

## Chapter 5

# M–Government: An Opportunity for Addressing the Digital Divide

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### ABSTRACT

*This chapter looks at technological inequities throughout the world within the context of e-government. The purpose of the study is to evaluate and highlight existing digital divides and current trends among the various divides. The concept of the digital divide, within the context of e-government, is often associated with the lack of access and resources to citizens for the purpose of utilizing technology in working with government. Utilizing survey data of international municipal Web portals as well as existing United Nations data, this research evaluates existing divides throughout the world. Through these findings, the authors underscore opportunities for addressing such existing divides and modes of increasing e-government performance. Specifically, mobile technology or m-government is examined as a medium for further connecting government and its citizens.*

### INTRODUCTION

The use of technology by governments to provide services and communicate with its citizens – e-government – depends on the ability of the public to have access and competencies to uti-

lize these technologies. The inability to access technologies or barriers to online government services have resulted in a divide between those who can utilize these online services and those who cannot. The “digital divide” has long been a concern with the ever-increasing use of online technologies by government entities. Research continues to review the emergence of a divide

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among municipalities and regions throughout the world. Recently, Holzer and Manoharan (2009) had attempted to determine whether the divide between the “haves” and “have-nots” is merely an extension of the existing inequalities. Existing social and economic divides may be a critical factor in the existing technological divides that arise throughout the world.

There is a wealth of national and international research studies, which have been able to track the continued progress and performance of e-government (UN, 2008; Holzer & Kim, 2008; West, 2008); however the need to underscore the digital divide against e-government performance is critical. The data for this paper are drawn from a study of global municipal Web portals conducted by the E-Governance Institute at Rutgers University, Newark. The study ranked municipalities worldwide based on their scores in the following five e-government categories; privacy, usability, content, services and citizen participation. Initial surveys (2003 & 2005) indicated a growing digital divide between cities across the globe. However, recent surveys (2007 & 2009) point toward a stabilizing but a digital divide that remains. In this international perspective, we define the digital divide as the difference in the average e-government scores between developed (OECD members) and developing (non-OECD) nations included in the Digital Government in Municipalities Worldwide Surveys.

A review of international e-government data will underscore an overview of digital divide worldwide. Although various digital divides may be stabilizing, our primary research question focuses on what can be done to address existing divides. To this end we will conclude this paper with the role that m-government or mobile technology can do to address digital divides among e-government efforts. This research paper begins with an overview of the existing data and a literature review of e-government and the digital divide and m-government to provide a framework for the research.

## **LITERATURE REVIEW**

### **E-Government Data**

The key questions of public management research have often sidelined the focus on social consequences of public administration in a democratic society (Kirlin, 1996). Under such circumstances, the emerging study of e-government introduces the risk of a digital divide between the digital ‘haves’ and ‘have-nots’. The definition of the digital divide is often associated with the lack of access to technology by certain sections of the public. The digital divide is not only confined to people’s access, but it can also be applicable to the online public service delivery by national governments. There clearly exists a divide among nations, particularly between the developed and developing nations, in terms of e-government functionality and performance. According to a United Nations report, “the network society is creating parallel communications systems: one for those with income, education and literal connections, giving plentiful information at low cost and high speed; the other for those without connections, blocked by high barriers of time, cost and uncertainty and dependent upon outdated information” (United Nations Development Program, 1999, p.63). In this research, we examine the divide in online services and functionality, among large municipalities throughout the world and also attempt to further understand the relationship of this digital divide to other divides - social, political, economic and literacy divides among nations, particularly those between OECD and non-OECD nations.

### **The Digital Divide**

Digital divide, in general refers to the gap between those who have access to information and communication technologies (ICTs) and those without such access. Based on a study conducted by the United States Department of Commerce (1999, p. 16), there existed a digital divide between “the

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