

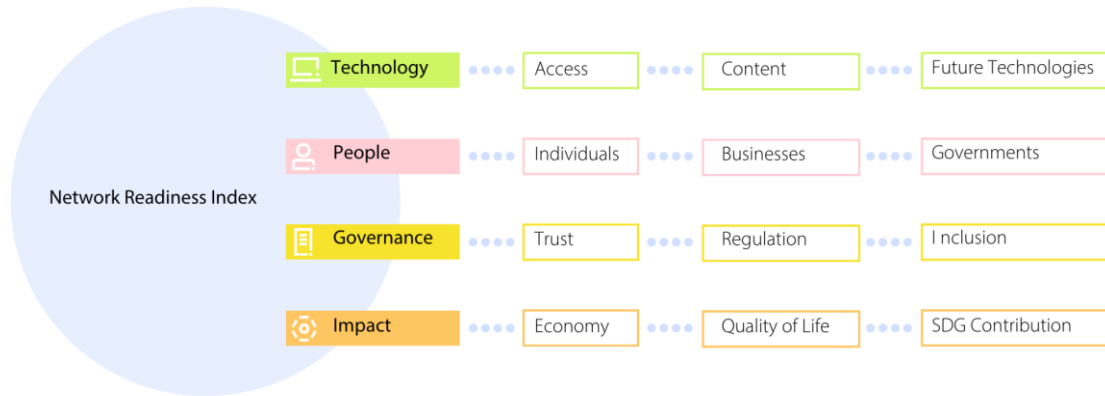
# Network Readiness Index 2024



## China

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 2024 the NRI Report maps the network-based readiness landscape of 133 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 54 variables.

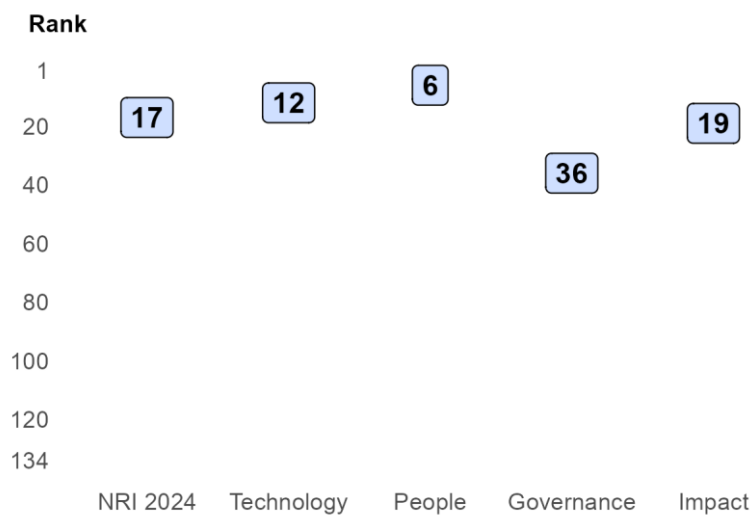
Figure 1: The NRI 2024 model



### Global NRI position of China

China ranks 17th out of the 133 economies included in the NRI 2024 (Figure 2). Its main strength relates to People. The greatest scope for improvement, meanwhile, concerns Governance.

