

Measuring the Information Society in Brazil

Cetic.br

UN Big Data Hub
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cetic.br
Regional Center for
Studies on the
Development of the
Information Society


unesco
Centre
under the auspices
of UNESCO

nic.br
Brazilian Network
Information Center

ABOUT CETIC.BR

18 years producing ICT data for
policymaking and research

1995

Multistakeholder
model
for Internet
governance
in Brazil

egi.br
nic.br
cetic.br
registro.br

2005

UNESCO 36th
General Conference
approves Cetic.br as a
Category 2 Center

2011

cetic.br
Regional Center for
Studies on the
Development of the
Information Society

2012


unesco
Centre
under the auspices
of UNESCO

2023



The Regional Center for Studies on the Development of the Information Society (Cetic.br) has the mission of producing ICT statistics.

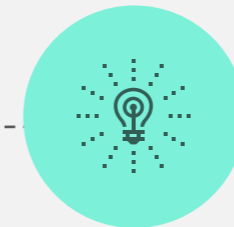


1. Knowledge center on ICT-data production

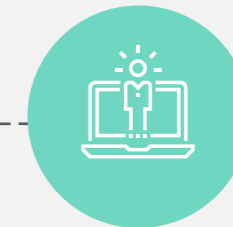
- » ICT public statistics
- » Statistics for the SDGs
- » Disaggregated data
- » Qualitative studies



2. Capacity-building methodologies for the production and use of ICT-statistics



3. Laboratory of ideas & methodological innovation



4. Analysis of ICT impacts in society, production of strategic recommendations & policy briefs

REGIONAL COOPERATION

INCLUSIVE INFORMATION AND KNOWLEDGE SOCIETIES

1. Infrastructure
Access
2. Uses and motivations
Digital skills
3. Tangible outcomes
Well-being

- » Capacity-building on measuring access, use and appropriation of ICT
- » Technical and methodological support to the production of quality, disaggregated and comparable statistical data
- » Fostering multisectoral public debate based on evidence

International organizations

CAF	UNCTAD	UNSD
IADB	UNECLAC	WHO
ITU	UNICEF	
OECD	UNESCO	

Civil society organizations

National statistical offices

Academia

REGULAR PUBLICATIONS

SECTOR ANALYSIS & CASE STUDIES

METHODOLOGICAL GUIDES, POLICY BRIEFS & REGIONAL REPORTS

ICT SURVEY REPORTS

This block displays a grid of 12 coversheets for ICT Survey Reports. The reports are organized by year and sector:

- 2021 Reports:**
 - TIC DOMICÍLIOS (ICT HOUSEHOLDS)
 - TIC EDUCAÇÃO (ICT IN EDUCATION)
 - TIC EMPRESAS (ICT ENTERPRISES)
 - TIC GOVERNO ELETRÔNICO (ICT ELECTRONIC GOVERNMENT)
 - TIC KIDS ONLINE BRASIL (ICT KIDS ONLINE BRAZIL)
 - TIC SAÚDE (ICT IN HEALTH)
 - PRIVACIDADE E PROTEÇÃO DE DADOS PESSOAIS (PRIVACY AND PERSONAL DATA PROTECTION)
 - TIC CULTURA (ICT IN CULTURE)
 - TIC PROVEDORES (ICT PROVIDERS)
- 2020 Reports:**
 - TIC CULTURA (ICT IN CULTURE)
 - TIC PROVEDORES (ICT PROVIDERS)

