From the Guest Editor

From Research to Policy Influence

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Information and communication technologies (ICTs) are increasingly pervasive across the globe and are recognized as critical tools for modern economic development. Yet, beyond the recognition of the positive impact of ICTs on economic growth, there is a need to assess how governments and enterprises, particularly in developing countries, can effectively use ICTs to meet broader socioeconomic objectives and in support of poverty-reduction strategies.

In the Global South, and in Africa particularly, the absence of public-interest research in the areas of ICT policy and regulation in universities, as well as a lack of think tanks, means there is little independent participation in public-policy processes, even where public consultations take place. Public policy is a result often entirely reliant on foreign experts appointed by governments, multilateral agencies, or aid agencies without local knowledge or with vested interests in particular policy outcomes. While the key elements of an integrated national ICT policy framework are now well-known in a Northern hemisphere context, a simple transposition of "best practice" often results in the adoption of inappropriate policies or inadequate implementation of good policy at the country level in the Global South.

Researchers within a country are often best suited to intervene in policy processes as they have greater local knowledge, if they have the data and analysis to do so. The CPR*south* conference, initiated by LIRNE*asia* 10 years ago and currently hosted by Research ICT Africa, has encouraged and promoted the development of a body of knowledge in the field of ICT policy and regulation in the Global South. This knowledge has been used evidentially to inform policy formulation and regulation in a developing-country context. For this reason, research excellence is a means to an end. With better and more relevant evidence, there is the potential for more effective policy. So CPR*south*'s broader objective is to facilitate the creation, sustenance, and continuous advancement of policy intellectuals capable of providing leadership on precise policy issues through informed and effective intervention in ICT policy and regulation processes in their specific country and in regional contexts in the Global South.

It is in this spirit that these articles were selected from among those available for publication from the CPR*south* 2014 Conference held in Maropeng, South Africa. Maropeng is where some of the oldest humanoid fossils in the world have been found. The area has been declared the Cradle of Humankind World Heritage Site. An educational and exhibition center has been erected there to celebrate Africa as the origin of humankind, and to recognize Maropeng as a site of considerable historic significance and scientific endeavor in South Africa's own history.

It was fitting that the alternating Africa-Asia-located conference be held in this symbolic space to showcase ICT policy research from across the African and Asian continents that not only seeks to create a practice of global research excellence, but one applied to improving the lives of people in the Global South, particularly those marginalized from the global digital economy and society and their well-documented benefits.

Although the articles in this special issue examine vastly different ICT challenges from diverse perspectives from a range of countries, what is common to all of them is the context of predominantly prepaid mobile communications services that have driven connectivity, particularly for those previously marginalized from communication services in the Global South. Different as their subjects are, each article examines how the deployment

of new services, apps, improved methodologies, or governance frameworks could contribute to greater inclusion through more locally appropriate, evidence-based policy and more effective regulation to enhance well-being, livelihoods, democracy, and economic participation. They all address the conference theme of *What works, why and how do we know?*

Erwin A. Alampay and Charlie Cabotaje examine the use of noncash mobile money (m-money) as a conduit for conditional cash transfers (CCT) in the Philippines, where CCT is used extensively to address development challenges among its poorest people. CCT use has expanded exponentially, presenting the Philippine government with a major logistics challenge to deliver increasingly large volumes of bimonthly payments. In the article, the authors assess the use of the dedicated GCash Remit network of merchants established by the government with Globe Telecom. Through a randomized survey of beneficiaries and interviews with implementers of the program and m-money providers, they examine the efficiency and security of the CCT implementation through the cash-based GCash Remit network. A cost comparison between the existing GCash Remit mode of CCT delivery and the potential use of m-money platforms in the market reveals that the use of existing m-money transfer systems may provide a more cost-effective solution to the problem in areas where such systems have a stronger presence than the cash-based GCash Remit system that was used.

The article by Enrico Calandro and Chenai Chair, "Policy and Regulatory Challenges Posed by Emerging Pricing Strategies," highlights the shift from voice revenues, which are still important, but declining, as data demand and revenues surge. The current preoccupation with the competitive or net-neutrality effects of zero-rating data use on popular, usually social networking platforms by operators are also shown to be only one of multiple new pricing strategies, including dynamic tariffs, one-to-one pricing, private pricing, time-based pricing, and integrated bundles of voice, SMS, and data services. The article highlights the problems with standard pricing evaluations of measuring, monitoring, and comparing prices in such a dynamic market with tens of thousands of products across the African continent. The dynamism of the predominantly prepaid mobile market in Africa as a result of the tariff innovation by operators in response to changing market conditions and the responsiveness of users to what appears to be relatively complex—but of greater value—bundled products there are several packages, products, and devices that reduce the price constraints on access and use for price-sensitive users. This positive finding contrasts with the data prices reflected by standard measures, which appear to remain high or static.

