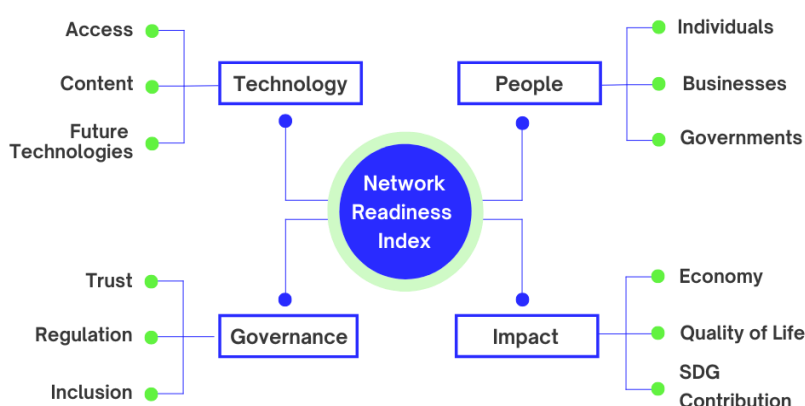


Network Readiness Index 2022 Malaysia

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 2022 the NRI Report maps the network-based readiness landscape of 131 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.

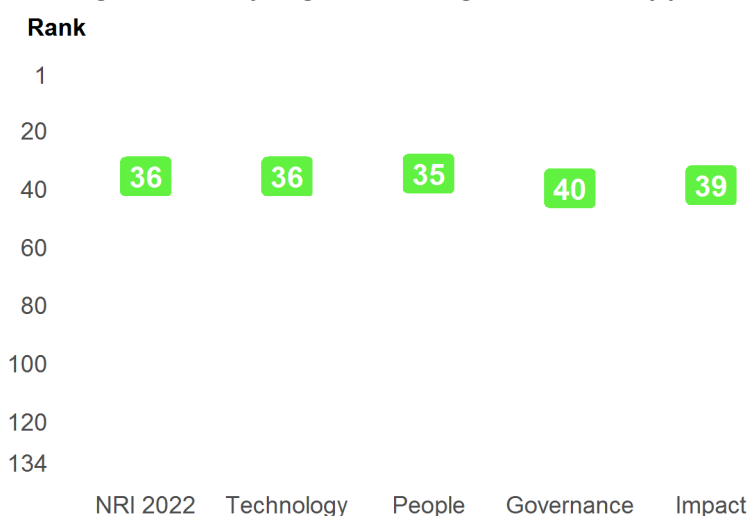
Figure 1: The NRI 2022 model



Global NRI position of Malaysia

Malaysia ranks 36th out of the 131 economies included in the NRI 2022 (Figure 2). Its main strength relates to People. The greatest scope for improvement, meanwhile, concerns Governance.

Figure 2: Malaysia global ranking, overall and by pillar



Performance at sub-pillar level

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

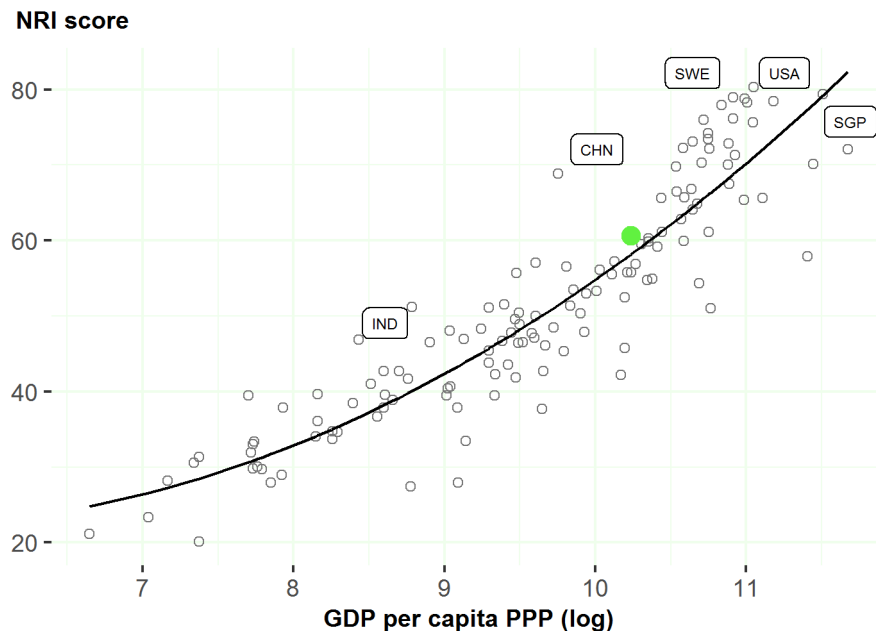
Table 1: Malaysia rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Individuals	12	Content	47
Economy	15	Inclusion	48
Governments	27	Regulation	51
Future Technologies	28	Businesses	58
Access	38	Quality of Life	61
Trust	38	SDG Contribution	87

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 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), SWE = Sweden (3), CHN = China (23), IND = India (61). Netherlands (NLD) is ranked 4th. 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).

