

# Chapter XI

## Digital Divide and Broadband Access: The Case of an Italian Region

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### ABSTRACT

*Reducing the digital divide in order to build an information society for all is one of the top priorities for European policymakers. A better understanding of the determinants of broadband access at the individual level represents a key starting point for any e-inclusion policy. Based on a review of the literature on digital divide and broadband access, we document different approaches to understanding the digital divide and argue that these perspectives can also help to understand broadband access. Combining the digital divide and broadband literature provides a systematic and theory-based approach to the selection and inclusion of variables in different models. This chapter presents the results of a survey conducted in an Italian region. We provide some implications of our findings and argue that policymakers should explore the relationship between IT skills acquisition, broadband access, and Internet use in order to develop more effective policies and programs.*

### INTRODUCTION

Over the last decade academic scholars, public officials, and private sector leaders have argued the positive social and economic impacts of broadband technologies as a key ingredient for the economic and social development of nations. Evidence of

this considerable expectation is demonstrated by the prominent and consistent role the issues of broadband diffusion have played in the last several years in the various strategic development plans devised at the European level (eEurope 2002, 2005, i2010).

In his recent best seller, *The World Is Flat*, Thomas Friedman, *New York Times* columnist,

argued that in the year 2000 the world entered a third and new era of globalization. According to Friedman, the first two phases were spearheaded by countries signing international trade agreements and organizations turning into multinational corporations, whereas the latest phase is, and will be, built around individuals “globalizing,” a process that requires fast and convenient access to people and knowledge regardless of their location. Friedman’s worldview stresses the importance of the key role individuals play as dynamic agents in an information-based economy. His perspective adds an interesting frame to the issues surrounding uneven distribution, access, and usage of broadband technology. The public policy problems of the digital divide, or e-inclusion, when viewed from this perspective are shifted from a focus on pure social inequality to an issue of the strategic use of information and communication technologies in the economic and social development of countries competing in a global market. At present, the different globalization patterns individuals may pursue are still vague and surely require further investigation. Nevertheless, the new direction hypothesized by Friedman and others offers an interesting point of departure for exploring new ways of conceptualizing the policy issues surrounding the diffusion of broadband.

While little doubt remains about the role broadband plays in sustainable economic development (OECD, 2004; Annis, 2005), it is still unclear how to obtain a widespread and economically accessible diffusion of such networks (Cantamessa et al., 2005). In this respect, the liberalization trend of telecommunication (TLC) markets that occurred in the nineties throughout most of the Western world represented an important turning point that led to a shift in logic. The logic moved away from strategies based on an acceptance of a natural monopoly toward a more market-driven approach (Hulsink, 1999).

The privatization of telecommunication markets was one of the ingredients that led to the Internet boom during which infrastructure expansion was mainly driven by an unconditional faith in the future profitability of Internet-related services. Since the burst of the speculative bubble, a strong emphasis

on the efficiency of investment allocation policies for building network infrastructures has emerged. However, recent studies continue to demonstrate that the expansion of broadband networks was, and to a large extent still is, driven by technological push rather than demand pull dynamics (Ferro, 2006). In this respect, the considerable marketing efforts currently made by the main European TLC operators to raise the adoption rates among residential users somehow supports this thesis.

The lack of a demand pull driving the diffusion of broadband infrastructure poses a number of issues. First, it raises the minimum threshold in terms of total inhabitants a municipality has to meet in order to attract investments in infrastructure (Howell, 2002), thus leaving unreached a higher portion of smaller municipalities. Second, it extends companies’ payback times for sunk cost investments, and finally, it hinders the birth of complementary services (Pentland, Fletcher, & Hasson, 2003). In simple terms, it fosters the formation of uneven access and usage opportunities (i.e., in rural and urban areas) and lowers the market profitability, thus hindering the viability of broadband technologies as an economic and social development tool.

Therefore, it is evident why it is extremely important for both the private and public sectors to understand how to enlarge the broadband customer base. In this respect, there are two main objectives to be considered. The first is an increase in the total number of Internet users, and the second is the maturation of usage patterns of current Internet users (i.e., make them broadband dependent). Efforts aimed at understanding the gap between access and usage patterns present among different social groups and geographical areas will be beneficial. The objective of this chapter is to explore how the digital divide literature may help identify some important areas for investigation and could prove useful in understanding the needs of broadband-enabled populations and how to increase broadband use.

The rest of the chapter, starting with the next section, highlights the current situation of broadband diffusion in Europe and briefly reviews the broadband literature. We then review the digital

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