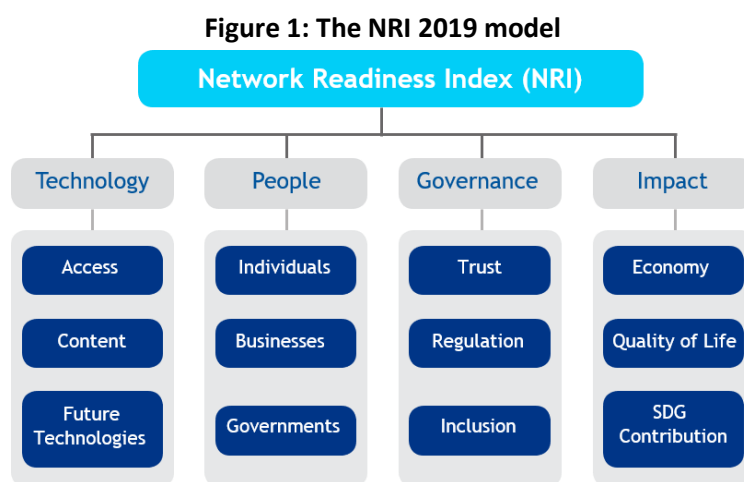


# Network Readiness Index 2019

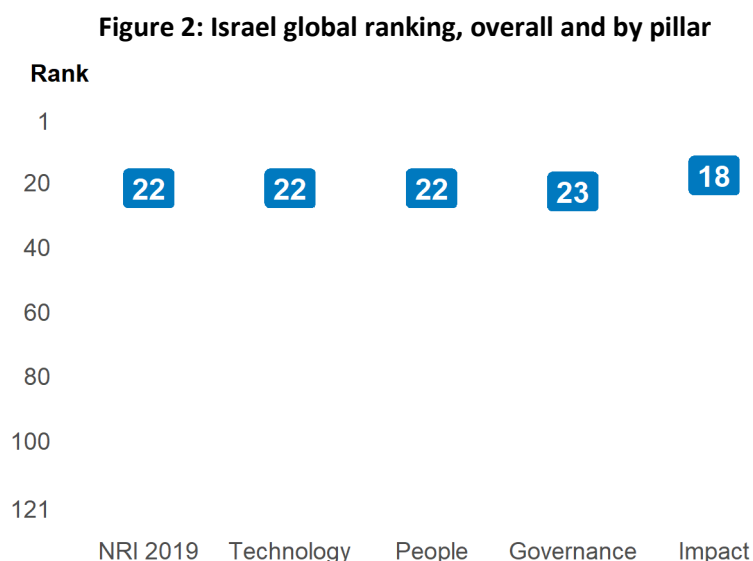
## Israel

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 Israel

Israel ranks 22nd 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.



### Performance at sub-pillar level

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

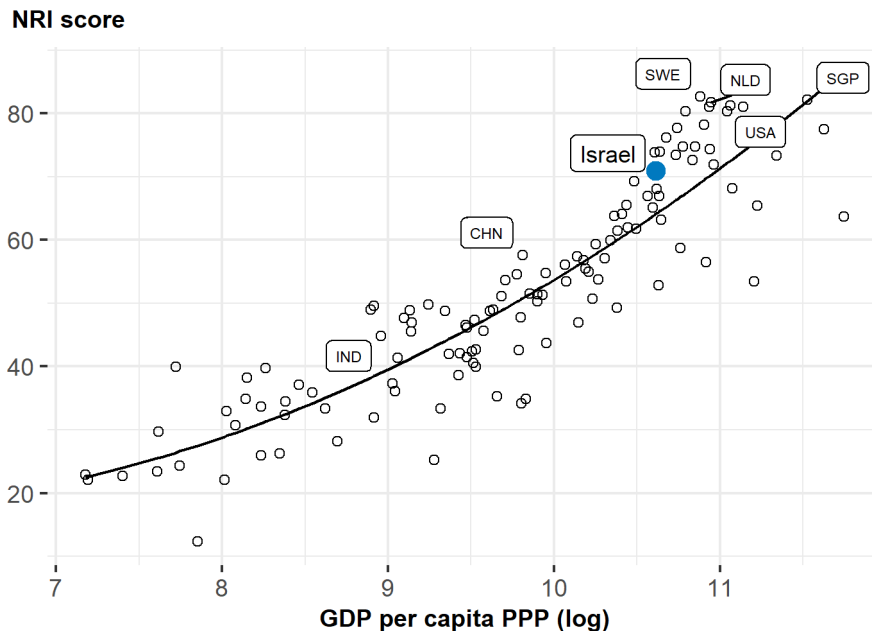
**Table 1: Israel rankings by sub-pillar**