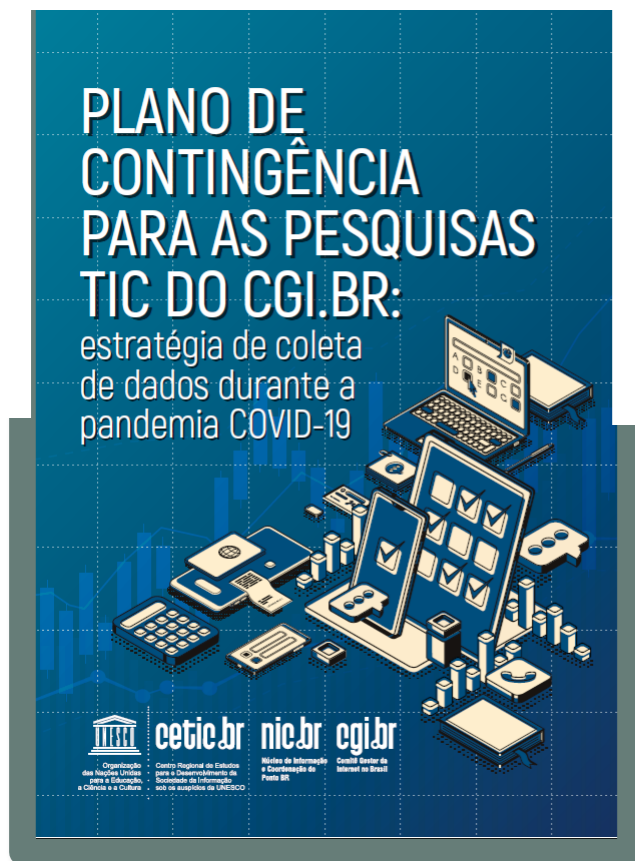
This block displays a collection of Sector Analysis & Case Studies coversheets:

- Tecnologias digitais, tendências atuais e o futuro da educação
- A transformação digital nos sistemas de saúde
- Inteligência Artificial e Cultura: perspectivas para a diversidade cultural na era digital
- REDES COMUNITÁRIAS DE INTERNET NO BRASIL: oportunidades de implementação e desafios para a inclusão digital
- EDUCAÇÃO E TECNOLOGIAS DIGITAIS: desafios e estratégias para a continuidade da aprendizagem em tempos de COVID-19
- SEGURANÇA DIGITAL: uma análise de gestão de risco em empresas brasileiras
- TECNOLOGIAS DE INFORMAÇÃO E COMUNICAÇÃO NA GESTÃO URBANA: desafios para a medição de cidades inteligentes
- Fronteiras da inclusão digital: Dinâmicas sociais e políticas públicas de acesso à Internet em pequenos municípios brasileiros
- Cuadernos de Discusión de Comunicación e Información 19
- Crianças, adolescentes e o uso da Internet em São Paulo e Buenos Aires: estudos a partir de uma perspectiva de igualdade de gênero

This block displays a collection of Methodological Guides, Policy Briefs & Regional Reports coversheets:

- Datos y hechos sobre la transformación digital
- INTELIGÊNCIA ARTIFICIAL E CULTURA: OPORTUNIDADES E DESAFIOS PARA O SUL GLOBAL
- Caminho para o desenvolvimento sustentável das cidades: o uso das tecnologias da informação e comunicação na gestão urbana
- O MERCOSUL DIANTE DA MUDANÇA TECNOLÓGICA E DA TRANSFORMAÇÃO DIGITAL: ELEMENTOS PARA ANÁLISE
- AValiação do Desenvolvimento da Internet no Brasil
- INTELIGÊNCIA ARTIFICIAL E CULTURA: perspectivas para a diversidade cultural na era digital
- POLICY PAPERS UNESCO: TIC para o desenvolvimento sustentável. Recomendações de políticas públicas que garantem direitos.

INTERNET & COVID-19 IN BRAZIL: INNOVATION ON DATA COLLECTION



- ✓ New methodological approaches
- ✓ Data collection via telephone and Web

ICT PANEL COVID-19



-  Online activities
-  Culture
-  Electronic Commerce
-  Online public services
-  Telehealth
-  Privacy
-  Remote learning
-  Telework

Source: Cetic.br. <https://cetic.br/en/>

CAPACITY- BUILDING PROGRAMMES & TECHNICAL SUPPORT TO COUNTRIES

Thematic workshops & technical support

- » Workshops in the areas of Education, Health, Kids Online & e-Gov
- » Technical support for UNESCO's Internet Universality Indicators

Capacity-building programmes on survey methodologies for data production & MOOCs

Annual Workshop on Survey Methodology:
Innovation and Trends on ICT Data Production

