



United Nations
Educational Scientific and
Cultural Organization

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Regional Center for Studies on
the Development of the Information
Society under the auspices of UNESCO

2016

Annual Report

Cetic.br

Regional Center for Studies
on the Development of the
Information Society



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Presentation

The Regional Center for Studies on the Development of the Information Society (Cetic.br) is a department of the Brazilian Network Information Center (NIC.br) that operates under the auspices of the United Nations Educational, Scientific and Cultural Organization (UNESCO). Since 2005, Cetic.br has produced trustworthy and relevant information for society. Indeed, data from surveys on access to information and communication technologies (ICT) and its use by the population has underpinned the design of numerous public policies. It has served not only to improve the Internet but also to promote digital inclusion and Internet use for overall well-being. This data has also played a key role for research in universities, both in Brazil and abroad.

Through its various activities, Cetic.br contributes significantly to the work of public administrators, researchers and other stakeholders. The Center develops programs related to capacity building programs on survey methodologies, publishes quantitative and qualitative studies that monitor the use of these technologies in various segments of society, and translates works produced by UNESCO into Portuguese and Spanish with the goal of disseminating knowledge on topics related to access to and use of ICT.

Thanks to its main activity of data production based on stand-alone ICT surveys, Cetic.br has consolidated its position as a reference for the production of ICT statistics. It also plays a major role in building capacities for the use of indicators and statistical data that foster the design, implementation and evaluation of public policies.

The Center also promotes debate in Latin America and Portuguese-speaking countries in Africa on the measurement of ICT. Together with government agencies, international organizations, civil society and academia, Cetic.br contributes to defining and revising ICT indicators, strengthening relationships and creating networks around the same objective: monitoring the development of information and knowledge societies.

NIC.br fully supports all efforts put forth by Cetic.br, and, by doing so, renews its commitment to producing periodic surveys and statistics for ICT that are of the highest technical rigor and aligned with international standards. We thus hope to contribute to the debate on themes related to the development of information and knowledge societies, as well as to encourage the sharing of experiences and best practices throughout Latin America and Portuguese-speaking Africa.

Demi Getschko - CEO

Brazilian Network Information Center (NIC.br)

Introduction

In 2016, Cetic.br celebrated 11 years of producing data and statistics on information and communication technologies (ICT), a source of reliable and relevant data for the design, implementation and monitoring of public policy that fosters ICT use in various segments of Brazilian society.

On a global scale, 2016 was marked by discussions on the United Nations' 2030 Agenda, which established a set of 17 Sustainable Development Goals (SDGs). The production of reliable and comparable statistics thus became even more important, as many international organizations deem ICT to be essential to the realization of the SDGs, which in turn serve to integrate and accelerate the development of the pillars of sustainable development: economic growth, social inclusion and environmental sustainability. What's more, specialized ICT surveys such as those carried out by Cetic.br are vital tools for monitoring the progress of countries toward achieving the SDGs.

In a context where ICT measurement has gained importance worldwide, Cetic.br has increased the number of workshops it holds throughout Latin America and Portuguese-

speaking Africa, with the goal of raising awareness and building capacities relative to the production of ICT statistics and its use by key stakeholders. These events are aimed at public administrators, researchers, and organizations of civil society and international organizations. In 2016, five capacity-building workshops were held. They covered theoretical concepts and the development of practical skills in survey methodologies, and fostered debate and the sharing of experiences among ICT data users. These workshops play an important role in the dissemination of methodologies and ICT measurement practices, and serve to bring data producers and users together.

Another noteworthy activity – in 2016, the Center participated actively in forums aimed at the discussion of ICT indicators such as those hosted by the International Telecommunications Union (ITU), the United Nations Economic Commission for Latin America and the Caribbean (UN ECLAC), the Organisation for Economic Co-operation and Development (OECD), and the United Nations Educational, Scientific and Cultural Organization (UNESCO).

Cetic.br published seven books in 2016: ICT Households, ICT in Education, ICT Kids Online and ICT in Health, produced annually; ICT Enterprises and ICT Electronic Government, produced biennially; and ICT Providers, thus fulfilling its role as a knowledge producer. Also in 2016, the Center conducted a new survey – ICT in Culture – that aims to produce indicators on ICT use by cultural institutions. The survey will be carried out every two years and will look at the consumption of culture and its relation to information and communication technologies. Furthermore, to advance the understanding of the link between ICT and society, Cetic.br will publish sectorial studies that include thematic discussions on ICT and culture based on a qualitative perspective.

Along these lines, Cetic.br has closely followed important debates that have gained prominence as information and knowledge societies develop further. It has initiated discussions on topics related to the 2030 Agenda: ICT and gender, ICT for people with disabilities, the use of big data to produce relevant statistics and smart cities. Through different means – new survey projects, partnerships, publications and events –, Cetic.br has begun addressing these topics and has strived to promote

informed debate among national and international stakeholders so as to develop more inclusive information and knowledge societies.

The surveys produced by the Center have led to new agreements with Brazilian government entities, international organizations, and academic institutions in Brazil and abroad, thus bearing testimony to their relevance. There are also plans for the provision of access to micro-data. This reinforces the Center's commitment to disseminating information and knowledge and further expanding the reach of the survey methodologies and their results. The Center also provides access to the ICT indicator database through a data visualization portal on the Web (<http://data.cetic.br>). This tool enables interactive and dynamic browsing, facilitating access to statistical data from the surveys and providing them in an open format.

Cetic.br's 2016 activities are well aligned with its mission as a UNESCO Category 2 Center, i.e., contribute to building inclusive information and knowledge societies in Latin America and Portuguese-speaking countries in Africa. The main accomplishments are detailed herein.



Main Lines of Action

Capacity Building Programs on Survey Methodologies

This line of action focuses on capacity-building programs related to survey methodologies used in the production of ICT-related statistics and indicators. The activities are also intended to raise awareness among stakeholders on the role of measurement in designing and monitoring public policies that foster the development of information and knowledge societies.

Knowledge Center

This line of action aims to produce data through ICT surveys and disseminate information and knowledge, including survey methodologies, indicators, data analyses and thematic ICT publications.

Laboratory of Ideas

Cetic.br also serves as a platform for sharing experiences and encouraging debate among key stakeholders and groups of experts who come together to discuss emerging issues related to the development of information and knowledge societies. To this end, the Center promotes public debate, lectures, and discussion panels with experts that explore the social impacts of ICT.

Culture and Ethics on the Internet

The social dimension of the Internet has drawn attention to topics such as culture and ethics. For this reason, Cetic.br is interested in the intersection of these issues and is conducting studies related to Internet use and its social implications. The new "ICT in Culture" survey bears testimony to the Center's commitment to the study of the relationship between the Internet and society.

