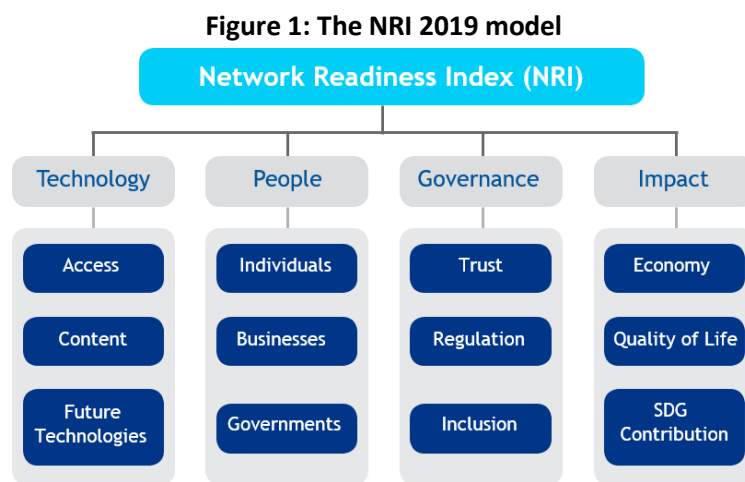


Network Readiness Index 2019

Laos

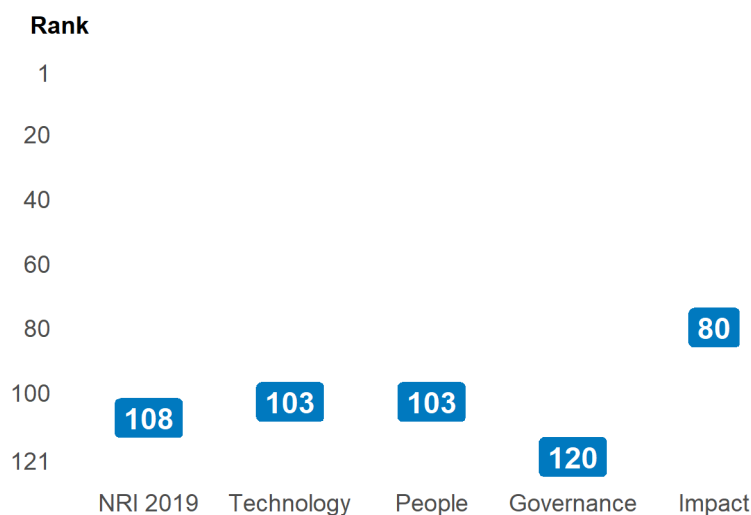
The Network Readiness Index (NRI) is one of the leading global indices on the application and impact of information and communication technology (ICT) in economies around the world. In its latest version of 2019 the NRI Report maps the network-based readiness landscape of 121 economies based on their 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 Laos

Laos ranks 108th out of the 121 economies included in the NRI 2019 (Figure 2). Its main strength relates to Impact. The greatest scope for improvement, meanwhile, concerns Governance.

