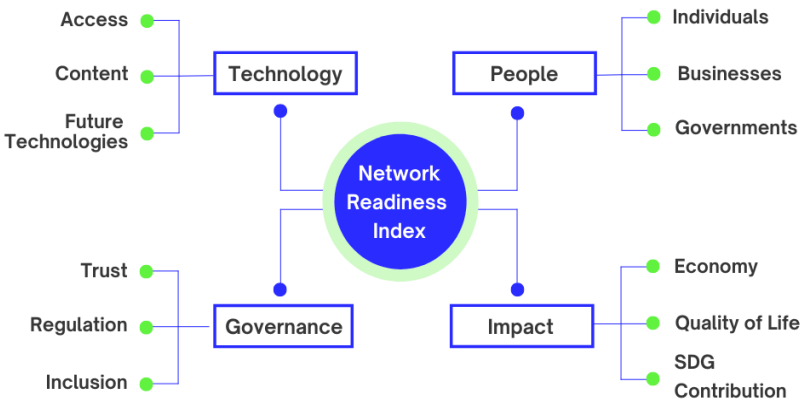
# Network Readiness Index 2022 Ecuador

*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 2022 the NRI Report maps the network-based readiness landscape of 131 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.*

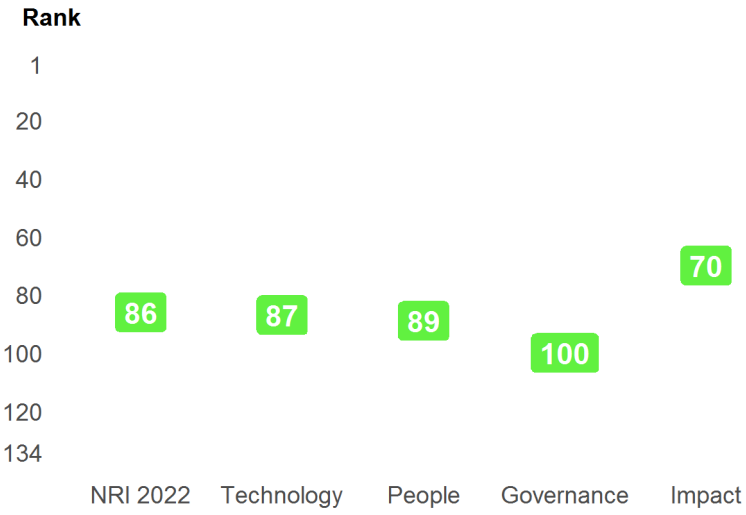
**Figure 1: The NRI 2022 model**




**Global NRI position of Ecuador**

Ecuador ranks 86th out of the 131 economies included in the NRI 2022 (Figure 2). Its main strength relates to Impact. The greatest scope for improvement, meanwhile, concerns Governance.

**Figure 2: Ecuador global ranking, overall and by pillar**



**Performance at sub-pillar level**

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

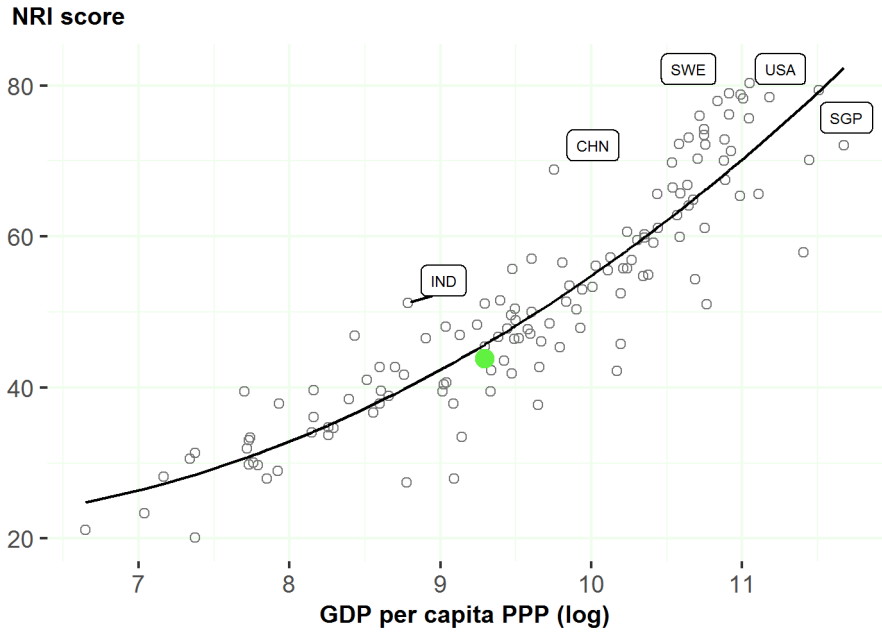
**Table 1: Ecuador rankings by sub-pillar**