2016 Activities

Production of ICT Data and Statistics

Since its inception, Cetic.br's main attribution has been the conduction of specialized surveys on access to and use of information and communication technologies (ICT) and its adoption by different sectors of Brazilian society.

Cetic.br manages a set of four annual stand-alone ICT surveys – relative to households, education, health, and children – six others that are published periodically – relative to enterprises, electronic government, nonprofit organizations, providers and culture. These projects cover critical themes related to the development of information and knowledge societies, also generating relevant data to monitor the new objectives and targets defined by the United Nations (UN) in its 2030 Agenda for Sustainable Development.

In 2016, more than 500 indicators were published on ICT access and use in Brazil, in addition to seven bilingual editions (Portuguese/English) corresponding to the following projects: ICT Electronic Government, ICT Households, ICT Enterprises, ICT in Education, ICT Kids Online Brazil, ICT Providers, and ICT in Health.

Throughout the year, three public debates were organized on the launch of ICT survey publications, addressing the following topics:

ICT Electronic Government

Challenges to ICT adoption in Brazilian municipalities: infrastructure, transparency and participation

ICT in Education and ICT Kids Online

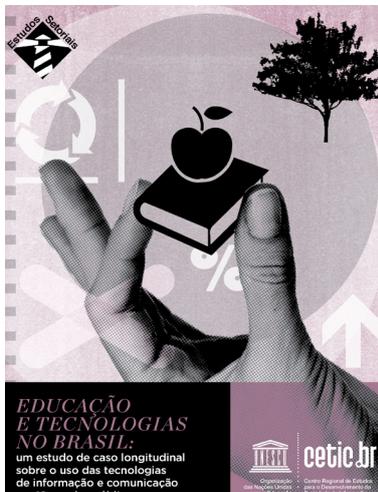
From research to public policy: challenges of media and information literacy for children.

ICT in Health

The adoption of ICT in the health sector: taking stock of progress and the next steps for public policy in Brazil.

In addition to the ICT survey publications, the Center published two editions of the Internet Sector Overview Report: the first about the universalization of Internet access, exploring data from the ICT Households survey; and the second on Internet access providers, based on data from the ICT Providers survey.

Inaugurating the Sectorial Studies series, a collection dedicated to discussing emerging themes relative to the interface between ICT and society, a publication was launched to address the use of technology in Brazilian public schools.



The book “Education and Technologies in Brazil: a Longitudinal Case Study on the Use of Information and Communication Technologies in 12 Public Schools” (*Educação e tecnologias no Brasil: um estudo de caso longitudinal sobre o uso das Tecnologias de Informação e Comunicação em 12 escolas públicas*), launched in April 2016, inaugurates a new series of Cetic.br publications: the Sectorial Studies. This work is the result of a qualitative study conducted between 2010 and 2013 in selected public schools in the Brazilian states of Paraná, São Paulo and Pernambuco. Based on qualitative methods – direct observations and in-depth interviews – the data collection in the field was conducted by researchers with principals, teachers, students and other school actors in the school community. The book presents first-hand data on the implementation of educational policies and their possible effects on the types of ICT use in school management and pedagogical practices. To this end, the publication examines the conditions of ICT infrastructure in schools, different forms of ICT use, and how these technologies are employed in school management as well as to carry out pedagogical activities. It also analyzes the ICT skills of managers, teachers and students, as well as training programs provided to teachers. This book is available free of cost for download on the Cetic.br website.

More information at cetic.br/publicacao/educacao-e-tecnologias-no-brasil

Public Debates

In 2016, the activities relative to the “Laboratory of Ideas” line of action were once again marked by the valuable expert meetings, which consist of a group of important experts who contribute significantly to the ICT surveys conducted by the Center. Furthermore, throughout the year, various public debates were organized in the context of the ICT survey publications launch, promoting the discussion of relevant themes among society, public administrators and opinion-makers.

“It is important to promote discussion and think about where we are headed and how the Internet

effects society. Good ideas emerge from such debates, which are also crucial to sustaining relevant concepts;”

emphasized Demi Getschko, CEO of NIC.br

The public debates organized by Cetic.br on topics related to the development of the information and knowledge societies always use ICT survey data as the trigger for discussion. Such events also serve as transparency and legitimacy mechanisms for the work conducted by the Center. In this context, special mention goes to the three main events that took place in 2016.



Challenges to ICT adoption in Brazilian municipalities: infrastructure, transparency, and participation.

The 2015 edition of the ICT Electronic Government survey was launched in October 2016 at an event that promoted a debate on ICT adoption in Brazilian cities. The event brought together public managers, academics, researchers, and representatives of the private sector and civil society and took place at the Getulio Vargas Foundation São Paulo Business School (FGV-EAESP) auditorium. The participants discussed the challenges of ICT use relative to dimensions such as infrastructure, transparency, and participation in the context of cities.

Wagner Silva de Araujo (Brazilian Ministry of Planning, Development and Management), Professor Marco Antonio Teixeira (FGV-EAESP), Fernanda

Campagnucci (Municipal Government of São Paulo), Professor Robson Zucolotto (Federal University of Espírito Santo – UFES), and professor José Carlos Vaz (University of São Paulo – USP) participated in the debate, which was mediated by Professor Maria Alexandra Cunha (FGV-EAESP).

In addition to providing relevant ICT indicators, the ICT Electronic Government 2015 survey also presents original articles and analyses on ICT use in two types of organizations: federal and state government organizations in all the spheres (the executive, legislative, judicial branches and the Public Prosecutor’s Office) and local government (municipal executive branch).



From research to public policy: challenges of media and information literacy for children

The 2015 editions of ICT Households, ICT in Education, and ICT Kids Online Brazil surveys were launched in November 2016 accompanied by a debate with renowned experts on the use of the Internet by children. The event was part of the “Global Media and Information Literacy Week 2016”, promoted by UNESCO with the support of NIC.br/Cetic.br.

Professors Divina Frau-Meigs (Sorbonne Nouvelle, Paris), Ellen Helsper (London School of Economics and Political Science) and Regina de Assis (Brazilian Ministry of Education) participated in the debate, which was mediated by Juliana Doretto (Cetic.br). The discussion addressed crucial issues in media and information literacy (MIL), such as the development of skills, challenges to measurement of MIL, international experiences and studies, and policymaking.

