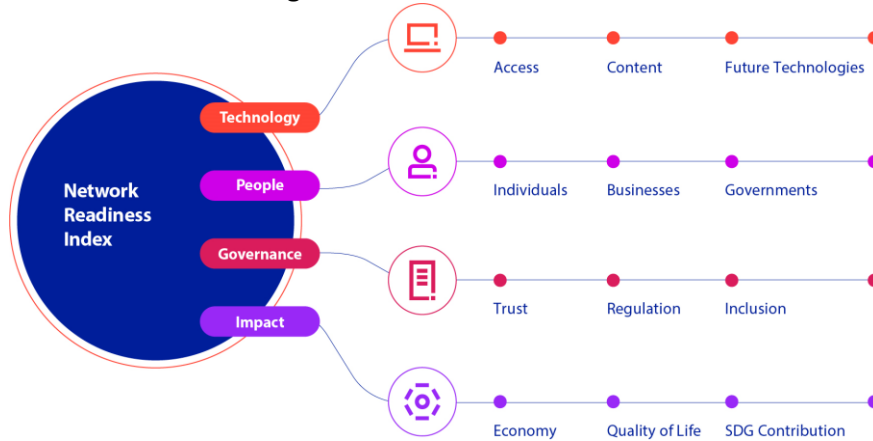




Malaysia

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.

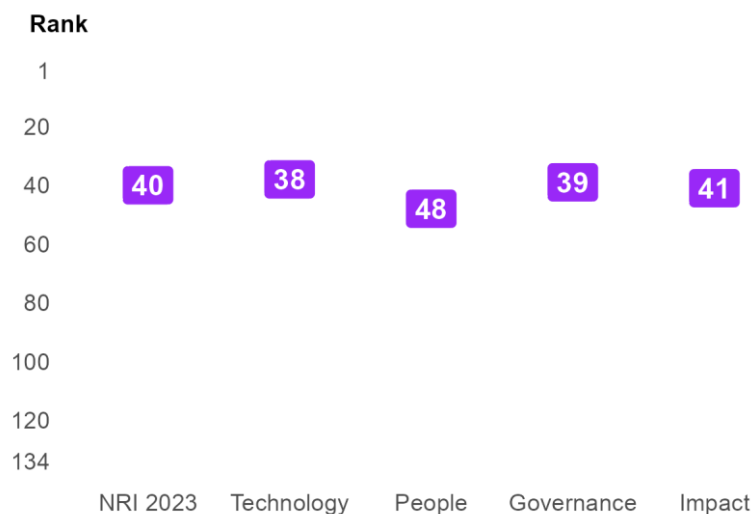
Figure 1: The NRI 2023 model



Global NRI position of Malaysia

Malaysia ranks 40th 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: Malaysia 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 Malaysia relate to Economy, Access and Future Technologies, among others (Table 1). More could be done, though, to improve the economy's performances in the Quality of Life, Businesses and SDG Contribution sub-pillars.

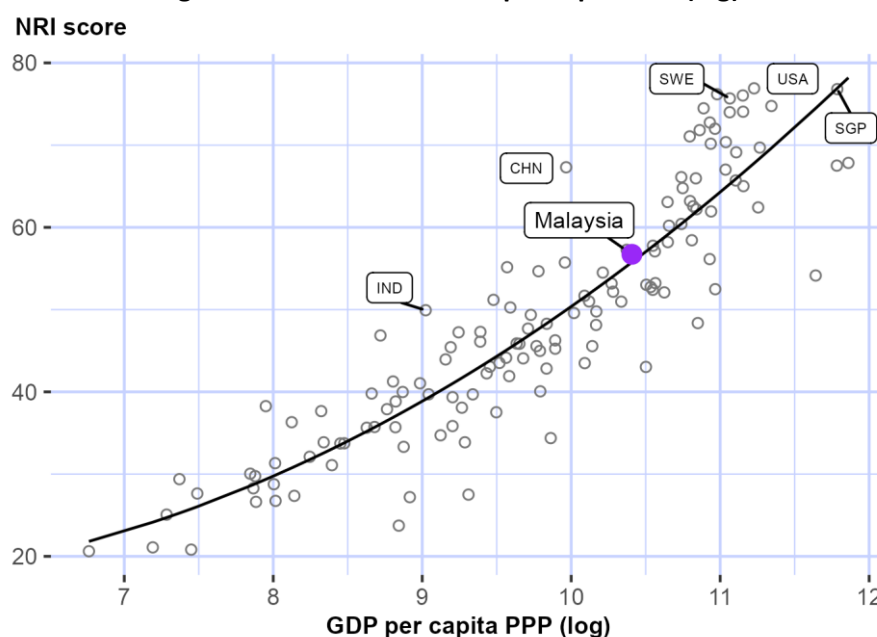
Table 1: Malaysia rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Economy	15	Regulation	52
Access	25	Individuals	56
Future Technologies	30	Content	59
Governments	37	Quality of Life	60
Trust	38	Businesses	62
Inclusion	46	SDG Contribution	89

