



Lao PDR

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.

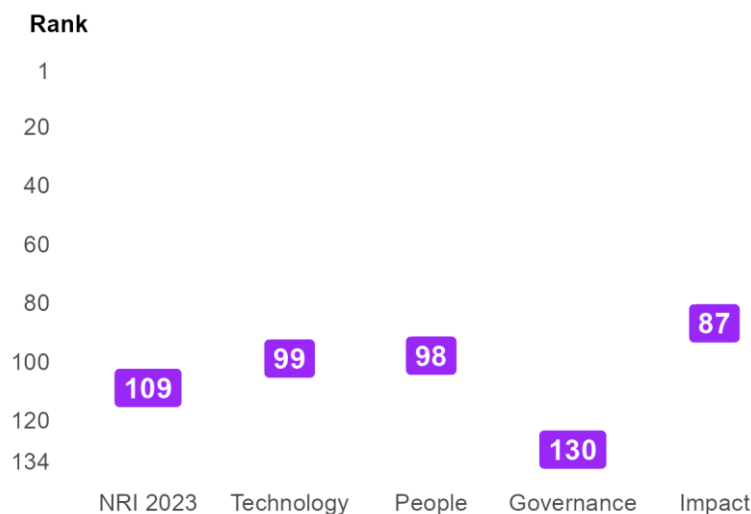
Figure 1: The NRI 2023 model



Global NRI position of Lao PDR

Lao PDR ranks 109th out of the 134 economies included in the NRI 2023 (Figure 2). Its main strength relates to Impact. The greatest scope for improvement, meanwhile, concerns Governance.

Figure 2: Lao PDR 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 Lao PDR relate to Future Technologies, Governments and Economy, among others (Table 1). More could be done, though, to improve the economy's performances in the Regulation, Content and Inclusion sub-pillars.

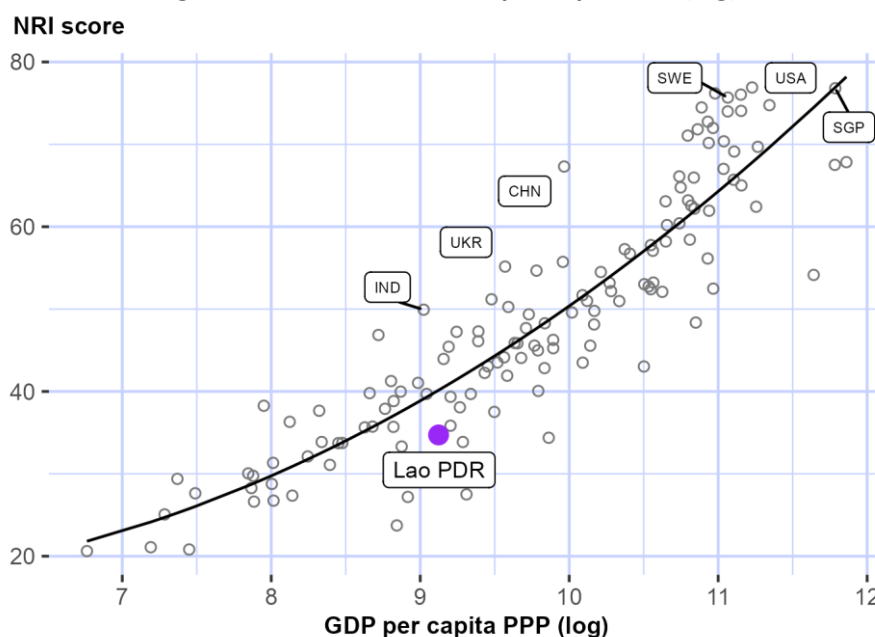
Table 1: Lao PDR rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Future Technologies	46	Individuals	98
Governments	77	Businesses	116
Economy	78	Trust	123
Quality of Life	82	Regulation	125
SDG Contribution	91	Content	126
Access	98	Inclusion	126

NRI score and income

Figure 3 shows the position of Lao PDR 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, Lao PDR 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: USA = United States (rank: 1), SGP = Singapore (rank: 2), FIN = Finland (3), NLD = Netherlands (4), SWE = Sweden (5), CHN = China (20), IND = India (61). Lao PDR belongs to the group of lower-middle-income countries, where the best performer is Ukraine (UKR). The top performer of its region-Asia & Pacific-is Singapore (SGP).

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Performance against its income group and region

Lower-middle-income countries

Lao PDR is ranked 28th 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 five of the twelve sub-pillars: Future Technologies, Governments, Economy, Quality of Life and SDG Contribution.

