# Chapter 7 The Digital Divide in the U.S. in the 21<sup>st</sup> Century

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### ABSTRACT

The United States has the world's largest national population of Internet users, roughly 170 million people, or 70% of the adult population. However, the deep class and racial inequalities within the U.S. are mirrored in access to cyberspace. This chapter examines the nature of the U.S. digital divide, differentiating between Internet access and usage, using data from 1995 to 2005. Although Internet usage has grown among all sociodemographic groups, substantial differences by income and ethnicity persist. The chapter also examines discrepancies in access to broadband technologies.

#### INTRODUCTION

By now, digital reality and everyday life for hundreds of millions of people have become so thoroughly fused that it is difficult to disentangle them. The Internet is used for so many purposes that life without it is simply inconceivable for vast numbers of people. From email to on-line shopping and banking to airline and hotel reservations to playing multiplayer video games to chat rooms to Voice over Internet Protocol telephony to distance education to down-loadable music and television shows to blogs to YouTube to simply "Googling" information, the Internet has emerged as much more than a luxury to become a necessity for vast swaths of the population in the economically developed world. In this context, simple dichotomies such as "off-line" and "on-line" fail to do justice to the diverse ways in which the "real" and virtual worlds for hundreds of millions are interpenetrated.

Yet for many others – typically the poor, the elderly, the undereducated, ethnic minorities – the Internet remains a distant, ambiguous world. Denied regular access to cyberspace by the technical skills necessary to log on, the funds required to purchase a computer, or public policies that assume their needs will be addressed by the market, information havenots living in the economically advanced world are

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deprived of many of the benefits that cyberspace could offer them. While those with regular and reliable access to the Internet often drown in a surplus of information - much of it superfluous - those with limited access have difficulty comprehending the savings in time and money it allows, and the convenience and entertainment value it offers. As the uses and applications of the Internet have multiplied rapidly, the opportunity costs sustained by those without access rise accordingly. At precisely the historical moment that contemporary capitalism has come to rely upon digital technologies to an unprecedented extent (Schiller 1999; Zook 2005; Malecki and Moriset 2008), large pools of the economically disenfranchised are shut off from cyberspace. In a society increasingly shaped by digital technologies, lack of access to cyberspace becomes ever-more detrimental to social mobility, rendering those excluded from the Internet more vulnerable than ever before (Graham 2002).

In 2008, roughly 1.5 billion people, or 22% of the planet, used the Internet on a regular basis (http://www.internetworldstats.com). The United States continues its long standing position as one of the world's societies with abundant access to the Internet (Figure 1). Although Internet penetration rates in the U.S. (70% in 2006) are not as high as Scandinavian nations, they remain higher than many other urbanized, industrialized countries, and Americans as a whole still constitute the largest and most influential national bloc of Internet users in the planet. Despite this prominence, there exist important discrepancies in Internet access within the U.S. in terms of age, income and class, ethnicity, and location. As a slough of books has demonstrated, the digital divide is real, rapidly changing, complex, difficult to measure, and even more difficult to overcome (Compaine 2001; Cooper and Compaine 2001; Norris 2001; Servon 2002; Kuttan and Peters 2003; Warschauer 2003; Van Dijk 2005; Stevens 2006). While some decry the divide as a catastrophe, others deny its very existence. Indeed, the digital divide is so

multi-dimensional that it cannot be reduced to dichotomous measurements, but should be seen as a continuum measured across a variety of variables (Barzilai-Nahon 2006).

This chapter examines the changing social differentials in access to the Internet in the U.S. in the period between 1995 and 2006. "Access," of course, is a nebulous term that exhibits different meanings (e.g., access at home, school or work); perhaps the multiplicity of meanings is optimal for conveying the complexity of the digital divide, which does not lend itself easily to simple dichotomies (DiMaggio et al. 2001). Equally important as access is what users do with the Internet, for simple access does not automatically lead one to become an Internet user. Although the ability to gain access to the Internet at work, home, school, or public libraries is widespread, employing cyberspace to gain meaningful information is another story. For many users, the Internet will remain primarily a toy. Thus, assessments of Internet usage must take into account the perspectives of the various populations that deploy it (or not) for their own means.

First, the chapter summarizes the various economic and political forces that have altered patterns of Internet access in the U.S. Central to understanding the digital divide is the rapid growth in computer and Internet usage among many social groups: the divide, such as it is, is never frozen in time or space, but a fluid, malleable entity that constantly shifts in size, composition, meaning, and implications. Second, it charts the growth in the absolute and relative numbers of different groups of American Internet users in terms of their access at home and at work from 1995 to 2005, with occasional excursions into later dates as data allow. Third, it focuses on the critical issue of broadband delivery, which has generated new patterns of inequality. The conclusion explores the changing meanings of the American digital divide in an age in which access has become widespread, Internet usage is of unparalleled importance, market imperatives

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