## COMMUNICATION AND INFORMATION TECHNOLOGIES ANNUAL

DIGITAL EMPOWERMENT: OPPORTUNITIES AND CHALLENGES OF INCLUSION IN LATIN AMERICA AND THE CARIBBEAN

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# COMMUNICATION AND INFORMATION TECHNOLOGIES ANNUAL

### DIGITAL EMPOWERMENT: OPPORTUNITIES AND CHALLENGES OF INCLUSION IN LATIN AMERICA AND THE CARIBBEAN

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### INTRODUCTION TO VOLUME 12: DIGITAL EMPOWERMENT: OPPORTUNITIES AND CHALLENGES OF INCLUSION IN LATIN AMERICA AND THE CARIBBEAN

Laura Robinson, Jeremy Schulz and Hopeton S. Dunn

This volume examines both the promise and the challenges posed by information and communication technologies (ICTs) in a region with great cultural and social diversity. Many insights into the evolution of the information society can be derived from the range of scholarly analyses presented here, covering digital media, infrastructure deployment, and the production and consumption of services in Latin America and the Caribbean.

While elites in the region have long enjoyed the fruits of the ICTs they have rapidly adopted, other segments of the population are becoming connected at far slower rates. For those Latin American and Caribbean countries with greater resources, over half of their populations enjoys ample digital broadband connectivity. Other countries in the region, by contrast, have yet to connect even a quarter of their populations to the increasingly pervasive interactive digital communications networks spreading on a global scale. As this contrasting scenario indicates, there is still much to be done to mitigate digital inequalities especially promoting more advanced ICT literacies and generating widespread usage of new applications of technology. The contributions to this volume address both the challenges and the progress being made in a number of key areas. While many of the problematic issues discussed here offer an agenda for change

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and reform, the cases of success provide important insights into how ICTs can engender social inclusion and development on a number of fronts.

The contributions to this volume seek to address important development themes in both small island developing states in the Caribbean sub-region like St. Lucia, Barbados, Trinidad and Tobago, and Jamaica and in larger nation states in Latin America such as Brazil, Colombia, and Peru. Assembling research from these two parts of the region, the authors examine how to empower new populations and traditionally underrepresented groups including the disabled, women, and the economically disadvantaged. In doing so, the analysts make clear that there is much to be done before the promise of digital inclusion and empowerment within and across cultures, peoples, and nations can be achieved.

The volume unpacks the tensions between opportunities for digital inclusion and challenges posed by digital exclusion. Authors examine these tensions in four arenas: young people, women, government policy-making, and political engagement at the national and community levels. Together, the authors offer insights relevant not only to Latin America and the Caribbean but also to the wider global community.

## SECTION I: OPPORTUNITIES AND CHALLENGES: YOUNG PEOPLE

The first section assembles three contributions probing the opportunities and challenges in the lives of young people. The first is "Disability and ICTs in the Caribbean: Enabling Visually Impaired Caribbean Youth" by Lloyd Waller. As Waller tells us, disabled youth have much to contribute to the digital public sphere, yet little research has either explored or documented the lived experiences of such youths in relation to their digital engagements. Waller contributes to remedying this gap in the literature with his application of a *democratic governance* conceptual framework, with semi-structured interviews carried out with visually disabled youth. He shows how his interviewees have benefited from ICTs in terms of both their political knowledge and their political discourse. In so doing, the author offers much needed evidence of how ICTs can play a supportive role in promoting the inclusion of visually impaired persons in what he defines as the *democratic space*.

Continuing this section of the volume, we turn from opportunities to challenges with "ICTs and Empowerment of Children with Disabilities:

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A Jamaican Case Study" by Floyd Morris and Anthea Henderson. Morris and Henderson examine a case study of children with disabilities in Jamaica. Their work explores two inclusion-oriented interventions among primary and high school students. Their survey data allows them to undertake a multi-pronged analysis. First they assess the accessibility of digital technology for children with disabilities. Second, they evaluate the success of a collaborative project undertaken jointly by a disability center and a government institution in providing assistive technologies as well as training and curriculum components for students with disabilities. In outlining solutions, Morris and Henderson find that institutional advocacy can be instrumental in mobilizing support for technological investments, particularly for vulnerable groups, and that partnerships are needed between institutions, advocacy groups, and government.

