Preface

This book examines the important issue of public management and electronic government (or e-government) adoption through case studies. Electronic government is the use of Information Technology (IT), such as the Internet, to interact with citizens in public sector organizations. Research has questioned if e-government will implement real transformational change in government or just incremental change (Kraemer & King, 2006; Bekkers, & Homburg, 2007).

This book takes a public management perspective. Public management is the examination of how to make public sector organizations more efficient, effective, and accountable. Public management is derived from the New Public Management (NPM) literature. This literature is a rejection of the Old Public Administration (OPA) model in which organizations are viewed as being reactive to situations, bureaucratic, and red tape bound, which inhibit IT reform (Bannister, 2001; Fountain, 2001; Welch, & Pandey, 2006; Denhardt & Denhardt, 2000).

E-government is said to change the way that bureaucracy interacts with its citizens (Bovens, & Zouridis, 2002). NPM argues that organizations need to be dynamic and take into account many of the principles of business administration and apply them to public settings. The focus on NPM is on results and outcomes, rather than just producing outputs in OPA (Denhardt & Denhardt, 2000). Essentially, public management is the counterpart of business administration, but with the focus on public sector organizations. However, existing IT and public administration research challenges the presupposition that you can apply private sector principles to public administration (Breitneider, 1990). The issues that public organizations face are viewed, according to the literature, as being vastly different than business administration. The case studies discussed in this book show the differences between public and private sector organizations.

This book provides case studies of public management and e-government adoption in both developing countries and developed nations. Developing countries have unique challenges with the adoption of e-government since they lack the requisite resources needed for successful adoption, and access to technology is more of an issue for these nations (Heeks, 2002). For developed countries, the adoption of e-
government is inhibited many times by being too expensive to adopt and uncertainty about the willingness of citizens to use this technology. Essentially, there is a lack of willingness politically to change existing systems because of the lack of incentives and uncertain returns on investment from e-government projects.

Case studies are a way of examining important issues in public administration (Stillman, 2010). The case study is a method to determine whether a certain theory or concept is applicable to a situation-specific context. For public managers, the case study becomes a tool for them to apply what they have learned in their business settings or in the classroom. Case studies should be dynamic, in that they offer more than just descriptions of events that have taken place; essentially they are more than just retelling a story. They have impacts beyond the immediate case study, and help in understanding important issues in public administration and management. With case studies public managers can learn more about the effectiveness of e-government programs (West, 2005; Reddick, 2008). The case studies provided in this book are able to discuss broader issues that impact e-government and IT adoption in the public sector.

This book has case studies that follow the socio-technical perspective (Pasmore, 1988). In this theory, case studies can be understood as a mixture of social dynamics within a technical setting. IT cannot be divorced from the social setting, and adoption of this technology must take into account the social dynamics of the organization. This means addressing not only change within the organization, but its broader impacts on citizenship. In the e-government and public administration literatures, citizens are viewed as playing a key role in the successful adoption of IT (Welch, Hinnant, & Moon, 2004). As many of these case studies in this book show, having citizens involved in the implementation of e-government projects has a great impact on the success of the project.

The importance of citizens in public administration can be shown through the New Public Service (NPS) literature (Denhardt, & Denhardt, 2000). This literature is a rejection of the NPM, in that it argues that public sector organization should focus on more than just using private sector principles and applying them to public settings. With the movement to NPM in the 1980s, citizens have taken a back seat to their important role in public service delivery (Chadwick, & May, 2003). The adoption of e-government in the late 1990s showed the extent to which citizens were viewed as being important. As many of the case studies examined in this book show that citizens’ are the key for successful implementation of e-government.

Denhardt and Denhardt (2000) have examined the differences between OPA, NPM, and NPS and the editor has examined these theories with application to IT and public administration research. The core differences between the three theories of OPA, NPM, and NPS are shown in Table 1. These three theories are explored in this preface by an examination of each of the case studies in this book. There has
been much theory building in e-government research, with most of it examining (or criticizing) the linear stages of growth model (Grant, & Chau, 2005). This research is different with its application of the Denhardt and Denhardt (2000) model to public administration and IT research.

