

Chapter 23

Experiences in E-Governance from an ICT4G Perspective: Case Studies and Lesson Learned

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ABSTRACT

In a world characterized by rapid change driven by globalization, an ICT-based economy transformation poses some challenges and opportunities for the private sector and the government sector alike. ICT has for some time been at the core of government tasks, inseparable from strategy, planning, consultation and implementation to improve citizen's life in different ways. Nevertheless, indications are that the government sector has been falling behind in these practices (mostly in developing countries), compared to the private sector. This realization has prompted some governments to put ICT high on their policy agendas, with the aim of introducing ICT-based solutions to improve their public administration processes, and thus deliver 'quality public services'. We define ICT for Good (ICT4G) as the use of ICT to addressing critical problems in societies characterized by low ICT penetration in a way that life is impacted for the better. Along this line, we have been working on the design, development, and evaluation of ICT solutions that directly require the involvement of citizen on the usage of the developed system itself and/or on the decision-making processes. In this chapter, we discuss our experiences and lessons learned in this holistic approach to e-Governance projects from the ICT4G perspective and the role it can play for developing countries.

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INTRODUCTION

The impact of Information and Communication Technology (ICT) on developed countries is quite evident in terms of services to final users, transformation of the way in which people work and live, and prosperity and wealth. The change induced by the use of ICT is so remarkable that the term digital divide is commonly used for specifying the gap between those who have access to new technologies and those who do not, also because of infrastructure, education, and contingency (Aibar & Urgell, 2004; Dada, 2006).

We focus, in particular, on the application of ICT to support public administration processes. These, in fact, can improve coverage, quality, and costs of public services, enhancing inclusion and equity for citizens. However, their implementation is often far from trivial. For instance, it has to consider different (if not conflicting) goals of various stakeholders. Government (perhaps) might want to present an image of modernity and transparency. Public agencies might focus on improving their efficiency, e.g., by reducing time and costs in offering services. (Sub)contractors might try to secure long-term maintenance contracts. Ironically, citizens, the actual end-users, have limited opportunities to make their requirements and needs get into the systems. This lack of investigation is often a cause of project (or service adoption) failure (Heeks, 2003; Vakan et al., 2002; Basole, 2008; Qureshi & York, 2008).

One of the most recent trends to address some of the issue mentioned above is based on multidisciplinary cooperation and coordination. Several studies have witnessed its positive effects in various domains, such as, e.g., Healthcare (Lenz & Reichert, 2005; Suomi, 2005; Avison & Young, 2007), e-Government and Public Administrations (Willcocks et al., 1997; Thaens et al., 1997; Ciaghi et al., 2009), and Education (Buckley et al., 2004; Buckley et al., 2008).

In this chapter, we move a step further in characterizing both the complexity of deploying e-Governance solutions and the way in which ICT practitioners might look at ICT and e-Governance projects. For this purpose, recently in (Eshete et al., 2010), we defined ICT for Good (ICT4G) as the use of ICT to addressing critical problems in societies characterized by low ICT penetration (i.e., infrastructure and services) in a way that life is impacted for the better. Notice that with “low ICT penetration” we not only refer to developing nations, where the penetration is remarkably low, but also to territories in developed countries characterized by digital divide. ICT4G, thus, moves the emphasis to challenges for ICT researchers and practitioners, including:

- *User-centric approaches to system development.* As systems are increasingly reaching wider segments of population, it is of paramount importance to deliver systems made for people and for the benefit of users.
- *Process and Technologies.* The adoption of the relevant processes, methodologies and techniques to improve the development process not only has the advantages everyone expects (e.g., quality, costs) but, in ICT4G contexts, it is a key enabler to foster growth.
- *Sustainability.* The effectiveness of deployed solutions relies, in the longer term, on a clear definition of sustainability and growth models. This point refers both to how the service is made available (e.g., delivery channels that are actually used by a wide audience) and how local capabilities are created and governed to provide affordable maintenance of the services in the long term.

Clearly, these challenges vary according to the needs of each individual project and the situation

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