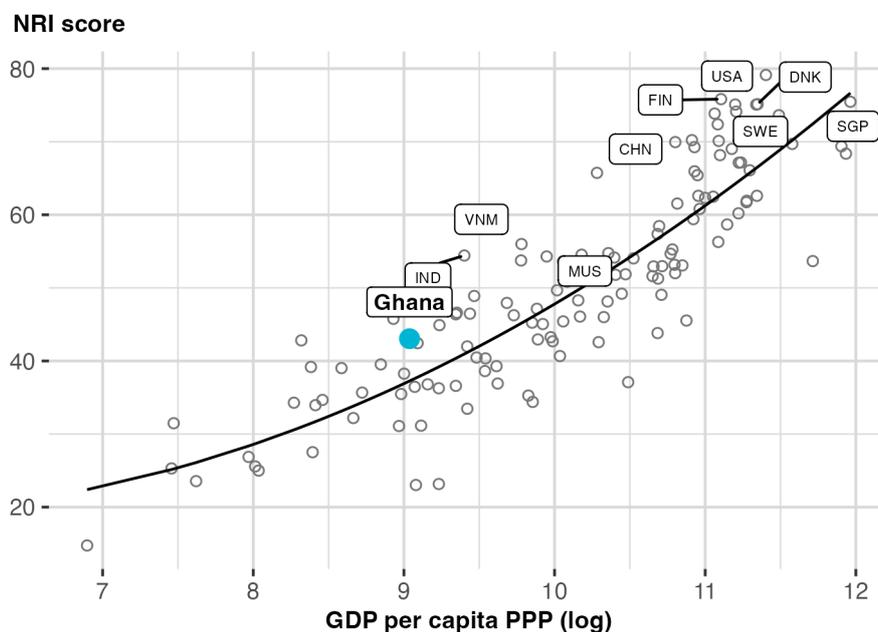
Table 1: Ghana rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Governments	49	Access	83
Trust	71	SDG Contribution	84
Future Technologies	72	Economy	96
Inclusion	72	Individuals	103
Businesses	75	Quality of Life	104
Regulation	75	Content	105

NRI score and income

Figure 3 shows the position of Ghana 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, Ghana 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 of America (rank: 1), FIN =Finland (rank: 2), SGP = Singapore (3), DNK =Denmark (4), SWE = Sweden (5), CHN =China (24), and IND = India (45).

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Performance against its income group and region

Lower-middle-income countries

Ghana 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 three of the four pillars: Technology, People and Governance. At the sub-pillar level, it outperforms lower-middle-income countries in eight of the twelve sub-pillars: Access, Future Technologies, Businesses, Governments, Trust, Regulation, Inclusion and SDG Contribution.

Africa

Ghana is ranked 4th within Africa (Figure 4, right panel). It outperforms its region in each of the four pillars. With regard to sub-pillars, it has a higher score than the regional average in each of the twelve sub-pillars.

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

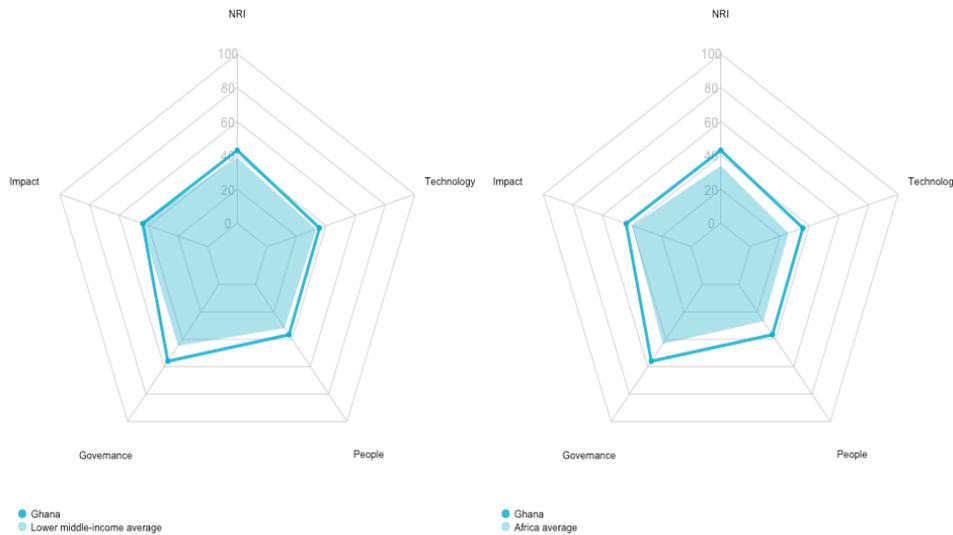


Table 2: Ghana scores vs. averages of its income group and region, overall and by pillar

Dimension	Ghana	Lower-middle-income countries	Africa
NRI	43.05	38.70	34.00
Technology	35.59	33.29	25.85
People	36.63	31.73	26.78
Governance	55.99	44.79	43.45
Impact	43.99	45.00	39.92

NRI 2025 At-A-Glance: Ghana

Network Readiness Index

Rank: 85 (out of 127)

