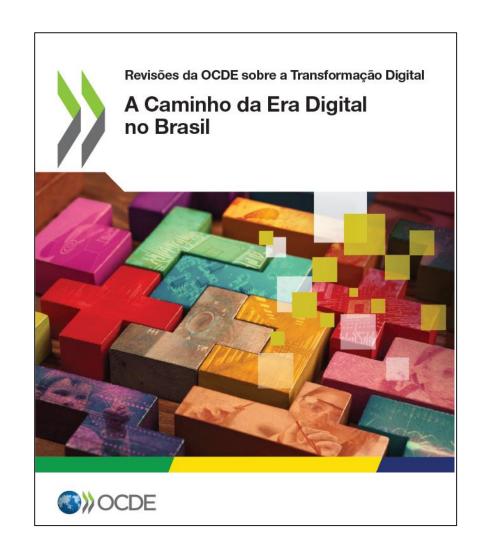




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Going Digital in Brazil

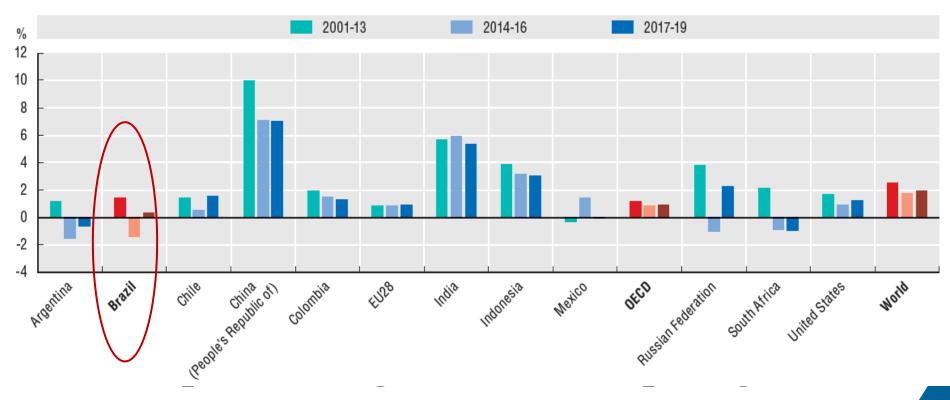


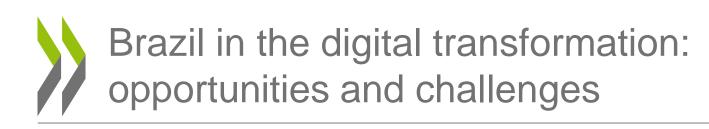


Brazil in the digital transformation: opportunities and challenges

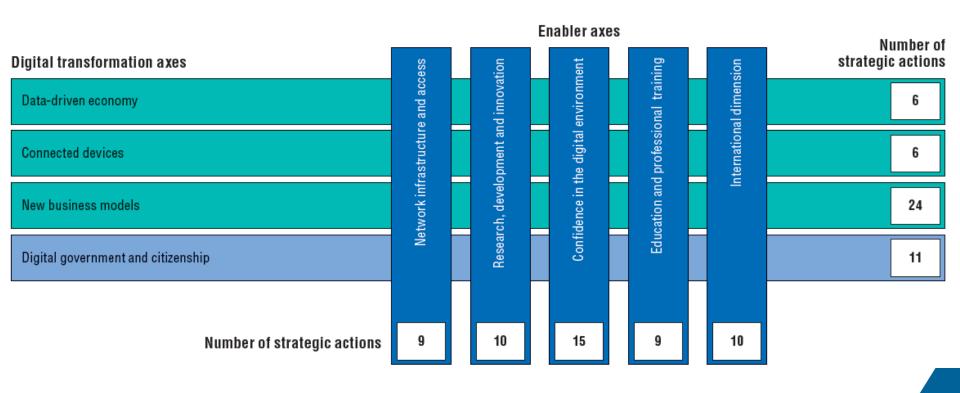
Figure 1.1. Labour productivity growth in selected countries, 2001-19

