



Thailand

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.

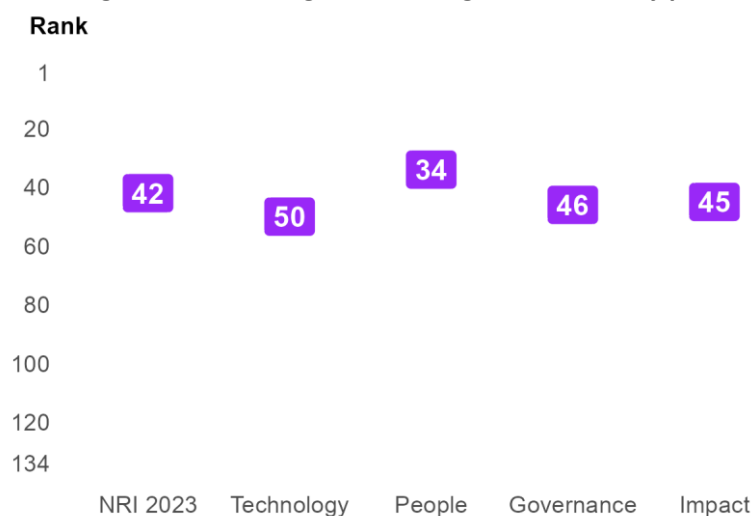
Figure 1: The NRI 2023 model



Global NRI position of Thailand

Thailand ranks 42nd 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 Technology.

Figure 2: Thailand 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 Thailand relate to Individuals, Access and Economy, among others (Table 1). More could be done, though, to improve the economy's performances in the Regulation, Content and SDG Contribution sub-pillars.

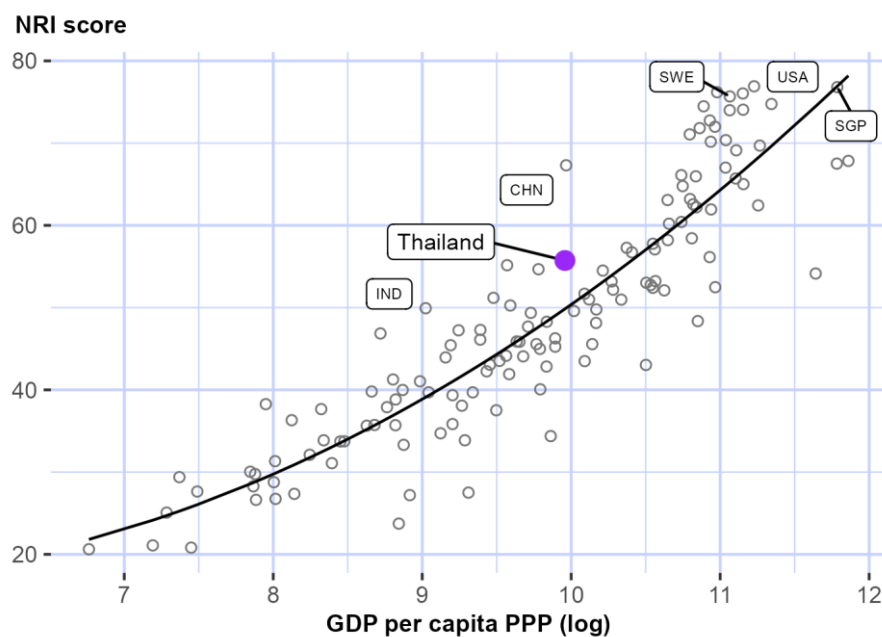
Table 1: Thailand rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Individuals	11	Businesses	43
Access	32	Trust	50
Economy	34	Future Technologies	52
Inclusion	37	Regulation	56
Quality of Life	39	Content	68
Governments	41	SDG Contribution	87

NRI score and income

Figure 3 shows the position of Thailand 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, Thailand 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). Thailand 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

Thailand is ranked 4th 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, Regulation, Inclusion, Economy and Quality of Life.

Asia & Pacific

Thailand is ranked 9th within Asia & Pacific (Figure 4, right panel). It has a score above the regional average in three of the four pillars: NRI, People, Governance and Impact. With regard to sub-pillars, it outperforms the average in Asia & Pacific in eight of the twelve sub-pillars: Access, Individuals, Businesses, Governments, Trust, Regulation, Inclusion and Quality of Life.