| Sub-pillar | Rank | Sub-pillar | Rank |
|---|---|---|---|
| SDG Contribution | 24 | Access | 89 |
| Individuals | 70 | Future Technologies | 89 |
| Content | 78 | Regulation | 96 |
| Inclusion | 78 | Trust | 108 |
| Quality of Life | 83 | Economy | 113 |
| Governments | 85 | Businesses | 114 |

**NRI score and income**

Figure 3 shows the position of Ecuador 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, Ecuador is slightly below 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: USA = United States (rank: 1), SGP = Singapore (rank: 2), SWE = Sweden (3), CHN = China (23), IND = India (61). Netherlands (NLD) is ranked 4th. Ecuador belongs to the group of upper-middle-income countries, where the best performer is China (CHN). The top performer of its region-The Americas-is United States of America (USA).

**Performance against its income group and region**

*Upper-middle-income countries*

Ecuador is ranked 27th in the group of upper-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 upper-middle-income countries in one of the twelve sub-pillars: SDG Contribution.

*The Americas*

Ecuador is ranked 14th within The Americas (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 The Americas in one of the twelve sub-pillars: SDG Contribution.

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

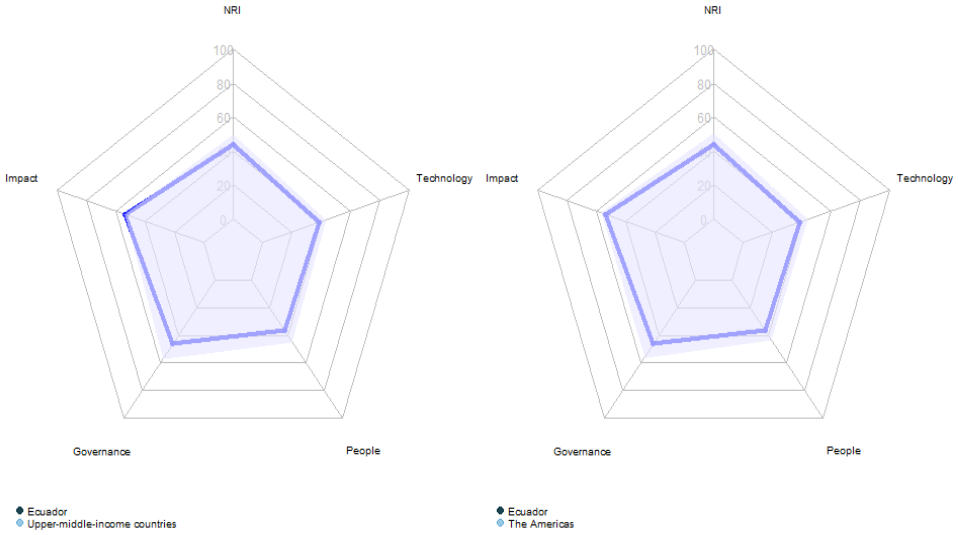



**Table 2: Ecuador scores vs. averages of its income group and region, overall and by pillar**

| Dimension | Ecuador | Upper-middle-income countries | The Americas |
|---|---|---|---|
| NRI | 43.81 | 49.66 | 50.09 |
| Technology | 38.62 | 43.11 | 44.16 |
| People | 36.37 | 44.94 | 43.67 |
| Governance | 46.33 | 57.08 | 56.24 |
| Impact | 53.94 | 53.50 | 56.30 |

**Strongest and weakest indicators**

The indicators where Ecuador performs particularly well include 3.2.4 E-commerce legislation, 1.1.3 FTTH/building Internet subscriptions, and 2.2.1 Firms with website (Table 3). By contrast, the economy's weakest indicators include 3.2.1 Regulatory quality, 4.1.5 Prevalence of gig economy, and 3.1.3 Online access to financial account.

