# Digital Quality of Life Index 2020

## FINDINGS REPORT

A global study on the quality of a digital wellbeing in 85 countries

6.3 billion people or 81% of the global population covered

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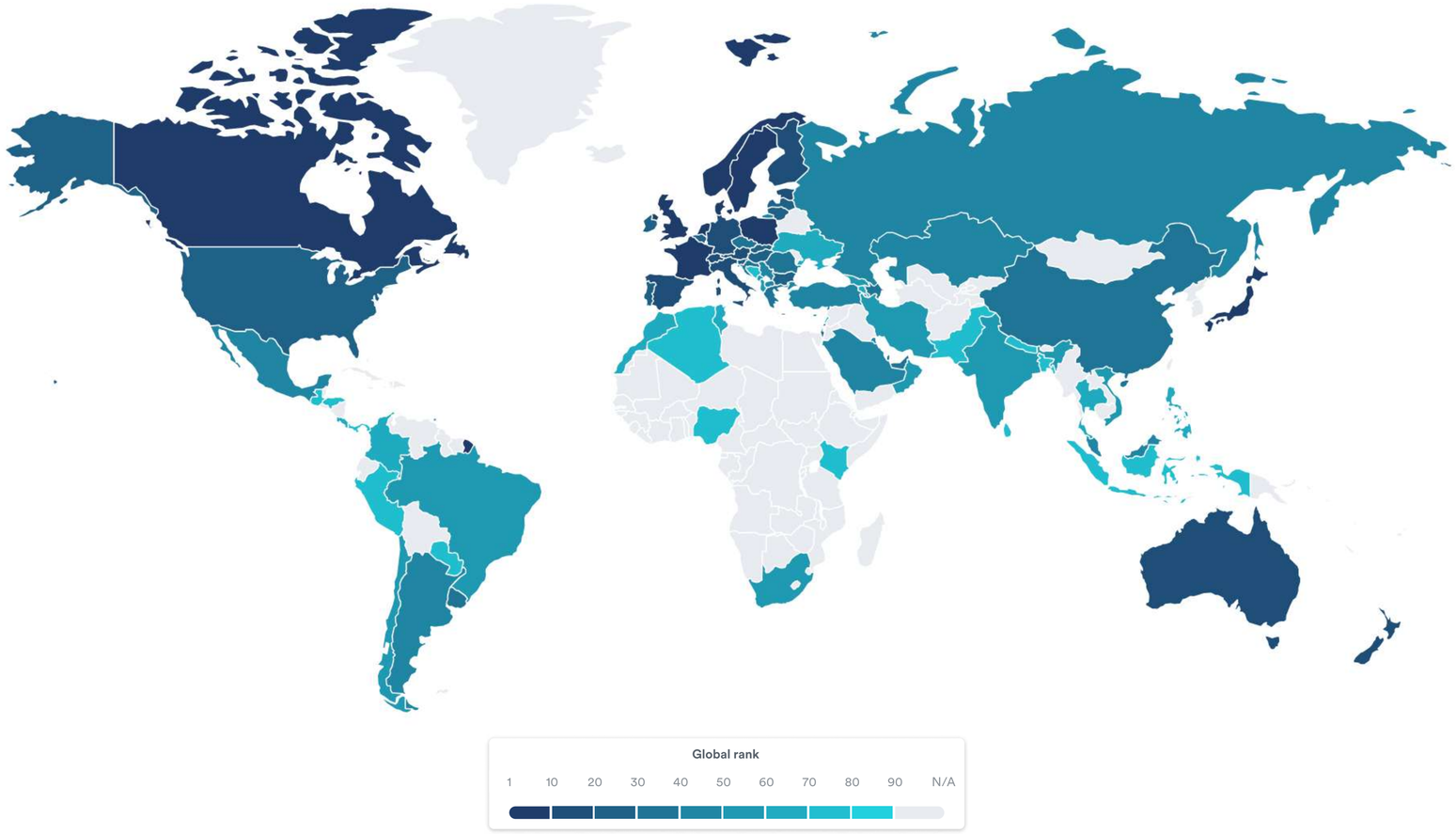
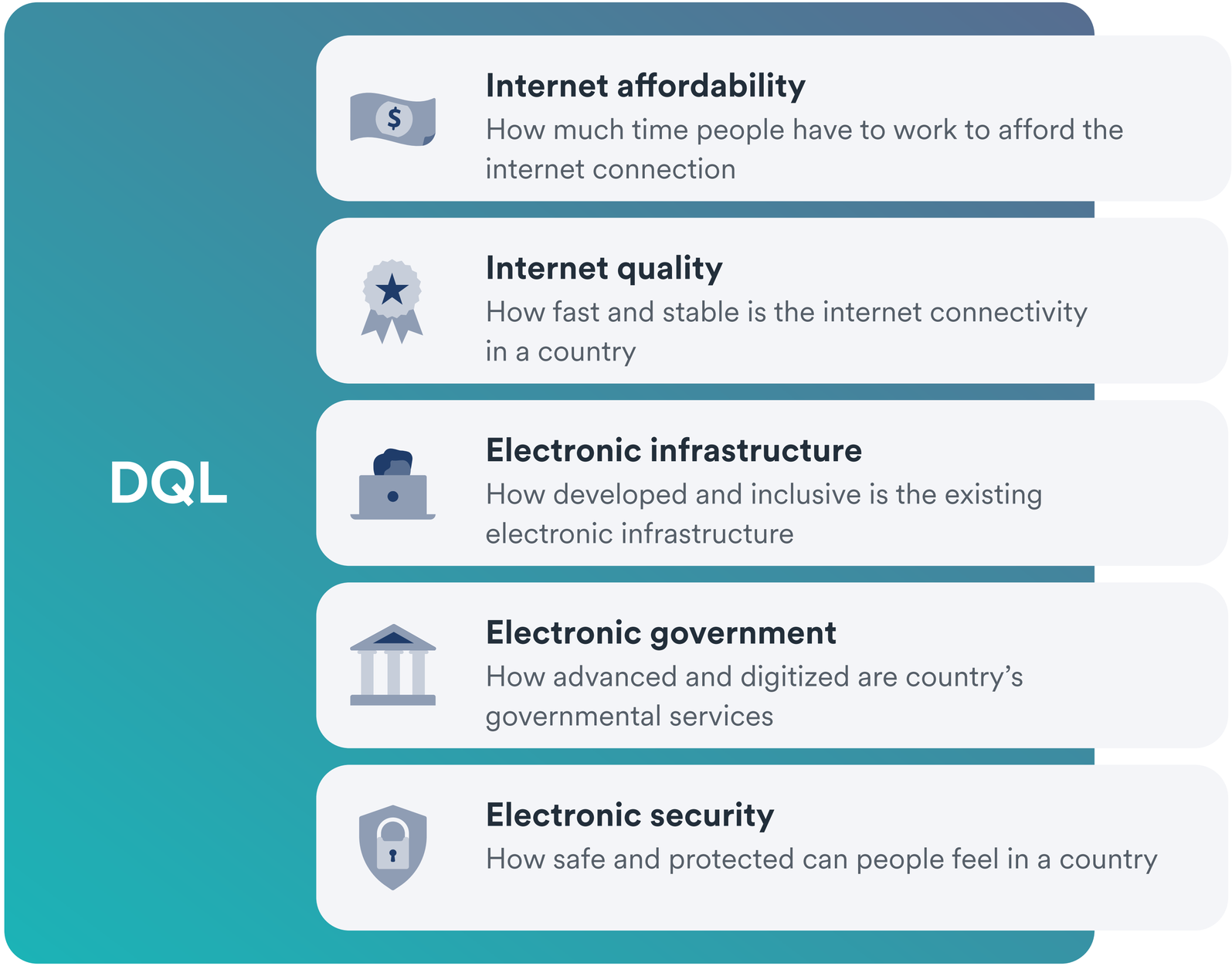
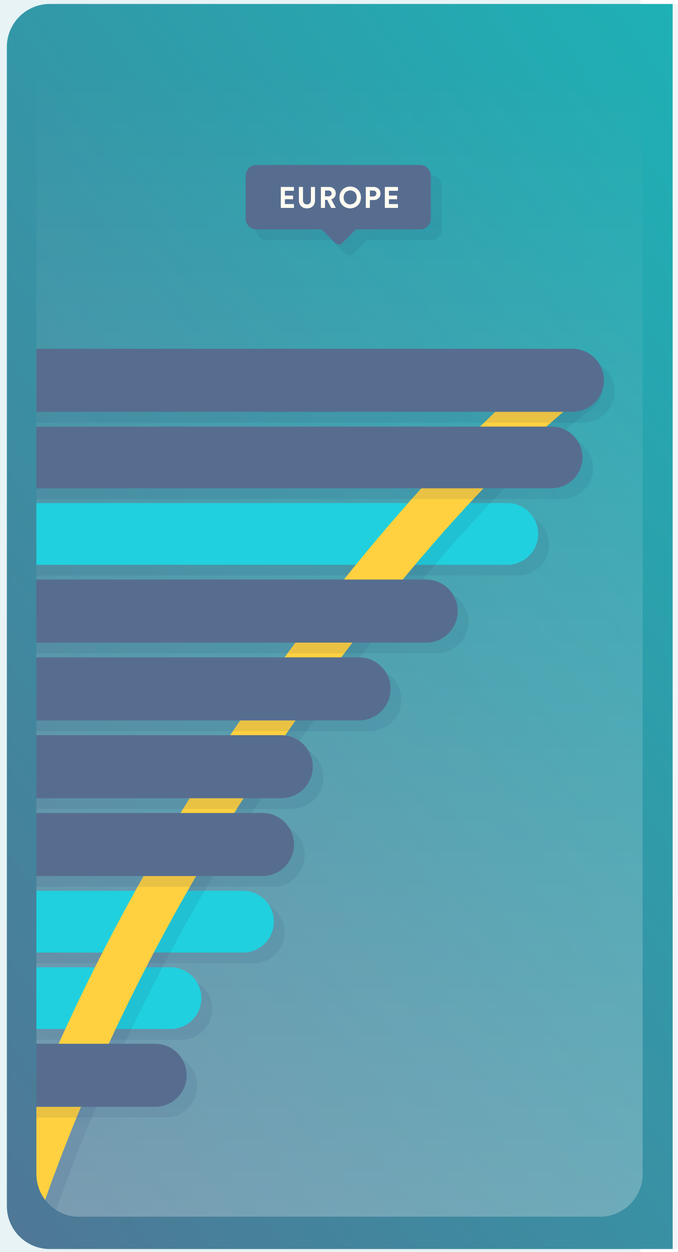
## Digital Quality of Life index 2020