The adoption of ICT in the health sector: taking stock of progress and the next steps for public policy in Brazil

The third edition of the ICT in Health survey was launched during the XV Brazilian Conference on Health Informatics (CBIS 2016), held in the city of Goiânia (Goiás, Brazil) in November 2016 and had a debate with experts on the results of the study.

Beatriz de Faria Leão (Brazilian Health Informatics Association – SBIS), Luiz Ary Messina (Telemedicine University Network/ National Education and Research Network – RUTE/RNP), Antonio Carlos Onofre de Lira (Sírio Libanês Hospital) and Celina Maria de Oliveira

(National Regulatory Agency for Private Health Insurance and Plans – ANS) participated in the event, which was mediated by Professor Heimar Marin (Sírio Libanês Hospital and Federal University of São Paulo – UNIFESP). The debate covered progress and challenges to the adoption of telehealth and telemedicine services, electronic patient records, capacity-building of professionals in health informatics, and ICT infrastructure in hospitals and other care facilities.

Capacity-Building and raising awareness

In 2016, Cetic.br renewed its commitment to organizing capacity-building activities on measuring information and knowledge societies. Throughout the year, there was a significant increase in the demand for activities of this nature, whether to promote discussions on survey methodology, define ICT indicators, or raise awareness on the importance of producing ICT data for policymaking.

The capacity-building and awareness-raising workshops have proven to be effective in bringing closer together the main stakeholders involved in the production,

analysis, and use of ICT indicators. Such participants include national statistics institutes, ministries, regulatory entities and international organizations, institutions with which the Center has been strengthening its partnerships, as is also the case with professionals, public managers, research centers, NGOs, foundations, enterprises, and universities. These meetings not only promote the development of technical skills for survey methodology, but also encourage the debate on the importance of ICT statistics for evidence-based policymaking and the production of internationally comparable data.

Summer School on Development, New Technologies, and Creative Innovation

In June 2016, Barcelona (Spain) hosted the third edition of the Summer School on Development, New Technologies and Creative Innovation. The event was organized by the Barcelona Institute of International Studies (IBEI), the Development Bank of Latin America (CAF), and the United Nations Economic Commission for Latin America and the Caribbean (UN ECLAC). The school brought together participants from Latin American countries and Spain interested in discussing the role of creative and technological innovation for development, including professionals, political leaders,

public managers, multilateral agencies, research centers, NGOs, foundations, enterprises, and universities.

The 2016 Summer School received the support of NIC.br/Cetic.br, which sponsored one participant and two lecturers from Brazil who discussed applications of big data in enterprises. The Center's participation in the event helped strengthen its partnership with ECLAC in initiatives aimed at capacity-building. This meeting was also an opportunity to convene Latin American stakeholders that are involved in the monitoring and producing ICT statistics.



The Importance of Measuring ICT for the Development of the Information Society in the Context of the UN Agenda for Sustainable Development

In April, a workshop was held in Santo Domingo (Dominican Republic) with 120 participants involved in ICT data production, analysis and use, including civil servants, researchers, university students, businessmen, and representatives of civil society organizations. The event was a result of the partnership between the Alliance for Affordable Internet (A4AI), the Dominican Institute of Telecommunications (INDOTEL), the National Statistics Office (ONE) of the Dominican Republic and Cetic.br.

The main goal of the meeting was to sensitize participants to the importance of producing ICT statistics in the Dominican Republic to measure the information society, using the work conducted in Brazil by Cetic.br as a reference. During the workshop, the participants were able to discuss the main demands for and challenges to producing ICT indicators in the country's various sectors.

2016 Workshop on ICT Statistics in Education

Held in November in São Paulo, Brazil, this event was organized by NIC.br/Cetic.br and the UNESCO Institute for Statistics (UIS), with the goal of discussing the collection of ICT indicators in the context of education.

The workshop brought together 39 participants, including representatives of the ministries of education of 19 Spanish-speaking countries; national statistics institutes in Brazil, Costa Rica, Cuba, Mexico, Dominican Republic, and Uruguay; and other professionals from the UNESCO Mercosur and UNESCO Brazil offices. The aim of the meeting was to foster the production of ICT statistics in the field of education at the national level, based

on a common methodology that allows for international comparison within the context of the 2030 Agenda. In this sense, the UIS presented its new administrative survey project on ICT use in educational institutions and discussed with participants possible challenges to data collection following the proposed methodology. During the event, the group also discussed the concept note developed by Cetic.br and UIS which proposes a methodological framework for an ICT in Education survey to measure the use of ICT in schools. This framework is aimed at providing a reference for countries willing to collect data in this field of study.

Capacity-Building Workshop: Applying ICT Indicators in the Health Sector

At the end of October, the Capacity-Building Workshop for Measuring ICT in the Health Sector (*Taller de Capacitación para la Medición de las TIC en el Sector Salud*) was organized by Cetic.br, the Ministry of Public Health (MSP) of the Dominican Republic, the Pan American Health Organization/Regional Office of the World Health Organization (PAHO/WHO) and the National Statistical Office (ONE) of the Dominican Republic.

The workshop took place in the city of Santo Domingo (Dominican Republic) and involved 40 representatives of the MSP and ONE,

and its purpose was to develop the national capacity for producing statistics on access to ICT and its use in the health sector, fostering the production of consistent, comparable, up-to-date, and representative national data. To this end, the survey framework used by the ICT Measurement Working Group of the Statistical Conference of the Americas (SCA) was presented in the Module for Measuring ICT Access and Use in the Health Sector; also presented were the lessons learned from the Brazilian experience in conducting the ICT in Health survey.

VI NIC.br Annual Workshop on Survey Methodology

The VI Annual Workshop on Survey Methodology was held in April 2016 in São Paulo, Brazil, bringing together about 60 representatives from academic, government, and international organizations. The goal of the event was to stimulate debate among ICT data producers and users, address theoretical and practical concepts in survey methodology, and foster the exchange of experiences among participants. The workshop included lectures, interactive activities and presentations of practical examples and case studies, covering themes such as “big data as a new source of data for development” and “uses and applications of

big data”. The participants discussed concepts relative to and opportunities for the use of big data for the design and monitoring of policies, as well as challenges to using these data sources to produce official statistics. Additionally, themes such as applications in for healthcare, publishing data on the Web, and data journalism were debated with much interest.

The event also promoted short courses on quantitative methods for the evaluation of public policies and on the use and implementation of Web questionnaires to carry out surveys, covering themes ranging from layout to the advantages and disadvantages of this type of approach.