Cetic.br ~ ENCE-IBGE

Annual School of Digital Transformation and
Innovation in Latin America

Cetic.br ~ CEPAL ~ CAF ~ IJPN

Tech for Good: The Role of ICT in Achieving the SDGs
Free MOOC (since 2018)

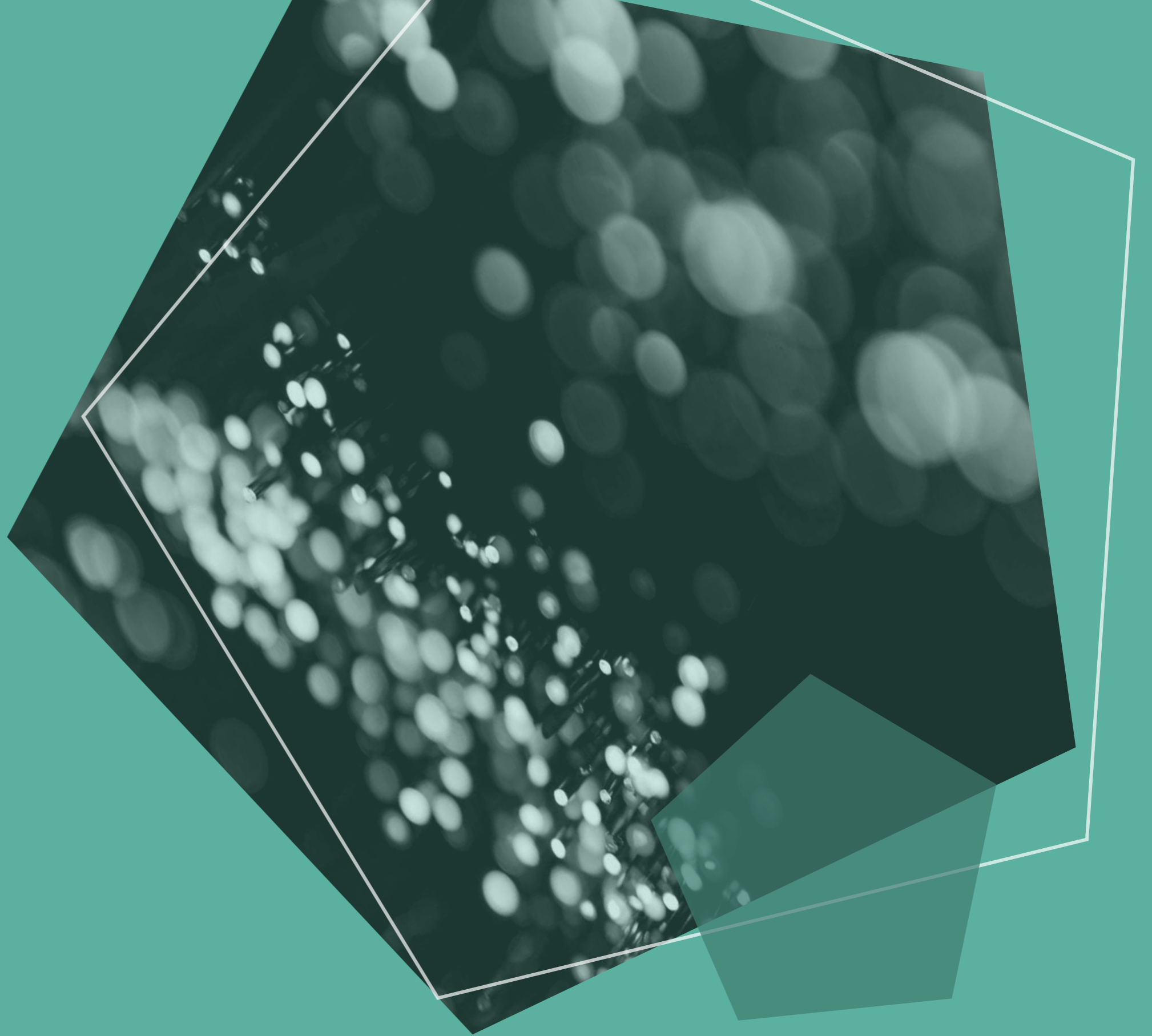
Cetic.br ~ UNESCO ~ SDG Academy

Artificial Intelligence and the Rule of Law
Free MOOC (since 2021)