Output per employed person, average yearly growth rates





Brazilian Digital Transformation Strategy (E-Digital) 2018-21





OECD integrated policy framework for digital transformation



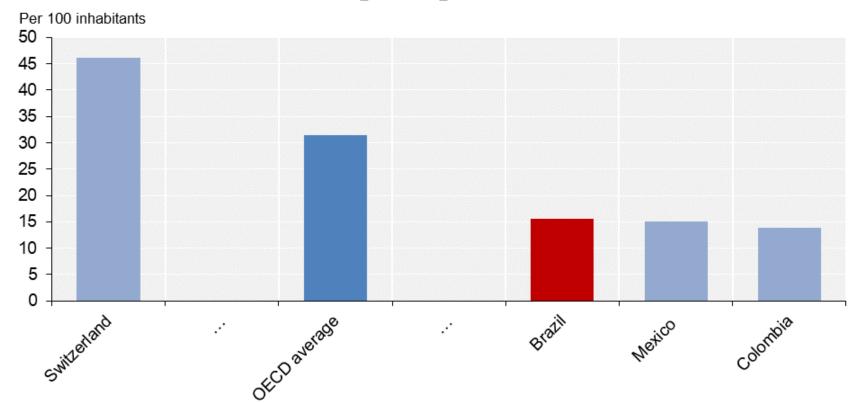
Source: OECD (2019), "Going Digital: An integrated policy framework to make the transformation work for growth and well-being".



Enhance access to quality broadband

High-quality communication services at competitive prices are crucial for Brazil to go digital:

Fixed broadband subscriptions per 100 inhabitants (June 2019)





Enhance access to quality broadband

Brazil should take further action to *enhance connectivity*:

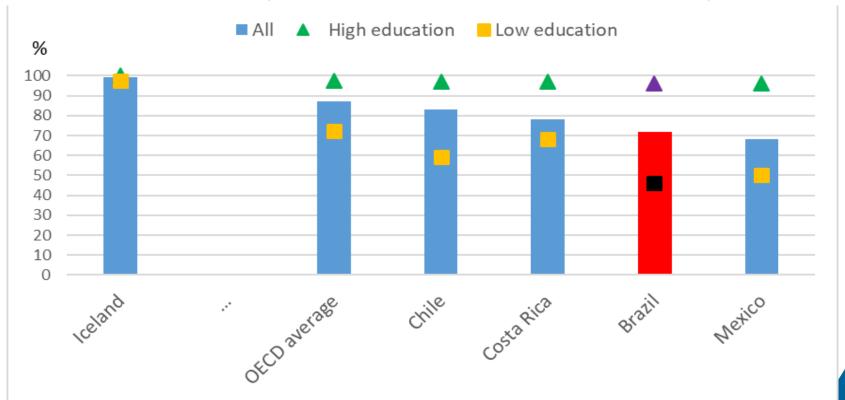
- create *a converged and independent regulator* for the communication and broadcasting sectors
- **reform the legal framework** to introduce a simple class-licensing regime for communication and broadcasting services
- enhance co-ordination among federal, state and municipal levels to promote broadband deployment
- merge sectoral funds into a single fund
- **foster the Internet of Things (IoT)** by abolishing fees and establishing a separate IoT numbering plan



Fostering digital uptake and use among individuals, firms and in the government

Brazil has made significant progress in improving access to the Internet. However, digital divides persist.

Internet users, by education level, 2019 or latest available year





Fostering digital uptake and use among individuals, firms and in the government

Brazil should put in place a wider set of policies to *upgrade digital skills* and *address the digital divide*:

- raise awareness on the benefits of digital technologies, targeting individuals with low digital uptake and micro-enterprises
- introduce *tax incentives for technological upgrade*, training and ICT investments for all firms
- remove regulatory barriers to e-commerce, e.g.: harmonise the rate of the tax on goods and services (ICMS) across states
- facilitate the formal recognition of skills acquired in online courses and vocational training
- *increase funding for STEM students* (science, technology, engineering and mathematics)



Enhancing trust in the digital economy

Brazil has taken significant steps to enhance trust in the digital environment by strengthening:

- digital security the National Cybersecurity Strategy
 (2019)
- personal data the General Data Protection Law (2018; 2020)
- consumer protection two ordonnances on product recall (2019)