ICT For Development

With the goal of expanding its actions to encompass other themes relevant to ICT and the development of information and knowledge societies, Cetic.br strives to promote and participate in national and international events relative to the measurement of ICT access and use in various areas. In 2016, the Center was present at more than 50 events - forums,

conferences, seminars, and meetings - that touched on important emerging debates that have gained prominence in the global context, such as the intersection between ICT and gender, the promotion of smart cities, and the increasing use and implications of mobile technologies. Next, we present a brief list of relevant events in which Cetic.br actively participated in 2016.



Internet Forum

In July, CGI.br promoted the VI Brazilian Internet Forum in the city of Porto Alegre, Rio Grande do Sul, Brazil. The event aimed to bring together participants from the government, business, and academic sectors, civil society, and all those interested and involved in discussions and issues regarding the Internet

in Brazil and the world. Cetic.br organized a workshop on the theme "The challenge of digital inclusion in Brazil: access, consumption and production of cultural assets through ICT," in which the preliminary results of the qualitative approach to the ICT in Culture survey were discussed with the public.

Internet Governance Forum

The 2016 Internet Governance Forum (IGF) took place in December in Guadalajara, Mexico, and addressed the theme "enabling inclusive and sustainable growth", given the context of the UN Agenda for Sustainable Development. Cetic.br participated in three important panels

relative to measuring ICT: 1) Broadband Policies for LAC: A digital economy toolkit; 2) Global Kids Online: From research on children's rights in the digital age to national and international policy; 3) Initiatives Connecting the Unconnected: Where's the data?.

Angolan Seminar on ICT and Gender: Girls in ICT

The fourth "Girls in ICT" seminar, organized by the Angolan Ministry of Telecommunications and Information Technology (MTTI) in Luanda, the capital city, marked the celebration of Girls in ICT Day, an initiative promoted by the International Telecommunications Union (ITU) aimed at raising awareness among girls and young women on the relevance of digital skills for a successful professional career and encouraging them to consider studies and careers related to information

and communication technologies (ICT). Over 300 people participated in the event with renowned local authorities and promoted an important discussion on the importance of including a gender perspective in the design of ICT policies.

Of particular note is thematic convergence in the discussion of ICT and gender issues. In addition to being the object of study for Cetic.br's ICT & Gender survey, this is also a priority agenda for UNESCO.

ICT & Gender Survey

In 2016, Cetic.br began fieldwork for the ICT & Gender survey, a qualitative study developed in partnership with the Latin American School of Social Sciences (FLASCO) in Buenos Aires. The study seeks to understand Internet use

by children between 10 and 17 years old from a gender perspective, addressing issues such as access to technologies, activities, opportunities, privacy, self-representation on social networking sites, and gender-related violence.

XV Meeting of the Executive Committee of the Statistical Conference of the Americas (SCA) of ECLAC

Cetic.br participated in the fifteenth meeting of the executive committee of the Statistical Conference of the Americas, held in June. The meeting, which was aimed primarily at the directors of the official statistics organizations of member states, established the activities plan for 2016-2017, including the plan of action for the

ICT working group coordinated by the National Statistics Office of the Dominican Republic. Additionally, an entire day of sessions was reserved for discussion of the Sustainable Development Goals (SDGs), in particular for addressing the progress and challenges in their measurement.

Ministerial GEALC Meeting

Cetic.br participated in the sixth Ministerial Meeting on Electronic Government in Latin America and the Caribbean (GEALC) and the tenth Annual Meeting of the Network of e-Government Leaders of Latin America and the Caribbean (RED GEALC), conducted on December 1 and 2, 2016 in Santiago, Chile. The aim of the RED GEALC is to

facilitate the generation and dissemination of knowledge in the area of electronic government and foster cooperation among countries in the region. The meeting included a workshop on the measurement of indicators for electronic government. Cetic.br presented the ICT Electronic Government survey results, methodology, and the indicators produced in Brazil.

World Summit on the Information Society Forum

Cetic.br participated in the World Summit on the Information Society (WSIS), the biggest annual event on the theme ICT for development, which is organized by the International Telecommunications Union (ITU), UNESCO, the United Nations Development Programme (UNDP), and the United Nations Conference on Trade and Development (UNCTAD). Held at the ITU headquarters in Geneva from May 2 to 6, 2016, the event addressed inclusive

ICT initiatives in priority areas of the Sustainable Development Goals (SDGs), such as health, education, women's empowerment, and the environment. Cetic.br participated in two sessions: the first was dedicated to sharing the Brazilian experience in conducting the ICT Kids Online Brazil survey, and the second presented the potential of ICT use in attaining the SDGs based on people-centered development.

Mobile Learning Week

Cetic.br participated in the Mobile Learning Week, an annual event held at the headquarters of UNESCO, in Paris (France), and that addressed the theme of "Innovation and Quality" in 2016. One of the main events held by UNESCO in the field of education and ICT, the event aim is to bring

together experts from around the world to discuss the use of mobile technologies – portable computers, mobile phones, and tablets – as a way to promote access to education and accelerate learning among children, youths, adults, and older adults, especially in low-income communities.

Regional Conference on ICTs for Persons with Disabilities in Central America

In November 2016, the Regional Conference on ICTs for Persons with Disabilities was organized by UNESCO in San José, Costa Rica, aligned with its mandate to promote the building of inclusive information and knowledge societies and its commitment to work with member states in implementing the 2030 Agenda. Participants included representatives of invited governments (Panamá, Costa Rica, Nicaragua, El Salvador, Honduras and Guatemala), civil society organizations involved with persons with disabilities, universities, and private enterprises in the field of accessible technological solutions.

Over the three days of the event, UNESCO worked with relevant stakeholders from these countries to discuss and produce input to create a regional action plan that can be used to generate work and educational opportunities for persons with disabilities.

Cetic.br was invited by UNESCO to present projects being developed at the Center relative to the production of indicators in the field of ICT and persons with disabilities, in conformity with international references. In addition to the Cetic.br representative, NIC.br also sponsored the participation of three experts from the region, who contributed to the discussion with their expertise on the subject.

Regional Symposium “Conectados al Sur: Chile”

In May, the city of Santiago hosted the second regional “*Conectados al Sur: Chile*” symposium, an initiative by Digitally Connected, a global network for studies on children, youths and digital media. The aim of the meeting was to map and discuss the state of research and relevant practices at the national, regional and international levels, in addition to promoting the exchange of ideas and experiences and encouraging collaboration among participants. This event focused on themes relative to Internet access and use by vulnerable communities

in Latin America and the Caribbean, such as youths living in rural areas, LGBTQ youths, ethnic and racial minorities, young persons with disabilities, and girls and young women, among other groups. Issues such as inequality in Internet access, safety risks (for example, cyberbullying) and privacy, hate speech, social exclusion, youth rights and empowerment, and skills were addressed. In addition to participating in the discussions, Cetic.br contributed by presenting an overview of the indicators of Internet use by children in the region.