# Five pillars that determine the digital quality of life

Today, people's overall wellbeing is strongly influenced by their digital wellbeing. Digital Quality of Life (DQL) Index 2020 offers a unique insight into the overall digital quality of life based on five core pillars.






Key takeaways: global outlook

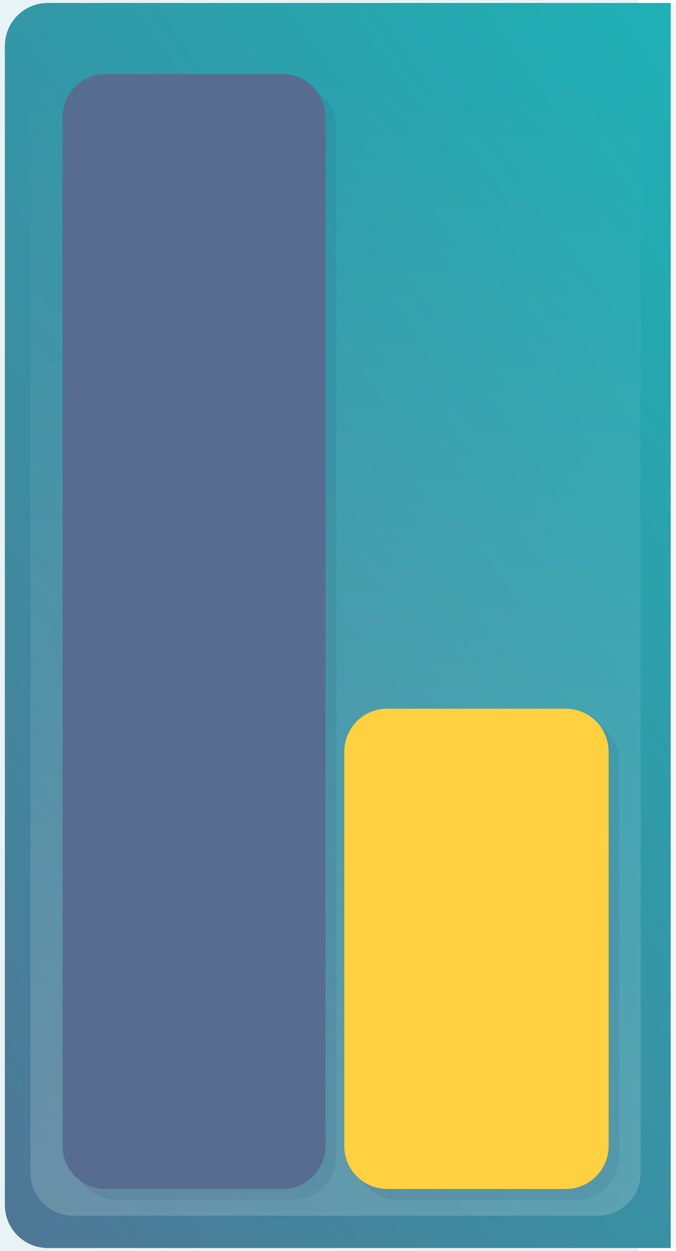
# 7 of 10 countries with the highest digital quality of life are in Europe

