Chapter 7
Adoption of E-Government Services in Developing Countries: An Empirical Evaluation

Suha AlAwadhi
Kuwait University, Kuwait

Anne Morris
Loughborough University, UK

ABSTRACT

E-government initiatives are in their infancy in many developing countries. The success of these initiatives is dependent on government support as well as citizens’ adoption of e-government services. This chapter explains in detail a study that aimed to explore the attitudes and perceptions of citizens regarding the adoption of e-government services in Kuwait, as a developing country. The study employed both quantitative and qualitative methods, including a questionnaire survey incorporating the amended version of the Unified Theory of Acceptance and Use of Technology (UTAUT), as well as usability testing and focus groups. The findings identified factors that determine and influence the adoption of e-government; these were then modeled taking a systemic approach. Based on the results and conclusions of the study, recommendations were made to Kuwaiti officials responsible for the e-government services.

INTRODUCTION

The rapid advances in technology, the significant improvements in communication and information technologies, the widespread use of the Internet, and the adoption of successful practices of e-business have redefined the public’s expectations of government and its services. These expectations and demands for a more responsive government has left leaders in the public sector struggling to find the best means of service delivery across multiple channels within budgetary constraints (Ke & Wei, 2004). Not surprisingly, e-government
Adoption of E-Government Services in Developing Countries

has been seen as a key method for resolving these issues (Jaeger & Thompson, 2003). The use of technology, particularly web-based Internet applications, is now enhancing citizens’ access to government services in many countries, enabling them to make online transactions and facilitating their communication with government in a quick and convenient manner (Ndou, 2004). The transition to e-government is not easy. Migrating from traditionally paper-based and face-to-face services to the Internet requires effective plans for changes that are expected to be made with a proper understanding of the infrastructure, IT systems, and business processes required (Liikanen, 2004).

Many governments in developed countries have taken progressive steps towards the implementation of e-government projects where the web and information communication technologies are used to access local activities, open up interactive services and increase the participation of citizens in governance. However, e-government initiatives are still in the early stages in most developing countries because of the need to grapple with complex technological, organizational, human, cultural, and societal factors (Chen et al., 2006).

The mission of this chapter is firstly, to present and discuss the adoption of e-government services in a developing country, namely Kuwait, and secondly, to provide recommendations to aid decision makers in governments to improve the effectiveness and quality of such services. This is deemed necessary since to date, there has been little research exploring factors that determine and influence the adoption of e-government services by citizens in developing countries, especially in the Arab world (AlShihi, 2005) and the research described in this chapter aims to address this gap. Therefore, the chapter aims to present the attitudes and perceptions of citizens towards the adoption of e-government services in developing countries. These results from research that utilized both quantitative and qualitative methods including a questionnaire survey, which incorporated the amended version of the Unified Theory of Acceptance and Use of Technology (UTAUT) model (Venkatesh et al., 2003), usability testing and focus groups using open-ended questions. The use of UTAUT, using 880 potential service users, identified factors that determined whether they were likely to adopt e-government services. For example, performance expectancy, effort expectancy, peer influence, and facilitating conditions were found to be direct determinants of usage intention and behavior.

The evaluation also identified a number of factors that positively and negatively influenced the attitude of potential users regarding the adoption of e-government services. For example, e-services are more likely to be used if they are seen to reform bureaucracy, are useful, eliminate or reduce the importance of connections or “wasta,” improve government-public communication, reduce gender differences, and are thought to be inclusive of all people in society. However, a number of factors were found which could affect usage of e-government services. These included fears and concerns about technology issues, such as privacy and security, lack of awareness, a lack of faith in government generally, the belief that a lack of face-to-face interaction would devalue dealings with government, and most importantly, the general thought that the government lacked the capacity to create e-government services.

In addition to these attitudes, the evaluation showed that the usability and functionality of e-government websites is also a key contributing factor to whether e-government services are adopted. Ideally, e-government websites should have good usability, functionality, and accessibility, and have other features reflected in their interface design to make it easy for users of different cultural backgrounds and with different levels of Internet experience and education to navigate and use the services quickly and efficiently.

The chapter also explains how all adoption factors identified in the evaluation can be modelled through the use of a “systemic” approach. The use of the “accidental adversaries” archetype