| Sub-pillar          | Rank | Sub-pillar      | Rank |
|---------------------|------|-----------------|------|
| Businesses          | 12   | Regulation      | 24   |
| Economy             | 12   | Governments     | 26   |
| Future Technologies | 13   | Inclusion       | 26   |
| SDG Contribution    | 18   | Quality of Life | 39   |
| Content             | 20   | Individuals     | 42   |
| Trust               | 23   | Access          | 53   |

### NRI score and income

Figure 3 shows the position of Israel 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, Israel 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: SWE = Sweden (rank: 1), SGP = Singapore (2), NLD = Netherlands (3), CHN = China (41), IND = India (79). USA is ranked 8th. Israel belongs to the group of high-income countries, where the best performer is Sweden (SWE). The top performer of its region—Europe—is also Sweden (SWE).

## Performance against its income group and region

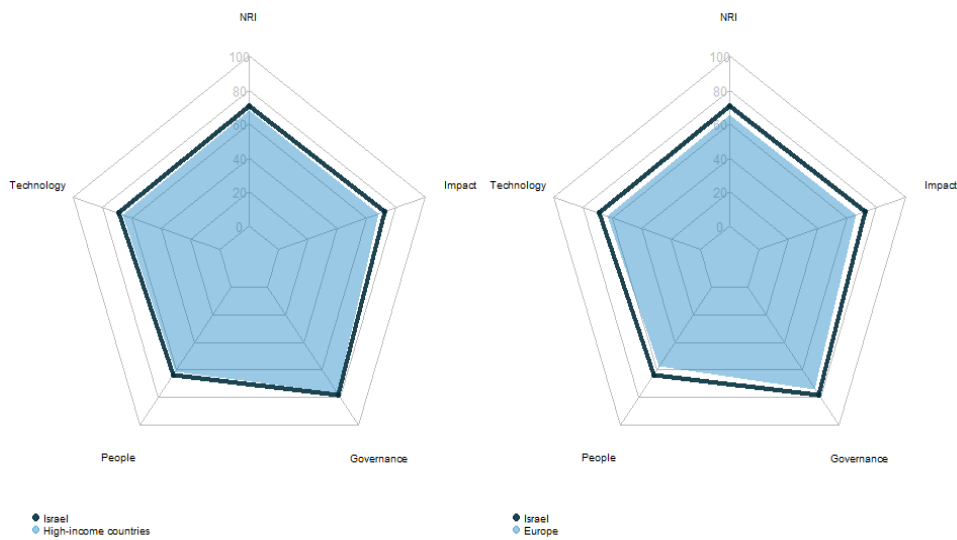
### High-income countries

Israel is ranked 22nd 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 eight of the twelve sub-pillars: Content, Future Technology, Businesses, Trust, Regulation, Inclusion, Economy and SDG Contribution.

### Europe

Israel is ranked 15th within Europe (Figure 4, right panel). It outperforms its region in each of the four pillars. With regard to sub-pillars, it outperforms the average in Europe in nine of the twelve sub-pillars: Content, Future Technology, Businesses, Governments, Trust, Regulation, Inclusion, Economy and SDG Contribution.