Key takeaways: global outlook

# High inequality in affordability: people in 75% of the researched countries have to work more than the global average to afford the internet

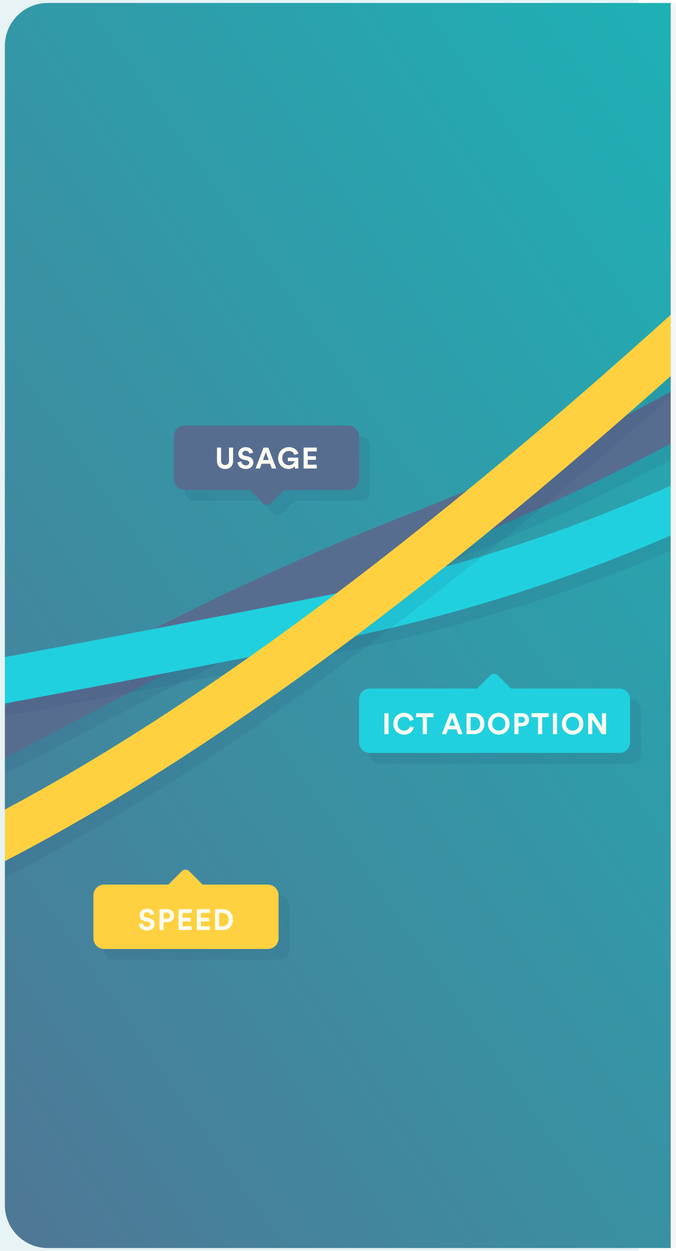
Key takeaways: global outlook

# COVID-19 impacted the internet stability:
# 49 of 85 countries experienced drops in mobile and 44 in broadband speed due to WFH setting



Key takeaways: internet usage

# 95% of people in Scandinavia use the internet (the most active internet users) vs. 35% in Southern Asia (the least active region globally)