**Table 3: Strongest and weakest indicators of Ecuador**

| Strongest indicators | Rank | Weakest indicators | Rank |
|---|---|---|---|
| 3.2.4 E-commerce legislation | 1 | 2.2.2 GERD financed by business enterprise | 102 |
| 1.1.3 FTTH/building Internet subscriptions | 17 | 4.2.3 Income inequality | 102 |
| 2.2.1 Firms with website | 25 | 3.1.3 Online access to financial account | 109 |
| 4.3.1 SDG 3: Good Health and Well-Being | 29 | 4.1.5 Prevalence of gig economy | 116 |
| 4.3.3 SDG 5: Women's economic opportunity | 37 | 3.2.1 Regulatory quality | 119 |
| 2.1.3 Use of virtual social networks | 39 | | |
| 2.3.1 Government online services | 40 | | |
| 4.2.4 Healthy life expectancy at birth | 42 | | |
| 4.3.4 SDG 7: Affordable and Clean Energy | 42 | | |
| 3.3.1 E-Participation | 48 | | |
| 4.3.5 SDG 11: Sustainable Cities and Communities | 51 | | |

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# NRI 2022 At-A-Glance: Ecuador

## Network Readiness Index — Rank: 86 (out of 131) — Score: 43.81

| Pillar/sub-pillar | Rank | Score |
|---|---|---|
| A. Technology pillar | 87 | 38.62 |
| 1st sub-pillar: Access | 89 | 55.43 |
| 2nd sub-pillar: Content | 78 | 33.16 |
| 3rd sub-pillar: Future Technologies | 89 | 27.28 |
| B. People pillar | 89 | 36.37 |
| 1st sub-pillar: Individuals | 70 | 47.46 |
| 2nd sub-pillar: Businesses | 114 | 25.23 |
| 3rd sub-pillar: Governments | 85 | 36.41 |

| Pillar/sub-pillar | Rank | Score |
|---|---|---|
| C. Governance pillar | 100 | 46.33 |
| 1st sub-pillar: Trust | 108 | 24.40 |
| 2nd sub-pillar: Regulation | 96 | 55.49 |
| 3rd sub-pillar: Inclusion | 78 | 59.10 |
| D. Impact pillar | 70 | 53.94 |
| 1st sub-pillar: Economy | 113 | 16.03 |
| 2nd sub-pillar: Quality of Life | 83 | 63.56 |
| 3rd sub-pillar: SDG Contribution | 24 | 82.22 |

### The Network Readiness Index in detail

| Indicator | Rank | Score | |
|---|---|---|---|
| **A. Technology pillar** | 87 | 38.62 | |
| *1st sub-pillar: Access* | 89 | 55.43 | |
| 1.1.1 Mobile tariffs | 98 | 40.51 | |
| 1.1.2 Handset prices | 84 | 44.47 | |
| 1.1.3 FTTH/building Internet subscriptions | 17 | 45.76 | ● |
| 1.1.4 Population covered by at least a 3G mobile network | 94 | 98.26 | |
| 1.1.5 International Internet bandwidth | 105 | 62.46 | |
| 1.1.6 Internet access in schools | 54 | 41.10 | |
| *2nd sub-pillar: Content* | 78 | 33.16 | |
| 1.2.1 GitHub commits | 77 | 3.61 | |
| 1.2.2 Internet domain registrations | 87 | 1.40 | |
| 1.2.3 Mobile apps development | 84 | 72.11 | |
| 1.2.4 AI scientific publications | 46 | 55.52 | |
| *3rd sub-pillar: Future Technologies* | 89 | 27.28 | |
| 1.3.1 Adoption of emerging technologies | 82 | 38.94 | |
| 1.3.2 Investment in emerging technologies | 113 | 23.25 | |
| 1.3.3 Robot density | NA | NA | |
| 1.3.4 Computer software spending | 65 | 19.64 | |