Enhancing trust in the digital economy

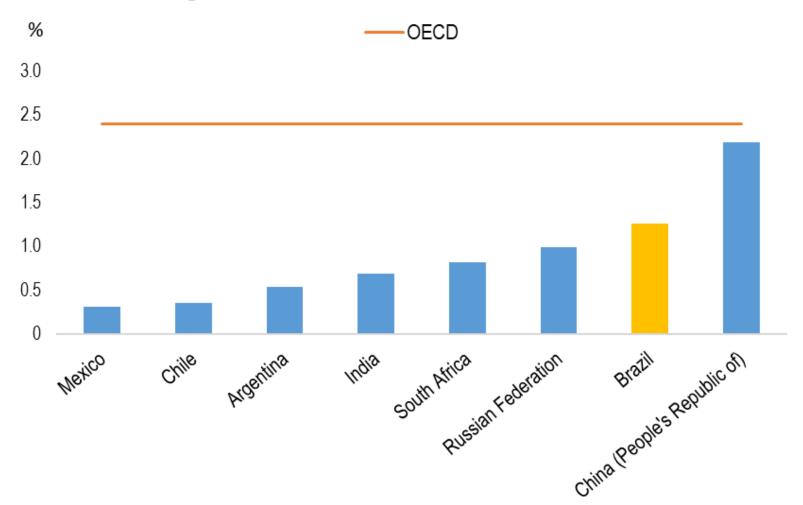
To further **enhance trust**, Brazil should:

- Establish *a wide community of digital security leaders* from the public and private sectors to implement the National Cybersecurity Strategy
- Foster *a decentralised approach to digital security governance*, with the Presidency (GSI/PR) as co-ordinator
- Ensure full independence of the National Data Protection Authority (ANPD)
- Ensure that the appointment of the ANPD's Board of Directors and the National Council for the Protection of Personal Data are transparent, fair and based on technical expertise
- guarantee *an adequate and predictable budget to the ANPD* through a transparent process
- Further the implementation of the *OECD Recommendation of the Council on Consumer Protection in E-Commerce*.



Unleashing digital innovation

Gross domestic expenditure on R&D, as a % of GDP, 2018 or latest available year





Unleashing digital innovation

To **strengthen digital innovation**, Brazil should:

- orient public support to digital innovation towards mission-oriented research, building on the model of the National IoT Plan
- ensure adequate, stable and predictable public resources for research in ICTs
- develop clear roadmaps for advancement in key digital technologies, e.g. AI and data analytics, with all stakeholders
- **reform the Informatics Law** so as to strengthen its support to innovation
- make the Good Law more suitable for young innovative firms through cash-refund or carry-forward provisions
- increase knowledge transfer between businesses and academia
- strengthen *innovation hubs for small and medium-sized enterprises*; open e-procurement to innovative start-ups.



Recommendations for a whole-of-government approach

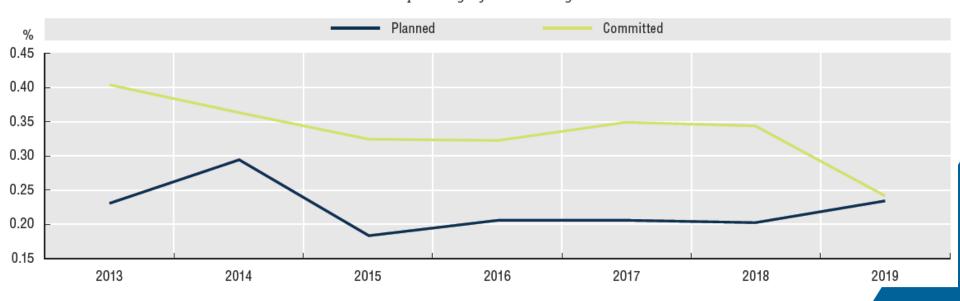
In 2018, Brazil issued its *Digital Transformation Strategy (E-Digital)* for the period 2018-21.

E-Digital has made it possible to bring existing policy programmes under a common umbrella...

.... but has not shifted policy priorities and resources to new

Figure 7.2. ICT expenditures in the federal and social security budget in Brazil, 2013-19

As a percentage of the total budget



Recommendations for a whole-of-government approach

In order to *develop a whole-of-government approach* to digital transformation policies, Brazil should:

- clarify the rules for decision making in the Interministerial Committee for Digital Transformation (CITDigital)
- integrate CITDigital's decisions into the regular policy-making process, for instance though a bill by the Presidency of the Republic
- establish *clear appropriations for the E-Digital* in the budgetary law.

Going Digital in Brazil