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



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

| Dimension  | Israel | High-income countries | Europe |
|------------|--------|-----------------------|--------|
| NRI        | 70.86  | 68.12                 | 65.20  |
| Technology | 69.06  | 66.07                 | 63.08  |
| People     | 63.55  | 61.07                 | 57.50  |
| Governance | 78.29  | 77.07                 | 73.99  |
| Impact     | 72.55  | 68.29                 | 66.24  |

### Strongest and weakest indicators

The indicators where Israel performs particularly well include R&D expenditure by businesses, E-commerce legislation, and Access to basic services (Table 3). By contrast, the economy's weakest indicators include Freedom to make life choices, ICT regulatory environment, 4G mobile network coverage, and Fixed-broadband subscriptions.

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

| <b>Strongest indicators</b>               | <b>Rank</b> | <b>Weakest indicators</b>            | <b>Rank</b> |
|---|-------------|--------------------------------------|-------------|
| R&D expenditure by businesses             | 1           | Gender gap in internet use           | 46          |
| E-commerce legislation                    | 1           | Internet access                      | 56          |
| Access to basic services                  | 1           | International Internet bandwidth     | 60          |
| Use of clean fuels and technology         | 1           | Pollution                            | 64          |
| Company investment in emerging technology | 2           | Rural gap in use of digital payments | 66          |
| Availability of local online content      | 2           | Income inequality                    | 69          |
| Availability of latest technologies       | 4           | 4G mobile network coverage           | 76          |
| ICT PCT patent applications               | 5           | Fixed-broadband subscriptions        | 76          |
| PCT patent applications                   | 5           | ICT regulatory environment           | 93          |
| Professionals                             | 7           | Freedom to make life choices         | 97          |

# NRI 2019 At-A-Glance: Israel

Network Readiness Index

Rank: 22 (out of 121)

Score: 70.86

| Pillar/sub-pillar                   | Rank      | Score        | Pillar/sub-pillar                | Rank      | Score        |
|-------------------------------------|-----------|--------------|----------------------------------|-----------|--------------|
| <b>A. Technology pillar</b>         | <b>22</b> | <b>69.06</b> | <b>C. Governance pillar</b>      | <b>23</b> | <b>78.29</b> |
| 1st sub-pillar: Access              | 53        | 71.86        | 1st sub-pillar: Trust            | 23        | 78.24        |
| 2nd sub-pillar: Content             | 20        | 70.57        | 2nd sub-pillar: Regulation       | 24        | 79.30        |
| 3rd sub-pillar: Future Technologies | 13        | 64.75        | 3rd sub-pillar: Inclusion        | 26        | 77.33        |
| <b>B. People pillar</b>             | <b>22</b> | <b>63.55</b> | <b>D. Impact pillar</b>          | <b>18</b> | <b>72.55</b> |
| 1st sub-pillar: Individuals         | 42        | 60.51        | 1st sub-pillar: Economy          | 12        | 54.00        |
| 2nd sub-pillar: Businesses          | 12        | 67.51        | 2nd sub-pillar: Quality of Life  | 39        | 69.34        |
| 3rd sub-pillar: Governments         | 26        | 62.61        | 3rd sub-pillar: SDG Contribution | 18        | 94.30        |

