



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 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.

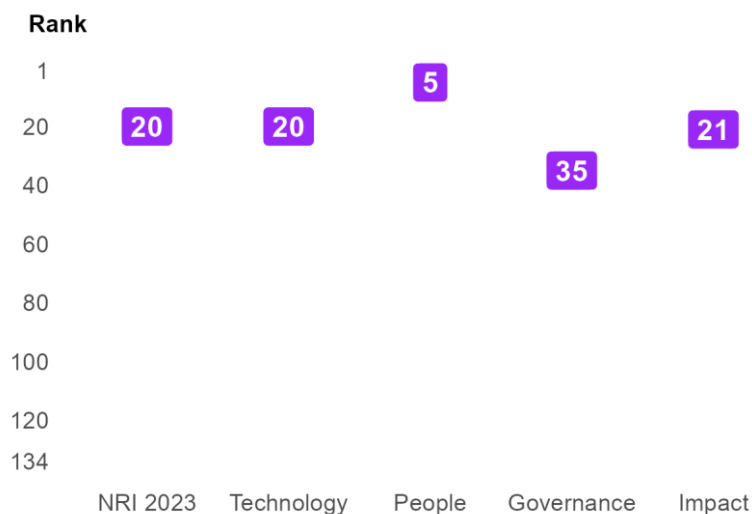
Figure 1: The NRI 2023 model



Global NRI position of China

China ranks 20th out of the 134 economies included in the NRI 2023 (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



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Performance at sub-pillar level

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

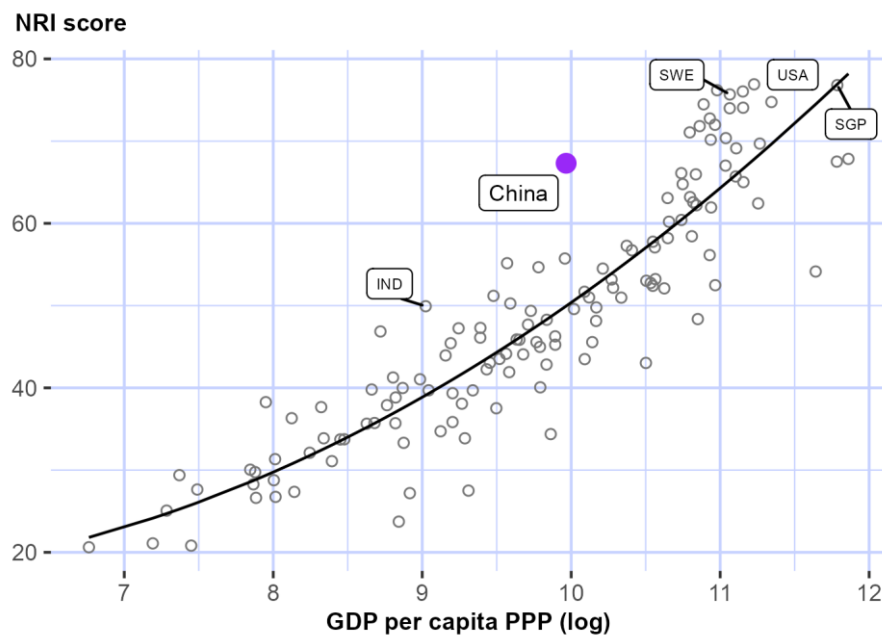
Table 1: China rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Access	1	Future Technologies	26
Economy	4	Trust	27
Individuals	6	Content	39
Businesses	6	Quality of Life	51
Governments	16	SDG Contribution	57
Inclusion	19	Regulation	84

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), NLD = Netherlands (4), SWE = Sweden (5), CHN = China (20), IND = India (61). 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).

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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 has a higher score than the regional average in each of the twelve sub-pillars.

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

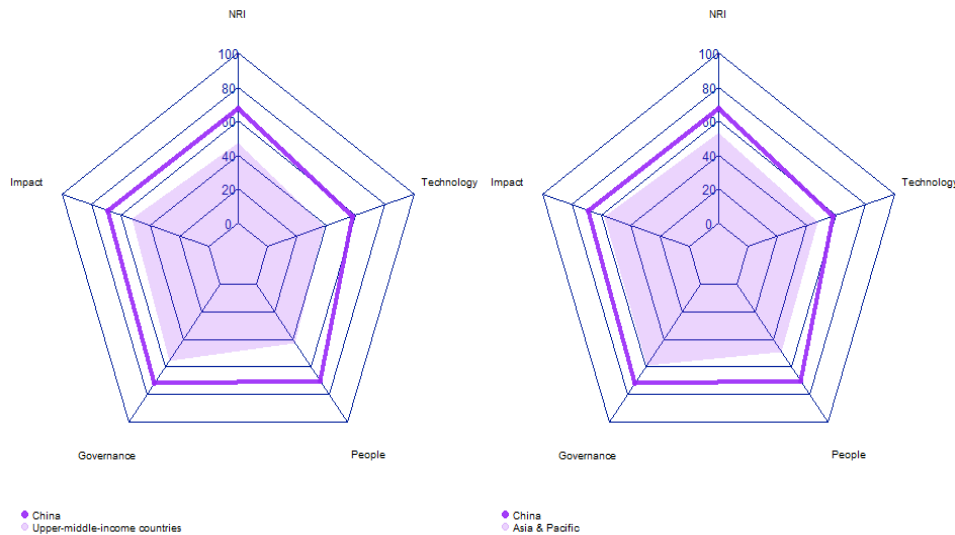


Table 2: China scores vs. averages of its income group and region, overall and by pillar