The section closes with "Experimenting with Media Education, Civic Engagement, and Sustainability in Brazilian Schools" by Alexandra Bujokas de Siqueira, Andrea Berardi, Jayalaxshmi Mistry, and Danilo Rothberg. This paper delves into the utility of publicly funded digital learning centers as a means of strengthening the self-efficacy of low-income Brazilian youths. Based on a series of online exercises influenced by the theoretical framework the authors dub the *design of meaning*, administered to a group of secondary school students, the study focuses on the potential for such exercises to expand the democratic imagination of the students. The study underlines the promise and limitations of digitally mediated resources for educating the next generation of engaged citizens and integrating marginalized social groups in a highly unequal social environment.

## SECTION II: OPPORTUNITIES AND CHALLENGES: WOMEN AND GENDER

The next section brings together four studies of women and gender in the Caribbean and Latin America. The section fittingly opens with a paper on "Gender Equity and Access in the Caribbean ICT Sector" by Leith L. Dunn and Ayanna T. Samuels. This introductory chapter deals with gender inequalities among both citizens generally and those within the ICT industry itself in Jamaica and St Lucia. Surveying the policy landscape in these countries as well as national level statistics and data from interviews with policy elites, the authors explore the challenges posed by gender inequality for economic and social development. Their findings support the

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conclusion that gender socialization and the resulting discrimination against women in education and employment undermine policy commitments to inclusive development. The paper puts forward a number of initiatives to enable women to better avail themselves of the opportunities for personal development and economic achievement presented by digital technologies.

The Second contribution is "Social Media, Women, and Empowerment: The Uses of Social Media Platforms by WNGOs in Jamaica and Brazil" by Nickesia S. Gordon and Juliana Maria D. Trammel. This paper targets the mediated networks of women's non-governmental organizations (WNGOs) in both Jamaica and Brazil in an effort to better understand their relationships to various stakeholders and constituencies. The study combines network analysis and content analysis to map the Facebook and Twitter activity of the selected organizations as they communicate with various stakeholders. Further, the outcomes of the observed social media communication patterns on WNGO social media sites suggest the occurrence of a noticeboard effect. Taken together, the findings clearly indicate that these organizations are falling short in both countries in terms of communicating with disadvantaged constituencies composed of mostly low-income women.

This contribution is followed by "Local Literacies at Play: Making and Breaking Learning in Trinidad and Tobago" by Sheba Mohammid. The author takes a close look at ordinary Trinidadian women who use digital media in order to pursue their personal and professional goals. The in-depth analysis mines original ethnographic and interview data to tell the stories of Trinidadian women as they move between offline and online contexts and engage in informal learning, connected to both leisure activities as well as small-scale entrepreneurship. As the findings show, these women use digital media, sometimes for pleasure and sometimes in order to learn skills which can serve to enhance their social or economic position. Through an intensive study of craft activities and gaming, the study shows how these activities provide some Caribbean women with opportunities to strengthen their skills and self-confidence, as well as broaden their social relationships and economic positions.

The section closes with a paper on "Women in Caribbean News Media: Challenges and Opportunities for Inclusion" by Hopeton S. Dunn and Michele D. Thomas. It examines the treatment and visibility of women newsmakers in relation to their male counterparts. Using quantitative content analysis data from the Global Media Monitoring Project (GMMP) the authors analyze how and why women are made significantly less visible than men in the news. The analyses focus on the reasons for a continuing

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underrepresentation of women in news coverage. With rich data sets from a global and regional longitudinal study, the authors were able to analyze results from 15 Caribbean countries, make global comparisons, and consider coverage topic categories. While the results confirmed a consistent gender disparity throughout the 20-year lifespan of the study, the authors concluded with calls for better newsroom planning policies, more women in prominent political and economic positions, greater content diversity in coverage more female directors of news operations. Despite a narrowing of the coverage gap in traditional media in 2015 in favor of women when compared to 2010, the paper called for a greater emphasis on online and new media outlets to help mitigate the disparity in a more hopeful future.