In Table 1 the roles of technology, citizens, politics, policy, and public management influence on the three theories of public administration is examined. This table can be used to view the role that technology plays in the organization along with the other dimensions of organizational change and reform. Technology in OPA is viewed as a way to automate production of public service delivery. An example of an emblematic technology for OPA is the use of transaction processing systems for payroll. The focus on OPA is on providing more outputs for a given input; there is no concern in this theory for achieving results. While for NPM the role of technology for government is to be more responsive to its customers. Citizens as “customers” are viewed critical for e-government development and customer relationship management technology is an emblematic technology in NPM (King, 2007). Governments can use e-government technology to provide more services to citizens and satisfy their service delivery needs. Notice in Table 1 that for NPM there is no role for citizens and democratic governance. The role of citizens comes out fully in NPS, where citizens are viewed as the drivers of policy change. Governments do not merely respond to customers by providing more services. Social media sites are

<table>
<thead>
<tr>
<th>Roles</th>
<th>Old Public Administration</th>
<th>New Public Management</th>
<th>New Public Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology and Example</td>
<td>Passive to automate organizations (e.g., transaction processing systems for payroll)</td>
<td>To be more responsive to citizens (e.g., customer relationship management technology)</td>
<td>E-government used for greater access for citizens to enhance democracy (e.g., social media technology)</td>
</tr>
<tr>
<td>Citizens</td>
<td>Citizens viewed as being inferior to the organization</td>
<td>Citizens viewed as being customers</td>
<td>Citizens are viewed as the most important for enhancing democracy</td>
</tr>
<tr>
<td>Public Managers</td>
<td>Increase productivity of workers</td>
<td>Provide incentives through market-based principles</td>
<td>To facilitate and collaborate with citizens</td>
</tr>
<tr>
<td>Policy Making</td>
<td>To administer change from the top-down</td>
<td>Considers input from its customers, but government makes the final decision</td>
<td>Citizens initiate policy changes from the bottom-up</td>
</tr>
<tr>
<td>Politics</td>
<td>Separation of politics from administration</td>
<td>Intermingling of politics and administration to focus on more efficient and effective service delivery.</td>
<td>Politicians are responsive to the needs of citizens; they collaborate and facilitate change through governance</td>
</tr>
<tr>
<td>Processes</td>
<td>Output-oriented</td>
<td>Results-oriented</td>
<td>Outcome-oriented</td>
</tr>
</tbody>
</table>
examples of empowering citizens to use technology for transformation change of government. E-government provides citizens with the ability to collaborate with government in the policy making process. Scholars argue that e-governance will replace NPM as the new reform agenda (Dunleavy, Margetts, Bastow, & Tinkler, 2005).

This book is composed of three distinct parts. The first part of the book examines the policy and politics of public information management and e-government adoption. In order to successfully adopt e-government within public organizations public managers need to take into account the politics of the organization (Danziger, Dutton, Kling, & Kraemer, 1982). If there is no support politically for e-government, the chances of it being successfully implemented will be slim. In addition, there must be an examination of the policy making process of e-government. What role does the policy-making process have on the adoption of e-government? The case studies in this book show the importance of policy and politics on the adoption of IT in public sector organizations.

Besides the importance of politics and policy, the management of IT in public sector organizations is also viewed as critically important for a book on this subject. E-government projects are ultimately implemented by public managers and understanding the issues that they face is fundamental to know (Brown, & Brudney, 1998). In addition, the underlying technical issue of e-government adoption is shown in these case studies, which public managers must understand the technical as well as the social dynamics for successful implementation.

The third part of this book examines the issues and constraints that these public sector organization’s face in the adoption of e-government. Any case study book would not be complete without a discussion of some of the topical issues in the area such as mobile government (m-government), wireless Internet access to government, and Global Positioning Systems (GPS), among others, and their impact on government. These technologies are the future of e-government and will impact its adoption.

In this book there are 19 case studies that fall in three parts that cover Politics and Policy in Section 1, Public Management Issues in Section 2, and Issues and Constraints in Section 3. Each of the case studies will be discussed along with their key contribution to the literature on OPA, NPM, and NPS theories. This book shows one cannot understand e-government adoption without knowing the three core areas.