Cetic.br ~ UNESCO ~ The Future Society



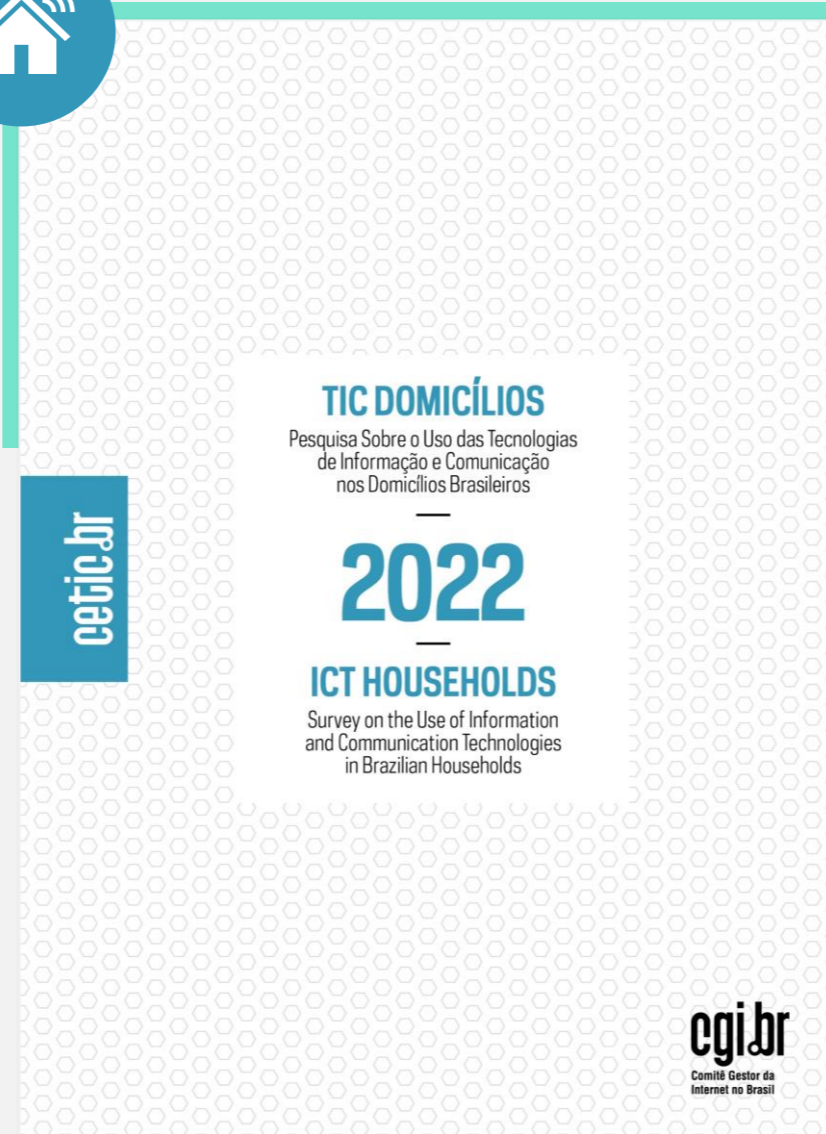
**MEASURING THE
INFORMATION
SOCIETY THROUGH
THE HOUSEHOLD
ICT SURVEY**



ICT HOUSEHOLD SURVEY

Meaningful connectivity; Access to information and communication technologies in the household; Computer use; Internet use; e-Government; e-Commerce; Mobile phone use; Online cultural activities; Digital skills; Online activities [communication, education, work, cultural activities, health etc.] [ITU framework].

ANNUAL ICT HOUSEHOLD SURVEY



MODULES

HOUSEHOLD LEVEL

- ICT devices
- Internet access / networks / WiFi / Speed
- Barriers for access

INDIVIDUAL LEVEL

- Use of ICTs
 - Use of Internet
 - Use of Mobile
 - Digital skills
 - Online activities
 - E-government
 - e-Commerce
-

ICT HOUSEHOLD SURVEY

SURVEY METODOLOGY



OBJECTIVE

To measure the ownership and use of information and communication technologies (ICT) in households and by individuals in Brazil 10 years old or older.