Score: 43.05

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	87	35.59	C. Governance pillar	74	55.99
1st sub-pillar: Access	83	60.72	1st sub-pillar: Trust	71	50.09
2nd sub-pillar: Content	105	13.41	2nd sub-pillar: Regulation	75	58.30
3rd sub-pillar: Future Technologies	72	32.63	3rd sub-pillar: Inclusion	72	59.58
B. People pillar	82	36.63	D. Impact pillar	101	43.99
1st sub-pillar: Individuals	103	36.34	1st sub-pillar: Economy	96	25.65
2nd sub-pillar: Businesses	75	27.61	2nd sub-pillar: Quality of Life	104	46.82
3rd sub-pillar: Governments	49	45.95	3rd sub-pillar: SDG Contribution	84	59.50

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	87	35.59	C. Governance pillar	74	55.99
1st sub-pillar: Access	83	60.72	1st sub-pillar: Trust	71	50.09
1.1.1 Mobile tariffs	69	64.60	3.1.1 Secure Internet servers	117	29.57
1.1.2 Handset prices	107	33.95	3.1.2 Cybersecurity	19	99.13
1.1.3 FTTH/building Internet subscriptions	61	32.13	3.1.3 Online access to financial account	21	55.19
1.1.4 Population covered by at least a 3G mobile network	57	97.37	3.1.4 Internet shopping	80	16.47
1.1.5 International Internet bandwidth	40	75.55	2nd sub-pillar: Regulation	75	58.30
1.1.6 Internet access in schools	n/a	n/a	3.2.1 Regulatory quality	82	37.71
2nd sub-pillar: Content	105	13.41	3.2.2 ICT regulatory environment	77	64.38
1.2.1 GitHub commits	95	2.71	3.2.3 Regulation of emerging technologies	83	32.17
1.2.2 Internet domain registrations	113	0.28	3.2.4 E-commerce legislation	72	75.00
1.2.3 Mobile apps development	114	39.20	3.2.5 Privacy protection by law content	25	82.25
1.2.4 AI scientific publications	46	11.45	3rd sub-pillar: Inclusion	72	59.58
3rd sub-pillar: Future Technologies	72	32.63	3.3.1 E-Participation	80	50.72
1.3.1 Adoption of emerging technologies	85	47.78	3.3.2 Socioeconomic gap in use of digital payments	70	68.91
1.3.2 Investment in emerging technologies	44	49.25	3.3.3 Gender gap in Internet use	n/a	n/a
1.3.3 Robot density	n/a	n/a	3.3.4 Rural gap in use of digital payments	48	59.12
1.3.4 Computer software spending	121	0.86	D. Impact pillar	101	43.99
B. People pillar	82	36.63	1st sub-pillar: Economy	96	25.65
1st sub-pillar: Individuals	103	36.34	4.1.1 ICT patent applications	n/a	n/a
2.1.1 Mobile broadband internet traffic within the country	47	21.44	4.1.2 Domestic market scale	66	53.01
2.1.2 ICT skills in the education system	80	42.04	4.1.3 Technology-Enabled Work Flexibility	97	18.79
2.1.3 Use of virtual social networks	109	18.06	4.1.4 ICT services exports	93	5.14
2.1.4 Adult literacy rate	77	63.82	2nd sub-pillar: Quality of Life	104	46.82
2.1.5 AI talent concentration	n/a	n/a	4.2.1 Happiness	111	24.13
2nd sub-pillar: Businesses	75	27.61	4.2.2 Freedom to make life choices	67	68.62

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Indicator	Rank	Score
2.2.1 Firms with website	53	61.04
2.2.2 Number of venture capital deals invested in AI	52	8.41
2.2.3 Annual investment in telecommunication services	70	39.05
2.2.4 Public cloud computing market scale	82	1.93
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3rd sub-pillar: Governments	49	45.95
2.3.1 Government online services	86	52.88
2.3.2 Data Capabilities	47	38.31
2.3.3 Government promotion of emerging technologies	40	46.65 ●
2.3.4 Gross expenditure on R&D	n/a	n/a

Indicator	Rank	Score
4.2.3 Income inequality	94	49.74
4.2.4 Healthy life expectancy at birth	106	45.66
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3rd sub-pillar: SDG Contribution	84	59.50
4.3.1 SDG 3: Good Health and Well-Being	111	28.89
4.3.2 SDG 4: Quality Education	n/a	n/a
4.3.3 SDG 5: Women's economic opportunity	99	63.64
4.3.4 SDG 7: Affordable and Clean Energy	31	85.47 ●
4.3.5 SDG 11: Sustainable Cities and Communities	111	29.89

NOTE: ● indicates a strength and ○ indicates a weakness.

Sources

- Escalona Reynoso, R., & Lanvin, B. (eds.) (2025). *The Network Readiness Index 2025: AI Governance in a Global Context: Policy and Regulatory Approaches*. Washington DC, USA.
- Dutta, S., & Lanvin, B. (eds.) (2024). *The Network Readiness Index 2024*. Oxford, UK; Washington DC, USA.
- Dutta, S., & Lanvin, B. (eds.) (2023). *The Network Readiness Index 2023: Trust in Network Society: A Crisis of the Digital Age*. Oxford, UK; Washington DC, USA.
- 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>