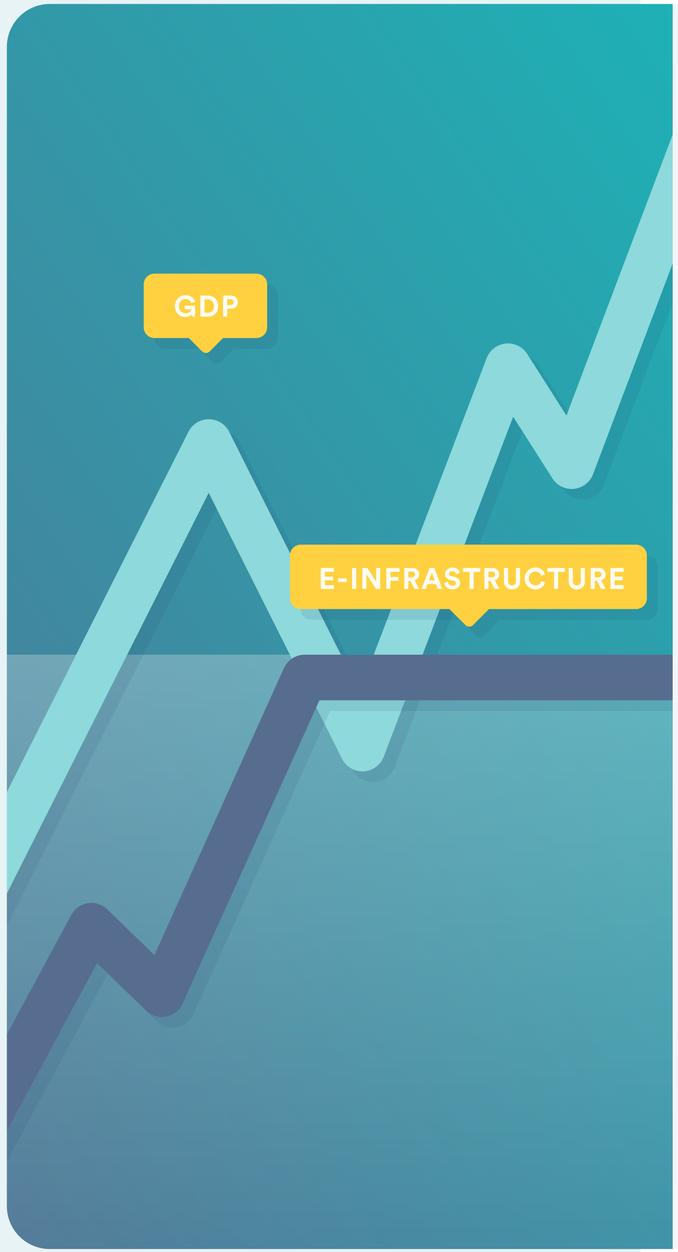



Key takeaways: internet usage

# Internet speed (mobile and broadband) is higher in countries with high ICT adoption rates and internet usage

Key takeaways: institutional development

# European Union countries lead in protecting people's personal data




Key takeaways: institutional development

# Countries stagnate in improving e-infrastructure once they reach higher than average GDP per capita level

Key takeaways: institutional development

# Strong e-security positively correlates with well developed e-government, except for Eastern European countries

# Internet affordability

Time of work required to afford the cheapest mobile internet (indexed)

+

Time of work required to afford the cheapest broadband internet (indexed)

**INTERNET AFFORDABILITY** index

The affordability of the internet connection directly impacts its accessibility.

A less affordable internet has a negative effect on the overall digital wellbeing and vice versa.

# Countries with the most and the least affordable internet

## MOST AFFORDABLE

| | |
|---|---|
| 1 | Israel |
| 2 | Canada |
| 3 | Azerbaijan |
| 4 | Poland |
| 5 | Iran |
| 6 | France |
| 7 | Denmark |
| 8 | Sweden |
| 9 | India |
| 10 | Bulgaria |

## LEAST AFFORDABLE

| | |
|---|---|
| 76 | Nigeria |
| 77 | Honduras |
| 78 | Colombia |
| 79 | Panama |
| 80 | Mexico |
| 81 | Peru |
| 82 | Philippines |
| 83 | Guatemala |
| 84 | Costa Rica |
| 85 | Albania |

The overall affordability is measured combining the affordability of the cheapest mobile and broadband plans available in a country.

# Mobile is much more affordable than broadband

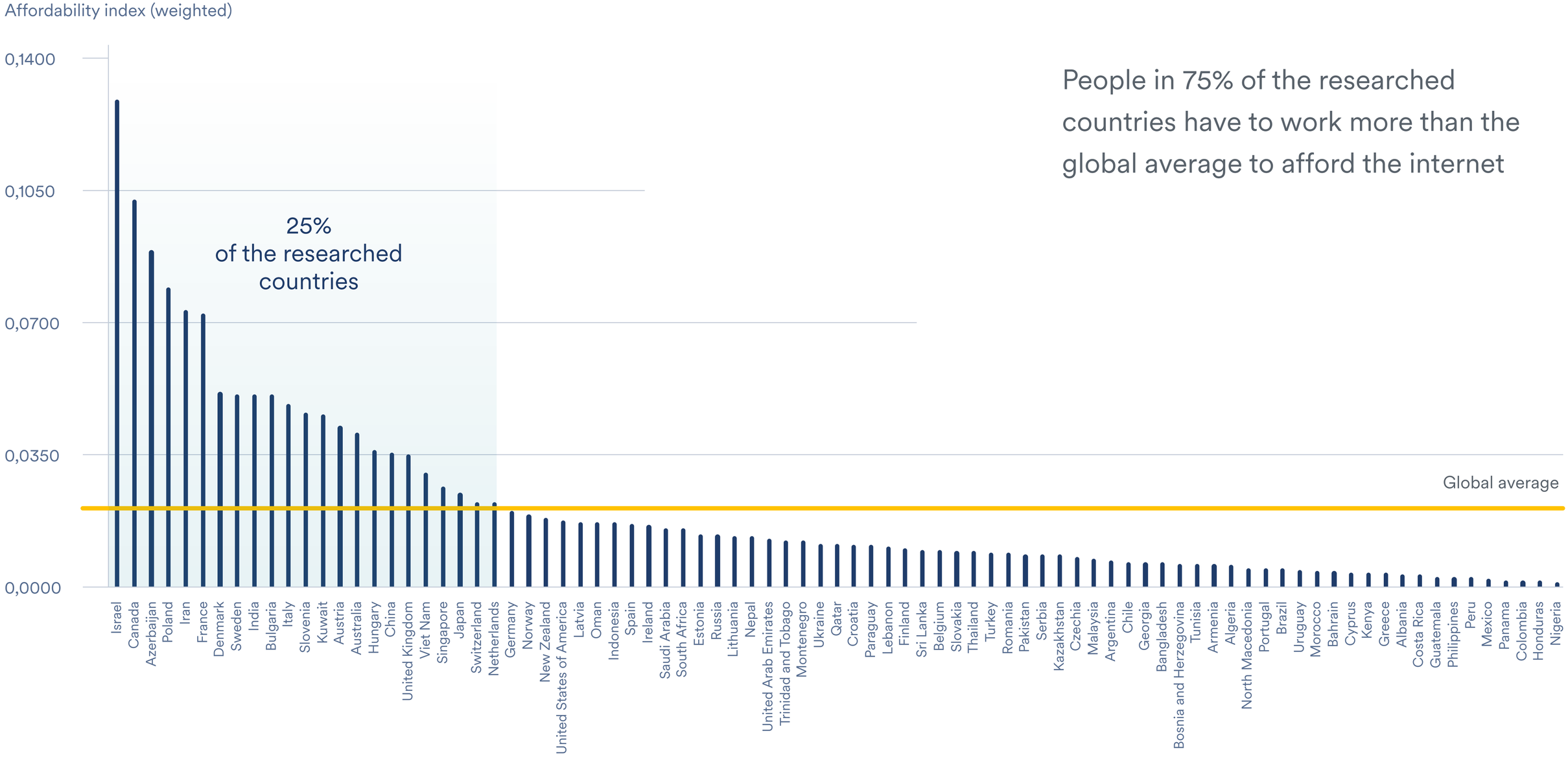
**3 hours 48 minutes** is a global average of working time needed to afford the cheapest **broadband internet**

vs.