## SECTION III: OPPORTUNITIES AND CHALLENGES: EXISTING POLICY FRAMEWORKS

This section commences with the paper "Planning Without Impacts: Assessing ICT Policies in Peru" by Eduardo Villanueva-Mansilla. This paper surveys the ICT policy framework instituted in the country of Peru. Peru serves as an example of a country which has yet to fully create and implement a full set of information society policies in the mold of the European Union. Though the country has succeeded in drafted a national action plan, Agenda Digital del Perú, with stakeholders' participation, as well as a National Broadband Plan, the policies and institutions on the ground have the potential to do much more. Policymakers' insistence on an information society approach therefore rings somewhat hollow, as the term is offered as a policy objective but often lacks concrete reality. Part of the problem, as the paper argues, is the incoherent nature of a policymaking process that privileges policies stemming from international bodies over locally driven understandings of ICT policy needs.

From public policy in Peru we turn to policy in Brazil with the paper entitled "ICTs and Inclusion Policies in Brazil: Converging Efforts toward Memory and Heritage Preservation" by Natalia Nakano, Maria José Vicentini Jorente, and Marcos Galindo. This paper outlines the various policy initiatives that the Brazilian government and stakeholder institutions have developed in regards to the preservation and digitization of the Brazilian cultural heritage. Brazil serves as an illuminating case study because its central policy, the *Marco Civil da internet* sets forth a vision of digital resources which stresses the open and collaborative character of the

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information society. Moreover, the laws and policies built on this foundation have taken steps to preserve and digitize the Brazilian cultural heritage. The success of these measures will depend on the extent to which all levels of Brazilian government, as well as private institutions committed to the custody of cultural collections, achieve cooperation. Their successful cooperation will advance the interests of all Brazilians in preserving and disseminating the country's cultural heritage.

The section wraps up with "Public Policies and Social Inclusion: A Sociotechnical Analysis of Televisión Digital Abierta in Argentina" by Soledad Analía Ayala and María Cecilia Vila. This paper analyzes the implementation of Open Digital Television (Televisión Digital Abierta or TDA) in Argentina from a sociotechnical standpoint. Surveying TDA as a public policy designed to foster social inclusion, the paper considers how the technological, institutional, and social aspects of this system interact with one another. It also looks closely at the logic guiding the policies themselves. The dominance of technological determinism as a guiding postulate meant that the government overlooked the potential for TV as a means of promoting social inclusion. What would be productive in this policy context, the paper asserts, is to reinterpret TV as a more interactive medium which can create social inclusion, rather than simply a medium of mass communication.

## SECTION IV: OPPORTUNITIES AND CHALLENGES: COMMUNITIES AND THE PUBLIC SPHERE

The fourth section continues the theme of the public sphere. It opens with the paper entitled "Autonomy of Use and Online Interaction with Government" by Alcides Velasquez. This paper analyzes the digitally mediated engagements between adult Colombian citizens and governmental entities through a statistical analysis. It looks at the associations between types of internet usage and access, on the one hand, and orientations toward the government, on the other hand. The results reported in the paper show that, among these internet users, the autonomy of use had a positive relationship with online interaction with government. This type of online activity was positively related with individuals' trust in government and negatively associated with perceptions of government corruption. The results suggest that e-government initiatives might enhance the trust of the

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citizenry in their government, but that government must maximize access opportunities in order to facilitate this process.