Figure 2: China global ranking, overall and by pillar



# Network Readiness Index 2024



## Performance at sub-pillar level

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

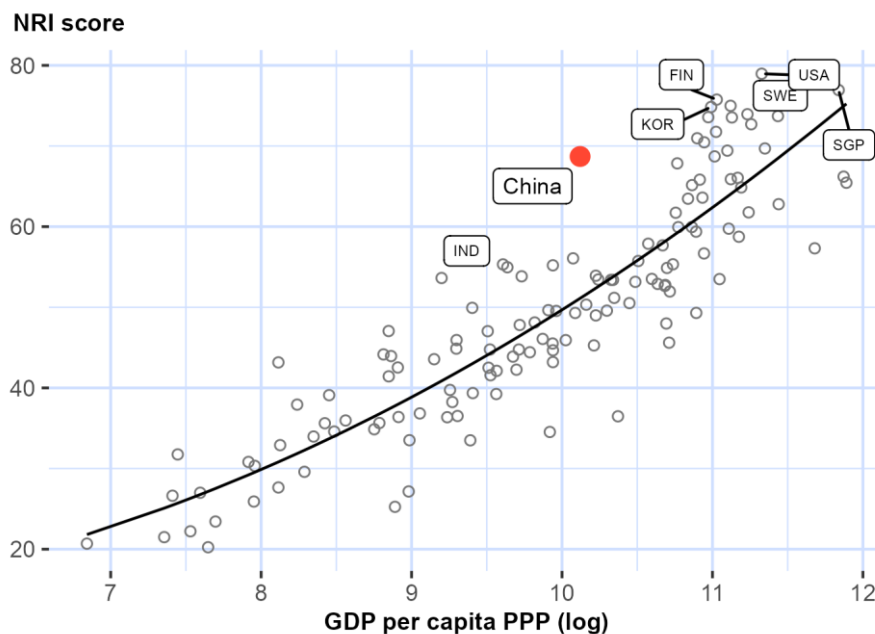
Table 1: China rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Access	1	Governments	22
Individuals	6	Trust	23
Economy	7	Future Technologies	26
Businesses	9	SDG Contribution	47
Content	16	Quality of Life	58
Inclusion	19	Regulation	88

## NRI score and income

Figure 3 shows the position of China 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, China 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 (rank: 1), SGP = Singapore (rank: 2), FIN = Finland (3), SWE = Sweden (4), KOR = Republic of Korea (5), CHN = China (17), and IND = India (49). China belongs to the group of upper-middle-income countries, where the best performer is China (CHN). The top performer of its region-Asia & Pacific-is Singapore (SGP).

# Network Readiness Index 2024



## Performance against its income group and region

### Upper-middle-income countries

China is ranked 1st 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 eleven of the twelve sub-pillars: Access, Content, Future Technologies, Individuals, Businesses, Governments, Trust, Inclusion, Economy, Quality of Life and SDG Contribution.

### Asia & Pacific

China is ranked 5th within Asia & Pacific (Figure 4, right panel). It outperforms its region in each of the four pillars. With regard to sub-pillars, it outperforms the average in Asia & Pacific in eleven of the twelve sub-pillars: Access, Content, Future Technologies, Individuals, Businesses, Governments, Trust, Inclusion, Economy, Quality of Life and SDG Contribution.

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

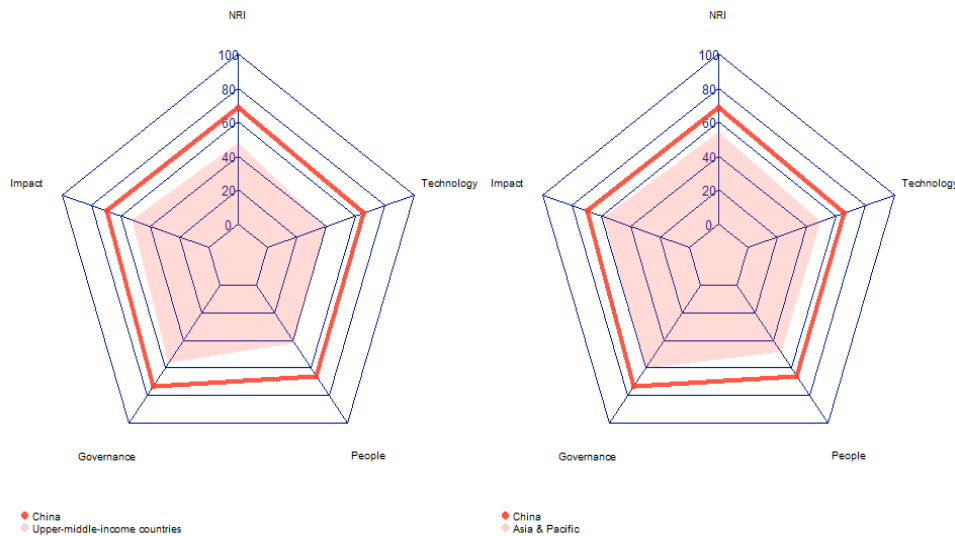


Table 2: China scores vs. averages of its income group and region, overall and by pillar