NRI score and income

Figure 3 shows the position of Malaysia 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, Malaysia is slightly above the trend line, which suggests that its network readiness is more or less in line with what 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). Malaysia 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

Malaysia is ranked 3rd 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

Malaysia is ranked 8th within Asia & Pacific (Figure 4, right panel). It has a score above the regional average in three of the four pillars: NRI, Technology, Governance and Impact. With regard to sub-pillars, it outperforms the average in Asia & Pacific in eight of the twelve sub-pillars: Access, Future Technologies, Governments, Trust, Regulation, Inclusion, Economy and Quality of Life.

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

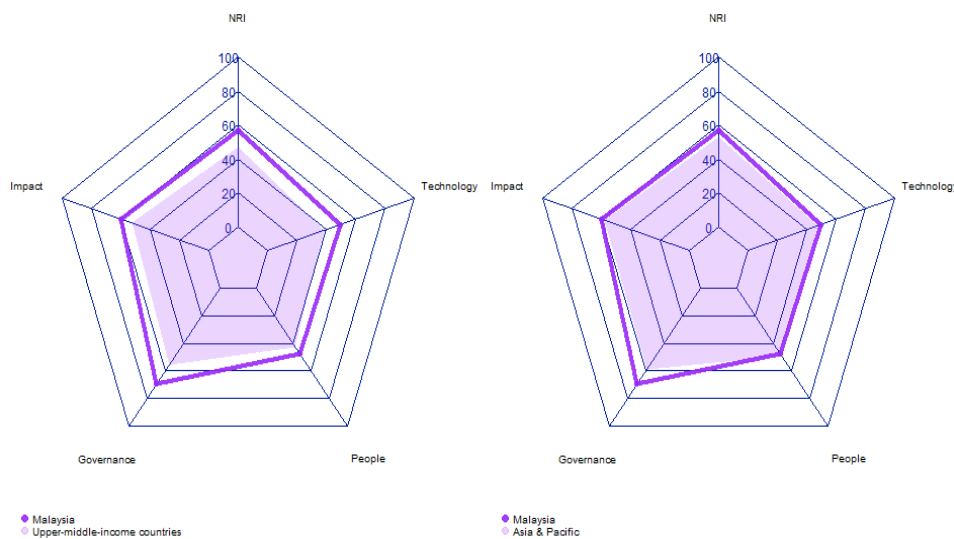


Table 2: Malaysia scores vs. averages of its income group and region, overall and by pillar

Dimension	Malaysia	Upper-middle-income countries	Asia & Pacific
NRI	56.72	47.35	53.28
Technology	49.31	38.48	47.34
People	47.97	42.59	48.95
Governance	69.80	55.90	59.22
Impact	59.81	52.43	57.62

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Strongest and weakest indicators

The indicators where Malaysia performs particularly well include 3.2.4 E-commerce legislation, 4.1.2 High-tech exports, and 4.1.5 Prevalence of gig economy (Table 3). By contrast, the economy's weakest indicators include 4.3.3 SDG 5: Women's economic opportunity, 3.2.5 Privacy protection by law content, and 4.2.3 Income inequality.

Table 3: Highlight of Strengths and Opportunities for Malaysia

Strongest indicators	Rank	Weakest indicators	Rank
3.2.4 E-commerce legislation	1	1.2.3 Mobile apps development	78
4.1.2 High-tech exports	4	4.2.3 Income inequality	86
4.1.5 Prevalence of gig economy	6	3.2.5 Privacy protection by law content	112
3.1.2 Cybersecurity	8	4.3.3 SDG 5: Women's economic opportunity	126
2.1.1 Mobile broadband internet traffic within the country	9		
2.3.3 Government promotion of investment in emerging technologies	11		
1.1.5 International Internet bandwidth	12		
1.3.2 Investment in emerging technologies	12		
4.1.1 High-tech and medium-high-tech manufacturing	17		
1.1.3 FTTH/building Internet subscriptions	22		
1.2.4 AI scientific publications	23		

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

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NRI 2023 At-A-Glance: Malaysia

Network Readiness Index

Rank: 40 (out of 134)