Dimension	China	Upper-middle-income countries	Asia & Pacific
NRI	67.31	47.35	53.28
Technology	57.89	38.48	47.34
People	70.46	42.59	48.95
Governance	71.96	55.90	59.22
Impact	68.92	52.43	57.62

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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

Strongest indicators	Rank	Weakest indicators	Rank
1.1.3 FTTH/building Internet subscriptions	1	1.2.1 GitHub commits	106
1.2.4 AI scientific publications	1	4.3.4 SDG 7: Affordable and Clean Energy	109
2.1.1 Mobile broadband internet traffic within the country	1	3.2.2 ICT regulatory environment	120
2.3.3 Government promotion of investment in emerging technologies	1	4.3.5 SDG 11: Sustainable Cities and Communities	120
3.2.4 E-commerce legislation	1	3.2.5 Privacy protection by law content	123
4.1.4 Domestic market size	1		
4.1.5 Prevalence of gig economy	1		
4.3.2 SDG 4: Quality Education	1		
2.2.4 Annual investment in telecommunication services	2		
1.1.5 International Internet bandwidth	3		
2.2.2 GERD financed by business enterprise	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.

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NRI 2023 At-A-Glance: China

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Rank: 20 (out of 134)

Score: 67.31

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	20	57.89	C. Governance pillar	35	71.96
1st sub-pillar: Access	1	89.25	1st sub-pillar: Trust	27	73.82
2nd sub-pillar: Content	39	35.29	2nd sub-pillar: Regulation	84	61.91
3rd sub-pillar: Future Technologies	26	49.15	3rd sub-pillar: Inclusion	19	80.15
B. People pillar	5	70.46	D. Impact pillar	21	68.92
1st sub-pillar: Individuals	6	68.41	1st sub-pillar: Economy	4	64.44
2nd sub-pillar: Businesses	6	76.81	2nd sub-pillar: Quality of Life	51	73.05
3rd sub-pillar: Governments	16	66.15	3rd sub-pillar: SDG Contribution	57	69.25

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	20	57.89	C. Governance pillar	35	71.96
1st sub-pillar: Access	1	89.25	1st sub-pillar: Trust	27	73.82
1.1.1 Mobile tariffs	40	75.27	3.1.1 Secure Internet servers	64	54.70
1.1.2 Handset prices	37	66.69	3.1.2 Cybersecurity	40	92.40
1.1.3 FTTH/building Internet subscriptions	1	100.00	3.1.3 Online access to financial account	28	55.81
1.1.4 Population covered by at least a 3G mobile network	28	99.97	3.1.4 Internet shopping	3	92.37
1.1.5 International Internet bandwidth	3	94.98	2nd sub-pillar: Regulation	84	61.91
1.1.6 Internet access in schools	32	98.56	3.2.1 Regulatory quality	87	42.52
2nd sub-pillar: Content	39	35.29	3.2.2 ICT regulatory environment	120	57.65
1.2.1 GitHub commits	106	1.76	3.2.3 Regulation of emerging technologies	7	83.90
1.2.2 Internet domain registrations	63	4.10	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	25.49
1.2.4 AI scientific publications	1	100.00	3rd sub-pillar: Inclusion	19	80.15
3rd sub-pillar: Future Technologies	26	49.15	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

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Indicator	Rank	Score	Indicator	Rank	Score	
1.3.3 Robot density	5	53.67	3.3.4 Gender gap in Internet use	42	69.81	
1.3.4 Computer software spending	27	34.02	3.3.5 Rural gap in use of digital payments	64	64.25	
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	1	100.00	• 4.1.1 High-tech and medium-high-tech manufacturing	13	60.86	
2.1.2 ICT skills in the education system	NA	NA	4.1.2 High-tech exports	10	54.10	
2.1.3 Use of virtual social networks	61	67.74	4.1.3 PCT patent applications	14	52.81	
2.1.4 Tertiary enrollment	49	41.09	4.1.4 Domestic market size	1	100.00	•
2.1.5 Adult literacy rate	36	96.11	4.1.5 Prevalence of gig economy	1	100.00	•
2.1.6 AI talent concentration	8	37.12	4.1.6 ICT services exports	52	18.90	
<i>2nd sub-pillar: Businesses</i>			<i>2nd sub-pillar: Quality of Life</i>			
2.2.1 Firms with website	42	65.39	4.2.1 Happiness	68	65.29	
2.2.2 GERD financed by business enterprise	3	95.82	• 4.2.2 Freedom to make life choices	37	83.25	
2.2.3 Knowledge intensive employment	NA	NA	4.2.3 Income inequality	68	62.31	
2.2.4 Annual investment in telecommunication services	2	98.94	• 4.2.4 Healthy life expectancy at birth	41	81.36	
2.2.5 GERD performed by business enterprise	13	47.11	<i>3rd sub-pillar: SDG Contribution</i>			
<i>3rd sub-pillar: Governments</i>			4.3.1 SDG 3: Good Health and Well-Being	27	88.24	
2.3.1 Government online services	15	87.58	4.3.2 SDG 4: Quality Education	1	100.00	•
2.3.2 Publication and use of open data	49	33.82	4.3.3 SDG 5: Women's economic opportunity	93	69.03	
2.3.3 Government promotion of investment in emerging tech	1	100.00	• 4.3.4 SDG 7: Affordable and Clean Energy	109	54.48	○
2.3.4 R&D expenditure by governments and higher education	14	43.21	4.3.5 SDG 11: Sustainable Cities and Communities	120	34.51	○

NOTE: • a strength and ○ a weakness.

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