Figure 2: Laos global ranking, overall and by pillar



Performance at sub-pillar level

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

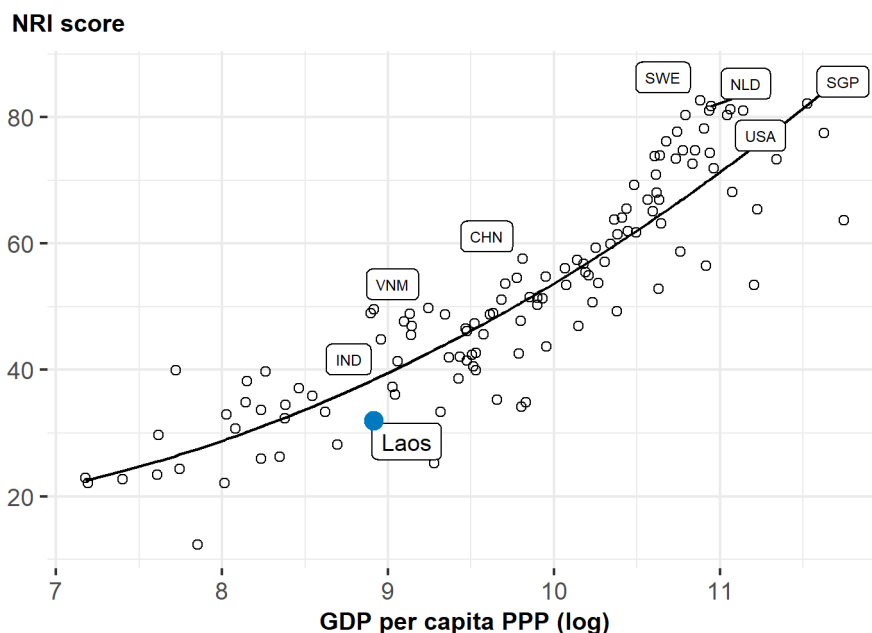
Table 1: Laos rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Economy	25	Governments	103
Future Technologies	42	Access	107
Quality of Life	81	Content	110
Individuals	100	Regulation	114
Businesses	100	Trust	115
SDG Contribution	101	Inclusion	119

NRI score and income

Figure 3 shows the position of Laos 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, Laos is well below the trend line, which suggests that it is underachieving and that one would expect it could raise its network readiness in view of 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. Laos 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

Laos is ranked 20th 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 one of the four pillars: Impact. At the sub-pillar level, it outperforms lower-middle-income countries in three of the twelve sub-pillars: Future Technology, Economy and Quality of Life.

Asia & Pacific

Laos is ranked 21st 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: Economy.

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



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

Dimension	Laos	Lower-middle-income countries	Asia & Pacific
NRI	31.88	37.18	52.44
Technology	28.19	32.15	48.56
People	25.21	30.04	44.85
Governance	26.32	46.17	61.84
Impact	47.82	40.35	54.50

Strongest and weakest indicators

The indicators where Laos performs particularly well include High-tech exports, Freedom to make life choices, and Maths proficiency in schools (Table 3). By contrast, the economy's weakest indicators include Government online services, E-Participation, and ICT regulatory environment.

Table 3: Top-ranked and bottom-ranked indicators of Laos

Strongest indicators	Rank	Weakest indicators	Rank
High-tech exports	6	E-commerce legislation	110
Freedom to make life choices	24	Use of clean fuels and technology	111
Maths proficiency in schools	44	Secure Internet servers	112
Company investment in emerging technology	51	Digital participation and content creation	113
Government procurement of advanced technology products	52	Ease of doing business	113
ICT use and government efficiency	55	Socioeconomic gap in use of digital payments	114
Legal framework's adaptability to digital business models	57	Rural gap in use of digital payments	115
Income inequality	57	ICT regulatory environment	117
Reading proficiency in schools	68	E-Participation	118
Road safety	71	Government online services	119

NRI 2019 At-A-Glance: Laos

Network Readiness Index

Rank: 108 (out of 121)

Score: 31.88

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	103	28.19	C. Governance pillar	120	26.32
1st sub-pillar: Access	107	33.50	1st sub-pillar: Trust	115	26.32
2nd sub-pillar: Content	110	12.61	2nd sub-pillar: Regulation	114	33.50
3rd sub-pillar: Future Technologies	42	38.44	3rd sub-pillar: Inclusion	119	19.15
B. People pillar	103	25.21	D. Impact pillar	80	47.82
1st sub-pillar: Individuals	100	31.31	1st sub-pillar: Economy	25	40.40
2nd sub-pillar: Businesses	100	17.41	2nd sub-pillar: Quality of Life	81	57.01
3rd sub-pillar: Governments	103	26.91	3rd sub-pillar: SDG Contribution	101	46.05