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

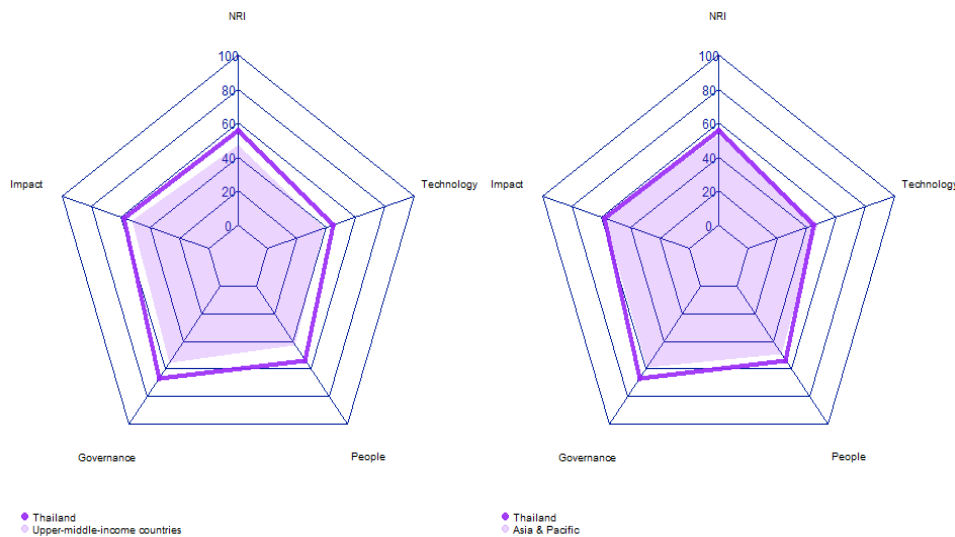


Table 2: Thailand scores vs. averages of its income group and region, overall and by pillar

Dimension	Thailand	Upper-middle-income countries	Asia & Pacific
NRI	55.73	47.35	53.28
Technology	44.73	38.48	47.34
People	53.79	42.59	48.95
Governance	66.67	55.90	59.22
Impact	57.72	52.43	57.62

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Strongest and weakest indicators

The indicators where Thailand performs particularly well include 2.2.2 GERD financed by business enterprise, 3.2.4 E-commerce legislation, and 2.1.1 Mobile broadband internet traffic within the country (Table 3). By contrast, the economy's weakest indicators include 4.1.6 ICT services exports, 4.3.5 SDG 11: Sustainable Cities and Communities, and 4.3.3 SDG 5: Women's economic opportunity.

Table 3: Highlight of Strengths and Opportunities for Thailand

Strongest indicators	Rank	Weakest indicators	Rank
2.2.2 GERD financed by business enterprise	1	4.3.2 SDG 4: Quality Education	58
3.2.4 E-commerce legislation	1	2.2.3 Knowledge intensive employment	92
2.1.1 Mobile broadband internet traffic within the country	6	4.3.3 SDG 5: Women's economic opportunity	93
3.3.2 Socioeconomic gap in use of digital payments	8	4.3.5 SDG 11: Sustainable Cities and Communities	117
1.1.3 FTTH/building Internet subscriptions	9	4.1.6 ICT services exports	130
1.1.5 International Internet bandwidth	11		
4.1.2 High-tech exports	12		
3.3.1 E-Participation	18		
2.3.3 Government promotion of investment in emerging technologies	23		
4.1.4 Domestic market size	23		
4.3.1 SDG 3: Good Health and Well-Being	23		

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

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NRI 2023 At-A-Glance: Thailand

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Rank: 42 (out of 134)

Score: 55.73

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	50	44.73	C. Governance pillar	46	66.67
1st sub-pillar: Access	32	74.07	1st sub-pillar: Trust	50	56.85
2nd sub-pillar: Content	68	22.73	2nd sub-pillar: Regulation	56	68.21
3rd sub-pillar: Future Technologies	52	37.39	3rd sub-pillar: Inclusion	37	74.95
B. People pillar	34	53.79	D. Impact pillar	45	57.72
1st sub-pillar: Individuals	11	60.49	1st sub-pillar: Economy	34	38.68
2nd sub-pillar: Businesses	43	53.04	2nd sub-pillar: Quality of Life	39	75.69
3rd sub-pillar: Governments	41	47.84	3rd sub-pillar: SDG Contribution	87	58.78