| Indicator | Rank | Score | |
|---|---|---|---|
| **C. Governance pillar** | 100 | 46.33 | |
| *1st sub-pillar: Trust* | 108 | 24.40 | |
| 3.1.1 Secure Internet servers | 79 | 47.40 | |
| 3.1.2 Cybersecurity | 110 | 25.00 | |
| 3.1.3 Online access to financial account | 109 | 9.80 | ○ |
| 3.1.4 Internet shopping | 75 | 15.40 | |
| *2nd sub-pillar: Regulation* | 96 | 55.49 | |
| 3.2.1 Regulatory quality | 119 | 17.33 | ○ |
| 3.2.2 ICT regulatory environment | 76 | 76.47 | |
| 3.2.3 Regulation of emerging technologies | 98 | 23.42 | |
| 3.2.4 E-commerce legislation | 1 | 100.00 | ● |
| 3.2.5 Privacy protection by law content | 81 | 60.21 | |
| *3rd sub-pillar: Inclusion* | 78 | 59.10 | |
| 3.3.1 E-Participation | 48 | 79.01 | ● |
| 3.3.2 Socioeconomic gap in use of digital payments | 91 | 54.30 | |
| 3.3.3 Availability of local online content | 101 | 39.18 | |
| 3.3.4 Gender gap in Internet use | 50 | 70.52 | |
| 3.3.5 Rural gap in use of digital payments | 88 | 52.47 | |

| Indicator | Rank | Score | |
|---|---|---|---|
| **B. People pillar** | 89 | 36.37 | |
| *1st sub-pillar: Individuals* | 70 | 47.46 | |
| 2.1.1 Mobile broadband internet traffic within the country | 72 | 7.15 | |
| 2.1.2 ICT skills in the education system | 98 | 31.07 | |
| 2.1.3 Use of virtual social networks | 39 | 75.75 | ● |
| 2.1.4 Tertiary enrollment | 65 | 31.48 | |
| 2.1.5 Adult literacy rate | 57 | 91.83 | |
| 2.1.6 AI talent concentration | NA | NA | |
| *2nd sub-pillar: Businesses* | 114 | 25.23 | |
| 2.2.1 Firms with website | 25 | 79.48 | ● |
| 2.2.2 GERD financed by business enterprise | 102 | 0.19 | ○ |
| 2.2.3 Knowledge intensive employment | 100 | 16.35 | |
| 2.2.4 Annual investment in telecommunication services | NA | NA | |
| 2.2.5 GERD performed by business enterprise | 55 | 4.91 | |
| *3rd sub-pillar: Governments* | 85 | 36.41 | |
| 2.3.1 Government online services | 40 | 80.61 | ● |
| 2.3.2 Publication and use of open data | 69 | 22.06 | |
| 2.3.3 Government promotion of investment in emerging tech | 102 | 21.66 | |
| 2.3.4 R&D expenditure by governments and higher education | 69 | 21.29 | |

| Indicator | Rank | Score | |
|---|---|---|---|
| **D. Impact pillar** | 70 | 53.94 | |
| *1st sub-pillar: Economy* | 113 | 16.03 | |
| 4.1.1 High-tech and medium-high-tech manufacturing | 81 | 12.25 | |
| 4.1.2 High-tech exports | 96 | 5.65 | |
| 4.1.3 PCT patent applications | 68 | 3.07 | |
| 4.1.4 Domestic market size | 64 | 52.01 | |
| 4.1.5 Prevalence of gig economy | 116 | 14.53 | ○ |
| 4.1.6 ICT services exports | 108 | 8.65 | |
| *2nd sub-pillar: Quality of Life* | 83 | 63.56 | |
| 4.2.1 Happiness | 75 | 57.98 | |
| 4.2.2 Freedom to make life choices | 58 | 75.60 | |
| 4.2.3 Income inequality | 102 | 39.45 | ○ |
| 4.2.4 Healthy life expectancy at birth | 42 | 81.20 | ● |
| *3rd sub-pillar: SDG Contribution* | 24 | 82.22 | |
| 4.3.1 SDG 3: Good Health and Well-Being | 29 | 85.26 | ● |
| 4.3.2 SDG 4: Quality Education | NA | NA | |
| 4.3.3 SDG 5: Women's economic opportunity | 37 | 85.09 | ● |
| 4.3.4 SDG 7: Affordable and Clean Energy | 42 | 83.79 | ● |
| 4.3.5 SDG 11: Sustainable Cities and Communities | 51 | 74.75 | ● |

NOTE: ● a strength and ○ a weakness.

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