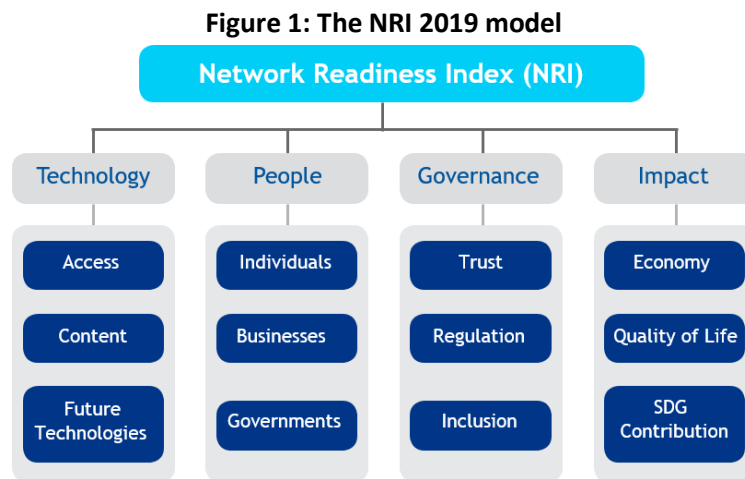


# Network Readiness Index 2019 Indonesia

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 2019 the NRI Report maps the network-based readiness landscape of 121 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 62 variables.



## Global NRI position of Indonesia

Indonesia ranks 76th out of the 121 economies included in the NRI 2019 (Figure 2). Its main strength relates to Governance. The greatest scope for improvement, meanwhile, concerns People.



### Performance at sub-pillar level

When it comes to sub-pillars, the strongest showings of Indonesia relate to Regulation, Future Technologies and Trust, among others (Table 1). More could be done, though, to improve the economy's performances in the Individuals, Content and Businesses sub-pillars.

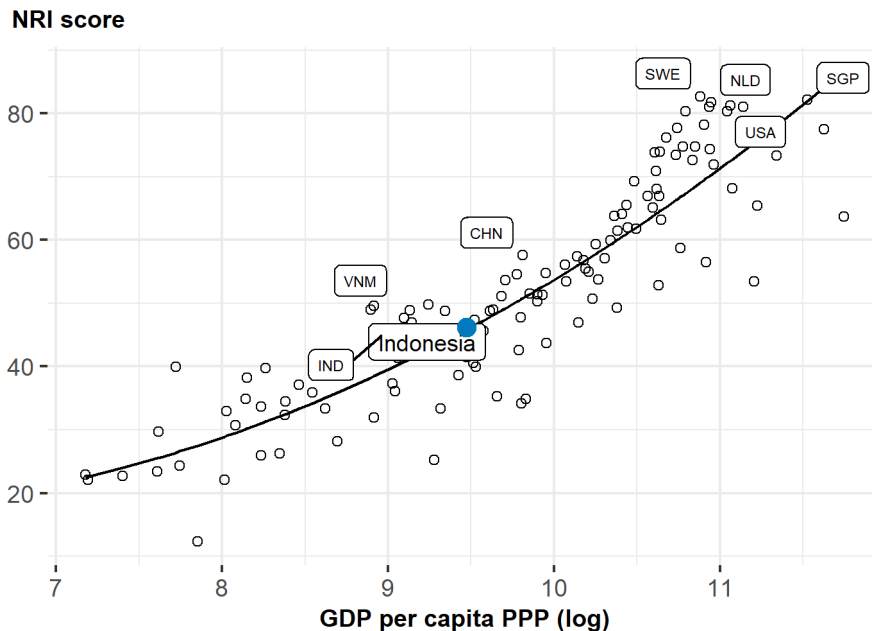
**Table 1: Indonesia rankings by sub-pillar**

Sub-pillar	Rank	Sub-pillar	Rank
Regulation	48	Quality of Life	68
Future Technologies	49	Inclusion	84
Trust	56	SDG Contribution	84
Access	67	Individuals	85
Economy	67	Content	93
Governments	68	Businesses	99

### NRI score and income

Figure 3 shows the position of Indonesia 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, Indonesia 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: SWE = Sweden (rank: 1), SGP = Singapore (2), NLD = Netherlands (3), CHN = China (41), IND = India (79). USA is ranked 8th. Indonesia belongs to the group of lower-middle-income countries, where the best performer is Vietnam (VNM). The top performer of its region—Asia & Pacific—is Singapore (SGP).

