

# Chapter 70

## Impact of E-Governance on Businesses: Model Development and Case Study

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### ABSTRACT

*The success of e-government policies and projects hinges on a robust assessment strategy that provides not only a valuable understanding of the impacts on stakeholders, but also an effective feedback mechanism for mid-course corrections. This study examines the antecedents of the impact assessment of e-governance in the context of an integrated model. The model incorporates a wide variety of important factors from previous research into a single theoretical framework provided by the e-government value chain model and the Information System success model. A government-to-business (G2B) case is utilized to operationalize the model into survey questions. The current chapter presents the results of the G2B survey and summarizes the key findings from the impact assessment of G2B. The knowledge gained from this study will help pave a path for future e-governance initiatives and improve our understanding of the key factors affecting the success of e-governance.*

### INTRODUCTION

E-governance has been available and promoted for a long time, but a number of questions regarding its impacts remain unanswered. Most of the literature concerning e-governance research has

focused on two basic problems. First of all, the e-governance impact literature has focused mainly on the supply side, taking the perspective of the government. Little has been written that directly addresses the demands or needs of users. Second, most e-government impact assessment studies are conceptual, or they are case studies examining

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the factors influencing the success or failure of e-government, such as infrastructure investments, system accessibility and service quality, usage and citizen satisfaction. Studies examining the nature and extent of e-governance impact assessment in the context of an integrated model are necessary.

Considering the importance of the demand side and the essence of impact assessment, this study proposes a theoretical framework and further elaborates the impact assessment of e-governance in the government to business (G2B) context. In section two, we review the history of e-governance development, the importance of e-governance impact assessment, and several essential theoretical models, such as the e-government value chain model (Heeks, 2006), the information system success model (DeLone & McLean, 2003) and e-SERVQUAL (Zeithaml, Parasuraman, & Malhotra, 2002). Based on the e-government value chain model and the information system success model, we introduce our theoretical framework, which covers three aspects of e-government, i.e., quality, usage, and impact, in section three. In section four, we use survey methodology to test this framework and make detailed assessments of three large-scale G2B programs. The concluding section discusses the key contributions of our research to the e-governance impact assessment literature.

## **LITERATURE REVIEW**

In the field of information and communication technologies (ICTs) in the public sector, e-government is the first emergent concept recognized as an important development in the outreach from government to citizens since the early 1990s. The emergence of ICTs can be traced to the report, "Reengineering through Information Technology", produced by the Clinton Administration (Lenk and Traunmüller, 2002). E-government is usually presented as using ICTs to (1) provide citizens and businesses easy access to government

information and services; (2) increase the quality of services by increasing their speed, completeness and process efficiency; and (3) provide citizens with the opportunity to participate in different types of democratic processes. According to the United Nations (UN, 2003), the major purpose of e-government is to use ICTs to transform its internal and external relationships. UN/ASPA (2001) identifies the five stages for quantifying the progress of e-government as emerging, enhanced, interactive, transactional, and seamless.

Recently, researchers have argued that the early concept of e-government is ambiguous and should be clarified. For example, Chadwick (2003) argued that applications of ICTs in the public sector have become a convergence of "e-democracy" and "e-government," and this convergence provides a broader understanding of how ICTs are reshaping public governance. In other words, e-government not only addresses service delivery but can also include e-democracy, which refers to the transformation of political systems (Mahrer and Krimmer, 2005; Bishop and Anderson, 2004). Backus (2001) used "e-governance," a composite term to represent the overall concept of the application of ICTs in the public sector. Marche & McNiven (2003) distinguished e-governance from e-government, with e-governance emphasizing methods of policy making, while e-government emphasizes policy execution and service delivery. Finger & Pécoud (2003) viewed e-governance as a dynamic concept that comprises three main functions: e-government, e-regulation, and e-democracy. Chiang, Chen, Huang, Chung, and Hsiao (2004) further described e-governance as "a key platform for integration and collaboration of social resources in which government follows principles of equity, transparency, efficiency, rule of law, and democracy, and adopts information and communication technologies to provide and promote e-infrastructure, information sharing, e-service, e-consultation, and decision participation, achieve efficiency and effectiveness, transparency and accountability, equity and rule of law,

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