Digital Economy: A Policy Perspective from Brazil

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International Organizations and Coordination Mechanisms are engaged in promoting the digital economy and identifying comparable metrics.
A broader definition of the Digital Economy

Digital Economy Definition

Source: Bukht and Heeks (2017)

Digital Industrialization
(Added Value of the Information Industry)

Industrial Digitization
(Marginal Contribution to the Application of Information Products in Other Fields)

Digital Economy

National Economy
Source: China – G20 DETF (2018)

G20 DETF 2016: G20
Digital Economy Development and Cooperation Initiative

"...a broad range of economic activities that include using digitized information and knowledge as the key factor of production, modern information networks as an important activity space, and the effective use of information and communication technology (ICT) as an important driver of productivity growth and economic structural optimization".
Definition of the Digital Sector

- A less ambiguous term than “the digital economy”
  - Some use “digital economy” to mean the Internet, new activities enabled by the Internet, and production of ICT goods and services
  - Others include all processes, products and transactions embodying digital technology
- Digital sector definition is broader than the ICT sector of ISIC 4
  - More complete/clearer coverage of online platforms
  - Includes platform-enabled services
- Definition of “digital sector” comprises areas of main measurement concern:
  - Producers of ICT equipment, software, and ICT services
  - Online platforms
  - Platform-enabled activities (the Sharing Economy, gig economy, …)
- Online platforms include e-commerce, (social) media, search, sharing/gig/collaborative economy, on-demand property rental, crowdsourcing, fintech, …
- Definition of Digital transactions also needed for analytical purposes
  - “digital ordering” is criterion for defining e-commerce
  - “digital delivery” of services (e.g. in foreign trade)
  - “platform-enabled” services

Source: Reinsdorf (2018)
The level of readiness of a country for the Digital Economy affects the perception of its level of Competitiveness.
Digital Economy
Challenges and Opportunities

Digital Economy = opportunity for growth in Productivity and Competitiveness.
Positive correlation between productivity, digital technology intensity and per capita income.

Productivity is low

Source: World Bank; ILO; IBGE.

OECD ECONOMIC SURVEY OF BRAZIL 2018

Source: Economic Commission for Latin America and the Caribbean (ECLAC).

Technological intensity of the production structure and relative productivity, 2013

Index of technological intensity of the production structure

Labour productivity of the United States

GNI per capita, 2013, US$ (log scale)

Networked readiness and income

Note: N = 138 economies.
Brazil Digital Transformation Strategy Structure

100 Strategic Actions focused on **enablers** and **drivers** of the Digital Economy.

**Digital Economy**
- Data-Driven Economy
- Connected Devices: IoT
- New Business Models
- Digital Government

**Enablers**
- Network Infrastructure and Access
- Research, Development and Innovation
- Confidence in the Digital Environment
- Education and Professional Training
- International Dimension

- 9
- 10
- 15
- 9
- 10

- 6
- 6
- 24
- 11
The ICT sector (goods and services) is at the core of the **Digital Economy**.

**ICT “Ecosystem”:**
- Network equipment
- User devices
- Telecom services
- IT services
- etc.

Digital Economy
Internet and Telecom Infrastructure
E-commerce is globally recognized as an important driver for growth in the Digital Economy:
Digital Marketplaces + Digital Means of Payment + Goods and Services

SMEs TOTAL 9 MILLION COMPANIES:
- 99% of Brazilian companies;
- 52% of Brazilian workforce;
- 27% of GDP;

17% of Brazilian export value, with great potential for growth

Brazil (2017)
32% of total online shopping done on mobile devices

Estimated share of online goods in total retail of goods
- 8.0% for Europe
- 3.0% for Brazil

Population 15+ 164 M
Number of shoppers 48 M
Internet users 108 M
Digital Startups (platforms, fintechs, etc.) bring growth and productivity to the Digital Economy.
Expand the **Digital Economy** by exploring comparative advantages in key sectors, with the support of Digital Technology, Big Data and Analytics.

Example: **Smart Farming & Precision Agriculture**
New data sources (e.g., Private Sector Data) can improve measurement of the Digital Economy.
Thank You!

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