## Performance against its income group and region

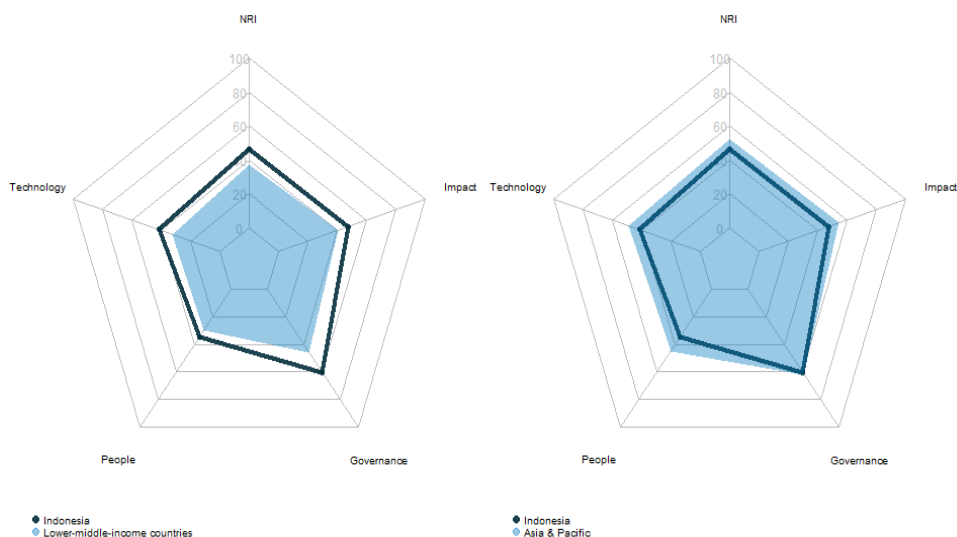
### Lower-middle-income countries

Indonesia is ranked 5th in the group of lower-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 lower-middle-income countries in eleven of the twelve sub-pillars: Access, Content, Future Technology, Individuals, Governments, Trust, Regulation, Inclusion, Economy, Quality of Life and SDG Contribution.

### Asia & Pacific

Indonesia is ranked 12th within Asia & Pacific (Figure 4, right panel). It lags behind its region in each of the four pillars. With regard to sub-pillars, it outperforms the average in Asia & Pacific in one of the twelve sub-pillars: Regulation.

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



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

Dimension	Indonesia	Lower-middle-income countries	Asia & Pacific
NRI	46.15	37.18	52.44
Technology	41.56	32.15	48.56
People	34.77	30.04	44.85
Governance	60.57	46.17	61.84
Impact	47.70	40.35	54.50

### Strongest and weakest indicators

The indicators where Indonesia performs particularly well include E-commerce legislation, Online trust and safety, and Government procurement of advanced technology products (Table 3). By contrast, the economy's weakest indicators include Professionals, Firms with website, and Socioeconomic gap in use of digital payments.

**Table 3: Top-ranked and bottom-ranked indicators of Indonesia**

<b>Strongest indicators</b>	<b>Rank</b>	<b>Weakest indicators</b>	<b>Rank</b>
E-commerce legislation	1	Government online services	90
Online trust and safety	3	ICT regulatory environment	90
Government procurement of advanced technology products	12	Software piracy rate	93
Legal framework's adaptability to digital business models	27	Healthy life expectancy at birth	93
Company investment in emerging technology	28	Digital participation and content creation	95
Extent of staff training	28	Access to basic services	95
ICT use and government efficiency	28	Internet users	96
Computer software spending	30	Socioeconomic gap in use of digital payments	97
Freedom to make life choices	36	Firms with website	108
Publication and use of open data	38	Professionals	115

# NRI 2019 At-A-Glance: Indonesia

Network Readiness Index

Rank: 76 (out of 121)

Score: 46.15

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
<b>A. Technology pillar</b>	<b>75</b>	<b>41.56</b>	<b>C. Governance pillar</b>	<b>62</b>	<b>60.57</b>
1st sub-pillar: Access	67	62.86	1st sub-pillar: Trust	56	58.26
2nd sub-pillar: Content	93	26.65	2nd sub-pillar: Regulation	48	68.17
3rd sub-pillar: Future Technologies	49	35.18	3rd sub-pillar: Inclusion	84	55.29
<b>B. People pillar</b>	<b>85</b>	<b>34.77</b>	<b>D. Impact pillar</b>	<b>81</b>	<b>47.70</b>
1st sub-pillar: Individuals	85	43.58	1st sub-pillar: Economy	67	18.88
2nd sub-pillar: Businesses	99	17.81	2nd sub-pillar: Quality of Life	68	60.30
3rd sub-pillar: Governments	68	42.93	3rd sub-pillar: SDG Contribution	84	63.91

