

# Chapter 17

## Perusing E-Readiness and Digital Divide: From a Critical View

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### ABSTRACT

*With the advent and evolution of information and communication technologies (ICTs) in general, the Internet, in particular, throughout the world, new terms such as “information society,” “digital divide,” and “e-readiness” were added to terminologies. Due to the rapid diffusion of the Internet in different aspects of human life, these concepts have attracted many scholars, practitioners, and policy-makers. In addition to much academic research done in these fields, nearly all countries have assessed their e-readiness and compared their digital divide with that of other countries, at least once. Consequently, there have been numerous e-readiness and digital divide models oriented towards certain objectives in recent years. The findings show (1) tremendous importance of the digital divide and e-readiness and (2) their complex and multi-faceted natures. Thus, effective examination and development of digital divide and e-readiness research requires a foundation in several rich literatures. Examining the e-readiness and digital divide literature in terms of their definitions and methodologies, in the current chapter, their strengths and weaknesses were recognized. Moreover, after an extensive literature survey, an integrated model was proposed for assessing e-readiness of small and medium-sized enterprises (SMEs) that can be used as the basis and standard for developing comprehensive models and frameworks in these enterprises. Finally, this chapter contributes to scarce literature on e-readiness/digital divide at micro level and creates additional pool of resources that practitioners and theorists could use to further enrich and extend their analysis of this construct.*

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## INTRODUCTION

Thus far, information and communication technology (ICT) has developed considerably among countries and organizations and brought them many benefits. Even though ICTs have provided tremendous opportunities, it is generally acknowledged that they have also potential pitfalls, such as the digital divide. The origin of the term digital divide goes back to an unknown American source in the mid 1990s and this concept initially emerged in media and government reports, e.g., “Falling Through the Net”, “A Nation Online” and by “US Department of Commerce’s National Telecommunications and Information Administration” (NTIA, 1995, 1997, 1999, 2000, 2002, 2004; Vehovar et al., 2006; van Dijk, 2006). The first scholarly papers on such a topic appeared around 1997 (Vehovar et al., 2006). As the information revolution has turned out to be a significant driver of the global economy, the digital divide has increasingly attracted researchers and policy-makers (Dewan et al., 2004). But the first step in any approach to the digital divide problem is to consider a country’s ability or “readiness” to integrate information technology (IT) and e-commerce, in order to provide a baseline that can be used for global and regional comparisons and planning. It is essential to understand what it means for a country or economy to be “e-ready” and conduct an evaluation based on objective criteria to establish basic benchmarks. Therefore, if a country is to narrow the digital divide, an understanding of where that country currently stands vis-à-vis the information society must be achieved, which is called “e-readiness”. Until now, various academic institutions, private organizations, and commercial publishers have put forward models for assessing and measuring e-readiness and the digital divide. These earlier measurements should be implemented for providing solid foundations for next stages of digital divide analysis and narrowing the gap. This paper addresses current widely diffused measurement instruments with the

purpose of measuring e-readiness and the digital divide and their strengths and weaknesses.

## DEFINING THE DIGITAL DIVIDE

There has been widespread debate about the definition of the digital divide and of the empirical analyses of its components (Barzilai-Nahon, 2006). The Organization for Economic Co-operation and Development (OECD) (2001) defined the digital divide as differences between individuals, households, companies, or regions related to the access to and use of ICT (Vehovar et al., 2006). The various factors may cause such a divide such as historical, socioeconomic, geographic, educational, behavioral, generation factors, or the physical incapability of individuals. There are a myriad of studies that address the factors influencing the digital divide and the plentiful models that measure it in terms of different factors widening inequalities including income, occupation, gender and age, education, geographic centrality, ethnicity and race, religion, language, family structure, physical capacity, frequency, time online, purpose, skills and experience, autonomy, affordability, competitive market structure, ownership and density of computers and web sites, communication infrastructure, equipment, social support, policy structure. In this paper, a brief focus is centered on some of the efforts that are more popular (for more information, see also Barzilai-Nahon, 2006).

In one study, DiMaggio & Hargittai (2001) pointed out that there are at least five factors of digital inequality: equipment, autonomy of use, skill, social support, and the purpose of using the Internet. Another framework, the MOSAIC model, was built as part of the “Global Diffusion of the Internet (GDI) Project” by Wolcott and his colleagues (2001). They examined the digital divide in terms of the diffusion of the Internet in a country based on six discrete valued factors: pervasiveness, geographic dispersion, sectoral absorption, connectivity infrastructure,

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