TARGET POPULATION

All permanent private Brazilian households and individuals 10 years old or older residing in permanent private Brazilian households.



COVERAGE

National



DATA COLLECTION

Computer-assisted personal interviewing (CAPI)



DATA COLLECTION PERIOD

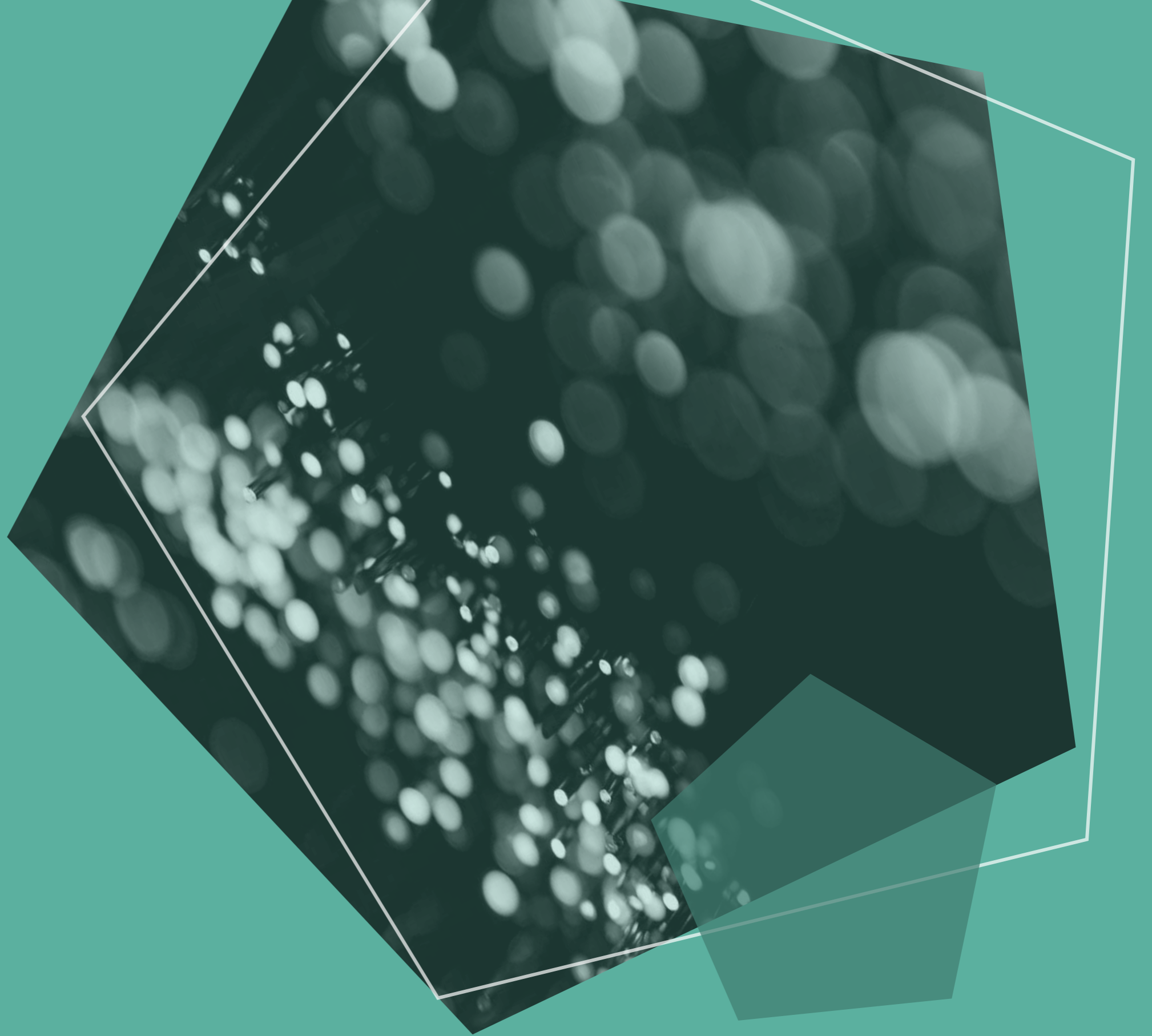
4~5 months

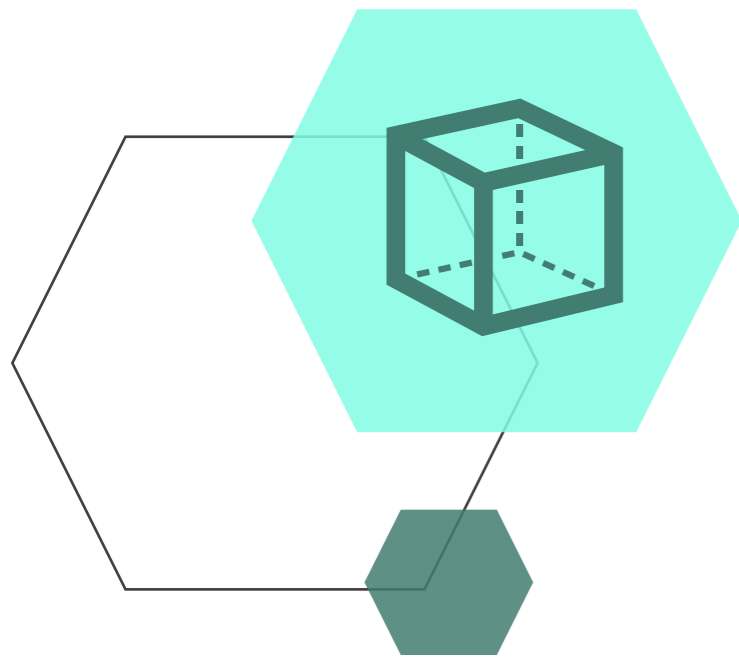


