Chapter XXIV
E-Government Implementation in Transition Countries

Mysore Ramaswamy
Southern University and A&M College, USA

ABSTRACT

The implementation of e-government is a challenging task in any developed political context, but all the more uniquely so in the postcommunist transitioning countries. These factors surpass the indubitable benefits of automation as an output and information technology as a tool, and take into account elements of context and capacity that should not be overlooked. The degree of resistance to change due to organizational, structural, and social factors varies depending upon differences in each of these critical dimensions. In postcommunist countries such as Armenia, e-transformation is considered in some quarters as a second disruption, the first being the fall of the Soviet rule. In this chapter, we develop a comprehensive framework which is needed for successful implementation of e-government initiatives. This framework combines not only the critical dimensions of e-government interactions but also the various sociotechnical aspects that are particularly relevant to the special challenges of transitioning countries.

INTRODUCTION

Innovations in information and communication technology (ICT) have dramatically influenced the nature and quality of government-to-constituent interactions all over the world. However the underlying structural, organizational and institutional components upon which technological innovation is superimposed are as widely divergent as the cultures from which they derive. As a result, the successes of such implementations are widely divergent, and the means by which their effectiveness can be assessed are as of yet in nascent form. Electronic government (e-government) can be defined as the use of information and communication technologies (ICT) by government to deliver information and services to its constituents. Gronlund (2005) states that while government

organizations have succeeded in achieving more efficient operations and better services at the national level, progress is slow to emerge at the local level. In spite of the considerable literature on digital or e-government, there is no general agreement on good measures for digital government or what we should be measuring (Carbo & Williams, 2004). Some studies have focused on availability, cost, and quality of ICT networks and equipment. Another stream of research looks at digital government as a special case of ICT-enabled business process change (Scholl, 2003). Factors such as societal readiness for e-government have also to be taken into account (Moon, 2005), in tandem with countless assessments of e-readiness as undertaken by various international organizations specialized in "ICT for development" work. In addition to the above, a clearer understanding of the organizational and structural changes that precede the transformation to e-governance is necessary; such analysis is heretofore largely lacking. With the filling of these gaps as a main objective, we take a bottom-up approach and analyze the actual interactions that occur between entities in an e-governance context.

In this chapter, we use the term "e-governance" in a broad sense to include a deeper understanding of the way ICTs impact the existing (and potential future) interactions between a government and its constituents. In other words, e-governance goes beyond the 'what' of an e-government interaction that presumably delivers service to a constituent - and includes rather an analysis of the 'how' and 'why'. We note that one cannot improve upon something in automation that is not already rational and functional in its current daily practice. In spite of tremendous innovations in the field of information technology (IT), the benefits of this progress have not reached all segments of our society, particularly in the case of developing and transition countries (Carbo & Williams, 2004; Ramaswamy & Selian, 2007). Most governments across the world desire their citizens and businesses to interface with them through electronic means for the obvious reasons of efficiency in cost-saving and effectiveness. It is less obvious whether the transparency in process and information-sharing that this presupposes is also an equally important objective for all leaders. As Jane Fountain (2001) states in her work, there is a certain element of the 'perversity of incentives' to acknowledge here; Kedzie calls this the "Dictator's Dilemma" in the state (Allison, 2002) – where increased efficiency and political efficacy (brought about by ICTs) are positively related to each other, and negatively related to authoritarian and highly centralized control. That said, of course, the clear exponential increases in numbers of Internet users around the world during the last two decades (Scholl, 2003; Wimmer, 2001) are a strong indicator of the likelihood of increases in demand for such ICT-enabled services within the confines of respective political systems.

The rest of this chapter is organized as follows. In the next three sections, we discuss the following e-Government models respectively: Design Reality Gap Model, Agent-Service-Discretion Model, and E-Governance Cube. This is followed by a discussion of socio-technical challenges in transition countries such as Armenia. In the subsequent section, we develop a comprehensive framework that aids in the implementation of e-government initiatives by taking a holistic approach that effectively responds to the socio-technical challenges encountered in transition countries. The conclusions and future research directions are presented in the last section.

DESIGN-REALITY GAP MODEL

The objective of Design-Reality Gap Model proposed by Heeks (2003) is to evaluate the amount of change between 'where we are now' and 'where the e-government project wants to get us.' The structure of this model is indicated in Appendix I. In this approach, e-government projects are analyzed along the following seven dimensions: