

## EDITORIAL

### **In the Age of Popular Uprisings, what is the Role of Public Access Computing and Social Media on Development?**

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#### **Introduction**

Civic engagement has long been touted as a key to enabling people to participate in their collective destiny and take control of their collective good. Recent events in Egypt have shown us that the will of the people is powerful, even though people's opinions, preferences, and political affiliations diverge. The role of social media in enabling coalitions to form, congregate in large numbers, and overthrow the governments they oppose appears to have become prominent. It appears that with these uprisings, social media are transforming the ways in which people choose to take control of their collective lives, that of their communities and societies. Social media and public access to the Internet serve as platforms supporting the creation of social coalitions and civic engagement, for better or for worse, bring about new ways people can quest for better livelihoods. The concept of development is emerging with these changes from being primarily supported through institutions to one in which these very institutions are part of the change that could lead to their destruction. For example, the heavy-handed nature of a military government's interventions could cause greater upheaval that in turn limits its legitimacy and remit for action unless they are aligned with the will of their people. While at the same time, government support, community acceptance, and valuable social activity in the relevant social groups are important in the creation of institutions of development supported by information and communication technologies (ICTs) as evidenced in studies reported by Madon, Reinhard, Roode, and Walsham (2009).

In this, ICT is often seen as a catalyst for bringing about changes that are intended to lead to improvements in the lives of people. Yet, these improvements are often punctuated with multiple failures in the use of ICTs (Avgerou, 2008; Heeks, 2002). The impact of ICTs as conceptualized by Sein and Harindranath (2004) for national development suggests that people will use ICTs to communicate more when given access to the technology through second-order effects and enable the generation of new technology-related businesses and societal change through third-order effects. It is believed that while failures in ICT abound, this impact framed within the context of local conditions and societal considerations can potentially lead to improvements in the lives of people (Avgerou, 2008; Heeks, 2002; Madon et al., 2009).

Understanding local conditions and societal considerations has been guided through notions of human development which suggest that when people are empowered with the skills, information, and resources that they need to be able to take opportunities to lead better lives, they will be able to contribute to making the lives of those around them better. This view of human development is seen to lead to better choices in education, health, and standards of living, building a democratic society marked by involvement, participation, and transparency amongst others (Sein & Harindranath, 2004). In addition, "bottom up" or "people-centered development" concepts suggest that realization of individual potential will lead to better

societies. These perspectives together with the wealth-creating potential of ICT service industries have led some governments to attempt to foster the potential of their people through investments in ICT infrastructures. This includes providing access to ICT services to larger segments of the population, stimulating ICT-enabled services such as software development and education in ICTs. While these notions of human development have done much to raise people out of poverty in countries that are investing in the ICT infrastructures, education, and healthcare to enable their people to lead better lives, there are some unintended consequences of the ICT use that have yet to be conceptualized.

In addition to India and China, Hanna (2010) identifies the rise of Egypt as a significant player which reported \$1 billion export revenue from ICT-enabled services in 2009 (Economist in Hana, 2010). Other countries such as the Philippines, Brazil, Mexico, Ghana, and Bangladesh are also aspiring to build their ICT services industries. Recent events in Egypt that led to the overthrow of a democratically elected president whose policies were unpopular with a large segment of society, can be attributed to transformations in a country known for its diverse population, growing ICT services sector and a younger vibrant generation that is highly connected through mobile phones and the Internet. In his upcoming publication in this Journal, the Associate Editor of *ITD* and Dean of the School of Business at the American University in Cairo, Kamel (forthcoming) states that “the substantial mobile access to social media through notebooks, tablets, and mobile phones among Egyptians was available because of the consistent government of Egypt efforts since the mid-1980s to introduce, diffuse, and institutionalize ICT,” as indicated earlier. This included projects such as the Free Internet Initiative “Internet4all,” Egypt PC 2010 “PC for every home,” and IT clubs to train all those who cannot afford getting trained on PC applications in both urban and rural communities as well as in underprivileged areas. Moreover, for over the last 15 years, Egypt has been investing in accelerating its high-tech infrastructure by developing technology parks with over 130 multinational companies in the areas of ICT, software development, outsourcing, and call centers.”

High ICT literacy, combined with free broadband access, made for a very empowered people. Kamel contends that social media have been an important driver, even “a game changer primarily because it helped close the wide gap between different social classes by creating a unified anti-government group that included everyone, the educated and the non-educated, the rich and the poor, and those who live in urban and rural communities.” This he argues, has led to an increase in freedom of expression made possible by the social media. Yet, can the increased access and use of ICTs in recent years to support local improvisations, as is the case in Egypt, bring about societal change that contributes to improvements in the lives of people?

### **Answers to calls for theory development**

The papers in this issue investigate questions associated with the above by drawing upon and adding to existing theories on social capital. They extend what we know about how ICTs may or may not bring about development, while answering a call for greater theory development in ICT for development research (Avgerou, 2008; Avgerou & Walsham, 2000; Heeks, 2002; Sein & Harindranath, 2004). The first paper in this issue entitled “Relationships and Connectedness: Weak Ties that Help Social Inclusion Through Public Access Computing” is co-authored by Luis Fernando Baron and Ricardo Gomez. The authors suggest that of all the benefits public access to computers (PAC) offer users, the most valued by users are having more information for stronger relationships, better learning, and effective transactions. In a developing country like Colombia, with strong conservative social and cultural traditions and profound political and communication problems that historically resort to violence, public access to ICT seems to

represent an important opportunity not only to rebuild social ties but also to extend social networks and create new relationships. These new possibilities are providing PAC users with an open platform to transform their lives and to look after their personal well-being.

Baron and Gomez add to existing concepts by analyzing the most salient benefit, more information for stronger relationships with friends and family. Results of a qualitative study among users of libraries, telecenters, and cybercafes in Colombia, South America, show that social media and personal relationships can also have an important community and sociopolitical dimension. By fostering a sense of belonging and connectedness to community and to a larger world, PAC usage often leads to feelings of empowerment and development of social capital, two intangible factors that are critical for community development. This study uses a mixed-methods approach, combining surveys and interviews in five regions of the country, to uncover the benefits of PAC for underserved communities. Their findings contribute new insight about the impact of ICTs on community development and social inclusion. These impacts can be seen as an important contribution of ICT to community development.

The second paper in this issue is entitled "Collisions between the Worldviews of International ICT Policy-Makers and a Deep Rural Community in South Africa: Assumptions, Interpretation, Implementation, and Reality" authored by Kirstin Krauss. This paper adds to our understanding of human development by creating a new concept based on critical ethnography which allows the researcher to step outside of their pre-conceived notions to offer us a new concept: called the ICT4D artifact. This concept represents the culture and value systems of a deep rural community in Africa. This is a new concept different from the one offered by Sein and Harindranath (2004) in that it has been drawn from the local cultural experiences and perceptions of the community in which the study takes place and departs from conceptualizations embedded in Western thought. The purpose of the Krauss paper is to understand and learn from the collisions between the underlying assumptions embedded in UNESCO's ICT Competency Standards for Teachers policy framework and the realities that face a deep rural Afrocentric community in South Africa. These collisions ultimately are about the manifestation of a deeper issue, namely collisions between worldviews. Although some preliminary issues regarding policy conflicts are highlighted, the primary focus is on understanding collisions that have emerged from the community entry phases of policy alignment and the introduction of the ICT for development (ICT4D) artifact. A critical theoretical underpinning is presented which also constitutes the departing values and thinking pursued by a team of academics which, in collaboration with local community visionaries, facilitates ongoing ICT training initiatives in the community. The author writes from his position as the "outsider" champion in this project; and due to his commitment and the length of time that he has been immersed in the training and all other aspects of the project, an ethnographic approach is adopted. The paper contributes to ICT4D discourses by representing a South African perspective on the international ICT policy frameworks. Consequently, compelling issues for further research are highlighted, including examples and practical guidelines for international ICT policy alignment and implementation in the deep rural Afrocentric context.

The third paper in this issue is co-authored by Manuel Mora, Fen Wang, and Ovsei Gelman, and is entitled "A Comparative Study on the Implementation Inhibitors and Facilitators of Management Information Systems and Integrated Decision Support Systems: A Perception of IT Practitioners in Mexico." This paper is a comparative study of inhibitors and facilitators for implementing MIS and integrated DSS is reported. Knowing implementation inhibitors and facilitators for a specific IT system is useful for IT practitioners to prepare and use implementation checklists and guidelines when they are confronted with such tasks. In the international literature, several studies have reported implementation critical success factors for a single component of integrated DSS. However, studies on specific inhibitors and facilitators

for integrated DSS implementation are still scarce. Consequently, there is very limited and incomplete knowledge about them for DSS implementations. This research addresses this knowledge gap by using collected data from IT practitioners located in medium and large organizations in the central region of an emergent economy (Mexico country), and compares the findings with implementation inhibitors and facilitators for MIS reported in the international literature. Relevant and particular findings suggest critical differences that should be considered for implementing integrated DSS and not treating them as MIS in similar regions of emergent economies. Their utilization in regions of well-developed economies is encouraged to be further studied through a cross-country study.

The final paper in this Journal's View from Practise section is entitled "A Cuban Spring? The Use of the Internet as a Tool of Democracy Promotion by United States Agency for International Development in Cuba" and is authored by Pamina Firchow. The author contends that the use of the Internet in the recent Arab uprisings and the recent opening of the US embargo for certain Internet-based communication services to Cuba do lead us to ask questions about the role of these technologies and the responsibility of development actors to provide them. This paper is an exploration of the use of Internet technologies as tools that form a part of democracy promotion programs in authoritarian regimes by international development actors – in particular US Agency for International Development. It discusses the role of development actors in democracy promotion, the role of the Internet and new media in democracy promotion, and the impact this has had on Cuba's nascent Internet infrastructure. The author argues that the Internet is more likely to create "weak ties" than "strong ties" that social movement theorists argue are the bedrock of costly political action. However, these "weak ties" do have the potential to become "strong ties" beyond the Internet. She discusses and asks questions about the role of development actors in the promotion of democracy, the emergence of online dissidents in Cuba and their impact on discussions pertaining to a so-called Cuban Spring, and the challenges of introducing the Internet into Cuba.

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