## 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   | 13   | 88.73  | 3.1.1 Rule of law   | 29   | 76.00  |
| 1.1.2 Handset prices   | 30   | 64.37  | 3.1.2 Software piracy rate                                      | 17   | 83.78  |
| 1.1.3 Internet access  | 56   | 72.33  | 3.1.3 Secure Internet servers                                   | 38   | 78.24  |
| 1.1.4 4G mobile network coverage                             | 76   | 82.00  | 3.1.4 Cybersecurity   | 41   | 83.77  |
| 1.1.5 Fixed-broadband subscriptions                          | 76   | 42.00  | 3.1.5 Online trust and safety                                   | 38   | 69.41  |
| 1.1.6 International Internet bandwidth                       | 60   | 68.65  | <i>2nd sub-pillar: Regulation</i>                               |      |        |
| 1.1.7 Internet access in schools                             | 33   | 84.94  | 3.2.1 Regulatory quality  | 24   | 78.89  |
| <i>2nd sub-pillar: Content</i>                               |      |        | 3.2.2 Ease of doing business                                    | 34   | 82.15  |
| 1.2.1 Digital participation and content creation             | *    | *      | 3.2.3 Legal framework's adaptability to digital business models | 9    | 83.93  |
| 1.2.2 Mobile apps development                                | 8    | 90.94  | 3.2.4 E-commerce legislation                                    | 1    | 100.00 |
| 1.2.3 Intellectual property receipts                         | 14   | 11.11  | 3.2.5 Social safety net protection                              | 36   | 60.72  |
| <i>3rd sub-pillar: Future Technologies</i>                   |      |        | 3.2.6 ICT regulatory environment                                | 93   | 70.08  |
| 1.3.1 Availability of latest technologies                    | 4    | 96.93  | <i>3rd sub-pillar: Inclusion</i>                                |      |        |
| 1.3.2 Company investment in emerging technology              | 2    | 95.89  | 3.3.1 E-Participation   | 43   | 80.90  |
| 1.3.3 Government procurement of advanced technology products | 11   | 71.91  | 3.3.2 Socioeconomic gap in use of digital payments              | 38   | 81.31  |
| 1.3.4 ICT PCT patent applications                            | 5    | 82.82  | 3.3.3 Availability of local online content                      | 2    | 98.05  |
| 1.3.5 Computer software spending                             | 30   | 27.27  | 3.3.4 Gender gap in internet use                                | 46   | 60.84  |
| 1.3.6 Robot density  | 30   | 13.65  | 3.3.5 Rural gap in use of digital payments                      | 66   | 65.55  |
| <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   | 33   | 79.89  | 4.1.1 Medium and high-tech industry                             | 24   | 54.12  |
| 2.1.2 Active mobile-broadband subscriptions                  | 24   | 41.04  | 4.1.2 High-tech exports   | 13   | 43.26  |
| 2.1.3 Use of virtual social networks                         | 15   | 75.05  | 4.1.3 PCT patent applications                                   | 5    | 72.34  |
| 2.1.4 Tertiary enrolment                                     | 41   | 46.05  | 4.1.4 Labour productivity per employee                          | 32   | 46.30  |
| 2.1.5 Adult literacy rate                                    | NA   | NA     | <i>2nd sub-pillar: Quality of Life</i>                          |      |        |
| 2.1.6 ICT skills   | NA   | NA     | 4.2.1 Happiness   | 18   | 80.61  |
| <i>2nd sub-pillar: Businesses</i>                            |      |        | 4.2.2 Freedom to make life choices                              | 97   | 45.40  |
| 2.2.1 Firms with website                                     | 41   | 63.09  | 4.2.3 Income inequality   | 69   | 63.42  |
| 2.2.2 Internet shopping                                      | 33   | 51.57  | 4.2.4 Healthy life expectancy at birth                          | 13   | 87.91  |
| 2.2.3 Professionals  | 7    | 67.04  | <i>3rd sub-pillar: SDG Contribution</i>                         |      |        |
| 2.2.4 Technicians and associate professionals                | 33   | 55.91  | 4.3.1 Access to basic services                                  | 1    | 100.00 |
| 2.2.5 Extent of staff training                               | 22   | 67.48  | 4.3.2 Pollution   | 64   | 84.50  |
| 2.2.6 R&D expenditure by businesses                          | 1    | 100.00 | 4.3.3 Road safety   | 12   | 95.31  |
| <i>3rd sub-pillar: Governments</i>                           |      |        | 4.3.4 Reading proficiency in schools                            | 20   | 91.68  |
| 2.3.1 Government online services                             | 39   | 80.77  | 4.3.5 Maths proficiency in schools                              | NA   | NA     |
| 2.3.2 Publication and use of open data                       | 28   | 46.26  | 4.3.6 Use of clean fuels and technology                         | 1    | 100.00 |
| 2.3.3 ICT use and government efficiency                      | 21   | 69.73  |   |      |        |
| 2.3.4 R&D expenditure by governments and higher education    | 25   | 53.69  |   |      |        |

\* Confidential data

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