Asia & Pacific

Lao PDR is ranked 20th within Asia & Pacific (Figure 4, right panel). It lags behind its region in each of the four pillars. With regard to sub-pillars, it trails the regional average in each of them.

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

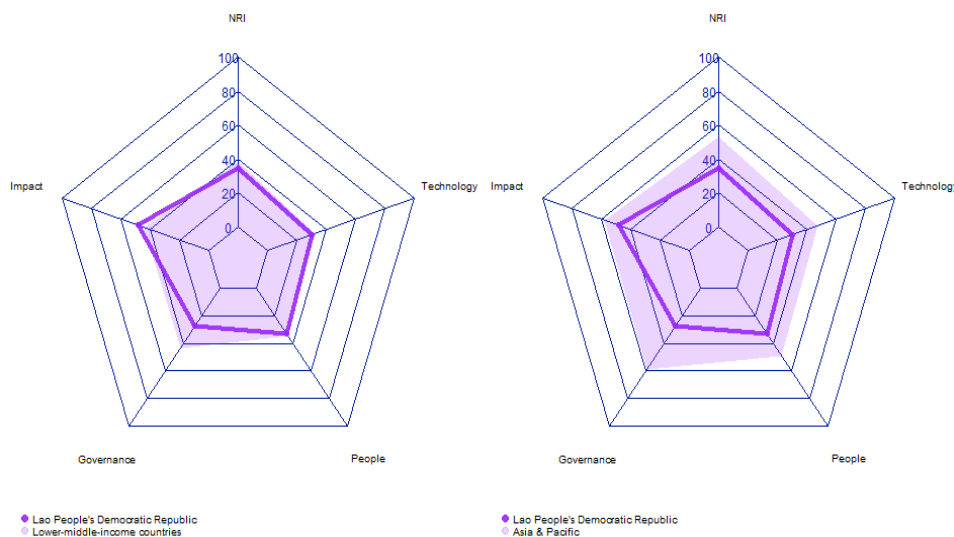


Table 2: Lao PDR scores vs. averages of its income group and region, overall and by pillar

Dimension	Lao PDR	Lower-middle-income countries	Asia & Pacific
NRI	34.72	38.41	53.28
Technology	30.12	32.12	47.34
People	33.17	34.38	48.95
Governance	27.68	43.27	59.22
Impact	47.91	43.89	57.62

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Strongest and weakest indicators

The indicators where Lao PDR performs particularly well include 4.2.2 Freedom to make life choices, 4.1.2 High-tech exports, and 2.3.3 Government promotion of investment in emerging technologies (Table 3). By contrast, the economy's weakest indicators include 3.2.2 ICT regulatory environment, 1.2.4 AI scientific publications, 3.2.5 Privacy protection by law content, and 3.3.2 Socioeconomic gap in use of digital payments.

Table 3: Highlight of Strengths and Opportunities for Lao PDR

Strongest indicators	Rank	Weakest indicators	Rank
4.2.2 Freedom to make life choices	13	3.1.3 Online access to financial account	122
4.1.2 High-tech exports	16	2.2.4 Annual investment in telecommunication services	123
2.3.3 Government promotion of investment in emerging technologies	43	1.2.4 AI scientific publications	129
4.1.5 Prevalence of gig economy	43	3.2.5 Privacy protection by law content	129
1.3.4 Computer software spending	46	3.3.2 Socioeconomic gap in use of digital payments	129
4.3.3 SDG 5: Women's economic opportunity	48	3.2.2 ICT regulatory environment	130
1.3.2 Investment in emerging technologies	51		
2.1.2 ICT skills in the education system	57		
1.3.1 Adoption of emerging technologies	70		
3.3.3 Availability of local online content	73		

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

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NRI 2023 At-A-Glance: Lao PDR

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Rank: 109 (out of 134)

Score: 34.72

Pillar/sub-pillar	Rank	Score	Pillar/sub-pillar	Rank	Score
A. Technology pillar	99	30.12	C. Governance pillar	130	27.68
1st sub-pillar: Access	98	50.12	1st sub-pillar: Trust	123	16.53
2nd sub-pillar: Content	126	0.99	2nd sub-pillar: Regulation	125	36.47
3rd sub-pillar: Future Technologies	46	39.25	3rd sub-pillar: Inclusion	126	30.05
B. People pillar	98	33.17	D. Impact pillar	87	47.91
1st sub-pillar: Individuals	98	37.34	1st sub-pillar: Economy	78	24.30
2nd sub-pillar: Businesses	116	26.93	2nd sub-pillar: Quality of Life	82	63.78
3rd sub-pillar: Governments	77	35.23	3rd sub-pillar: SDG Contribution	91	55.64

