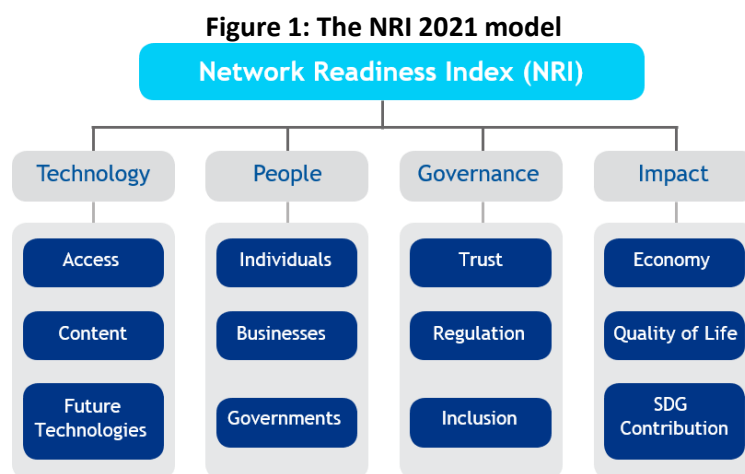


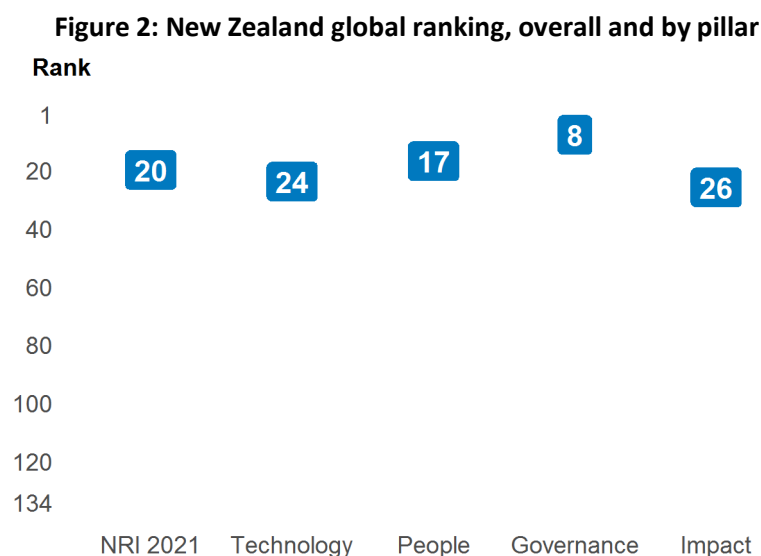
Network Readiness Index 2021 New Zealand

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 2021 the NRI Report maps the network-based readiness landscape of 130 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 60 variables.



Global NRI position of New Zealand

New Zealand ranks 20th out of the 130 economies included in the NRI 2021 (Figure 2). Its main strength relates to Governance. The greatest scope for improvement, meanwhile, concerns Impact.



Performance at sub-pillar level

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

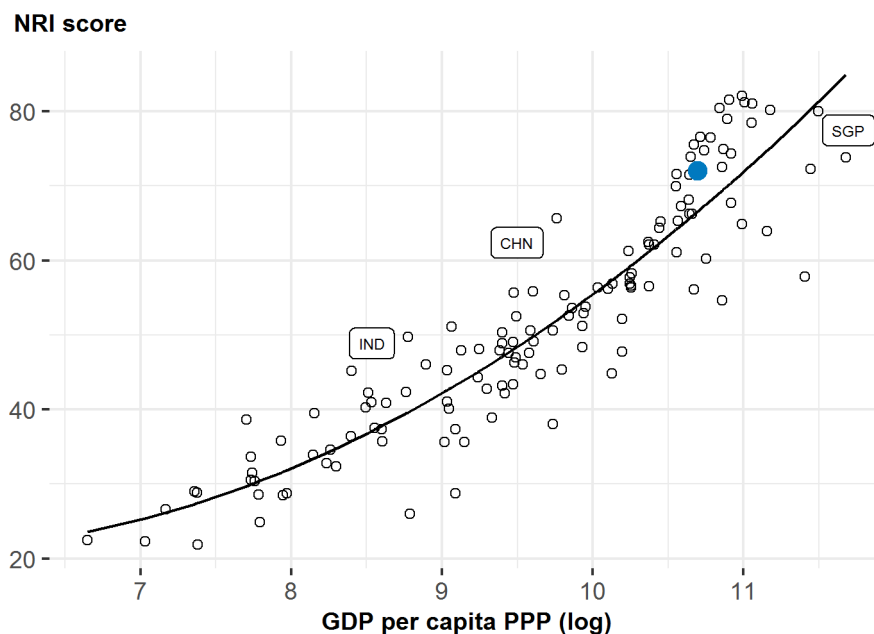
Table 1: New Zealand rankings by sub-pillar

Sub-pillar	Rank	Sub-pillar	Rank
Inclusion	3	Businesses	21
Quality of Life	9	SDG Contribution	22
Trust	11	Future Technologies	31
Content	14	Individuals	36
Regulation	17	Access	42
Governments	18	Economy	44

NRI score and income

Figure 3 shows the position of New Zealand 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, New Zealand 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: NLD = Netherlands (rank: 1), SWE = Sweden (2), DNK = Denmark (3), CHN = China (29), IND = India (67). USA is ranked 4th. New Zealand belongs to the group of high-income countries, where the best performer is Netherlands (NLD). The top performer of its region-Asia & Pacific is Singapore (SGP).