POLITICS AND POLICY

The first section of this book deals with the politics and policy of public information management and e-government adoption. Chapter 1, by Dedeke, examines the im-
important issue of open standards in public sector organizations through an examination of IT developments and policy in the state of Massachusetts in the United States. This case study discusses some of the issues that public sector organizations face in the movement to open standards in IT architecture. This case study addresses the importance of the consideration of politics in the process of selecting a vendor for open source software, where there are various vested interests that prevent an easy option path. This case study shows the importance of IT in public organizations, since funding for these projects rest with the legislative branch, which involves politics. As the case study illustrates, it was in the late 1990s that government agencies throughout the world became more concerned about the issue of un-integrated IT infrastructures. The issue is that when you there are not open standards, it is difficult to have scalable systems that grow with the organization. As the authors mention, their case study shows the extent in which e-government has a major impact on public sector reforms. NPM had an influence on governments that wanted to adopt more open standards for their IT infrastructure. This case study shows the importance of understanding the political situation for e-government reform, where there was much turnover in state government CIOs as a result of a new administration coming to office and having a different agenda than the previous.

Chapter 2, the case study by Wang, discusses the importance of democratic deliberation in the formulation of a new policy on casinos in Singapore. Singapore used an online consultation form to engage their citizens on the debate over whether they should build the nation’s first casino. This case shows the importance of the Internet for civic engagement through social media sites and other web-based forums. Singapore is an interesting case study of e-government because it shows an increase in the use of the Internet, but there are also issues of the government using censorship and control of the Internet. This government used an online consultation portal to get feedback on this policy idea. The findings from this study indicated that the online consultation forum might have the potential to become a place for civic engagement and consensus building. Participates were able to make comments on casino gambling, but making their comments they rarely referenced sources other than their own experiences and values. The author suggests that perhaps a moderator of the discussion would have been helpful to provide more focus on the conversation. The key contribution of this study is seen through the examination of NPS, in which citizen involvement is the key for successful e-government adoption.

In Chapter 3, Misra points out one of the greatest challenges for developing countries is to address issues of the digital divide and generally low usage of the Internet for e-governance. Studying the digital divide is a very important and growing area of e-government research (Norris, 2001; Helbig, Gil-Garcia, & Ferro, 2009). Another challenge that has not been addressed as much in the literature is that of the rural versus urban digital divide. Efforts in e-governance are county
specific, depending upon the national level policies, the socio-economic situation, and governmental system. India is a country, according to many reports, that needs dramatic improvements to bridge the digital divide. One of the most important issues that this chapter addresses is the idea of e-inclusion. These are the efforts governments are taking to address the challenges of lack of infrastructure, integration, and transformation of government through e-governance. Most of the reform so far, in many developing countries, have been supply driven by government’s themselves. The author points out that the livelihood of rural citizens is dependent on providing more access to e-governance in these communities. Therefore, this case study falls under the framework of NPS since it shows the importance of citizens in the adoption of e-government.

Chapter 4, by Aspland, discusses the important topic of the use of IT to support surveillance and intelligence gathering by private policing. For example, the use of Closed Circuit Television (CCTV) by private police organizations can help to fight crime, but there are also privacy issues as well that should be acknowledged. CCTV is used to monitor public and private spaces, which has been a critical component of law enforcement for years. However, more recently, CCTV has enabled the private policing of large numbers of areas to practice proactive policing. A major concern is the anonymity of the individual and their right to privacy has been diminished. Therefore, the greatest concern with CCTV is the misuse of this information and invasion of privacy for those unaware that they are being observed. For example, in the United Kingdom there are 4.2 million CCTV cameras, or 1 for every 14 Britons. This case study shows the importance of NPM on the adoption of this technology for society, in that its use reflects a serious concern of using private entities to assume the role of public law enforcement.

Kamel, in Chapter 5, provides a case study that examines the evolution and issues with the National Post Organization in Egypt. Postal organizations throughout the world have had to change the way that they do business as a result of the Internet. Egypt is trying to implement an aggressive strategy to modernize the National Post Organization for the purpose of economic development, with IT being used for these efforts. Three important initiatives adopted by the Egyptian government are citizen-centric service delivery, community participation, and efficient allocation of government resources that are reflected in postal reforms. Through IT, the post offices can provide innovative and secure services, with products and services that citizens and businesses want. Many of the IT reforms involve providing electronic means of processing mail and other methods to improve the efficiency and effectiveness of business operations. These principles applied to the National Post Organization in Egypt are consistent with NPM theory.

Chapter 6, by Molinari et al., discusses the use of citizen-centric software in Europe to enhance electronic democracy or e-democracy. Their chapter examines
the feasibility of having a Trans-European service integrated to produce greater
e-democracy. Their methodology can be used so that citizens can co-design and co-
produce e-government services. The power of the Internet is that it enables users to
get involved in the production of public service delivery. These authors stress that
politicians are beginning to realize that connecting directly with citizens to shape
policy is becoming possible and important as a result of e-government. There is a
movement from government merely providing information online, to consultation,
and ultimately active participation of citizens in public policy. The key contribution
is that the authors show how this is feasible with e-government; this is consistent
with NPS and the importance of citizens for enhancing democracy.

