

# Chapter 1

## Government Services in Outlying Regions

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### ABSTRACT

*E-government offers the potential to provide easy and flexible access to a vast array of government services, particularly in outlying regions where traditional service centers are scarce and costly. However, past research shows that online services use decreases in non-urban areas. The objective of this chapter is to identify factors that influence the use of e-government services in outlying regions. In the delivery of any government services, there are two parties: citizens and the government. Hence, in order to better identify these factors, we conducted our study from two points of view: the citizens' and the government's managers. These results show that attitude positively affects intention to use e-government services. From the citizens' perspective, attitude is in turn influenced by perceived usefulness, perceived ease of use, perceived risk, and trust. From the managers' perspective, several social, economic, demographic, and psychological factors should be considered for the development of online services.*

### 1. INTRODUCTION

The objective of e-government is to provide better and more accessible services to citizens while reducing service costs. Since these services are used by a variety of citizen profiles such as students or workers, young persons or seniors, and for different needs (Bertot & Jager, 2008), governments must take a segmented approach

to study and understand these needs in order to maximize the adoption potential. Past studies show that there is a difference in behavior between urban and outlying citizens in using electronic government services, with a marked decrease in online services adoption in rural areas (Goldfinch et al., 2009; Previtali & Bof, 2009). Consequently, governments must address the specific needs for online services in outlying regions in order to

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deploy better strategies to encourage use (Nam & Sayogo, 2011). However, little is known about what factors affect citizens' from outlying regions intention to use e-government services or behavior.

In this chapter, we describe a large scale study that was performed in the province of Quebec in order to shed some light onto the factors that predispose citizens in outlying regions to use online government services. In any delivered government service, there are at least two parties involved: citizens and government employees. Hence, in order to better understand the adoption of electronic government services in outlying regions, the study was designed to address both the perspective of citizens as well as the perspective of government's officials (Fagan, 2006; Huang, 2007; Moon, 2002; Reddick & Frank, 2007).

Electronic government services adoption was widely studied in the literature (Horst et al., 2007). However, these studies focused on the adoption of people living in central cities. In our knowledge, there are no studies on electronic government services adoption in outlying regions. The difference between an outlying region and a central region is that an outlying region, generally, does not have a decision making power; it mainly depends on the government agencies located in central cities. Furthermore, the technological infrastructure is not the same in outlying regions and central cities; that is called the digital divide. Consequently, it becomes interesting to study electronic government adoption in outlying regions and identify the main barriers that hinder e-government adoption in these regions.

In addition, most of e-government adoption studies conducted interviews with citizens to identify the barriers and the incentives of the adoption of electronic services. However, it is the government who is delivering electronic services to the citizens. Hence, if the citizens perceive barriers that hinder them from using electronic services, it is necessary that government's managers perceive the same barriers than citizens so that they can

improve the Quality of Services of the provided electronic government services. Otherwise, and since government's managers do not perceive the same barriers than citizens, actions may be taken on things that do not lead to a better adoption of electronic services from citizens. The aim is to see if managers and citizens perceive the same barriers and incentives for adoption of e-government services.

This chapter is organized as follows. Section 2 presents related work on the digital divide and appropriation of e-government. Section 3 details the conceptual frameworks adopted to study the citizens' and government's point of view. Section 4 presents the results from the field studies. Finally, the last section concludes and argues for future research avenues.

## **2. RELATED WORK**

Our study focuses on the use of e-services by citizens living in outlying regions. To this end, two questions may arise: what are the technological differences between outlying regions and urban areas? And what does it mean to use or adopt e-services in outlying regions? Based on the literature, these two questions are discussed in the following two sections.

### **Digital Divide and Outlying Regions**

The "digital divide" is the difference in use of information and communication technologies between two or more groups: those who have access to the digital technologies and those who do not (Rallet & Rochelandet, 2004). The digital divide can impact economic, demographic, or social divisions between groups and consequently between cities (Edmiston, 2003). Several studies have been conducted to understand the causes of the digital divide between cities (Huang, 2007; Canada, 2012). In Huang (2007), it is stated that

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