Performance against its income group and region

High-income countries

New Zealand is ranked 20th in the group of high-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 high-income countries in nine of the twelve sub-pillars: Content, Individuals, Businesses, Governments, Trust, Regulation, Inclusion, Quality of Life and SDG Contribution.

Asia & Pacific

New Zealand is ranked 5th within Asia & Pacific (Figure 4, right panel). It outperforms its region in each of the four pillars. With regard to sub-pillars, it has a higher score than the regional average in each of the twelve sub-pillars.

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

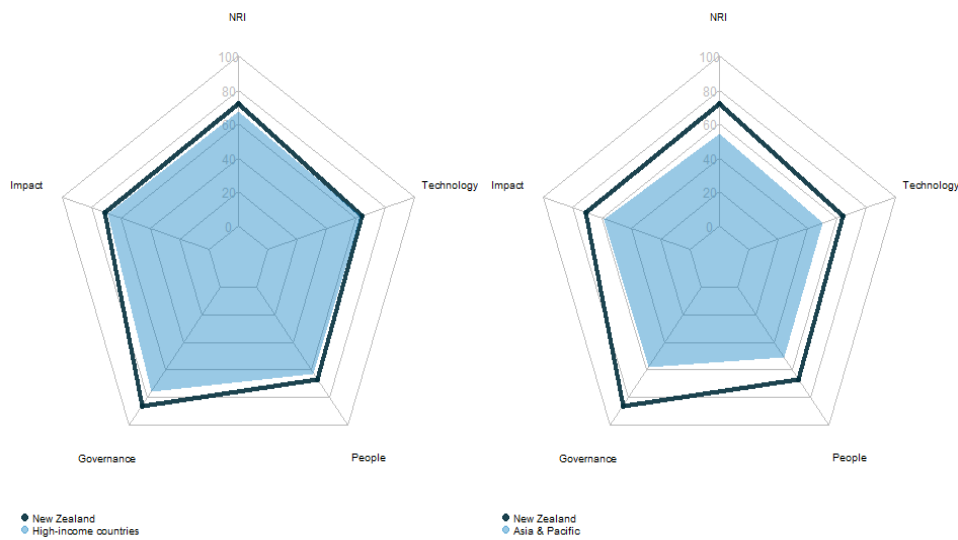


Table 2: New Zealand scores vs. averages of its income group and region, overall and by pillar

Dimension	New Zealand	High-income countries	Asia & Pacific
NRI	72.00	67.45	54.38
Technology	63.91	62.99	50.01
People	67.17	62.65	51.22
Governance	86.06	75.52	58.01
Impact	70.87	68.63	58.28

Strongest and weakest indicators

The indicators where New Zealand performs particularly well include 3.2.4 E-commerce legislation, 4.3.1 SDG 3: Good Health and Well-Being, and 3.2.1 Regulatory quality (Table 3). By contrast, the economy's weakest indicators include 4.3.4 SDG 7: Affordable and Clean Energy, 2.1.1 Active mobile broadband subscriptions, and 4.1.6 ICT services exports.

Table 3: Strongest and weakest indicators of New Zealand

Strongest indicators	Rank	Weakest indicators	Rank
3.2.4 E-commerce legislation	1	4.1.1 High-tech and medium-high-tech manufacturing	69
4.3.1 SDG 3: Good Health and Well-Being	2	1.1.5 Population covered by at least a 3G mobile network	70
3.2.1 Regulatory quality	3	4.1.6 ICT services exports	76
3.3.1 E-Participation	4	2.1.1 Active mobile broadband subscriptions	79
3.3.2 Socioeconomic gap in use of digital payments	4	4.3.4 SDG 7: Affordable and Clean Energy	81
1.2.1 GitHub commits	6		
3.1.3 Online access to financial account	6		
1.1.2 Handset prices	7		
2.3.2 Publication and use of open data	7		
3.1.4 Internet shopping	8		
1.2.2 Wikipedia edits	10		