PUBLIC MANAGEMENT ISSUES

The second section of this book examines chapters that deal with important public
management issues. Chapter 7 by Kő, Kovács, and Gábor, discusses the importance
of knowledge management in public administration. Knowledge management is
critically important for governments, because public sector agencies need this re-
source to manage their programs. In order to manage the proliferation of knowledge,
special knowledge management software must be used in these organizations. As
the authors discuss, knowledge management is a strategic resource for public sector
organizations. They discuss a case study of a project in the European Union to show
the importance of knowledge management for the utilization of more efficient and
effective public administration, which is consistent with the principles of NPM.

Fugini, Cesarini, and Mezzanzanica, in Chapter 8, discuss that one of the most
important things to consider for the public sector organization is effective database
management. There are administrative databases that are good for administrative
purposes, but these databases may be faulty for statistical analysis. This is a result
of the presence of errors in the data, duplications, inconsistencies, and instability
in the database. These databases can look up information on citizens for public
service delivery, but provide inaccurate information for the analysis of the statistics
of the populations that they serve. Sometimes these errors go undetected by the
administrative agencies, as the authors in this chapter explain. The solution to this
problem is to provide data cleansing in order to correct for errors and duplication
in the data. This case study recalls that data can have two purposes, one being the
day-to-day operations and the other knowledge management and examining trends
in agency operations and performance. The first use can sometimes be perceived
as more important because it is immediate, but the statistical analysis is equally
important for policy making and management, impacting the long-term viability
of the public sector organization. This case study shows the importance of NPM
principles of providing for more efficiency and effectiveness in database management for public sector organizations.

Seo, in the case study in Chapter 9, discusses the importance of wireless communication industry and the government’s role in creating standards in two Asian countries. In the chapter, the importance of the government’s role in South Korea and Japan is examined with their choice of national technology standards for wireless communication. Other countries like the U.S. have led industry through competition to determine the standards, while South Korea and Japan are examined as two countries that have used regulation of the communications industry to create standards. The case illustrates the importance of government’s role in the regulation of industry, which can have an impact on the development of e-government, an area that deals with NPM and the role of privatization of government oversight.

In Chapter 10, Demirbaş discusses the importance of fiscal transparency in a case study of Turkish Websites. The Internet offers governments an unprecedented ability to increase the level of transparency in their operations. The Internet has enabled governments to make fiscal information more easily accessible, in a cost effective way, and to a large audience of citizens and business users. Fiscal transparency is part of the NPM reforms efforts, with governments offering more of these types of accountability reforms since the 1990s. The authors mention some important obstacles to fiscal transparency in their case study of Turkey, which include: lack of leadership and coordination, funding issues, the digital divide, and the lack of public interest in fiscal information.

Chapter 11, by Suomi and Krebs, discusses the issue of vision impairment and access to e-government. These authors argue that since e-government in intended for the masses, it leaves out a small minority of the population, the visually impaired. This case shows the importance of e-government research addressing the digital divide, or the inequality in access to online public services. This chapter discusses some of the activities that governments are using to assist vision-impaired individuals in e-government in Finland and Germany. The authors conclude by saying that the technology currently exists to aid those that are vision impaired to access e-government; however, the technology has not been used to the full extent that it should. This case study shows the importance of NPS in e-government adoption, in that citizens can be left out of e-government adoption, if governments just follow what the majority of what citizens want through NPM.

In Chapter 12, Lawry, Waddell, and Singh examine the critical factors that are important for public sector Chief Information Officers (CIO) in Australia. The CIO’s role is becoming increasingly important in public sector organizations because of e-government. The authors compare some of the differences between public and private sector organizations as being important to know to understand the constraints that public sector CIOs face. Some of these include the increased level of
bureaucracy, more red tape, and lower managerial autonomy than their private sector counterparts. Through a series of interviews with CIOs, the authors concluded that there are unique differences between the sectors and that public sector CIOs need to appreciate their distinctive roles. Therefore, a focus on understanding the unique differences between public and private sectors, as this case study discusses, is an important area of research in NPM.