2016 APCEIU Global Citizenship Education Network Meeting

The city of Seoul, South Korea, hosted the Global Citizenship Education (GCED) Network Meeting from November 9 to 11, organized by the Asia-Pacific Centre of Education for International Understanding (APCEIU), a UNESCO Category 2 Center. Participants included expert representatives from 36 institutions and organizations from all the continents. The aim of the event was to share ideas and discuss strategies for implementing initiatives that catalyze GCED at the national, regional, and international levels, along with challenges to its measurement.

Based on the shared perspective that education is the foundation for fostering understanding among peoples, cultures, and

nations for sustainable development, the participants discussed ways to collaborate through the creation of an international network to promote GCED. The theme gained prominence in the international context and was incorporated into SDG 4: "Ensure inclusive and quality education for all and promote lifelong learning."

Cetic.br took part in the discussion and contributed with a presentation on the importance of measurement for the production of relevant data for policymaking, with emphasis on the ICT in Education project and the possibility of incorporating GCED-related themes into the currently adopted methodology.

International Symposium on the Measurement of Digital Cultural Products

Organized by the UNESCO Statistical Institute (UIS) and the Culture and Communications Observatory of Quebec (*Observatoire de la culture et des communications du Québec*), the symposium was held in May in Montreal, Canada. The goal of the event was to discuss and analyze issues, methods, practices, and innovations relative to the production of cultural and

digital products, as well as the shift to digital methods of creating, producing, and disseminating cultural works and methods for their statistical measurement, emphasizing the importance of statistics about culture. Cetic.br presented the ICT in Culture survey and the preliminary findings of the project's qualitative phase and detailed the project's quantitative phase.

First Latin America and Caribbean Open Science Forum

The Latin America and Caribbean Open Science Forum (CILAC) is organized by UNESCO and aligned with the 2030 UN Agenda for Sustainable Development. At the first meeting, which occurred in September 2016 in Montevideo, Uruguay, the objective of the forum was to promote dialogue among the sciences, politics, and citizens to promote better development scenarios for the population.

Cetic.br was invited by UNESCO to coordinate a thematic panel on methodologies and projects to measure ICT skills in education. The aim of this panel was to discuss data production to measure the implications of ICT in the context of education and the development of ICT skills, exploring the experience of participating countries in the area. The materials produced by Cetic.br, such as the ICT Households, ICT Kids Online, and ICT in Education surveys, were made available by UNESCO to the

participants in the event. In addition to this panel, Cetic.br also participated in a round table called "ICT as a strategy for social transformation - youth, citizenship and sustainable development: The UNESCO project 'Seven complex lessons in education for the future'". The aim of the round table discussion was to promote reflection on the potential of ICT in developing a culture of coexistence and solidarity among younger generations, promoting social transformations based on dialogue, collective intelligence, mutual understanding and global citizenship. Also discussed were ways to foster partnerships to implement the UNESCO project noted above. During the event, Cetic.br also presented the ICT in Education project at a meeting with ten ministers of science and technology from Latin America and the Caribbean countries.

Santa Catarina Conference on Digital Cities

In June, Cetic.br participated in the first Santa Catarina Conference on Digital Cities (*I Conferência Catarinense de Cidades Digitais*), which was held in Florianópolis in Santa Catarina, Brazil. The event was organized by the Digital City Network and the Florianópolis Municipal Secretariat for Science and Technology. The objective was for public managers to discuss and

present how technology has driven various areas of municipal action and its cross-sectionality with public administration. With the intent of promoting discussion and knowledge exchange among experts, authorities and managers, Cetic.br presented the main findings of the ICT Households and ICT Electronic Government surveys.

Mobile Technology-Based Services for Global Health and Wellness: Opportunities and Challenges

In October, the Organisation for Economic Co-operation and Development (OECD), the Harvard Global Health Institute, the Swedish innovation agency Vinnova, Canada Health Infoway, and the Global Coalition on Ageing held a workshop on mobile health (mHealth) in Boston, Massachusetts. The event was aimed at academics and researchers, organizations and enterprises in the

health sector, as well as doctors, and other stakeholders involved with ICT adoption in the health sector. Cetic.br participated in the discussion on the demands for data for evidence-based policymaking, presenting the lessons learned from the pilot for the model survey proposed by the OECD for measuring ICT adoption and use in health, which was adopted in Brazil in 2013.

Debating Methodologies and ICT Indicators

Cetic.br follows the methodological guidelines set forth by international organizations that measure and analyze ICT statistics, allowing for the international

comparability of its indicators. Furthermore, it actively participates in national and international forums to review methodological standards and define ICT indicators, as listed below.

Methodology Symposium of Statistics Canada (STATCAN)

The annual Methodology Symposium took place in Canada in March and was organized by STATCAN, the organization responsible for official statistics in the country. Participants made presentations about methodological progress

and challenges for the production of public and official statistics. The main discussion addressed the use of big data databases, which are not produced with the intent of providing information for the production of official statistics.



Expert Group on ICT Household Indicators

The mission of the Expert Group on ICT Household Indicators (EGH) is to bring together representatives from various countries to discuss indicators for measuring ICT in households. Moderated by Alexandre F. Barbosa, the manager of Cetic.br, the group has exchanged experiences on ICT indicators on an online forum since 2012 and meets in person once a year to consolidate the results of these discussions.

The fourth face-to-face meeting of the EGH took place in Geneva, Switzerland in October 2016, and was attended by representatives of national statistical offices, ministries, regulatory agencies, international organizations, and the private sector. The meeting was organized by the Telecommunication Development Bureau of

the International Telecommunication Union (ITU) to discuss methodologies for collecting thematic indicators related to electronic commerce, ICT use by persons with disabilities, and ICT skills, among others. Cetic.br contributed to the forum with a presentation about its dissemination strategy, including the Center's data portal. The EGH Meeting was held back-to-back with the 7th Meeting of the Expert Group on Telecommunication/ICT Indicators (EGTI), in which Cetic.br also participated. The topics included ITU price baskets; IoT indicators; data collection on m-banking services; fixed network coverage indicators; and the guidelines for measuring international connectivity. Additionally, the EGTI and EGH joint session discussed the use of big data in official statistics and the ICT Development Index (IDI).

Working Party on Measurement and Analysis of the Digital Economy (WP-MADE)

Since 2010, Cetic.br has participated in meetings of the Working Party on Measurement and Analysis of the Digital economy (WP-MADE), held at the headquarters of OECD in Paris (France). The group is an opportunity for member states and partners, other international organizations, and nongovernment stakeholders to exchange information and experiences on methods for collecting, compiling, analyzing and presenting data on the digital economy.