The article by Mariama Deen-Swarray, "Toward Digital Inclusion: Understanding the Literacy Effect on Adoption and Use of Mobile Phones and Internet in Africa," extends the policy focus beyond access to the Internet, which is steadily increasing across Africa, although far below global averages, to the suboptimal adoption of the Internet by those who have access. She demonstrates the significance of literacy—particularly English literacy, given the dominance of English in Internet content—as a key factor that inhibits adoption. This identifies a precise point of policy intervention by governments committed to improving citizens' digital inclusion to redress wider social and economic inequalities, but not adequately addressing the problems of illiteracy. Although literacy (or the lack of it) impacting the ability of people to use the Internet is treated as conventional wisdom in many policy circles, there has been little research anywhere that seeks to quantify and analyze the extent of this. This article examines the impact of literacy on Internet adoption across 12 African countries.

Highlighting the tensions that emerge when governments' developmental commitments to infrastructural access are not matched by online rights and protections for content producers and users, the article by Faheem Hussain and Mashiat Mostafa explores the emergence of new, media-driven citizen participation in Bangladesh against a background of contradictory government policy approaches to ICT use. Their article, "Digital Contradictions in Bangladesh: Encouragement and Deterrence of Citizen Engagement via ICTs," demonstrates that despite the discourse about a digital Bangladesh that makes ICTs core to citizen empowerment, "netizens" operate under a conservative ICT legal framework and aggressive state crackdowns on new media platforms. Using online data-mining applications and visualization software, the research analyzes the positive and negative ways that Twitter was used in Bangladesh during the 2013 Shahbag political mobilization and draconian state responses to new media platforms and their users. The findings reported in this article reflect the sense of insecurity prevalent among Bangladeshis online over freely expressing their opinions and ideas. The authors document the chilling effect of indiscriminate arrests, site blocks, and newly amended punitive measures on the development of a genuinely participatory digital space for communication.

The article authored by the LIRNE*asia* big data team, led by Sriganesh Lokanathan, "The Potential of Mobile Network Big Data as a Tool in Colombo's Transportation and Urban Planning," demonstrates some of the research innovation being undertaken in the Global South and showcased at CPR*south*. The use of big data represents a fundamental shift in research and in policy planning and implementation, with the potential to provide real-time data and enormous cost savings over traditional data-gathering methods. With mobile phone use becoming ubiquitous in developing countries, the article demonstrates mobility-related insights for the capital city of Colombo, Sri Lanka, using mobile network big data. The analyses suggest population movements can be understood at a higher frequency and spatial resolution than what was possible before, complementing infrequent surveys. Such insights cannot substitute for all the information acquired from the kind of specialized sensors being deployed in some mature economies or the depth of information derived from nationally representative surveys. But for resource-constrained economies, the article demonstrates the possibility of producing timely, if currently limited, insights from big data to improve existing planning until such techniques can be mainstreamed.

Together, these articles demonstrate the interconnected nature of the ICT ecosystem and the need from a policy perspective to understand the linkages among the constituent elements. Addressing the digital divide through the supply side's infrastructural components without redressing the fundamental human development inequalities in our societies will result in increasingly suboptimal outcomes as we move into the more complex Internet world. Governments that enable access without addressing their human rights framework and safeguarding the rights of their citizens online will soon find the contradictions unmanageable. Should they be receptive to it, governments can also benefit enormously from the kind of research being undertaken. Big data is a case in point. If the governance systems for the use of such data with regard to access, privacy, and anonymity can be clarified so as to create a public good—in the same way that national statistics ideally are—certain kinds of information could be available for policy formulation, planning, implementation, monitoring, and evaluation, without the lag traditionally associated with gathering evidence for these purposes.

This special issue would not have materialized without the efforts of a number of people who must be acknowledged. First, I must thank the various review panels for the multiple rounds of peer reviewing, initially for the conference papers and later for the blind review rounds for this special issue. I wish to mention specifically the eminent group of CPR*south* senior scholars and policy practitioners who refereed the articles in this issue: Dr. Lishan Adam, Prof. Yuntsai Chou, Dr. Kammy Naidoo, Dr. Bitange Ndemo, Helani Galpaya, Dr. Zhong Lui, Prof. Pirongrong Ramasoota, Dr. Rohan Samarajiva, Dr. Linnet Taylor, Prof. Supriya Singh, Dr. Christoph Stork, and Prof. Tim Waema.

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