Chapter 5.7
Institutions, Organizations, and Interorganizational IT Projects in the Mexican Federal Government

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ABSTRACT

Electronic government has the potential of transforming the way government works and interacts with citizens. However, recent research has found that the promised benefits are rarely completely achieved. Some of these studies highlight the importance of institutions in shaping the development, implementation, and use of information technologies in government settings. Based on a survey and a set of interviews with Mexican federal government managers, this chapter explores the relationships between institutional arrangements, organizational forms, information technologies, and the outcomes of Mexican IT initiatives. Overall, the authors found that there are important interactions among these variables and important similarities exist between developed countries and other realities, such as Latin America. The research presented here contributes to the field by testing causal relationships often cited in the digital government literature, but with little empirical quantitative exploration. Moreover, understanding those relationships offers guidance in the implementation of interorganizational IT applications in government, potentially increasing their probability of success as well as the benefits for citizens and other stakeholders.

DOI: 10.4018/978-1-60566-918-2.ch012

INTRODUCTION

According to Fountain (2001, 2004), information and communication technologies (ICTs) are one of the most important advances in this century and

have the potential to significantly transform government. In fact, some government structures and processes have changed due to the incorporation of technological innovations such as the personal computer and the Internet (Fountain, 2004). Information technologies create interesting possibilities for government. They are used not only to improve the quality of services, but also to reduce costs and make policies and programs more effective (Gil-Garcia, 2006; Gil-Garcia & Helbig, 2006; Lim & Tang, 2008; OECD, 2003; Roy, 2007). Information and communication technologies are used as a catalyst for organizational change (Dawes, 2002; Holmes, 2001; Rocheleau, 2003; Welch & Pandey, 2007). They are also considered a tool to improve democratic participation in a variety of political topics (Carbo & Williams, 2004; Gil-Garcia, 2005; Hiller & Bélanger, 2001).

The term "electronic government" or "digital government" emerged within this context, and is still evolving (Gil-García & Luna-Reyes, 2006; Schelin, 2003; Yildiz, 2007). OECD defines e-government as the use of information and communication technologies for a better government or to improve the quality of its services, especially through the use of the Internet and Web technologies (OECD, 2003). Some general characteristics of e-government are: (1) the use of information and communication technologies, (2) supporting government actions, (3) improving the relationships between government and citizens, and (4) following a strategy to add value for participants in the process (Gil-García & Luna-Reyes, 2006). In contrast to electronic commerce, electronic government does not include only the transactional aspects, but also takes into consideration the democratic relationships between governments and citizens (6, 2001; Gil-Garcia, 2005; Scholl, 2002).

The implementation of these technological innovations has been challenging. In Mexico, information and communications technologies were first used widely in government in the '90s. However, it was only in 2001 when the Secretary of Communications and Transportation created the e-Mexico project. The e-Mexico initiative fosters innovation in government through the use of information technologies and also promotes the use of the Internet by certain sectors of Mexican society. New laws and regulations regarding electronic government in Mexico have supported this initiative. One important example is the Law for Transparency and Access to Government Public Information. The objective of this law is to establish the necessary mechanisms to guarantee any person the access to information from the different branches of government, autonomous constitutional organizations, and any federal agency (Poder Ejecutivo, 2002). The main objective of electronic government in Mexico is to use information and communication technologies to innovate and improve government and its relationships with citizens (OECD, 2005).

Therefore, the implementation of electronic government in Mexico needs to consider different factors such as laws and regulations, organizational structures, and the characteristics of the technologies themselves. This study proposes and empirically tests a model to explore the relationships between some of the factors that have an impact on information and communication technology projects in government. Institutional theory and Fountain's technology enactment framework provide the conceptual basis for this study.

After this brief introduction, the chapter is organized into five more sections. The following section presents a brief literature review of institutional theory and the technology enactment framework, as well as some of their applications to government settings. The third section describes the research model and hypotheses, and the fourth section includes a description of the research methods and procedures. Finally, the last two sections consist of a discussion of the main results and conclusions.