**10 minutes** is a global average work time required to afford the cheapest **mobile internet***

* The indicators are explained in more detail in the research methodology

# High inequality in internet affordability




People in 75% of the researched countries have to work more than the global average to afford the internet

# Internet quality

Avg. broadband download speed + Avg. mobile download speed + Broadband stability during the COVID-19 outbreak + Mobile stability during the COVID-19 outbreak

**INTERNET QUALITY** index

The quality of the internet connectivity highly depends on its speed and stability. Slow and unstable connection inhibits daily use and diminishes work efficiency, while fast and stable internet allows to communicate better, enjoy high quality content, and more. Consequently, it directly impacts the quality of one's digital life.

# High broadband speed ≠ High mobile speed

## FASTEST AND MOST STABLE INTERNET

| | |
|---|---|
| 1 | Singapore |
| 2 | Sweden |
| 3 | Netherlands |
| 4 | Norway |
| 5 | Denmark |
| 6 | Switzerland |
| 7 | Canada |
| 8 | Belgium |
| 9 | Australia |
| 10 | Estonia |

## SLOWEST AND LEAST STABLE INTERNET

| | |
|---|---|
| 76 | Sri Lanka |
| 77 | Philippines |
| 78 | Algeria |
| 79 | Peru |
| 80 | Nigeria |
| 81 | Nepal |
| 82 | Bangladesh |
| 83 | India |
| 84 | Pakistan |
| 85 | Indonesia |

Internet quality (mobile and broadband combined) is the highest in countries with high internet usage and high internet technologies' (ICT) adoption rates

# Singapore and Balkan countries surprise by the internet quality

Singapore has the fastest broadband & the 8th fastest mobile in the world that are also highly stable

Balkan countries are scoring surprisingly high on internet quality despite lower e-infrastructure levels due to fast and stable mobile internet.

# Electronic infrastructure

Active internet users (per 100 inhabitants) (indexed)

+

ICT adotion rate (indexed)

**ELECTRONIC INFRASTRUCTURE** index

Highly functional e-infrastructure enables people to use the internet more in their daily lives for a multitude of purposes, such as studying, e-commerce, entertainment, banking, and others. This strongly amounts to having a better digital experience.

# Eastern Asia, Europe & North America lead in e-infrastructure development

## MOST DEVELOPED E-INFRASTRUCTURE

| | |
|---|---|
| 1 | United Arab Emirates |
| 2 | Sweden |
| 3 | Denmark |
| 4 | Quatar |
| 5 | Norway |
| 6 | Japan |
| 7 | Switzerland |
| 8 | Singapore |
| 9 | Netherlands |
| 10 | New Zealand |

## LEAST DEVELOPED E-INFRASTRUCTURE

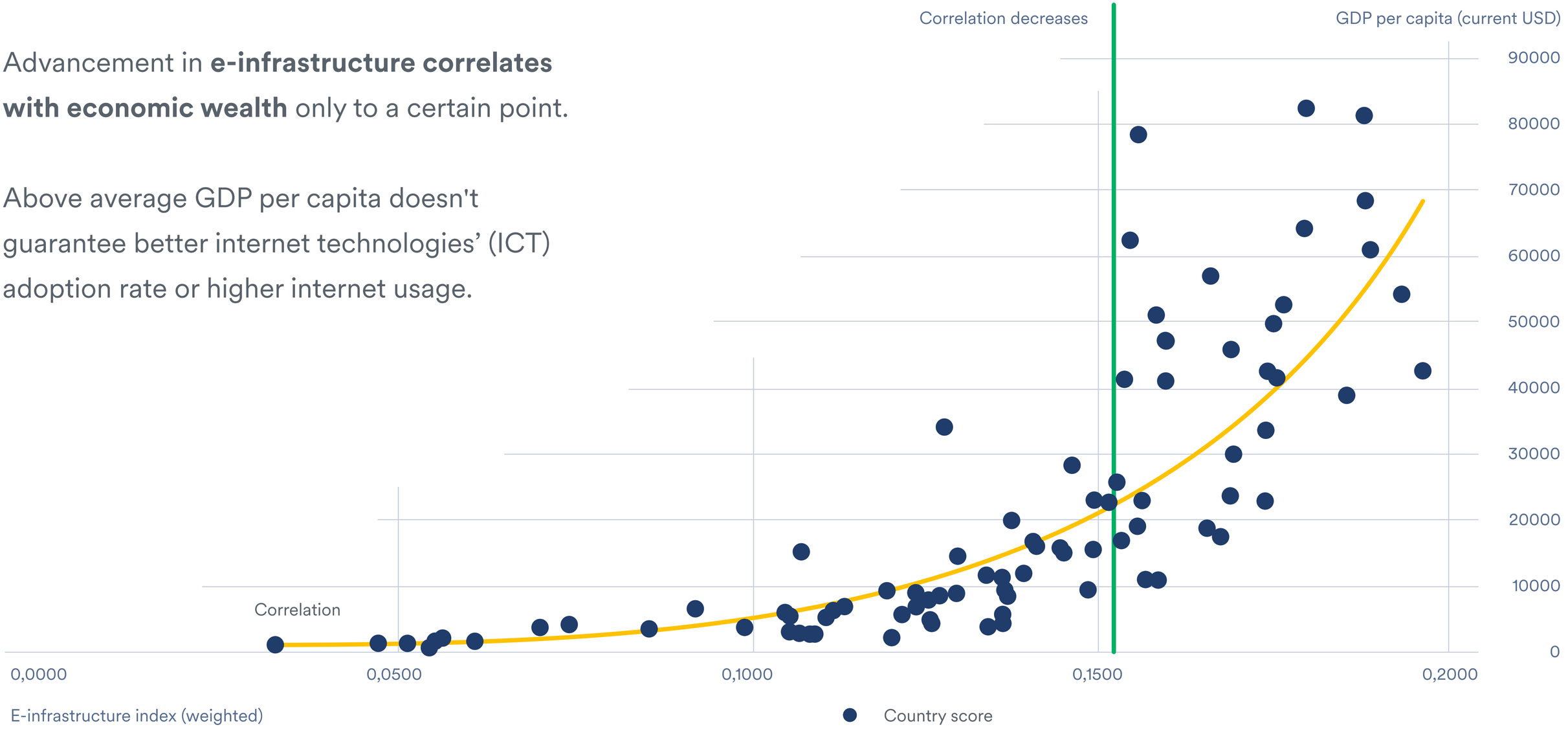
| | |
|---|---|
| 76 | Pakistan |
| 77 | Kenya |
| 78 | Bangladesh |
| 79 | Nepal |
| 80 | Nigeria |
| 81 | Honduras |
| 82 | India |
| 83 | Sri Lanka |
| 84 | Guatemala |
| 85 | Indonesia |