SAMPLE SIZE

32,000 households

**QUANTITATIVE
METHODS AND
INNOVATION
LAB**



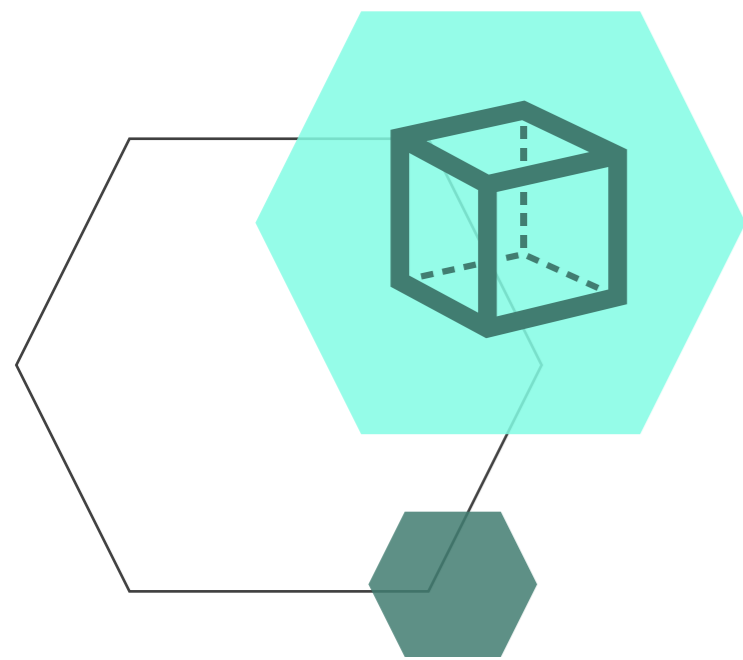


INNOVATION LAB

The Innovation Lab is the area that work in new projects, some demanded by other departments of Cetic.br, some demanded by statistics area and some related to international forums in which Cetic.br participates.