Performance against its income group and region

Upper-middle-income countries

Malaysia is ranked 2nd 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 outperforms its region in each of the four pillars. With regard to sub-pillars, it outperforms the average in Asia & Pacific in nine of the twelve sub-pillars: Access, Future Technologies, Individuals, Governments, Trust, Regulation, Inclusion, Economy and Quality of Life.

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

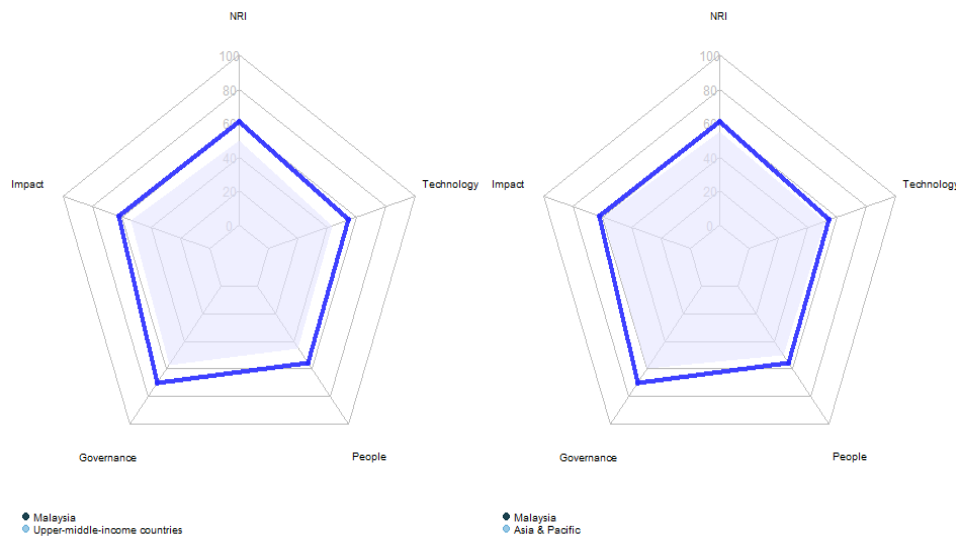


Table 2: Malaysia scores vs. averages of its income group and region, overall and by pillar

Dimension	Malaysia	Upper-middle-income countries	Asia & Pacific
NRI	60.58	49.66	55.18
Technology	54.18	43.11	51.78
People	56.07	44.94	50.21
Governance	70.06	57.08	59.66
Impact	62.01	53.50	59.07

Strongest and weakest indicators

The indicators where Malaysia performs particularly well include 1.1.6 Internet access in schools, 3.2.4 E-commerce legislation, and 4.1.2 High-tech exports (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 1.1.4 Population covered by at least a 3G mobile network.

Table 3: Strongest and weakest indicators of Malaysia

Strongest indicators	Rank	Weakest indicators	Rank
1.1.6 Internet access in schools	1	4.2.3 Income inequality	84
3.2.4 E-commerce legislation	1	1.1.4 Population covered by at least a 3G mobile network	87
4.1.2 High-tech exports	1	3.2.5 Privacy protection by law content	113
4.1.5 Prevalence of gig economy	6	4.3.3 SDG 5: Women's economic opportunity	123
2.1.3 Use of virtual social networks	8		
3.1.2 Cybersecurity	8		
2.1.1 Mobile broadband internet traffic within the country	11		
2.3.3 Government promotion of investment in emerging technologies	11		
1.3.2 Investment in emerging technologies	12		
1.1.5 International Internet bandwidth	15		
1.1.3 FTTH/building Internet subscriptions	18		
4.1.1 High-tech and medium-high-tech manufacturing	18		

NRI 2022 At-A-Glance: Malaysia

Network Readiness Index

Rank: 36 (out of 131)