Countries in Central America and Africa lag behind in terms of ICT adoption and internet usage.

# High GDP ≠ better e-infrastructure

Advancement in **e-infrastructure correlates with economic wealth** only to a certain point.

Above average GDP per capita doesn't guarantee better internet technologies' (ICT) adoption rate or higher internet usage.



# Electronic security

Cybersecurity (indexed) + Status of personal data protection (indexed)

**ELECTRONIC SECURITY** index

Country’s preparedness to counter the ever growing threat of cyber crimes as well as its commitment to protect any individual’s privacy signal about the extent to which people can feel confident about their online data and digital experience.

# European Union leads in electronic security

## HIGHEST E-SECURITY

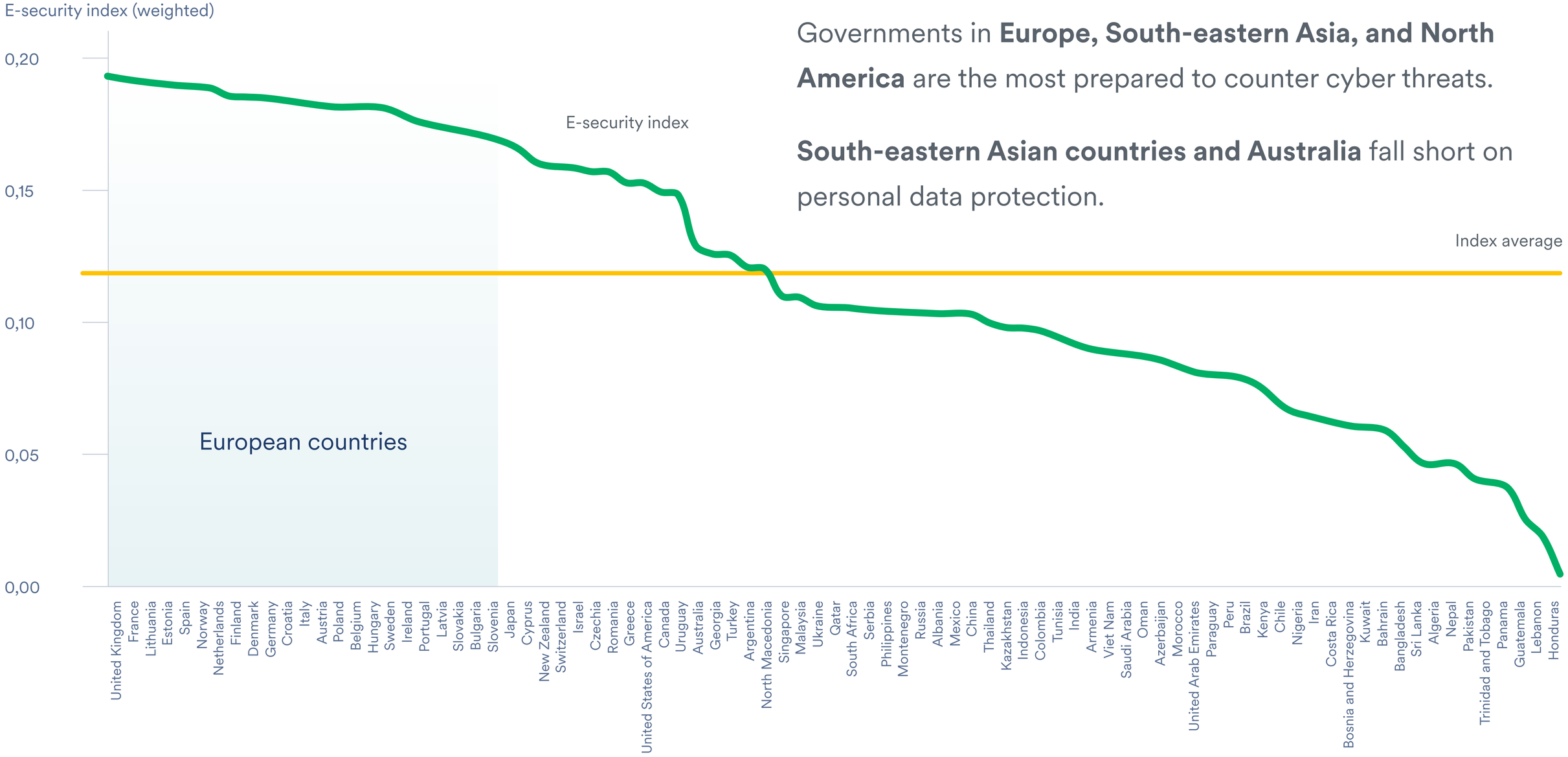
| | |
|---|---|
| 1 | United Kingdom |
| 2 | France |
| 3 | Lithuania |
| 4 | Estonia |
| 5 | Spain |
| 6 | Norway |
| 7 | Netherlands |
| 8 | Finland |
| 9 | Denmark |
| 10 | Germany |

## LOWEST E-SECURITY

| | |
|---|---|
| 76 | Honduras |
| 77 | Lebanon |
| 78 | Guatemala |
| 79 | Panama |
| 80 | Trinidad and Tobago |
| 81 | Pakistan |
| 82 | Nepal |
| 83 | Algeria |
| 84 | Sri Lanka |
| 85 | Bangladesh |

Top 10 countries with the highest e-security levels are the European Union member states. Globally, they lead in implementing effective cybersecurity policies and ensuring personal data protection.

