

# Chapter 12

## Citizens' Voice and Adoption of Pakistani E-Government Services

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### ABSTRACT

*Even though there is emerging literature on e-government, research focused on potential problems related to citizens' adoption of e-government services in developing countries is still limited. As a developing country, e-government services in Pakistan have witnessed prolific advancements over the years. Since 2002, Pakistan has strategically adopted e-government as a part of its policy. In this chapter, the factors influencing citizens' e-government service adoption in Pakistan are examined using the unified theory of acceptance and use of technology model. The findings indicate that, in addition to the lack of awareness and data privacy, all of the factors specified by the model have an effect on the adoption of these services in Pakistan. The empirical results highlight the voice of citizens concerning the usage of the services. This information can be used by the policy and decision makers to promote services that correspond better to the needs of the citizens.*

### INTRODUCTION

The expansion of the Internet and the advancement of information and communication technologies (ICT) offer new channels for governments to reach and serve their citizens. ICT provides opportunities

for government to increase operational efficiency by reducing costs, increasing productivity, and providing quality services. E-government has been conceptualized as an intensive use of ICT, by governments, to provide high quality public services to citizens. According to Laudon and

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Laudon (2009), e-government brings transparency into the process of governance, cost, and time savings. Following this concept, governments around the globe have started to provide their services electronically (Kamal et al., 2009; Irani et al., 2007; Sarikas & Weerakkody 2007). The United Nations' annual survey on e-government (UN, 2012) reported that almost all governments now have websites and they are providing various electronic services to their citizens using modern ICT. Indeed, due to its affordability and accessibility, governments around the globe are working to promote citizen interaction through ICT (Gauld et al., 2010; Irani et al., 2007).

Nonetheless, in consideration of the current literature (UN, 2012; Alshehri et al., 2012; Rehman et al., 2012; Gupta et al., 2008; Dwivedi & Irani, 2009; AlAwadhi & Morris, 2008; Carter & Weerakkody 2008; Irani et al., 2007), developing countries still face many challenges, such as lack of infrastructure, awareness, government regulation, human resource capacity, technical skills, and inexpensive technology. In addition to these challenges, some researchers (Carter & Belanger, 2005; Ahmad et al., 2012; Ahmad et al., 2013) argue that the success of e-government is dependent upon the citizens' willingness to adopt this innovation. Clearly, many governments still face the problem of a low-level of citizen adoption of e-government services, especially in developing countries such as Pakistan (Ahmad et al., 2013; Belanger & Carter, 2008; Gupta et al., 2008; Kumar et al., 2007). Based on the above arguments, it is essential to investigate the factors hindering the adoption of e-government services in developing countries.

Various technology adoption models have been applied in e-government adoption research. These models include the theory of reason action, the technology acceptance model, the motivational model, the model of PC utilization, the diffusion of innovations, the theory of planned behaviour, social cognitive theory, and the unified theory of acceptance and use of technology (UTAUT)

(Venkatesh et al., 2003). To overcome the limitations of the existing models, the UTUAT models combine the previously developed models into four constructs: performance expectancy, effort expectancy, social influence, and facilitating condition. These four constructs are the direct determinants of user acceptance and the adoption of technology and services (Harby et al., 2012; Venkatesh et al., 2011; Alhujran & Chatfield, 2008; Venkatesh et al., 2003).

Using a modified UTAUT as a research model, this chapter presents the factors affecting citizens' adoption of Pakistani e-government services. The study also provides contemporary information and an understanding of the current state of e-government services in Pakistan from the citizens' perspective. In this way, it raises the citizens' voice, which can be used by the decision-makers. Additionally, it can be used by service-designers to improve e-government services and their accessibility for citizens, not only in Pakistan but also in other developing countries, especially South Asian countries, as well.

This chapter is divided into seven sections. After the introduction, there is a brief summary of previous research. Then a description of e-government in developing countries, in South Asia and specifically in Pakistan, are presented. Next, the research strategy and methods are discussed. The results of the empirical data, along with the challenges in citizen adoption of e-government services in Pakistan, are all presented. Finally, the chapter provides recommendations for overcoming these challenges and it concludes by examining the implications and suggestions for future research.

## **E-GOVERNMENT ADOPTION**

E-government services are still not mature around the world. The maturity of e-government services can be divided into four stages, based on the technological development of the e-government portals. The four-stage model of the United Na-

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