## Preface

This book examines the role that citizens play in the development of electronic government or e-government. This book specifically focuses on the impact of e-government and citizens, exploring issues of policy and management in government. What is unique about this book is that many of the chapters actually focus on the effectiveness of e-government, as a way of improving citizen access and engagement with their government. This book does not just focus on the adoption of e-government and its impact on citizens, but it also discusses the effectiveness this technology for governance. The primacy audiences for this book are scholars and practitioners in the area of e-government, but secondary audiences exist with those interested in the importance of citizens in information technology adoption and development.

There are twenty four chapters in this book divided into the sections of theoretical and conceptual issues, issues and challenges, and case studies. The theoretical and conceptual issues section covers some of the leading edge theories in the development of e-government and citizens. Some of the chapters in this section include: e-government creating a more user-centered government, trust and e-government use, effectiveness of e-government services, evaluation of e-government projects, images of citizens through e-government, Web 2.0 technologies and government, and online referral systems. After reading the first section the reader should have a thorough grasp of some of the major theoretical research in e-government and citizens. Most of the chapters in this section come to the conclusion that there is a need to study theoretical and conceptual reasons why citizens engage in e-government, in order to further enhance its effectiveness.

The second section of the book examines the issues and challenges, showing some of the most important problems that countries have faced in the adoption of e-government and its influence on citizens. Some of the topics discussed in this section include online transparency, human factors and e-government initiatives, security, individual rights, and government responsibility, cybercrime, electronic identity management, channel choice, and social tagging and e-government. After reading this section the reader will understand some of the most important dimensions of how e-government impacts citizens and their behavior.

The final section of this book examines case studies on the adoption of e-government and its influence on citizens. Some of the issues covered are citizen engagement and the Internet, e-filing income taxes, and citizen use of e-government services. This section also covers the development of e-government and citizens in various countries such as China, Taiwan, Australia, and India. After reading the third section the reader will have a very thorough grasp of the application of citizens and e-government in several different countries and the benefits and costs of its implementation. The following sections provide a summary of the key contributions of each of the chapters in this book to the research on citizens and e-government.

## THEORETICAL AND CONCEPTUAL ISSUES

Jaeger and Bertot in Chapter 1 examine the design for and evaluation of research about user-centered e-government and its implications for policy and management. They argue that an often neglected area of e-government research is how e-government is meeting the needs of users. These authors believe that the goal of improving user-oriented e-government and more efficient government can be problematic because it is always more costly taking into account the users' perspectives. Jaeger and Bertot offer several strategies for designing citizen-centered e-government. One important conclusion of this chapter is that developing successful citizen-centered e-government can be labor-intensive and costly, requiring a range of research methods and ability to understand what citizens desire from e-government.

Verdegem and Huattekeete in Chapter 2 make the case that in e-government research the user is often neglected. These authors argue that in developing e-government policies there is a need to shift from government centric e-government to user-centric e-government. In addition, e-government research needs to move from the focus on efficiency towards effectiveness. This requires a cultural shift from a government orientation to a citizen orientation in the development of e-government. Currently the uptake of e-government adoption and use in most countries is rather low; this is most likely due to the focus of the research on its government orientation rather than citizen focus. These authors conclude that e-government research as a result should take a more holistic perspective than what it currently does.

In Chapter 3 Huang and Lee administered a citizen survey of e-government users and nonusers in Taiwan and found that e-government had a significant impact on citizens regarding their time savings, perception of information credibility, and satisfaction with government. In Taiwan the most important impact of e-government on citizens was the savings in time that citizens received from e-government services. However, their results did not find that trust in government was enhanced as a result of e-government use.

Park in Chapter 4 examines the effectiveness of delivering e-government services and how citizens value and are satisfied with these services. Through an empirical study this author found that 38 items grouped into eight major categories influenced the effectiveness of e-government services. Essentially, the work by Park showed that the success of e-government was related to citizens' willingness to use these services. Therefore, it is critical to understand the effectiveness of e-government services, whether they are perceived to be better than conventional methods of contacting government.

Fitsilis, Anthopoulos, and Gerogiannis in Chapter 5 examine an evaluation framework for e-government projects as a way of measuring the success of e-government projects in achieving their targets and user satisfaction. A key component of their framework is the inclusion of citizens in project management. Citizen satisfaction with e-government is a key measure that these authors incorporate in the framework.

Jensen in Chapter 6 showed that the content of most e-government websites revealed that they were almost universally communicating in a consumer mode rather than a participatory mode of interactions with citizens. This author's study examined both consumer and participatory interactions of citizens through an examination of 24 local government websites in the United States. The findings of the empirical analysis revealed that local government websites were generally more consumer rather than participatory oriented. Political information on a website was generally less accessible and useful than other forms of more consumer information.

Anttiroiko in Chapter 7 explored Web 2.0 technologies and their application to government. This chapter provided an overview of this technology and demonstrated some important issues that public administrators should know when adopting this technology. Web 2.0 technologies refer to users' networks and user generated content that provide a social dimension and social networking opportunities on the Web,. Wwhile Government 2.0 areis technologies that give users a new role in public service and gov-

ernance through social networking and content sharing activities. For example, YouTube and Facebook are able to disseminate information and services to a large audience of citizen about their government. Anttiroiko chapter showed that Government 1.0 is hierarchical, single channel, and input-oriented, while Government 2.0 is collaborative, multi-channel, and outcome-driven.

In Chapter 8 Rosa, Rovira, Beer, and Montaner examinesexamine information and referral services through a comparative case study of Greenwich, Massachusetts, in the United States and Terrassa, Catalonia, Europe. The results of their study reveal that when comparing phone and online approaches to citizen contact, online referral services helped to reduce the required manned telephones by a third with an increase in the number of phone calls. These information and referral services can help agencies collect data regarding the number and nature of enquiries that they received and governments can use these statistics to better serve their citizens. The next section provides chapters that demonstrate some of the issues and challenges in the adoption of e-government and citizens.

## **ISSUES AND CHALLENGES**

In Chapter 9 Perez, Bolivar, and Hernandez examine the degree of online transparency in Latin-American capital cities. Specifically, they examine whether capital cities are using the Internet to enhance citizens' access to public sector information. The disclosure of government information online is a significant factor in improving governance and public accountability. The empirical results of their study indicate that Latin-American capital cities are still not fully aware of the potential importance of the Internet to increase transparency.

Hamner, Taha, and Brahimi in Chapter 10 found that human factors appeared to play the greatest role in the success or failure of e-government initiatives rather than more technical factors in developing countries. These authors note that one should understand the intention of use for e-government technology before it is implemented. These authors present an approach that takes into account systems engineering, determining the requirements of key stakeholders in e-government development, especially for developing countries is critical to their model. This chapter notes that one of the key stakeholders is citizens and their input is crucially important for e-government development in developing countries.

Wolf and Korosec in Chapter 11 argue that there are few e-government studies that examine security, individual rights, and government responsibility. With more governments placing information online, there is an increased potential for misuse and abuse of data collected, managed and stored online. One central component to this question is the issue of privacy of citizens' information. These authors believe that governments should be more proactive in creating comprehensive legislation to protect individuals from potential intrusions on their personal lives.

Miller, Higgins, and Lopez in Chapter 12 argue that cybercrime is an unavoidable by product of greater use of the Internet. Their chapter examines the scope of cybercrime in the United States as a way to determine what future research program in this important area should address. These authors indentify the most common cybercrimes such as identify theft, online child pornography, and electronic copyright theft. Their conclusions are that we know little in the fields of criminal justice and e-government on this important area of inquiry and they advocated a research program as a result.

Halperin and Backhouse in Chapter 13 examines the issue of digital indentify management of citizens in the United Kingdom, a proposed government policy. Their empirical results indicated that a number of citizens in the UK were deeply nervous about how electronic identity management might usher in a degree of risk never encountered for citizens and government. The issues that citizens' commented upon were technology failure, public authority competence and integrity, lack of control over personal data, and overpowering the state with information. Halperin and Backhouse believe that governments should understand these implications before they embark upon creating a national identity management system.

In Chapter 14 Pieterson provides an overview of channel choice and public sector service delivery. The author found that the choice of service channel such as phone and website is dependent upon the task at hand. Research shows that traditional service channels such as visiting a government office or calling the agency on the phone are still more popular than going online. The author argues that an integrated strategy, where channels are seamlessly connected, is the best in terms of serving the needs of citizens. An example of this technology is New York City's, in the U.S. 311 system customer relationship management system.

