

# Chapter 1

## An Overview of E–Government Technological Divide in Developing Countries

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### ABSTRACT

*This chapter presents an overview of e-Government technological divide in developing countries. Technological divide here does not consist simply of telecommunications and computer equipment (i.e. ICTs), but it is also e-Readiness (i.e. the available capacity as indicated by workforce capacity to build, deploy, and maintain ICT infrastructure), ICT literacy (using digital technology, communication tools, and/or networks appropriately to access, manage, integrate, evaluate, and create information), e-Inclusion and/or e-Exclusion (i.e. no one is left behind in enjoying the benefits of ICT), etc., which are factors also necessary in order for people to be able to use and benefit from e-Government applications. Most of the currently published works on e-Government strategies are based on successful experiences from developed countries, which may not be directly applicable to developing countries. Based on a literature review, this chapter reveals the status of e-Government technological divide in developing countries and also underscores the challenges associated with e-Government in developing countries, thus bringing to the limelight the factors that influence the growth of the technological divide and different approaches that have been put in place to overcome the divide. In conclusion, this chapter advocates education and training, local content development, enhancing network infrastructure, and capacity building, among others, as ways of bridging the divide.*

### INTRODUCTION

Many governments worldwide are attempting to increase accountability, transparency, and the

quality of services by adopting information and communications technologies (ICTs) to revise and change the way their administrations work. Meanwhile e-Government is becoming a signifi-

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cant decision-making and service tool at local, regional and national government levels and the vast majority of users of these governments online services see significant benefits from being able to access services online. The rapid pace of technological development has created increasingly more powerful ICTs that are capable of radically transforming public institutions and private organizations alike. These technologies have proven to be extraordinarily useful instruments in enabling governments to enhance the quality, speed of delivery and reliability of services to citizens and to business (VanderMeer & VanWinden, 2003). However, there is unequal access to ICTs—primarily computers and the Internet—based on income, ethnicity, geography, age, and other factors. Eventually it has evolved to more broadly define disparities in technology usage, resulting from a lack of access, skills, or interest in using technology.

The initiatives of government agencies and departments to use ICT tools and applications, Internet and mobile devices to support good governance, strengthen existing relationships and build new partnerships within civil society, are known as e-Government initiatives. Many government agencies in developed countries have taken progressive steps toward the Web and ICT use, adding coherence to all local activities on the Internet, widening local access and skills, opening up interactive services for local debates, and increasing the participation of citizens on promotion and management of the territory (Yaghoubi, Haghi and Khazae, 2011). According to Cordella (2007), e-Government is often thought of as “online government” or “Internet-based government,” but there are non-Internet “electronic government” technologies that can be used in this context, some of which include telephone, fax, PDA, SMS text messaging, MMS, wireless networks and services, Bluetooth, CCTV, tracking systems, RFID, biometric identification, road traffic management and regulatory enforcement, identity cards, smart cards and other NFC applications.

Adejuwon (2012) stated that governance has undergone important changes in the last decade or thereabout and the emergence of supra-national, inter-state, and private governance mechanisms and practices have also taken place, further challenging the traditional power of national governments (UNDP, 2005). Electronic Governance (e-Governance) is a new way to govern processes in which Information and Communication Technology (ICT) play an active and significant role. The arrival of ICT in the modern years has presented an opening for the central and state governments to change the way organizations control and leverage and value their information assets. Throughout the world, the work of government is being reshaped by two ineluctable trends (Adejuwon, 2012). The first is the movement away from centralized, vertical and hierarchical government machines towards polycentric networks of governance based upon horizontal interactions between diverse actors within complex, dynamic and multi-layered societies. Governance entails government co-governing with a range of organizations, public, private and voluntary, in what Bryson and Crosby have called a shared power, no-one in charge, interdependent world (Coleman, 2008).

Moving away from these assertions, the aim of this chapter is to discuss and analyze the key issues that have brought about e-Government technological divide and the opportunities and challenges that e-Government initiatives present for developing countries.

## **BACKGROUND**

An important component of the factors which interface with the ability of developing nations to harness the use of IT for better and more productive governance as well as delivery of public goods and services is the issue relating to Digital Divide between countries integrating with each other in the total IT environment. This divide is not merely between countries: developed and developing, rich

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