# EU's GDPR boosts region's electronic security




Governments in **Europe, South-eastern Asia, and North America** are the most prepared to counter cyber threats.

**South-eastern Asian countries and Australia** fall short on personal data protection.

# Electronic government

State of government's online presence (indexed)

+

Readiness to employ the artificial intelligence technology (indexed)

**ELECTRONIC GOVERNMENT** index

The advancement of electronic government services helps to minimize the bureaucracy, reduce corruption and increase transparency of the public sector. Well-developed e-government also improves the efficiency of public services and helps people save time, having a notable influence on the quality of their digital lives.

# E-government development strongly correlates with country's e-security

## MOST DEVELOPED E-GOVERNMENT

| | |
|---|---|
| 1 | Singapore |
| 2 | United Kingdom |
| 3 | United States of America |
| 4 | Denmark |
| 5 | Finland |
| 6 | France |
| 7 | Germany |
| 8 | Sweden |
| 9 | Japan |
| 10 | Canada |

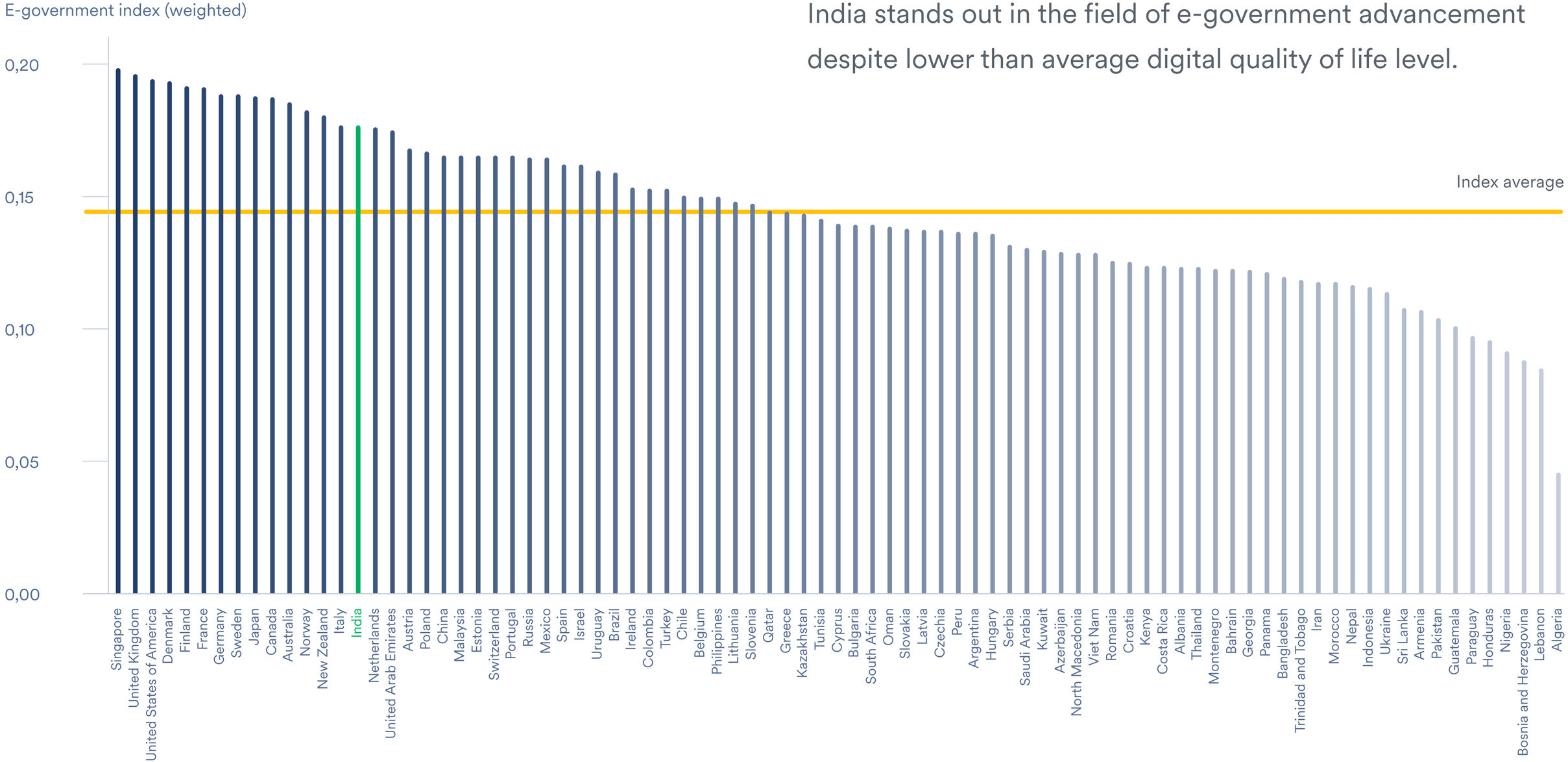
## LEAST DEVELOPED E-GOVERNMENT

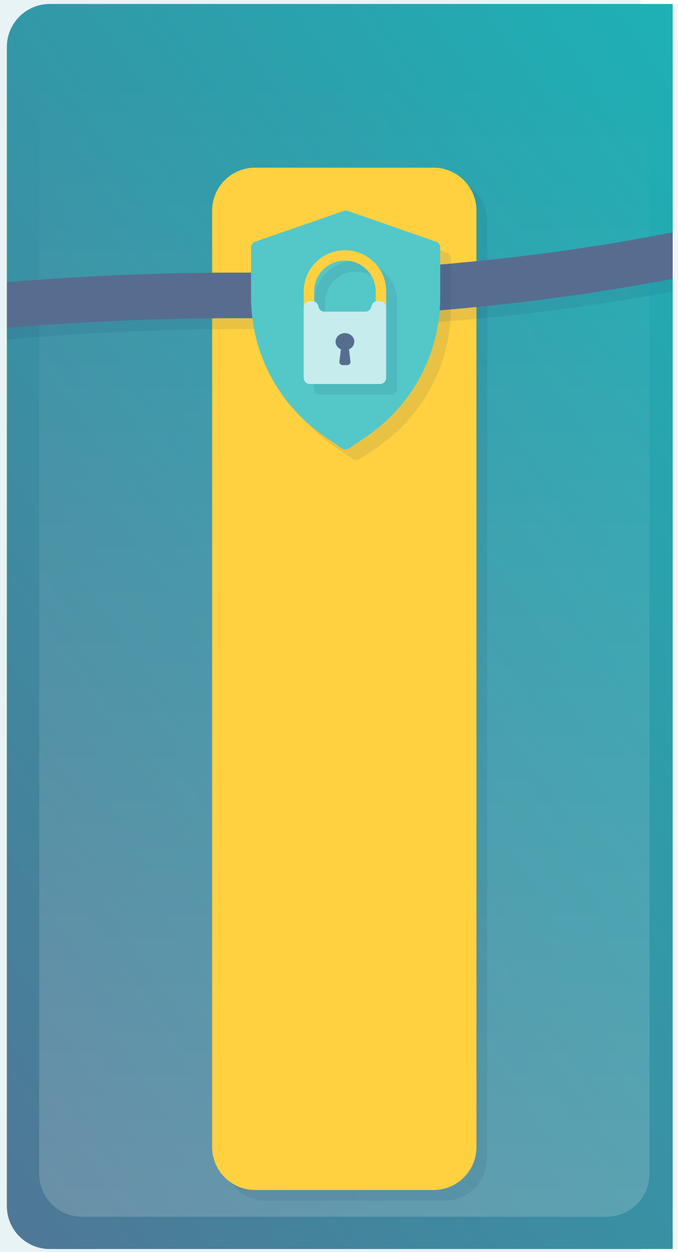
| | |
|---|---|
| 76 | Algeria |
| 77 | Lebanon |
| 78 | Bosnia and Herzegovina |
| 79 | Nigeria |
| 80 | Honduras |
| 81 | Paraguay |
| 82 | Guatemala |
| 83 | Pakistan |
| 84 | Armenia |
| 85 | Sri Lanka |

The government's readiness to take advantage of the opportunities offered by the artificial intelligence technology and the assortment of its services provided online strongly correlate with the country's e-security, except for Eastern European, South Asian, and African countries.