## The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
<b>A. Technology pillar</b>			<b>C. Governance pillar</b>		
<i>1st sub-pillar: Access</i>			<i>1st sub-pillar: Trust</i>		
1.1.1 Mobile tariffs	64	63.58	3.1.1 Rule of law	79	46.15
1.1.2 Handset prices	72	42.05	3.1.2 Software piracy rate	93	8.11
1.1.3 Internet access	68	63.96	3.1.3 Secure Internet servers	61	61.06
1.1.4 4G mobile network coverage	61	92.70	3.1.4 Cybersecurity	43	83.00
1.1.5 Fixed-broadband subscriptions	71	48.04	3.1.5 Online trust and safety	3	93.00
1.1.6 International Internet bandwidth	75	66.84	<i>2nd sub-pillar: Regulation</i>		
1.1.7 Internet access in schools	NA	NA	3.2.1 Regulatory quality	75	49.84
<i>2nd sub-pillar: Content</i>			3.2.2 Ease of doing business	66	69.60
1.2.1 Digital participation and content creation	*	*	3.2.3 Legal framework's adaptability to digital business models	27	62.20
1.2.2 Mobile apps development	83	49.79	3.2.4 E-commerce legislation	1	100.00
1.2.3 Intellectual property receipts	75	0.16	3.2.5 Social safety net protection	41	56.11
<i>3rd sub-pillar: Future Technologies</i>			3.2.6 ICT regulatory environment	90	71.24
1.3.1 Availability of latest technologies	65	52.56	<i>3rd sub-pillar: Inclusion</i>		
1.3.2 Company investment in emerging technology	28	59.63	3.3.1 E-Participation	86	56.69
1.3.3 Government procurement of advanced technology products	12	69.87	3.3.2 Socioeconomic gap in use of digital payments	97	41.34
1.3.4 ICT PCT patent applications	79	0.16	3.3.3 Availability of local online content	45	62.23
1.3.5 Computer software spending	30	27.27	3.3.4 Gender gap in internet use	75	46.91
1.3.6 Robot density	47	1.56	3.3.5 Rural gap in use of digital payments	57	69.30
<b>B. People pillar</b>			<b>D. Impact pillar</b>		
<i>1st sub-pillar: Individuals</i>			<i>1st sub-pillar: Economy</i>		
2.1.1 Internet users	96	33.37	4.1.1 Medium and high-tech industry	40	44.72
2.1.2 Active mobile-broadband subscriptions	50	33.30	4.1.2 High-tech exports	56	15.19
2.1.3 Use of virtual social networks	58	55.30	4.1.3 PCT patent applications	86	0.01
2.1.4 Tertiary enrolment	73	26.14	4.1.4 Labour productivity per employee	76	15.60
2.1.5 Adult literacy rate	43	93.31	<i>2nd sub-pillar: Quality of Life</i>		
2.1.6 ICT skills	53	20.07	4.2.1 Happiness	75	47.55
<i>2nd sub-pillar: Businesses</i>			4.2.2 Freedom to make life choices	36	81.23
2.2.1 Firms with website	108	2.47	4.2.3 Income inequality	66	65.53
2.2.2 Internet shopping	68	12.64	4.2.4 Healthy life expectancy at birth	93	46.89
2.2.3 Professionals	115	1.14	<i>3rd sub-pillar: SDG Contribution</i>		
2.2.4 Technicians and associate professionals	77	25.70	4.3.1 Access to basic services	95	75.25
2.2.5 Extent of staff training	28	64.35	4.3.2 Pollution	42	88.89
2.2.6 R&D expenditure by businesses	77	0.54	4.3.3 Road safety	48	70.31
<i>3rd sub-pillar: Governments</i>			4.3.4 Reading proficiency in schools	42	66.42
2.3.1 Government online services	90	52.30	4.3.5 Maths proficiency in schools	62	15.93
2.3.2 Publication and use of open data	38	38.35	4.3.6 Use of clean fuels and technology	87	66.67
2.3.3 ICT use and government efficiency	28	63.27			
2.3.4 R&D expenditure by governments and higher education	75	17.79			

\* Confidential data

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