Chapter 1
Government ICT Adoption:
Global Trends, Drivers, and Barriers

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ABSTRACT

This chapter focuses on the information and communication technologies (ICTs) adoption by governments in various countries. Theoretical models related to information systems and technology adoption are presented in order to understand the various constructs of importance from the adoption and diffusion of innovations perspective. Moreover, this chapter highlights the drivers and barriers to ICT adoption from the government perspective. Furthermore, this chapter provides important information of ICT adoption in different world regions by governments. Future implications and conclusions are provided.

INTRODUCTION

Governments as public sector organisations throughout the world are the largest users of ICT (Information and Communication Technologies) and often play a lead role in the adoption and diffusion of ICTs (Affisco & Soliman, 2006). The impacts associated with the adoption/non-adoption of ICTs are huge on both governments and citizens. The key benefits associated with government adoption of ICTs include enhanced performance of the government organisations, modernisation of the public sector from the traditional models, improved interactions with the businesses and citizens, reduced transaction costs, increased connections between different levels of the government (federal/state/local), decreasing the levels of business processes and improved cooperation and communication at various levels.

As the citizens and various businesses operate in an integrated manner in a society, the factors driving government ICT adoption from the regional perspective relate to the economic status of the country, prevailing political situation, technological readiness of the country, socio-cultural situation and prevailing laws and regulations in a country. Similarly, citizens and organisations heav-

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ily rely on their knowledge and awareness, service delivery, efficiency, quality and implementation of the government ICT adoption. Government ICT adoption is evident to the businesses and citizens in the form of enhanced public sector processes (e-Administration), maintaining better connections with the citizens (e-Services) and building interactions with the external stakeholders (e-Society) (West, 2005).

ICTs have been adopted phenomenally by the commercial sectors in many countries. The adoption of ICTs by citizens also increased in a phenomenal manner. Therefore, citizens and other businesses expectation about the adoption of ICTs by their governments have emerged (Nelou, 2004). Today, citizens, businesses, employees and other interest groups if any, expect increase in service provision by the governments, call for better administration practices and tend to create an innovation climate by fostering e-Society (Burne, 2002). Governments in many countries have realised the importance of embracing ICTs in their day today operations as they associate the ICT developments with the immediate benefits of economic development, upgrading infrastructure and productivity gains.

Governments adopting ICTs are often referred to as eGovernment in the extant literature. The concept of e-government enhances the process of decentralisation by bringing the decision-making aspects closer to the citizens, businesses, employees and other governments. Thus e-government focuses on delivering the relevant information and services online through the internet or other digital means for its users (Muir and Oppenheim, 2002). These users are identified to be citizens, businesses, employees and other governments. Furthermore ICTs are creating networked economies where by businesses involving different stakeholders such as suppliers, manufacturers, customers etc., are linked with the business processes in an integrated manner in the real time in order to create more value.

THEORETICAL MODELS ON THE ACCEPTANCE OF TECHNOLOGY

Several businesses are utilising innovative technological advancements in order to make their services more accessible to consumers as well as to improve their business performance and increase their productivity (Winch & Joyce 2006; Reid 2008). However, the correlation between technological advancements and increase in business productivity is feasible only if they are accepted by the intended users (Venkatesh *et al.* 2003). The objective of most research on ICT adoption has been to analyse the process of acceptance, intention to adopt or adoption of the new technology and compare it with the other technologies that are in place. Nevertheless, in recent years ICT adoption has shown increasing uptake by several commercial users and there are more and more citizens willing to adopt ICTs. Recently, there has been an upsurge in the public sector to embrace ICTs in their day to day operations for better service provision to its users. Therefore, governments throughout the world are trying to provide enhanced eService and eAdministration through their web portals in order to create an eSociety.

Thus, from the existing research, possible theoretical models that provide a comprehensive understanding of user acceptance of innovations come from disciplines such as information systems, psychology and sociology. The present study proposes the application of two main theoretical models that of an integrated technology model of consumer adoption and diffusion of innovations model, in order to explain the factors that might have a significant impact on the usage patterns of ICTs offered by eGovernments in several countries.

Four theories are discussed in detail which might explain the perceptions consumers have towards their use of internet banking. The theories that are reviewed include: