

## Chapter 102

# The Roles of Business Process Modeling and Business Process Reengineering in E-Government

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### ABSTRACT

*This chapter reveals the roles of business process modeling (BPM) and business process reengineering (BPR) in eGovernment, thus describing the concepts of eGovernment and BPM; BPM methodologies; business process modeling notation (BPMN); the importance of BPR in government-to-citizen (G2C) e-commerce; the relationship between BPM and eGovernment-based citizen satisfaction; the application of BPR in eGovernment; and the implementation of eGovernment through BPM. eGovernment is a modern trend that is driven by the advances in BPM and BPR as well as the aspirations of citizens who place increasing demands on governments' service. By modeling business processes in eGovernment, public sector organizations can achieve improvements in transparency and reduction in costs and resource requirements, resulting in improved business performance and compliance. The chapter argues that applying BPM and BPR in eGovernment has the potential to enhance public sector performance and achieve organizational goals in public sector organizations.*

### INTRODUCTION

Business processes constitute a significant portion of organizational costs. Managing business processes offers significant opportunities for improving market share, managerial decision making, and performance (Seethamraju, 2012). eGovernment phenomenon has become more important with the increasing number of implementations worldwide (Ozkan & Kanat, 2011). eGovernment is a variety of electronic communications between governments, business, and citizens (Tohidi, 2011). eGovernment is defined as the provision of public information and services through the use of information and communications technology (ICT) (Andersen & Henriksen, 2006; Helbig, Ramón Gil-García, & Ferro, 2009).

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The increase in citizens' use of eGovernment becomes a long-term trend because a growing number of people have recognized and experienced greater efficiency, effectiveness, and convenience in using various government functions via eGovernment and digital connections with conventional channels (Nam, 2014). eGovernment has the potential to improve the provision of public services and foster citizens' participation in public policy process. Many governments have increasingly adopted ICT to provide services and information, thus limiting direct contacts with service recipients (Asongwe, 2012; Chun, Shulman, Sandoval, & Hovy, 2010).

Business process is considered as a critical corporate asset (Seethamraju, 2012). BPM is one of the effective techniques that can be used for understanding business process and for improving business performance (Abu Rub & Issa, 2012). BPM enables a common understanding and analysis of business process (Gandhewar & Wadegaonkar, 2012). BPR is a business approach aiming at improving the efficiency and effectiveness of business processes within and across organizations (Toor & Dhir, 2011).

The strength of this chapter is on the thorough literature consolidation of utilizing BPM and BPR in eGovernment. The extant literatures of BPM and BPR provide a contribution to practitioners and researchers by describing a comprehensive view of the functional applications of BPM and BPR to appeal to different segments of BPM and BPR in order to maximize the public sector impact of BPM and BPR in eGovernment.

## **BACKGROUND**

Since the late 1990s, a number of countries have launched the eGovernment projects, with a particular emphasis on using information technology (IT) to provide electronic information and services to citizens and businesses, thus combining the purposes of increasing efficiency and becoming more customer-responsive (Chen & Gant, 2001). From the beginning of the 1990s, public administration has been confronted by a process of new demands. The public society has been transformed by the influence of new technologies. With the development of the World Wide Web (WWW) and its establishment as the most important platform through which data and services are accessible for humans and programs, a new business challenge is raised concerning not only the management of workflows within an organization, but also the management of business processes that span the boundaries of organizations (van der Aalst, 1999).

eGovernment systems are built based on the website technology (Sensuse & Ramadhan, 2012). eGovernment practically transforms the nature of relationships from command and control hierarchy to interactive collaboration among governments, citizens, businesses, public sector employees, and other governments (Sarantis, Charalabidis, & Askounis, 2011). eGovernment has the potential to promote the free flow of public information and provision of public services to citizens, promote government transparency and accountability, and facilitate citizens' involvement in the public policy process (Bertot, Jaeger, & Grimes, 2010; Bwalya, 2009; Relly & Sabharwal, 2009). eGovernment has the ability to improve the efficiency of public service provision through electronic transactions and interactions with citizens, businesses, and other branches of government (Bertot et al., 2010).

eGovernment has the capability of building citizens' trust in government by providing citizens with the freedom and ability to participate in the political, social, and economic life of their countries (Parment, Vandebeek, & Gemino, 2005). eGovernment services reduce operating costs and provide direct communications between citizens, companies, and governmental organizations (Aydinli, Brinkkemper,

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