# India shines in e-government

India stands out in the field of e-government advancement despite lower than average digital quality of life level.

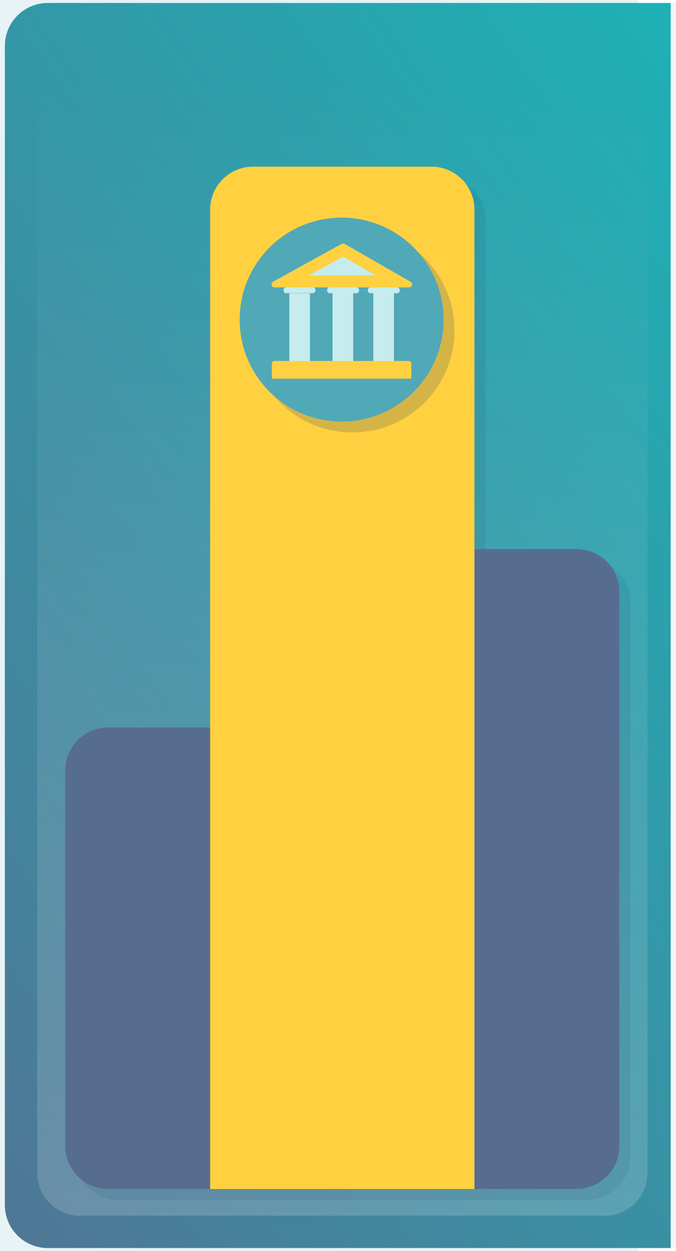




Final remarks

# E-security has the strongest correlation (0.89) with the DQL

Focusing resources on improving country's cybersecurity and protecting people's personal data would have the greatest impact on their digital quality of life



Final remarks

# Importance of the institutional factors

Out of all the pillars, country's e-security is the least correlated (0.58) with its GDP per capita. It proves that other factors (ex. government's efficiency, legislation on data protection, etc.) than GDP play a more important role in people's digital lives.

Final remarks

# Focus on e-government, e-infrastructure & quality to improve DQL

Internet affordability has the lowest (0.52) correlation with the DQL, highlighting the fact that investing in internet quality (0.84), e-government (0.84), e-infrastructure (0.84) would have a more positive effect on people's digital wellbeing.

# Methodology & data sources

Information points used to index the digital quality of life around the world were gathered from open data sources provided by the United Nations, World Bank, International Telecommunications Union, U.S. Department of State, World Economic Forum, Commission Nationale de l'Informatique et des Libertés, Speedtest, Cable, United Nations University, and the International Development Research Centre.

Full data set and the research material can be found here

Full methodology can be found here

# Curious to learn more?

For questions and commentary, contact:

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