The current Innovation Lab activities are:

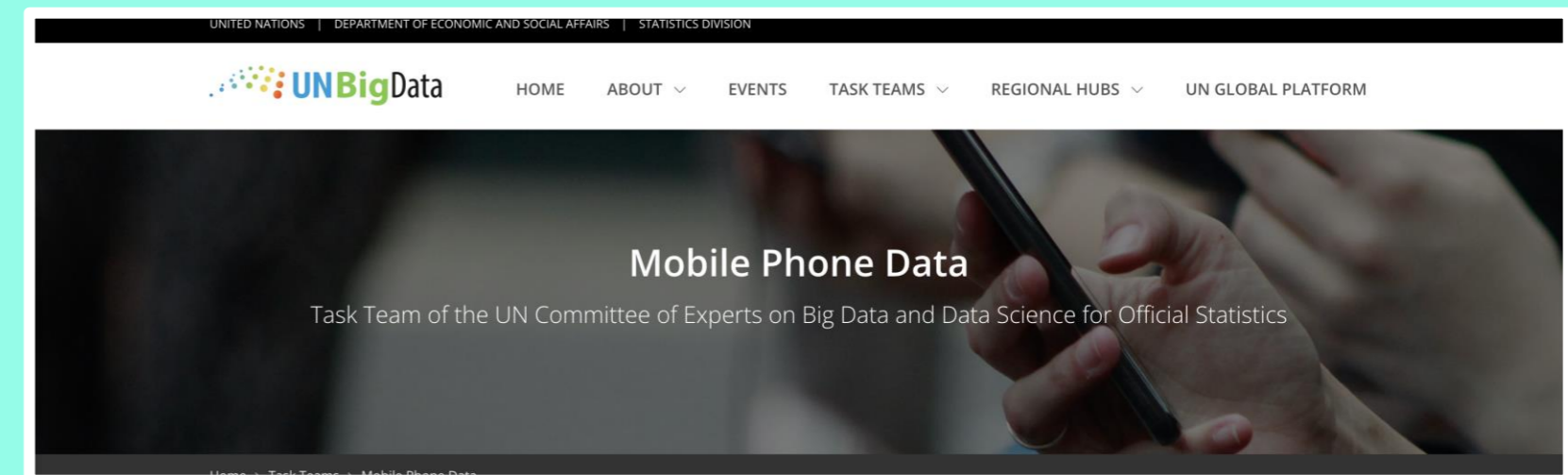
- ✓ Discussion of the proposals for a **new IDI (ITU)**.
- ✓ Discussion of the possibilities on **indicators about OTT (ITU)**.
- ✓ Calculation and evaluation of the new proposed **Skills indicator (ITU)**.
- ✓ Calculation and evaluation of proposed **CGI Global indexes (ITU)**.
- ✓ Data collection of **e-waste indicators** through web panel survey to understand and evaluate different questionnaires proposed for the theme in ITU discussions.
- ✓ Piloting **OECD AI Enterprises**
- ✓ **questionnaire** in São Paulo State in partnership with Seade Foundation (Official Statistics Institute for the São Paulo State).
- ✓ **Web scraping of Brazilian Enterprises** websites to understand statistics of e-commerce collected through web – compared to the traditional survey indicators.
- ✓ Study on how to **weight non-probability collected data** connected to administrative records and/or census.
- ✓ Participation in discussions about indicators on AI that will populate the
- ✓ **Brazilian AI Observatory.**
- ✓ Study of **new methodologies for small areas** based on differential weighting methodologies (demand for state estimators for Brazil on all the traditional surveys).
- ✓ Study of **statistical disclosure control techniques** to disseminate microdata on our organizations survey.
- ✓ **Support for experts in statistical analysis** of data collected by our surveys (Households, Enterprises, Health Facilities, Schools, NGOs, etc.).



Methodological guide on the use of mobile phone data: Measuring the Information Society (SDG ICT indicators)

Prepared by the ICT Data & Analytics Division (IDA) at the Telecommunication Development Bureau (BDT) of the International Telecommunication Union (ITU).

The Measuring the Information Society subgroup of the Task Team on Mobile Phone Data under the UN Committee of Experts on Big Data and Data Science for Official Statistics.



<https://unstats.un.org/bigdata/task-teams/mobile-phone/index.cshtml>

Pilot in Brazil

- IBGE
- Rio de Janeiro
- Indicators: Internet user and Internet coverage

Thank you!

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