New Zealand

Network Readiness Index Rank (out of 130) **20** Score **72.00**

Pillar/sub-pillar	Rank	Score
A. Technology pillar	24	63.91
1st sub-pillar: Access	42	74.40
2nd sub-pillar: Content	14	71.17
3rd sub-pillar: Future Technologies	31	46.16
B. People pillar	17	67.17
1st sub-pillar: Individuals	36	71.15
2nd sub-pillar: Businesses	21	60.65
3rd sub-pillar: Governments	18	69.69
C. Governance pillar	8	86.06
1st sub-pillar: Trust	11	84.59
2nd sub-pillar: Regulation	17	84.01
3rd sub-pillar: Inclusion	3	89.57
D. Impact pillar	26	70.87
1st sub-pillar: Economy	44	46.11
2nd sub-pillar: Quality of Life	9	88.62
3rd sub-pillar: SDG Contribution	22	77.89



Network Readiness Index in detail

Indicator	Rank	Score
A. Technology pillar	24	63.91
1st sub-pillar: Access	42	74.40
1.1.1 Mobile tariffs	32	77.87
1.1.2 Handset prices	7	93.83 ●
1.1.3 Households with internet access	36	87.95
1.1.4 SMS sent by population 15-69	31	81.45
1.1.5 Population covered by at least a 3G mobile network	70	99.46 ○
1.1.6 International Internet bandwidth	34	5.86
1.1.7 Internet access in schools	NA	NA
2nd sub-pillar: Content	14	71.17
1.2.1 GitHub commits	6	72.66 ●
1.2.2 Wikipedia edits	10	85.03 ●
1.2.3 Internet domain registrations	*	*
1.2.4 Mobile apps development	20	94.23
1.2.5 AI scientific publications	50	53.63
3rd sub-pillar: Future Technologies	31	46.16
1.3.1 Adoption of emerging technologies	18	77.97
1.3.2 Investment in emerging technologies	19	68.51
1.3.3 Robot density	29	14.53
1.3.4 Computer software spending	45	23.64
B. People pillar	17	67.17
1st sub-pillar: Individuals	36	71.15
2.1.1 Active mobile broadband subscriptions	79	73.29 ○
2.1.2 ICT skills	NA	NA
2.1.3 Use of virtual social networks	19	82.33
2.1.4 Tertiary enrollment	16	57.85
2.1.5 Adult literacy rate	NA	NA
2nd sub-pillar: Businesses	21	60.65
2.2.1 Firms with website	14	84.77
2.2.2 GERD financed by business enterprise	33	57.38
2.2.3 Professionals	NA	NA
2.2.4 Technicians and associate professionals	NA	NA
2.2.5 Annual investment in telecommunication services	35	82.31
2.2.6 GERD performed by business enterprise	28	18.14
3rd sub-pillar: Governments	18	69.69
2.3.1 Government online services	10	92.73
2.3.2 Publication and use of open data	7	79.32 ●
2.3.3 Government promotion of investment in emerging tech	35	51.77
2.3.4 R&D expenditure by governments and higher education	26	54.95

Indicator	Rank	Score
C. Governance pillar	8	86.06
1st sub-pillar: Trust	11	84.59
3.1.1 Secure Internet servers	35	79.24
3.1.2 Cybersecurity	56	83.76
3.1.3 Online access to financial account	6	86.73 ●
3.1.4 Internet shopping	8	88.63 ●
2nd sub-pillar: Regulation	17	84.01
3.2.1 Regulatory quality	3	92.36 ●
3.2.2 ICT regulatory environment	39	87.65
3.2.3 Legal framework's adaptability to emerging technologies	23	65.82
3.2.4 E-commerce legislation	1	100.00 ●
3.2.5 Privacy protection by law content	46	74.22
3rd sub-pillar: Inclusion	3	89.57
3.3.1 E-Participation	4	98.77 ●
3.3.2 Socioeconomic gap in use of digital payments	4	99.13 ●
3.3.3 Availability of local online content	17	86.43
3.3.4 Gender gap in Internet use	NA	NA
3.3.5 Rural gap in use of digital payments	38	73.94
D. Impact pillar	26	70.87
1st sub-pillar: Economy	44	46.11
4.1.1 High-tech and medium-high-tech manufacturing	69	18.36 ○
4.1.2 High-tech exports	62	26.46
4.1.3 PCT patent applications	22	73.12
4.1.4 Growth rate of GDP per person engaged	54	61.89
4.1.5 Prevalence of gig economy	14	73.86
4.1.6 ICT services exports	76	23.00 ○
2nd sub-pillar: Quality of Life	9	88.62
4.2.1 Happiness	10	86.64
4.2.2 Freedom to make life choices	21	92.13
4.2.3 Income inequality	NA	NA
4.2.4 Healthy life expectancy at birth	27	87.07
3rd sub-pillar: SDG Contribution	22	77.89
4.3.1 SDG 3: Good Health and Well-Being	2	96.72 ●
4.3.2 SDG 4: Quality Education	13	68.92
4.3.3 Females employed with advanced degrees	31	64.60
4.3.4 SDG 7: Affordable and Clean Energy	81	71.25 ○
4.3.5 SDG 11: Sustainable Cities and Communities	47	87.97

NOTE: * Indicates confidential data; ● a strength and ○ a weakness.

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