Dimension	China	Upper-middle-income countries	Asia & Pacific
NRI	68.70	47.52	54.25
Technology	65.34	39.51	49.31
People	66.33	41.65	48.55
Governance	73.81	56.74	60.88
Impact	69.32	52.19	58.26

# Network

## Readiness Index

### 2024



#### Strongest and weakest indicators

The indicators where China performs particularly well include 1.1.3 FTTH/building Internet subscriptions, 1.2.4 AI scientific publications, and 2.1.1 Mobile broadband internet traffic within the country (Table 3). By contrast, the economy's weakest indicators include 3.2.5 Privacy protection by law content, 3.2.2 ICT regulatory environment, and 4.3.5 SDG 11: Sustainable Cities and Communities.

**Table 3: Highlight of Strengths and Opportunities for China**

<b>Strongest indicators</b>	<b>Rank</b>	<b>Weakest indicators</b>	<b>Rank</b>
1.1.3 FTTH/building Internet subscriptions	1	3.3.5 Rural gap in use of digital payments	63
1.2.4 AI scientific publications	1	4.2.3 Income inequality	63
2.1.1 Mobile broadband internet traffic within the country	1	4.2.2 Freedom to make life choices	78
3.2.4 E-commerce legislation	1	3.2.1 Regulatory quality	93
4.1.2 Domestic market scale	1	4.3.3 SDG 5: Women's economic opportunity	96
4.1.3 Prevalence of gig economy	1	4.3.4 SDG 7: Affordable and Clean Energy	106
4.3.2 SDG 4: Quality Education	1	3.2.2 ICT regulatory environment	119
2.2.3 Annual investment in telecommunication services	2	4.3.5 SDG 11: Sustainable Cities and Communities	119
2.2.4 Public cloud computing market scale	2	3.2.5 Privacy protection by law content	123
1.1.5 International Internet bandwidth	3		
1.3.3 Robot density	3		
3.1.4 Internet shopping	3		
3.3.3 Availability of local online content	3		

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

# Network

## Readiness Index

### 2024



## NRI 2024 At-A-Glance: China

Network Readiness Index

Rank: 17 (out of 133)

Score: 68.70

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	12	65.34	C. Governance pillar	36	73.81
1st sub-pillar: Access	1	91.77	1st sub-pillar: Trust	23	79.41
2nd sub-pillar: Content	16	52.03	2nd sub-pillar: Regulation	88	62.11
3rd sub-pillar: Future Technologies	26	52.24	3rd sub-pillar: Inclusion	19	79.90
B. People pillar	6	66.33	D. Impact pillar	19	69.32
1st sub-pillar: Individuals	6	74.25	1st sub-pillar: Economy	7	64.76
2nd sub-pillar: Businesses	9	63.14	2nd sub-pillar: Quality of Life	58	70.41
3rd sub-pillar: Governments	22	61.60	3rd sub-pillar: SDG Contribution	47	72.80

