

# Chapter 7

## Deploying Information and Communication Technologies (ICT) to Enhance Participation in Local Governance for Citizens with Disabilities

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### ABSTRACT

*Information and Communication Technologies (ICT) offer a promising technology for citizens with disabilities to participate in local e-governance planning and implementation, provided that underlying issues of social exclusion and technology accessibility are properly addressed. Existing research suggests that for citizens with disabilities gateway issues such as technology access, usability, community- and government-receptivity are barriers to participation in local e-governance. Results from a pilot study indicate that the e-governance landscape for people with disabilities is heterogeneous; likely reflecting both differences within the disability community, as well as among the online governance entities. Systematic changes to the development, implementation, and evaluation of local e-governance for people with disabilities are recommended, informed by an analytical model suitable for empirical testing.*

### INTRODUCTION

Technology is tasked with enhancing the ‘reach’ of humanity, and so-called ‘technologies of citizenship’ are meant to help vulnerable populations increase their capacity for participation

(Dowse, 2009). Information and Communication Technologies (ICT), such as the Internet, and wireless devices such as mobile phones and other Web-accessing technology, have been proposed as tools for enhancing the participation of people with disabilities in the public domain. People with disabilities use ICT both as consumers of, and contributors to public goods, services and

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policies (Jaeger, 2006). More especially, ICT hold the promise of enhancing the participation of people with disabilities in 'governance' or the web of coordinated governmental and non-governmental exchanges aimed at addressing social issues and public policy goals (Polat, 2005). The online dimension of governance, electronic or 'e-governance' is enabled by ICT. Individual participation has the greatest potential for impact at the local level of e-governance, as compared to larger regional, national or transnational aggregations, making local e-governance a good unit of analysis for examining the participation-enhancing qualities of ICT. Social and communication networks that link people to information, resources and each other lie at the core of e-governance participation. The principle challenge to participation in e-governance for people with disabilities stems from the fact that people with disabilities face social exclusion and accessibility barriers to communication technologies (Stienstra & Troschuk, 2005).

The relative value of ICT in the context of participation in local e-governance by people with disabilities is contingent upon inclusion and access; noting that rapid technological change, disablist attitudes and strong normalization pressures in a global society constitute barriers to both social inclusion and access (i.e., Roulstone, 2003). By enabling decentralized, distributed environments of exchange, ICT have occasioned the collapse of distance as a barrier in e-governance, but they have not occasioned a parallel collapse of social distance, which manifests itself in technical interface, social and interpersonal barriers. These barriers are embedded in both the ICT architecture and the transactions it carries. The question of how to make e-governance effective as an approach to enhancing the local government participation of people with disabilities arises naturally from this discussion.

A significant first step in addressing this question of effectiveness is to explore the role of the e-governance ICT 'environments'; social and

technological, in influencing local government participation. This paper critically examines the extant research literature and reports Web-based pilot study findings to propose an analytical model, suitable for empirical testing that links aspects of the users and ICT environment to e-government participation. The analytical model describes how the ICT environment mediates key transactions between person-level traits of citizens with disabilities and system-level e-governance participation. Recommendations for future research, policy and practice are generated from the model.

Local government has a critical role to play as the front-line resource for local services, information and social goods, as well as being the most accessible point for participative democracy in the lives of disadvantaged, marginalized populations (Odendaal, 2003). However, the experience of people with disabilities engaged in partnerships with local government authorities point to enduring barriers to participation attributable to unequal power relations, negative perceptions of ability, lack of knowledge, and inadequate consultation (i.e., Barnes, 2002; Piggot, Sapey, & Wilenius, 2005; Riddington, Mansell, & Beadle-Brown, 2008). These challenges to local government participation do not stem from ICT, nor is ICT their solution. However, the social networks and social capital that ICT can facilitate are relevant to a solution. Both the social inclusion challenges and the role of ICT in providing a solution will be discussed later.

As governments around the globe have sought to increase ease of access to public information, services and feedback they have used the Web as a platform for communication and outreach (Martinez-Moyano & Gil-Garcia, 2004). This Web-based platform has become known as electronic government, or digital government; commonly shortened to 'e-government.' E-government is typically one of several nodes in e-governance, albeit an important one. There exists a great deal of variation in the sophistication in e-government services, varying along lines of

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