The aim of the group is to address themes related to measurement of the digital

economy and analysis of how policies contribute to the digital economy and socioeconomic development. To this end, WP-MADE debates statistical methodologies and indicators to improve the production of data and evidence for policymaking, creating value for industry based on the adoption of ICT, innovation, job creation, and access to and use of digital technologies by individuals, enterprises, and governments. The work conducted by WP-MADE includes discussion of the impacts of digital economy policies on productivity, innovation, development of skills, and societal well-being.

Green Indicators for Enterprises

Organized within the framework of the project "Towards a set of indicators for greener production" ("*Hacia un conjunto de indicadores para una producción más verde*"), headed by ECLAC and the Canadian International Development Research Center (IDRC), this workshop was organized by ECLAC and the Brazilian Institute

for Geography and Statistics (IBGE) and held in April 2016 in Rio de Janeiro. The event aimed at reviewing the model questionnaire used to collect statistical information on environmental practices in enterprises in Latin America and the Caribbean and featured participation by representatives of national statistical offices in the region.

Third Global Conference on Big Data for Official Statistics

The third Global Conference on Big Data for Official Statistics was held in Dublin, Ireland on August 30 and September 1, 2016. Its goal was to encourage progress in the use of alternative and nontraditional data sources. In 2014, the UN established a global working group with the mandated of developing

methodologies and sharing experiences in using big data - that is collected in administrative processes and records - to produce official statistics directly or as an auxiliary to traditional surveys, which are currently the most common source of information in official statistics organizations worldwide.

World Telecommunication/ICT Indicators Symposium

The World Telecommunications/ICT Symposium was organized by the International Telecommunication Union and hosted by the Government of Botswana, in Gabarone, in November 2016. The objective of this annual symposium is to debate current and emerging issues relative to ICT data and statistics and provide strategic guidance to the national and international community in the field of ICT statistics in addition to its role in policymaking. The Symposium received around 400 participants from 60 countries, from public and private

organizations. The event featured important thematic discussions related to the 2030 Agenda, including the concept of Leaving No one Behind, new data needs in the context of the SDGs, among others. In addition, the conclusions of the work carried out by the EGTI and EGH were also presented at the Symposium. In 2016, Cetic.br's participation consisted of presentations in the panels "New data needs for the SDGs: Update on the Expert Group on Household Indicators (EGH)" and "Better ICT data for better policymaking: Stakeholder perspectives."

Third National Conference for Producers and Users of Statistical, Geographical and Environmental Information (INFOPLAN)

In December, the third National Conference for Producers and Users of Statistical, Geographical and Environmental Information (INFOPLAN) took place in Rio de Janeiro to evaluate the production, dissemination and use of statistical and geoscientific information. The event brought together data producers and users involved in the production, dissemination and use of

information needed to depict the country's reality for policymaking and research, in addition to technicians and researchers, and representatives of government organizations, research institutes, civil society organizations, scientific organizations. The main theme of the conference was "coordination for planning" and Cetic.br participated in three panels on producing statistics about ICT access and use.

IBGE Methodology Seminar

Organized annually by the Brazilian Institute of Geography and Statistics (IBGE), the IBGE Methodology Seminar (Seminário de Metodologia do IBGE, SMI) took place in November. The purpose of the event was to promote discussion and reflection about progress, challenges and perspectives on

methodology relative to the production of statistical and geoscientific information. The SMI gathers researchers and technicians from IBGE and public and private organizations, representatives of national statistics institutes from countries in the region, and others interested in the theme.

Cooperation Networks

Partnerships and cooperation agreements are essential to carrying out and improving Cetic.br's activities. In 2016, the Center further consolidated national, regional and international networks, broadening the exchange of experiences on themes relative to the measurement of technologies and

their socioeconomic impact. At the regional level, Cetic.br strengthened cooperation by fostering the sharing of knowledge and common frameworks for the collection of comparable data, and, consequently, allowing for comparative analysis. The Center is currently part of four regional thematic networks.

Latin America Kids Online Network

The Latin America Kids Online Network meets regularly to debate methodological issues and promote joint analyses of topics related to ICT use by children. In 2016, two meetings took place in Latin America, one in Chile and the other in Brazil, with the participation of representatives from seven countries. In addition to actively participating in EU Kids Online academic forums, Cetic.br is also part of Global Kids Online project, an initiative launched by the London School of

Economics (LSE), the UNICEF Office of Research – Innocenti, and the EU Kids Online network. The Center developed a module called "Survey Sampling & Administration" for the project's Methodological Guide, aimed at promoting a methodological framework for the production of reliable and high-quality statistics for measuring Internet access by children, in addition to providing practical guidance for managing surveys on the theme.

Regional Collaboration for ICT Measurement in Health

A network that has been growing stronger in recent years lies within the thematic scope of technology adoption in the health sector. In 2016, a workshop was conducted on this theme in the Dominican Republic, together with local institutions and PAHO/WHO. Also, the results of the second edition of the survey on ICT and Health in Uruguay were launched, with the support of Cetic.br. Still in the field of health, the Center has

shared with other countries its experience in conducting the ICT in Health survey in Brazil and lessons learned. An example of this was Cetic.br's contribution at the event "Mobile technology-based services for global health and wellness: Opportunities and challenges," promoted by the OECD, the Harvard Global Health Institute, Swedish innovation agency Vinnova, Canada Health Infoway, and the Global Coalition on Aging.

Supporting the Electronic Government in Latin America and the Caribbean Leadership Network

Cetic.br also participated in meetings of the Network of e-Government Leaders of Latin America and the Caribbean (RED GEALC), sharing its experience with the ICT Electronic Government survey with other participating countries. This partnership occurred in two events in Chile, at which the Center presented an executive summary of its experience measuring ICT within the context of electronic government in order to provide a framework for other countries that wish to start measuring this theme.

In addition to regional networks, Cetic.br's surveys rely on the contribution of a large network of local experts who voluntarily collaborate in the planning of projects and the analysis and dissemination of results. Each survey has a corresponding group of experts that includes representatives from the government sector, academia, civil society organizations, international organizations and the private sector.

This multi-stakeholder group of experts confers greater legitimacy on the research process and adds even more rigor and transparency to the various steps of data production. In 2016, six of the previously established expert meetings were held, involving over 200 collaborators in data production on ICT use by Brazilian society.