Score: 56.72

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	38	49.31	C. Governance pillar	39	69.80
1st sub-pillar: Access	25	75.61	1st sub-pillar: Trust	38	67.57
2nd sub-pillar: Content	59	24.88	2nd sub-pillar: Regulation	52	70.55
3rd sub-pillar: Future Technologies	30	47.45	3rd sub-pillar: Inclusion	46	71.28
B. People pillar	48	47.97	D. Impact pillar	41	59.81
1st sub-pillar: Individuals	56	49.37	1st sub-pillar: Economy	15	53.67
2nd sub-pillar: Businesses	62	45.76	2nd sub-pillar: Quality of Life	60	69.60
3rd sub-pillar: Governments	37	48.78	3rd sub-pillar: SDG Contribution	89	56.18

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	38	49.31	C. Governance pillar	39	69.80
1st sub-pillar: Access	25	75.61	1st sub-pillar: Trust	38	67.57
1.1.1 Mobile tariffs	72	59.83	3.1.1 Secure Internet servers	45	70.99
1.1.2 Handset prices	42	63.03	3.1.2 Cybersecurity	8	98.03
1.1.3 FTTH/building Internet subscriptions	22	46.74	3.1.3 Online access to financial account	41	43.40
1.1.4 Population covered by at least a 3G mobile network	84	98.97	3.1.4 Internet shopping	39	57.86
1.1.5 International Internet bandwidth	12	85.50	2nd sub-pillar: Regulation	52	70.55
1.1.6 Internet access in schools	29	99.60	3.2.1 Regulatory quality	42	65.92
2nd sub-pillar: Content	59	24.88	3.2.2 ICT regulatory environment	70	83.53
1.2.1 GitHub commits	61	8.12	3.2.3 Regulation of emerging technologies	40	60.00
1.2.2 Internet domain registrations	56	5.58	3.2.4 E-commerce legislation	1	100.00
1.2.3 Mobile apps development	78	62.86	3.2.5 Privacy protection by law content	112	43.30
1.2.4 AI scientific publications	23	22.97	3rd sub-pillar: Inclusion	46	71.28
3rd sub-pillar: Future Technologies	30	47.45	3.3.1 E-Participation	47	67.44
1.3.1 Adoption of emerging technologies	25	71.90	3.3.2 Socioeconomic gap in use of digital payments	59	79.29
1.3.2 Investment in emerging technologies	12	78.75	3.3.3 Availability of local online content	39	76.68

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Indicator	Rank	Score	Indicator	Rank	Score
1.3.3 Robot density	30	9.20	3.3.4 Gender gap in Internet use	68	66.70
1.3.4 Computer software spending	38	29.94	3.3.5 Rural gap in use of digital payments	58	66.29
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	9	46.08	• 4.1.1 High-tech and medium-high-tech manufacturing	17	57.79
2.1.2 ICT skills in the education system	61	51.21	4.1.2 High-tech exports	4	93.51
2.1.3 Use of virtual social networks	37	74.10	4.1.3 PCT patent applications	50	5.69
2.1.4 Tertiary enrollment	76	26.10	4.1.4 Domestic market size	30	67.85
2.1.5 Adult literacy rate	NA	NA	4.1.5 Prevalence of gig economy	6	85.76
2.1.6 AI talent concentration	NA	NA	4.1.6 ICT services exports	73	11.40
<i>2nd sub-pillar: Businesses</i>			<i>2nd sub-pillar: Quality of Life</i>		
2.2.1 Firms with website	69	44.71	4.2.1 Happiness	52	68.11
2.2.2 GERD financed by business enterprise	45	47.27	4.2.2 Freedom to make life choices	36	83.77
2.2.3 Knowledge intensive employment	48	41.52	4.2.3 Income inequality	86	54.77
2.2.4 Annual investment in telecommunication services	35	83.57	4.2.4 Healthy life expectancy at birth	71	71.74
2.2.5 GERD performed by business enterprise	41	11.70	<i>3rd sub-pillar: SDG Contribution</i>		
<i>3rd sub-pillar: Governments</i>			4.3.1 SDG 3: Good Health and Well-Being	46	77.85
2.3.1 Government online services	53	73.81	4.3.2 SDG 4: Quality Education	47	39.53
2.3.2 Publication and use of open data	58	27.94	4.3.3 SDG 5: Women's economic opportunity	126	29.20
2.3.3 Government promotion of investment in emerging tech	11	76.39	• 4.3.4 SDG 7: Affordable and Clean Energy	83	67.41
2.3.4 R&D expenditure by governments and higher education	43	16.96	4.3.5 SDG 11: Sustainable Cities and Communities	65	66.91

NOTE: ● a strength and ○ a weakness.

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