The Network Readiness Index in detail

Indicator	Rank	Score	Indicator	Rank	Score
A. Technology pillar	99	30.12	C. Governance pillar	130	27.68
1st sub-pillar: Access	98	50.12	1st sub-pillar: Trust	123	16.53
1.1.1 Mobile tariffs	97	43.59	3.1.1 Secure Internet servers	113	31.56
1.1.2 Handset prices	94	36.52	3.1.2 Cybersecurity	117	18.94
1.1.3 FTTH/building Internet subscriptions	98	14.38	3.1.3 Online access to financial account	122	5.12 ○
1.1.4 Population covered by at least a 3G mobile network	114	94.47	3.1.4 Internet shopping	89	10.49
1.1.5 International Internet bandwidth	114	61.64	2nd sub-pillar: Regulation	125	36.47
1.1.6 Internet access in schools	NA	NA	3.2.1 Regulatory quality	120	29.55
2nd sub-pillar: Content	126	0.99	3.2.2 ICT regulatory environment	130	26.71 ○
1.2.1 GitHub commits	120	0.61	3.2.3 Regulation of emerging technologies	69	43.12
1.2.2 Internet domain registrations	79	2.28	3.2.4 E-commerce legislation	87	66.67
1.2.3 Mobile apps development	NA	NA	3.2.5 Privacy protection by law content	129	16.30 ○
1.2.4 AI scientific publications	129	0.09 ○	3rd sub-pillar: Inclusion	126	30.05
3rd sub-pillar: Future Technologies	46	39.25	3.3.1 E-Participation	114	24.42
1.3.1 Adoption of emerging technologies	70	44.69 ●	3.3.2 Socioeconomic gap in use of digital payments	129	14.18 ○
1.3.2 Investment in emerging technologies	51	46.25 ●	3.3.3 Availability of local online content	73	56.49 ●
1.3.3 Robot density	NA	NA	3.3.4 Gender gap in Internet use	NA	NA

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Indicator	Rank	Score	Indicator	Rank	Score
1.3.4 Computer software spending	46	26.80	• 3.3.5 Rural gap in use of digital payments	114	25.09
B. People pillar	98	33.17	D. Impact pillar	87	47.91
<i>1st sub-pillar: Individuals</i>	98	37.34	<i>1st sub-pillar: Economy</i>	78	24.30
2.1.1 Mobile broadband internet traffic within the country	93	2.93	4.1.1 High-tech and medium-high-tech manufacturing	101	3.69
2.1.2 ICT skills in the education system	57	53.96	• 4.1.2 High-tech exports	16	41.76
2.1.3 Use of virtual social networks	94	40.57	4.1.3 PCT patent applications	92	0.60
2.1.4 Tertiary enrollment	106	6.92	4.1.4 Domestic market size	100	40.45
2.1.5 Adult literacy rate	71	82.35	4.1.5 Prevalence of gig economy	43	54.36
2.1.6 AI talent concentration	NA	NA	4.1.6 ICT services exports	96	4.93
<i>2nd sub-pillar: Businesses</i>	116	26.93	<i>2nd sub-pillar: Quality of Life</i>	82	63.78
2.2.1 Firms with website	93	24.72	4.2.1 Happiness	92	47.88
2.2.2 GERD financed by business enterprise	NA	NA	4.2.2 Freedom to make life choices	13	91.95
2.2.3 Knowledge intensive employment	93	17.65	4.2.3 Income inequality	73	60.80
2.2.4 Annual investment in telecommunication services	123	38.41	○ 4.2.4 Healthy life expectancy at birth	100	54.50
2.2.5 GERD performed by business enterprise	NA	NA	<i>3rd sub-pillar: SDG Contribution</i>	91	55.64
<i>3rd sub-pillar: Governments</i>	77	35.23	4.3.1 SDG 3: Good Health and Well-Being	111	36.00
2.3.1 Government online services	127	22.69	4.3.2 SDG 4: Quality Education	NA	NA
2.3.2 Publication and use of open data	NA	NA	4.3.3 SDG 5: Women's economic opportunity	48	83.19
2.3.3 Government promotion of investment in emerging tech	43	47.77	• 4.3.4 SDG 7: Affordable and Clean Energy	105	58.38
2.3.4 R&D expenditure by governments and higher education	NA	NA	4.3.5 SDG 11: Sustainable Cities and Communities	103	45.00

NOTE: ● a strength and ○ a weakness.

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