In 2016, new agreements were signed with government agencies, academia and international organizations for access to and use of micro-data from the surveys produced by Cetic.br. These are key stakeholders in the production of analyses and studies on access to and use of ICT in different segments of Brazilian society. Finally, Cetic.br's work has been consulted by various stakeholders, with special mention of its repercussion in the media in 2016; it was cited over 500 times by vehicles that use the Center's surveys as reference for their journalistic productions.

Creating a Regional Framework for the Production of ICT Indicators in Education

Another collaboration initiated by Cetic.br within the scope of sharing methodologies was in the field of ICT in education. The year of 2016 was marked by important progress in designing and discussing an international conceptual framework for measurement of this theme. Expert meetings were held in São Paulo (in March and June) to update

the indicators for the ICT in Education survey and review the dimensions covered by the survey. This initiative was also discussed by experts during the 2016 Workshop on Statistics on Information and Communication Technologies (ICT) in Education, hosted in São Paulo and co-organized by UIS-UNESCO and Cetic.br.

Publications

In keeping with its role of disseminating information on the main themes relative to information and knowledge societies to countries in Portuguese-speaking Africa and Latin America, in addition to the ICT surveys, in 2016 the Center also launched a Portuguese translation of two UNESCO publications: “Global Media and Information Literacy Assessment Framework: Country Readiness and Competencies” and “Media and Information Literacy: Policy and Strategy Guidelines”.

These books are part of a set of three publications on the topic of media and information literacy. Both are freely available in electronic format (.pdf) at the Cetic.br website, and there are also printed versions of their executive summaries. The Portuguese translations were launched at the UNESCO Global MIL Week 2016, held at the University of São Paulo (USP), Brazil, November 2 to 5. The event included a comprehensive program of talks by experts from various countries about media and information literacy.

Global Media and Information Literacy Assessment Framework: Country Readiness and Competencies (UNESCO)

The “Global Media and Information Literacy Assessment Framework: Country Readiness and Competencies” is a publication by UNESCO that offers a framework for UNESCO’s Member States that wish to implement the assessment of country readiness and competencies with regards to the media and information literacy (MIL) of citizens, in particular teachers in service and in training. It is particularly aimed

at policymakers, national officers responsible for statistical data collection and analysis and teacher training institutions and teachers. The document provides a theoretical and conceptual overview of MIL and presents information on UNESCO’s Framework, including methodology, recommendations and tools for the implementation of the instrument at a national level.

Media and Information Literacy: Policy and Strategy Guidelines (UNESCO)

The “Media and Information Literacy: Policy and Strategy Guidelines” is part of a set of MIL resources that have been developed by UNESCO and its partners. The guidelines are divided into two parts: the first presents a MIL policy brief, designed for policymakers; the second, which is divided into several chapters, discusses how to enlist MIL as a development tool, presents conceptual frameworks for MIL policy and strategies, and a model MIL policy and

strategies that can be adapted to any country. This is the first publication of its kind to treat MIL as a composite concept, unifying information literacy and media literacy and considering the right to freedom of expression and access to information through ICT. These guidelines provide a harmonized approach, which in turn enables all stakeholders to coordinate more sustainable national MIL policies and strategies, describing the process and the content to be considered.

Cetic.br publications in 2016



Since 2013, the ICT Electronic Government survey has sought to investigate the supply of e-government in Brazil. ICT use in the public sector can be a way to broaden access to public services, make government more transparent, and allow citizen participation. With the objective of analyzing this scenario, the survey interviewed ICT managers and those responsible for the digital content of government organizations at all three levels (federal, state and local) and in all branches (executive, legislative, and judicial), in addition to the Public Prosecutor's Office.

Articles published in ICT Electronic Government 2015:

Designing Digital Government to Support Inclusive and Sustainable Growth in Latin America and The Caribbean

Rodrigo Mejia Ricart & Barbara-Chiara Ubaldi

Digital Government in Brazil, Mexico and the United States: Initial Efforts and Current Status

J. Ramon Gil-Garcia & Beatriz Barreto Brasileiro Lanza

Information and Communication Technology Governance in Government Organizations

Edimara M. Luciano & Marie Anne Macadar

Innovation in the Public Sector

Fabiana Ruas Vieira

Government Transparency in the Brazilian Federation: Heterogeneous Results Originating from Different IT Capacities

Maria Alexandra Cunha, Taiane Ritta Coelho, Thomaz Anderson Barbosa Silva, Stefania Lapolla Cantoni &

Marco Antonio Carvalho Teixeira

Factors Impacting the Development of Public Organizational Models: Electronic Government Infrastructure as the Foundation

Ricardo Matheus & Marijn Janssen

The Challenges of the Open State: Facilitating Citizens' View and Empowering their Voices

Cristiano Ferri Soares De Faria

In Practice, Theory is Different: The Importance of Concept to Understanding the State of the Art of E-Participation in Brazil

Rafael Cardoso Sampaio & Rodrigo Carreiro

The Brazilian Civil Rights Framework for the Internet and the Lessons Learned about the Capability of Brazilian Public Authorities to Promote Citizen Participation through the Internet

Anita Gea Martinez Stefani & José Carlos Vaz



Since 2010, the ICT in Education survey has assessed ICT infrastructure in schools in urban areas and ICT appropriation in educational processes. The survey is conducted with students, teachers of Portuguese and mathematics in Elementary and Secondary Education, directors of studies, and principals.

Articles published in ICT Education 2015:

Literacy and ICT: Computerized Adaptive Testing as a Resource

Ocimar Munhoz Alavarse & Érica Toledo Catalani

Curricula, ICT and Public Policies for Education

Maria Elizabeth Bianconcini De Almeida

The ICT in Education Survey: From Inclusion to Digital Culture

Leila Rentroia Iannone, Maria Elizabeth Bianconcini Almeida & José Armando Valente

Educommunication and the Pedagogic-Communicational Practices of Formative Assessment: Mapping Leadership and Dialogic Abilities in Educational Action

Luci Ferraz De Mello & Ismar De Oliveira Soares

School Education and Social Networks in Dialogue: A Glimpse of Possibilities

Maria Lucia M. Carvalho Vasconcelos

ICT in Inclusive Schools: Challenge or Reality?

Eladio Sebastián-Heredero

Free Internet Programs: Concepts, Controversies and Uncertainties

Vinicius W. O. Santos, Diego R. Canabarro, Nathalia Sautchuk Patrício & Juliano Cappi

Education for the Knowledge Society? An Analysis of Policies on the Use of ICT in Schools in Brazil and Argentina

Jamila Venturini

Challenges to the Concept of Massive Open Online Courses

Dilmeire Sant' Anna Ramos Vosgerau, Joanita Do Rocio Artigas & Rosane De Mello Santo Nicola



Since 2013, Cetic.br has conducted the ICT in Health survey, which investigates ICT infrastructure and availability and ICT-based applications in Brazilian healthcare facilities. It also observes how doctors and nurses use these tools in their work and the main barriers to their incorporation.