In Chapter 13, there is a discussion by Ambali of e-government and the e-filing system in Malaysia. The case study shows that the overall usage of the e-filing system in this country is very low, despite media efforts to increase e-filing. There are concerns by the public of the security and privacy of this e-government. Since e-government involves trust, there is a less trusting relationship with government in Malaysia, which impedes use of the e-filing system. In addition, the digital divide is a factor that prevents usage of the e-filing system. Governments throughout the world would like to use e-government to improve public service delivery, and the e-filing system is a good example of a program with that purpose. This case falls right into the NPM framework, with the adoption of e-government technology to improve public service delivery.

**ISSUES AND CONSTRAINTS**

The final section of this book deals with some of the most important issues and constraints that public administrators need to know when dealing with e-government adoption. Rich, in Chapter 14, examines the use of IT to integrate toll collection in the State of Ohio in the United States. This is an interesting case study in the use of IT to improve the performance of public service delivery for motorists. The E-ZPass system is the introduction of technology whereby drivers have the convenience of automated toll collection, allowing them to move through the toll areas quickly. This system use Radio Frequency Identification (RFID) tags as an inexpensive way to collect tolls from the motorist. However, the cost of the technology is expensive, and this is especially so with the need to maintain existing toll operators for those motorists that do not have access to the technology. This shows the application of NPM for improving the performance of toll collection.

Chapter 15 discusses the importance of elderly population and e-government adoption. This is a challenge that governments must address throughout the world, making sure the elderly have access to e-government. The elderly have traditionally been a group that strongly relies on government support. Governments tend to use e-government in ways that neglects the elderly population. Batenburg, Versendaal, and Bredeveld, in Chapter 15, provide evidence of this in the case of the Dutch elderly population. Their main contribution of their study is that governments
should design e-government systems that take into account the elderly population. This case study shows the impact of NPM reforms through e-government that can marginalize a population from access to this technology.

In Chapter 16, Abbas et al. discuss the impact of Global Positioning Systems (GPS) that can track the movements of individuals. These devices can be used to display location specific information along with other characteristics of individuals can be gathered. These authors argue that these technologies have in the past only been used by law enforcement, but now they are readily available to the community at large. The issue is that the use of this technology by private citizens and organizations does not have the checks that have been placed on law enforcement. This type of technology subverts democracy and prevents citizens’ access to privacy, which runs counter to NPS theory.

In Chapter 17, Thominathan and Thurasamy discuss some of the challenges of e-filing of income taxes in Malaysia. Some of the most important issues are the low use of personal computers and broadband use in this country that may impede adoption. There also is the impact of the digital divide on the use of the e-filing system. There are some advantages of the e-filing system such as the immediate knowledge that their taxes have been filed. In addition, there is 24/7 availability of this service for citizens, something that is critically important if focusing on customer satisfaction with NPM. There are potential costs savings for both government and citizens from filing online which can be realized from the e-filing system.

In Chapter 18, Arh, Dimovski, and Blažič, examines mobile government with a case study of Saudi Arabia. As in many Middle East countries, there is a high rate of mobile technology adoption by its citizens. The numbers of mobile phones have skyrocketed in Saudi Arabia compared to Internet subscribers for this country. There have been rapid advances in mobile technology, which have opened up the opportunities for mobile government (m-government). Mobile technology is a more cost effective and convenient way to deliver government services, especially in developing countries that lack Internet infrastructure. Mobile government may replace e-government and has some unique characteristics that should be noted. There is more personalization of information, it is always on, and the mobility of the individual is consistent with empowering citizens and accessing their government in NPS. There are some issues with mobile devices for m-government such as limited memory of processors, small display areas, short battery life, and lack of security.

Chapter 19, the final chapter in this book, examines the role of free wireless Internet connection in Qatar. Al-Shafi in this chapter examines the use of wireless Internet parks in Qatar, as providing citizens with a free way of accessing the Internet in a public space. The government has adopted a policy of “Broadband for All” as a way of fostering a more knowledge-based economy for Qatar. The way Qatar is doing this is by creating “hot spots” in public parks. The authors of this case recall
that because of the digital divide, the benefits of the Internet are not available to all, and free wireless Internet access is one way to bridge the digital divide. This shows the importance of understanding citizens and e-government adoption, which is important for the theory of NPS.

As mentioned, this book can be read using the framework provided in Table 1 showing the unique roles of OPA, NPS, and NPM. This framework provides a way of understanding the development of e-government and public information management adoption through an analysis of case studies.

Christopher G. Reddick
The University of Texas at San Antonio

REFERENCES