We return to Brazil with "Digital Inequalities in Brazil: A Weberian Analysis of Technology Use in the Favelas" by David Nemer and David Hakken. This paper makes use of Weberian stratification theory coupled with original ethnographic data collected in Brazilian favelas. Linking classical understandings of social stratification to the social realities of these economically disadvantaged and institution-poor environments, the paper explores how digital media function to reproduce and reshape the social order. The data was drawn from ethnographic observation, Facebook interactions, and 76 semi-structured interviews with various favela residents. It sheds light on such issues as economic status, social status, and political engagement. As it shows, drug cartel members who could afford smartphones and data plans did not necessarily achieve status. Where status is concerned, the highest stratum of the community is composed of Facebook celebrities, teenagers who know how to produce content online, such as images and videos. Finally, in terms of political engagement, the divisions between the urban elites and favela residents appear to be reinforced by digital media disparities.

The next contribution is "Connectivity Public Policy in the Network Society: The Case of "WiFi Livre SP"" by Claudio Luis de Camargo Penteado, Paulo Roberto Elias de Souza, Ivan Fortunato, and Sérgio Amadeu da Silveira. This paper turns to a public initiative implemented in the largest city in Brazil. In 2014, the city of São Paulo began to implement the public policy WiFi Livre SP. This policy created the infrastructure for an entirely free WiFi network providing unrestricted internet connectivity in a 120 public squares distributed in 5 geographical regions of the city (center, south, north, east, and west). The paper explores the efficacy of this measure through a series of surveys administered to users which ascertained their views about the quality and frequency of the signal in the public squares. The results show that the networks functioned effectively and provided good service to the users. The study lends support to the idea that free and full access without any sacrifices of privacy should be guiding principles in policies oriented toward providing internet access to the public.

The volume closes with "Give Me a Mobile and I Will Raise a community" by Claudia Magallanes-Blanco and Leandro Rodriguez-Medina. This paper traces the origins and development of the first community cellular network in the state of Oaxaca in southern Mexico. The paper offers an account of a highly unusual set of community-led institutional

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innovations based on primary data drawn from the main participants in this innovative network. The analysis deploys a theoretical framework informed by Actor-Network Theory as well as data gathered in 2015 and 2016 through in-depth interviews, participant observation, workshops, photos, official documents, and informal interviews. The history of this community network demonstrates that the construction of this path-breaking network implicated both a technical program of action and a legal program of action which could capitalize effectively on existing legal structures around telecommunications. These two programs of action were pursued by two activists, P. Bloom and E. Huerta, working in concert with a number of Indígena communities, in order to bring the non-profit, communitarian, and self-organized network to fruition. Since its establishment, the network has had a variety of positive effects on the community. It has reduced the economic costs of communication, strengthened family bonds, increased the number of jobs, expanded the range of community-owned projects, and empowered the community vis-à-vis powerful external actors such as large telecommunication corporations.

#### CONCLUSIONS AND IMPLICATIONS

These contributions cover a wide range of themes in relation to ICTs in Latin America and the Caribbean. These themes include policy frameworks oriented toward digital inclusion, digital political engagement and community building, equity in digital access for disadvantaged groups including women and the disabled, and institutional innovation. In exploring these themes the volume yields many insights into the stumbling blocks standing in the way of full digital inclusion. Some of these impediments have to do with the lack of basic access and connectivity in many of the countries under study. Other hindrances have to do with the profound offline inequalities which still remain a challenge in many of the countries in this region, as well as around the world.

Governments, commercial service providers, and economic institutions in many of the countries and communities featured in these studies need to make greater commitments to inclusion. They also must deliver high quality access, content, and quality of service to all segments of the populations. Only in this way can they enable greater digital inclusion and information-driven development. On a more positive note, the volume also illuminates the vast possibilities for greater digital inclusion in this region

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by showcasing community level and national initiatives designed to engender development. Many contributors point to the numerous positive outcomes which materialize when self-directed individuals and groups enlist digital resources to advance their social, psychological, economic, and cultural goals.

In conclusion, the volume reminds us that the inclusion of young people, women, persons with disabilities, rural dwellers, and the urban disadvantaged is indispensable in creating more equitable societies in Latin America, the Caribbean and the world over. It is also clear that many of the region's citizens, communities, institutions and governments are embracing the opportunities presented by ICTs to advance toward critical development goals.

Laura Robinson Jeremy Schulz Hopeton S. Dunn

Volume Co-Editors