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	50	44.73	C. Governance pillar	46	66.67
1st sub-pillar: Access	32	74.07	1st sub-pillar: Trust	50	56.85
1.1.1 Mobile tariffs	75	58.09	3.1.1 Secure Internet servers	58	60.09
1.1.2 Handset prices	86	38.90	3.1.2 Cybersecurity	52	86.26
1.1.3 FTTH/building Internet subscriptions	9	62.28	3.1.3 Online access to financial account	77	22.52
1.1.4 Population covered by at least a 3G mobile network	69	99.61	3.1.4 Internet shopping	36	58.54
1.1.5 International Internet bandwidth	11	85.63	2nd sub-pillar: Regulation	56	68.21
1.1.6 Internet access in schools	26	99.94	3.2.1 Regulatory quality	64	51.73
2nd sub-pillar: Content	68	22.73	3.2.2 ICT regulatory environment	64	84.12
1.2.1 GitHub commits	76	4.28	3.2.3 Regulation of emerging technologies	66	43.64
1.2.2 Internet domain registrations	73	2.97	3.2.4 E-commerce legislation	1	100.00
1.2.3 Mobile apps development	63	66.73	3.2.5 Privacy protection by law content	74	61.54
1.2.4 AI scientific publications	32	16.94	3rd sub-pillar: Inclusion	37	74.95
3rd sub-pillar: Future Technologies	52	37.39	3.3.1 E-Participation	18	77.91
1.3.1 Adoption of emerging technologies	39	60.58	3.3.2 Socioeconomic gap in use of digital payments	8	98.84
1.3.2 Investment in emerging technologies	37	54.50	3.3.3 Availability of local online content	60	63.94

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Indicator	Rank	Score	Indicator	Rank	Score
1.3.3 Robot density	32	8.53	3.3.4 Gender gap in Internet use	67	66.74
1.3.4 Computer software spending	52	25.97	3.3.5 Rural gap in use of digital payments	55	67.30
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	6	58.54	4.1.1 High-tech and medium-high-tech manufacturing	20	54.99
2.1.2 ICT skills in the education system	50	55.61	4.1.2 High-tech exports	12	49.95
2.1.3 Use of virtual social networks	56	68.52	4.1.3 PCT patent applications	57	4.69
2.1.4 Tertiary enrollment	72	27.85	4.1.4 Domestic market size	23	70.77
2.1.5 Adult literacy rate	57	91.94	4.1.5 Prevalence of gig economy	49	50.87
2.1.6 AI talent concentration	NA	NA	4.1.6 ICT services exports	130	0.82
<i>2nd sub-pillar: Businesses</i>			<i>2nd sub-pillar: Quality of Life</i>		
2.2.1 Firms with website	73	41.59	4.2.1 Happiness	53	67.97
2.2.2 GERD financed by business enterprise	1	100.00	4.2.2 Freedom to make life choices	33	84.22
2.2.3 Knowledge intensive employment	92	17.78	4.2.3 Income inequality	51	70.10
2.2.4 Annual investment in telecommunication services	26	85.32	4.2.4 Healthy life expectancy at birth	44	80.45
2.2.5 GERD performed by business enterprise	31	20.53	<i>3rd sub-pillar: SDG Contribution</i>		
<i>3rd sub-pillar: Governments</i>			4.3.1 SDG 3: Good Health and Well-Being	23	89.56
2.3.1 Government online services	47	75.28	4.3.2 SDG 4: Quality Education	58	31.97
2.3.2 Publication and use of open data	58	27.94	4.3.3 SDG 5: Women's economic opportunity	93	69.03
2.3.3 Government promotion of investment in emerging tech	23	64.36	4.3.4 SDG 7: Affordable and Clean Energy	84	67.27
2.3.4 R&D expenditure by governments and higher education	32	23.80	4.3.5 SDG 11: Sustainable Cities and Communities	117	36.09

NOTE: ● a strength and ○ a weakness.

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