Score: 60.58

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	36	54.18	C. Governance pillar	40	70.06
1st sub-pillar: Access	38	72.82	1st sub-pillar: Trust	38	67.69
2nd sub-pillar: Content	47	42.42	2nd sub-pillar: Regulation	51	69.34
3rd sub-pillar: Future Technologies	28	47.32	3rd sub-pillar: Inclusion	48	73.15
B. People pillar	35	56.07	D. Impact pillar	39	62.01
1st sub-pillar: Individuals	12	61.72	1st sub-pillar: Economy	15	57.58
2nd sub-pillar: Businesses	58	45.91	2nd sub-pillar: Quality of Life	61	70.07
3rd sub-pillar: Governments	27	60.57	3rd sub-pillar: SDG Contribution	87	58.37

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	36	54.18	C. Governance pillar	40	70.06
1st sub-pillar: Access	38	72.82	1st sub-pillar: Trust	38	67.69
1.1.1 Mobile tariffs	58	65.25	3.1.1 Secure Internet servers	45	71.19
1.1.2 Handset prices	83	44.69	3.1.2 Cybersecurity	8	98.03 ●
1.1.3 FTTH/building Internet subscriptions	18	44.36 ●	3.1.3 Online access to financial account	40	43.40
1.1.4 Population covered by at least a 3G mobile network	87	98.46 ○	3.1.4 Internet shopping	36	58.16
1.1.5 International Internet bandwidth	15	84.15 ●	2nd sub-pillar: Regulation	51	69.34
1.1.6 Internet access in schools	1	100.00 ●	3.2.1 Regulatory quality	39	61.60
2nd sub-pillar: Content	47	42.42	3.2.2 ICT regulatory environment	67	82.35
1.2.1 GitHub commits	63	6.49	3.2.3 Regulation of emerging technologies	40	59.47
1.2.2 Internet domain registrations	63	4.79	3.2.4 E-commerce legislation	1	100.00 ●
1.2.3 Mobile apps development	51	83.52	3.2.5 Privacy protection by law content	113	43.30 ○
1.2.4 AI scientific publications	19	74.87	3rd sub-pillar: Inclusion	48	73.15
3rd sub-pillar: Future Technologies	28	47.32	3.3.1 E-Participation	29	85.18
1.3.1 Adoption of emerging technologies	25	71.90	3.3.2 Socioeconomic gap in use of digital payments	55	79.29
1.3.2 Investment in emerging technologies	12	78.75 ●	3.3.3 Availability of local online content	39	76.68
1.3.3 Robot density	29	9.41	3.3.4 Gender gap in Internet use	66	67.52
1.3.4 Computer software spending	34	29.21	3.3.5 Rural gap in use of digital payments	76	57.10

Indicator	Rank	Score	Indicator	Rank	Score
B. People pillar	35	56.07	D. Impact pillar	39	62.01
<i>1st sub-pillar: Individuals</i>	12	61.72	<i>1st sub-pillar: Economy</i>	15	57.58
2.1.1 Mobile broadband internet traffic within the country	11	45.24	• 4.1.1 High-tech and medium-high-tech manufacturing	18	59.78
2.1.2 ICT skills in the education system	46	55.92	4.1.2 High-tech exports	1	100.00
2.1.3 Use of virtual social networks	8	86.08	• 4.1.3 PCT patent applications	58	5.40
2.1.4 Tertiary enrollment	73	27.82	4.1.4 Domestic market size	29	67.35
2.1.5 Adult literacy rate	50	93.56	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	27.22
<i>2nd sub-pillar: Businesses</i>	58	45.91	<i>2nd sub-pillar: Quality of Life</i>	61	70.07
2.2.1 Firms with website	72	44.71	4.2.1 Happiness	54	68.30
2.2.2 GERD financed by business enterprise	43	47.25	4.2.2 Freedom to make life choices	31	85.23
2.2.3 Knowledge intensive employment	51	42.29	4.2.3 Income inequality	84	55.03
2.2.4 Annual investment in telecommunication services	29	83.29	4.2.4 Healthy life expectancy at birth	72	71.74
2.2.5 GERD performed by business enterprise	41	12.00	<i>3rd sub-pillar: SDG Contribution</i>	87	58.37
<i>3rd sub-pillar: Governments</i>	27	60.57	4.3.1 SDG 3: Good Health and Well-Being	46	77.85
2.3.1 Government online services	24	84.84	4.3.2 SDG 4: Quality Education	47	41.72
2.3.2 Publication and use of open data	58	27.94	4.3.3 SDG 5: Women's economic opportunity	123	29.82
2.3.3 Government promotion of investment in emerging tech	11	76.38	4.3.4 SDG 7: Affordable and Clean Energy	76	75.52
2.3.4 R&D expenditure by governments and higher education	27	53.10	4.3.5 SDG 11: Sustainable Cities and Communities	64	66.91

NOTE: • a strength and o a weakness.

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