Reddick in Chapter 15 also discusses the role of channel choice examining public opinion data in the United States. The results of this empirical study indicated that e-government was just one of many possible service channels for citizen-initiated contacts with their government, with the phone being the most popular contact channel. The results also indicated that when citizens need information they were more likely to want to go online, when they had a problem they turned to the phone. The results of this empirical study are similar to the previous chapter arguing that task at hand drives service channel choice.

In Chapter 16 Warner and Chun showed that social tagging technology can support citizen information and service requirements by facilitating discovery of needed information, services, and knowledge. Social tags act as a filter that narrows the range of potential sources that might be of interest to the researcher. This has an advantage over the traditional search engine because it makes use of knowledge and expertise of human taggers, which can be especially helpful when searching for government information online for citizens to get access to. The following section provides case studies of citizens and e-government focusing on its development and effectiveness in a diverse range of countries throughout the world.

## CASE STUDIES

Chapter 17 by Cassell and Hoornbeek examine three models of citizen engagement, namely electronic bureaucracy, information management, and populist models. These authors performed a content analysis of municipal government websites and looked for these three features. Their empirical results indicated that information management was the dominate model of developing municipal government websites. There was little evidence of municipal websites providing a populist intervention, with less than 3% of them having this feature. Therefore, websites have not fully accounted for democratic governance in their design and are mostly information management tools for governments.

In Chapter 18 Kaliannan, Raman, and Dorasamy examines the reasons why citizen intend to use efiling systems in income tax submissions in Malaysia. The purpose of e-filing systems is to encourage taxpayers to submit their income tax online thus reducing the paper based version of income tax return filing. The results of their empirical study indicated that the intention of citizens to use e-filing systems was related to the perceived usefulness and perceived readiness to use e-filing.

In Chapter 19 Lean, Zailani, Ramayah, and Fernando examined the factors that influenced the use of e-government services in Malaysia. Using a survey of e-government service users, the empirical results showed that trust was one of the biggest factors that decreased use of e-government services by citizens. Their findings imply that government should look into ways of enhancing trust in e-government services among citizens, as this was directly related to a higher volume of transactions over the Internet.

In Chapter 20 Lollar conducted a comprehensive analysis of 31 provincial and metropolitan websites in China to examine e-government adoption. There are two views as noted by this author for increased web utilization of e-government. On the one hand, the web can be used to bring greater transparency, accountability, and efficiency to its citizens in China. On the other hand, the web can be used to monitor and control citizens in China. One of the important findings of this study is that Chinese e-government shows an effort to reach out to citizens and respond to their needs. Overall, e-government has played a greater role in providing public information and improving transparency and citizen outreach, while playing less of a significant role in delivering efficient services and including citizens in the decision making process of government.

Hu, Chen, and Tseng in Chapter 21 conducted a case study of an e-governance scenario workshop in Taiwan in 2008 on citizens and their views of e-government. The results of this case study indicated that current e-government initiatives were insufficient in Taiwan since they lacked participatory planning for citizens or users. Citizens had little intention of using the services because they were not involved in its development. These authors recommended a model where citizens were much more involved in the development of e-government, indicating a needed move from government being technocratic driven to citizen-centric.

In another case study of Taiwan, Yeh and Chu in Chapter 22 examined the electronic complaint system in Taiwan as a way of providing outreach to its citizens through e-government. Through a survey of users of the electronic complaint system these authors found that service quality impacted satisfaction with e-government. The authors argued that the e-complaint system had the potential to help meet citizens' needs for better service quality and focuses on citizens' demands for e-government.

Shackleton in Chapter 23 examined the progress in local e-government in the State of Victoria, Australia in utilizing the Internet to deliver traditional services and improve governance. This chapter conducted a case study of four local councils and found that adoption was related to external factors such as technology, digital divide, and higher levels of government. There were also internal factors such as funding and innovation and change that influenced e-government adoption in Australia. This chapter concluded that differences in councils might be related to priories placed on citizen involvement in their government.

The final chapter by Arlikatti, Wachira, and Gregory examined community policing and e-governance using a case study of India. This chapter indicates that the use of e-governance for policing has made it easier to measure the time required to respond to critical incidents and complaints, monitor citizen satisfaction with police response, and to obtain input from citizens when citizens are dissatisfied with the response. In several case studies of an electronic community policing system these authors found that increased transparency, trustworthiness, and efficiency in policy administration in India was enhanced through e-government.