

Preface

Countries around the world are making heavy resource investments in e-government initiatives. However, few of these projects achieve all of their stated goals and many could easily be considered failures. In addition, several new applications and tools have emerged in recent years, significantly increasing the technical and organizational complexity of these projects. E-government initiatives are not only about efficiency and cost-saving; they are now also designed to realize other important benefits for the public sector such as transparency, openness, policy effectiveness, service quality, and citizen participation. As the goals of e-government expand, understanding its success has become more important and urgent. In order to develop the necessary knowledge about this phenomenon, researchers and government professionals need to identify and assess the main conditions, variables, or factors that have an impact on e-government success. However, before being able to evaluate these impacts, it is necessary to define what e-government success looks like and how it should be measured. This book presents a review of both e-government success measures and e-government success factors. It also provides empirical evidence from quantitative analysis and two in-depth case studies about the success of e-government initiatives. Thus, based on sound theory and rigorous empirical analysis, the book not only contributes to academic knowledge, but also provides some practical recommendations for government officials, public managers, and IT professionals.

Before analyzing e-government success, it is first necessary to clarify what e-government is. E-government could be thought of as a totally new phenomenon triggered by the introduction of the Internet and related technologies. In contrast, e-government could also be understood as a new term to represent the use of information and communication technologies in government settings—or a new label for an old phenomenon with a long history. This book takes this second approach. E-government is considered one of many terms used to represent and describe a complex socio-technical phenomenon that has been studied for several decades. New technologies are continuously emerging and expanding its object of study, but the overall phenomenon is still the same. Following this perspective, this book argues that e-government is a broad concept that includes socio-technical

aspects of the selection, design, implementation, and use of any kind of information and communication technology in government, from fax machines and mainframe computers to complex inter-organizational systems, cloud computing, information integration, Web 2.0 tools, social media, and open government applications.

Theoretically, this study draws upon and extends institutional theory—specifically, the technology enactment framework—by incorporating concepts from recent studies on technology and organization, as well as theoretical elements from other integrative approaches. Thus, the book attempts to explain the effects of organizational forms and institutional arrangements on the information technology used by government agencies, which is an alternative approach for the study of electronic government. According to Fountain (1995, 2001a), the technology enactment framework pays attention to the relationships among information technology, organizations, embeddedness, and institutions. The book proposes variables to measure each of the different constructs relevant to institutional theory and tests the relationships hypothesized in Fountain's framework. The study also proposes some adjustments and extensions to the original framework in a theory building effort, leading to a new proposal for using institutional and socio-technical integrative theoretical models to better understand electronic government success. Considering the existence of good work at the federal (Fountain 2001a) and the local (Kraemer et al. 1989) levels, this book applies the proposed framework to state governments, filling an existing gap in the literature and enriching previous knowledge by adding evidence at the state level.

Methodologically, the book reports on one of the first systematic, sequential-explanatory mixed-method studies in the field of e-government success. More specifically, this study uses a nested research design, which combines statistical analysis with two in-depth case studies. The study begins with the statistical analysis, using organizational, institutional, and contextual factors as independent variables, but this analysis also explores some of the relationships between different factors and, therefore, considers some of the complex interactions among the dependent and the independent variables. The result is a new way to quantitatively operationalize Fountain's technology enactment framework. An overall score representing e-government success in terms of the functionality of government-wide websites is the ultimate dependent variable. Based on the statistical results, two cases were selected (New York and Indiana) and case studies were developed using semi-structured interviews and document analysis. Government-wide websites are good cases to use because they include a great variety of IT tools and applications and they are a very pervasive example of an e-government initiative. In the context of this book, they are seen as an instance of a broader e-government phenomenon.

In terms of the statistical analysis, the book presents one of the first applications of partial least squares (PLS) to an e-government success study. PLS is a structural equations modeling (SEM) technique that allows for estimating the measurement model and the structural model simultaneously. The use of this sophisticated statistical strategy helped to test the relationships between e-government success and different factors influencing it, as well as some of the relationships between the

factors, thus allowing for the exploration of indirect effects. The ability to explore multiple causal relationships simultaneously helps to understand the e-government phenomenon in more detail, without isolating some relationships that are deeply intertwined in the real world. Therefore, in contrast to previous studies that focus on one or a few single variables and ignore most of the organizational, institutional, and contextual aspects of the phenomenon, this study is able to analyze a complex set of variables and identify their direct and indirect influences on the success of e-government initiatives.

This book is the product of great teamwork and the individual dedicated time of many wonderful people. Some helped me in the design, implementation, and writing of this research. Others supported me, encouraged me, and shared both my good and bad times during the process. Although I am thankful to all, I want to especially mention a few of them, recognizing that their actual contributions were greater than my small tribute in this preface.

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Mexico City, Mexico

J. Ramon Gil-Garcia

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Gil-Garcia, J.R.

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