### The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
<b>A. Technology pillar</b>	12	65.34	<b>C. Governance pillar</b>	36	73.81
<i>1st sub-pillar: Access</i>	1	91.77	<i>1st sub-pillar: Trust</i>	23	79.41
1.1.1 Mobile tariffs	38	76.06	3.1.1 Secure Internet servers	65	54.70
1.1.2 Handset prices	40	83.04	3.1.2 Cybersecurity	40	92.50
1.1.3 FTTH/building Internet subscriptions	1	100.00	3.1.3 Online access to financial account	17	78.08
1.1.4 Population covered by at least a 3G mobile network	29	98.83	3.1.4 Internet shopping	3	92.37
1.1.5 International Internet bandwidth	3	94.00	<i>2nd sub-pillar: Regulation</i>	88	62.11
1.1.6 Internet access in schools	40	98.68	3.2.1 Regulatory quality	93	38.20
<i>2nd sub-pillar: Content</i>	16	52.03	3.2.2 ICT regulatory environment	119	57.14
1.2.1 GitHub commits	NA	NA	3.2.3 Regulation of emerging technologies	7	85.10
1.2.2 Internet domain registrations	63	4.06	3.2.4 E-commerce legislation	1	100.00
1.2.3 Mobile apps development	NA	NA	3.2.5 Privacy protection by law content	123	30.12
1.2.4 AI scientific publications	1	100.00	<i>3rd sub-pillar: Inclusion</i>	19	79.90
<i>3rd sub-pillar: Future Technologies</i>	26	52.24	3.3.1 E-Participation	13	86.04
1.3.1 Adoption of emerging technologies	NA	NA	3.3.2 Socioeconomic gap in use of digital payments	51	83.52
1.3.2 Investment in emerging technologies	33	59.75	3.3.3 Availability of local online content	3	97.12
1.3.3 Robot density	3	60.98	3.3.4 Gender gap in Internet use	47	68.57

# Network

## Readiness Index

### 2024



Indicator	Rank	Score	Indicator	Rank	Score
1.3.4 Computer software spending	29	35.98	3.3.5 Rural gap in use of digital payments	63	64.25 ○
<b>B. People pillar</b>	6	66.33	<b>D. Impact pillar</b>	19	69.32
<i>1st sub-pillar: Individuals</i>	6	74.25	<i>1st sub-pillar: Economy</i>	7	64.76
2.1.1 Mobile broadband internet traffic within the country	1	100.00 ●	4.1.1 ICT patent applications	17	38.83
2.1.2 ICT skills in the education system	NA	NA	4.1.2 Domestic market scale	1	100.00 ●
2.1.3 Use of virtual social networks	36	64.61	4.1.3 Prevalence of gig economy	1	100.00 ●
2.1.4 Adult literacy rate	42	95.25	4.1.4 ICT services exports	52	20.19
2.1.5 AI talent concentration	8	37.12	<i>2nd sub-pillar: Quality of Life</i>	58	70.41
<i>2nd sub-pillar: Businesses</i>	9	63.14	4.2.1 Happiness	55	65.56
2.2.1 Firms with website	52	61.09	4.2.2 Freedom to make life choices	78	70.95 ○
2.2.2 Number of venture capital deals invested in AI	24	21.20	4.2.3 Income inequality	63	70.18 ○
2.2.3 Annual investment in telecommunication services	2	96.34 ●	4.2.4 Healthy life expectancy at birth	33	79.26
2.2.4 Public cloud computing market scale	2	73.93 ●	<i>3rd sub-pillar: SDG Contribution</i>	47	72.80
<i>3rd sub-pillar: Governments</i>	22	61.60	4.3.1 SDG 3: Good Health and Well-Being	34	83.87
2.3.1 Government online services	15	87.58	4.3.2 SDG 4: Quality Education	1	100.00 ●
2.3.2 Data Capabilities	26	54.02	4.3.3 SDG 5: Women's economic opportunity	96	70.09 ○
2.3.3 Government promotion of investment in emerging technologies	NA	NA	4.3.4 SDG 7: Affordable and Clean Energy	106	61.92 ○
2.3.4 R&D expenditure by governments and higher education	14	43.21	4.3.5 SDG 11: Sustainable Cities and Communities	119	34.51 ○

NOTE: ● a strength and ○ a weakness.

# Network

## Readiness Index

### 2024



#### Sources

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>