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar			C. Governance pillar		
<i>1st sub-pillar: Access</i>			<i>1st sub-pillar: Trust</i>		
1.1.1 Mobile tariffs	85	51.35	3.1.1 Rule of law	110	34.12
1.1.2 Handset prices	105	23.15	3.1.2 Software piracy rate	NA	NA
1.1.3 Internet access	97	19.40	3.1.3 Secure Internet servers	112	25.53
1.1.4 4G mobile network coverage	103	43.00	3.1.4 Cybersecurity	109	19.30
1.1.5 Fixed-broadband subscriptions	103	2.93	3.1.5 Online trust and safety	NA	NA
1.1.6 International Internet bandwidth	98	61.20	<i>2nd sub-pillar: Regulation</i>		
1.1.7 Internet access in schools	NA	NA	3.2.1 Regulatory quality	109	33.97
<i>2nd sub-pillar: Content</i>			3.2.2 Ease of doing business	113	36.42
1.2.1 Digital participation and content creation	*	*	3.2.3 Legal framework's adaptability to digital business models	57	44.88
1.2.2 Mobile apps development	102	35.36	3.2.4 E-commerce legislation	110	25.00
1.2.3 Intellectual property receipts	NA	NA	3.2.5 Social safety net protection	86	30.98
<i>3rd sub-pillar: Future Technologies</i>			3.2.6 ICT regulatory environment	117	29.73
1.3.1 Availability of latest technologies	105	29.70	<i>3rd sub-pillar: Inclusion</i>		
1.3.2 Company investment in emerging technology	51	41.87	3.3.1 E-Participation	118	6.37
1.3.3 Government procurement of advanced technology products	52	43.75	3.3.2 Socioeconomic gap in use of digital payments	114	21.08
1.3.4 ICT PCT patent applications	NA	NA	3.3.3 Availability of local online content	87	37.20
1.3.5 Computer software spending	NA	NA	3.3.4 Gender gap in internet use	NA	NA
1.3.6 Robot density	NA	NA	3.3.5 Rural gap in use of digital payments	115	11.95
B. People pillar			D. Impact pillar		
<i>1st sub-pillar: Individuals</i>			<i>1st sub-pillar: Economy</i>		
2.1.1 Internet users	106	17.48	4.1.1 Medium and high-tech industry	91	17.11
2.1.2 Active mobile-broadband subscriptions	101	14.76	4.1.2 High-tech exports	6	63.69
2.1.3 Use of virtual social networks	92	37.63	4.1.3 PCT patent applications	NA	NA
2.1.4 Tertiary enrolment	96	10.42	4.1.4 Labour productivity per employee	NA	NA
2.1.5 Adult literacy rate	72	76.26	<i>2nd sub-pillar: Quality of Life</i>		
2.1.6 ICT skills	NA	NA	4.2.1 Happiness	96	37.53
<i>2nd sub-pillar: Businesses</i>			4.2.2 Freedom to make life choices	24	87.55
2.2.1 Firms with website	98	15.97	4.2.3 Income inequality	57	70.00
2.2.2 Internet shopping	82	7.11	4.2.4 Healthy life expectancy at birth	103	32.97
2.2.3 Professionals	74	18.97	<i>3rd sub-pillar: SDG Contribution</i>		
2.2.4 Technicians and associate professionals	103	10.60	4.3.1 Access to basic services	97	71.32
2.2.5 Extent of staff training	74	34.42	4.3.2 Pollution	81	78.83
2.2.6 R&D expenditure by businesses	NA	NA	4.3.3 Road safety	71	56.56
<i>3rd sub-pillar: Governments</i>			4.3.4 Reading proficiency in schools	68	23.45
2.3.1 Government online services	119	7.70	4.3.5 Maths proficiency in schools	44	46.13
2.3.2 Publication and use of open data	NA	NA	4.3.6 Use of clean fuels and technology	111	0.00
2.3.3 ICT use and government efficiency	55	46.12			
2.3.4 R&D expenditure by governments and higher education	NA	NA			

* Confidential data

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