

# Chapter 30

## Rethinking E-Government Adoption: A User-Centered Model

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### ABSTRACT

*E-government acceptance has attracted substantial research interest over the last fifteen years. The majority of this research is based on technology acceptance models primarily because e-government is viewed as a technology for achieving efficiency, transparency, and information management. However, the adoption of e-government ultimately depends on whether users perceive the technology as serving their needs and meeting their expectations. Thus, understanding and incorporating users' needs in the design, organisation, and deployment of e-government are crucial but have been overlooked. This study develops and tests a user-centric model of e-government by using six factors that have been widely discussed in the literature. The factors have been labelled content, accessibility, localisation, e-participation, user-friendliness and awareness/government literacy. The results show that all six factors plus the interaction of e-participation with user-friendliness are statistically significant in promoting e-government use. The research and practical implications of the results are discussed.*

### INTRODUCTION

E-government is defined as a dynamic socio-technical system encompassing issues of governance, societal trends, technological change, information management, interaction, and human factors (Dawes, 2009). Recent reviews of the e-government literature (Dwivedi et al., 2010; Titah

& Barki, 2006) show that prior research has been primarily oriented towards the technological and informational aspects of e-government. Indeed, several recent studies (Jaeger & Bertot, 2010; Millard, 2006; Pieterse, 2010; Reddick, 2010) point to the dearth of academic research on the human aspects of e-government, specifically, the relationship between users' needs and e-government

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design, delivery, and adoption. Heeks and Bailur (2007) contend that governments rarely undertake such studies and the available evidence show how little governments actually understand citizens' needs, preferences, and behaviours toward e-government. Jaeger and Bertot (2010) argued that there is a huge need for more research on user-centred e-government acceptance because the level of knowledge within governmental agencies about the behaviour of citizens is rather low (Pieterse & Ebbers, 2008). Millard (2011) observed that despite the enormous allocation of resources and progress in e-government technology, citizens' usage of e-government has plateaued around 32% between 2007 and 2010.

The lack of research and understanding of users' perspective imply that our understanding of e-government acceptance is incomplete and primarily technology-focussed. Thus, the primary motivation for undertaking this study is not only to give greater prominence to the user perspective but also to extend our knowledge of e-government acceptance by exploring user-centred factors. Providing a stronger user-centred basis for improving the design and delivery of e-government is a key rationale of this study since better design and delivery could promote greater usage and citizen participation in government policy- and decision-making processes, which is a major policy goal of e-government.

This study contributes to fulfilling the gap in the literature for more user-focussed research by investigating the relationship between user needs and e-government adoption. Specifically, a model comprising of various dimensions of users' needs and the extent to which these dimensions influence users' decision to use e-government is proposed and tested. The model is developed based on several recent studies that have articulated various aspects of users' needs that are crucial for e-government but which have received little attention or their impact is not clearly understood. The model is tested empirically with data obtained through a survey of over 400 participants.

This study is also important from a policy perspective because getting more citizens to use e-government to communicate, transact, and participate in government decision-making remains a crucial challenge for governments around the world (U.N., 2010). Shedding light on the link between user needs and e-government adoption could inform policies and programs aimed at promoting greater usage of e-government, which is crucial for achieving the service delivery efficiencies of e-government. Moreover, a clear understanding of users' needs could guide the design, development, and implementation of e-government, which could enhance its usage. From users' perspective, e-government sites that provide information and services in a manner that meet or exceed their expectations in terms of quality, reliability, and efficiency could encourage greater usage (Pieterse, 2010; Pieterse & Ebbers, 2008). This is because user-friendliness could result in lower costs to transact with the government, reduced administrative burden to complete tasks, more effective decision-making, and greater satisfaction (Verdegem & Veryeye, 2009).

This article is structured into six sections. The following section presents a brief review of the relevant literature. The third section describes the conceptual framework and hypotheses. The fourth section describes the research methodology. The fifth section presents the results, and the sixth section discusses the implications of our results and offers the conclusion.

## LITERATURE REVIEW

This section presents a synthesis of the research literature on citizens' acceptance of e-government. Table 1 profiles a sample of recent studies that examined users' acceptance of e-government focussing on the theoretical frameworks used, research design, and variables assessed. According to Table 1, technology acceptance models such as TAM, TPB, and DOI were the most widely used

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