Articles published in ICT Health 2015:

Digital Health: The Necessary Reengineering of Health Care

Julio Villalobos Hidalgo, Carme Carrion, Pilar García-Lorda, David Novillo Ortiz & Francesc Saigí-Rubió

Conceptual Model for Assessing the Impact of Digital Health Investment

Andrés Fernández & Ignacio Carrasco

International Medical Informatics Association (IMIA) and its Role on Global Health Informatics

Hyeoun-Ae Park

The HEGP Clinical Data Warehouse

Anne-Sophie Jannot, Eric Zapletal, Marie-France Mamzer, Anita Burgun & Patrice Degoulet

Measurement of ICT in Health in Uruguay: The Salud.Uy Program

Cecilia Muxí, Cecilia Hughes, Jorge Forcella, Gastón Díaz & Juan Bertón

Information and Communication Technologies for Health Management

Antonio Carlos Onofre De Lira

Telemedicine as a Health Care Coordination Driver: Much More than Technology

Erno Harzheim, Ana Célia Da Silva Siqueira, Natan Katz, Rafael Gustavo Dal Moro, Cynthia Molina

Bastos, Otávio Pereira D'ávila, Carlos André Aita Schmitz, Roberto Nunes Umpierre, Sotero Serrate

Mengue & Marcelo Rodrigues Gonçalves



The ICT Households survey has been conducted annually since 2005, with the goal of mapping access to ICT infrastructure in urban and rural households in Brazil and method to access to these technologies by individuals 10 years old or older.

Articles published in ICT Households 2015:

Inequalities in Digital Literacy: Definitions, Measurements, Explanation and Policy Implications

Ellen Johanna Helsper

Digital Agendas in Latin America and The Caribbean: Good Practices for Seizing the Digital Economy

Lorraine Porciuncula & Jorge Infante

Access to Technology as the Subject of Public Policy: Rights, Democracy, Development and National Sovereignty

José Carlos Vaz

The Digital Divide in Online Privacy and Safety Skills: Evidence from the Israeli Case

Matías Dodel & Gustavo S. Mesch

Personal Data Collection in Mobile Applications

Chen Wen Hsing & Cesar Alexandre De Souza

Free Basics: Regulatory Challenges, Prospects for Digital Inclusion and Considerations of Network Neutrality in Brazil

Lucas Costa Dos Anjos & Marcos Henrique Costa Leroy

Free Internet Programs: Concepts, Controversies and Uncertainties

Vinicius W. O. Santos, Diego R. Canabarro, Nathalia Sautchuk Patrício & Juliano Cappi



With the goal of mapping potential online risks and opportunities among children 9 to 17 years old, the first edition of ICT Kids Online Brazil was published in 2012. The survey provides indicators on how children access and use the Internet, and aims at understanding the perceptions of children on online safety, in addition to outlining mediation practices by parents and legal guardians.

Articles published in ICT Kids Online 2015:

Parental Mediation in the Use of ICT as Perceived by Brazilian Children: Reflections on the 2014 ICT Kids Online Brazil Survey

Patricio Cabello, Magdalena Claro & Tania Cabello-Hutt

Digital Uses, Risk-Taking and Online Negative Experiences among Secondary School Students in France and India: A Comparative Study

Lorrayne Porciuncula & Jorge Infante

Children Who Struggle More than Others with Online Profile Hacking: The Role of Personal Characteristics and Social Context

Sofie Vandoninck & Leen D'haenens

Surf Safe Campaign: The Right to be an Adolescent in the Virtual Environment

Gabriela Goulart Mora

The Critical, Creative and Shared Use of Digital Languages

Regina De Assis

My Privacy, Our Rules: Social Strategies for Management of Privacy among Adolescents

Rodrigo Nejm

Young YouTubers: Artistic Expression or Child Labor

Thaís Dantas & Renato Godoy

"People who Only Use The Internet to Scold Others": Things that Upset Brazilian Children on the Internet

Jéssica Castro, Zena Eisenberg, Rosalia Duarte & Cristina Carvalho

Children and the Intensive Use of Information and Communication Technologies: Health Challenges

Evelyn Eisenstein & Eduardo Jorge Custódio Da Silva



Published annually since 2005, the ICT Enterprises survey measures the presence of ICT in enterprises with 10 or more employed persons. The goal of the survey is to investigate access to infrastructure and how the private sector uses and appropriates new technologies, mapping the perception of the possible benefits generated for their activities.

Articles published in ICT Enterprises 2015:

Research Indicators on ICT Use in Enterprise Management

Fernando De Souza Meirelles

Collaborative Economy and the Emergence of New Ways of Working Based on ICT Use

Luiza A. F. Mesquita

Using ICT as an Innovation Tool: The Case of a Global Service Enterprise Operating in Brazil

Alessandro Maia Pinheiro & Paulo Bastos Tigre

Advanced Manufacturing: A Challenge for Brazil

Aírton José Ruschel, Diogo Cunha Dos Reis & Antônio Renato Pereira Moro

A Study of the Digital Divide among Small and Medium Enterprises Using the Innovation Adoption Theory for Organizations

Chen Wen Hsing & Cesar Alexandre De Souza

Free Basics: Regulatory Challenges, Prospects for Digital Inclusion and Considerations of Network Neutrality in Brazil

Lucas Costa Dos Anjos & Marcos Henrique Costa Leroy

Free Internet Programs: Concepts, Controversies and Uncertainties

Cesar Alexandre De Souza, Érica De Souza Siqueira & Nicolau Reinhard



Since 2011, Cetic.br has conducted the ICT Providers survey with the goal of gathering information on Internet service providers (ISP) to build a National Database of Internet Access Providers, mapping the Internet access provision market in Brazil.



The Internet Sector Overview Report explores themes related to technology use and access in various sectors of society and uses the data produced by Cetic.br's surveys as input for its reflection. In 2016, two reports were published. The first covered the universalization of access, and the second, Internet access providers in Brazil.



The first publication in the NIC.br Sectorial Studies series was launched in 2016. With the goal of discussing emerging themes in the interface between ICT and society, it was called "Education and Technologies in Brazil: A Longitudinal Case Study on the use of Information and Communication Technologies in 12 Public Schools". The report summarizes the results of four years of regular efforts in collecting qualitative data about ICT adoption in public schools.





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