Chapter 79
Does the Digital Divide Extend to Minority- and Women-Owned Small Businesses?

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ABSTRACT

This chapter examines whether the digital divide in the United States extends to computer use in small businesses. The analysis is based on a 2003 telephone survey of 1,123 firms with fewer than 50 employees and at least one computer, and in-depth interviews with 45 business owners. The analysis provides no evidence of a business digital divide across racial, ethnic, and gender groups. In fact, firms owned by African-American males show more intensive computer use than white male-owned firms, even after controlling for firm and owner characteristics. We do, however, find links between the intensity of computer use and firm and owner characteristics, such as firm size, market reach, intensity of computer use in the relevant industry, and age of owner. Finally, the in-depth interviews suggest that businesses with effective computer use depend upon the technical expertise of the business owners or people in their social networks.

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INTRODUCTION

Discussions about the digital divide often focus on access to computers by most people in developing countries and by poor and minority households in developed countries. Persons in developing countries are substantially less likely to use computers and access the Internet than those in developed countries (e.g., Chinn & Fairlie, 2006; Chen & Wellman, 2004). The United States is among the countries with the highest rates of computer use, but there are disparities across demographic subgroups, including race. An extensive literature documents that African Americans are less likely than whites to own a computer and to have convenient access to the Internet (e.g., Fairlie, 2004; Hoffman & Novak, 1998; Krueger, 2004; Noll et al., 2001). This divide among individuals can exacerbate differences in business activity. For example, not having a home computer is associated with a reduced likelihood of starting a business, particularly among women (Fairlie, 2006). Another potential impact is a digital divide among small businesses by the race and sex of owners. At this point, little evidence is available to determine whether the digital divide among individuals extends to business and whether minorities and women who run small businesses are disadvantaged in their access to information technology.

To place small businesses in context, the United States has well over 20 million small businesses, but they account for a modest share of overall sales. Firms with business receipts under $100,000 per year make up 78 percent of all firms but receive only 3 percent of all receipts. For tax purposes, U.S. businesses are grouped into C corporations (usually large, publicly traded companies), subchapter S corporations and partnerships (usually medium size and owned by a small number of owners), and sole proprietorships (usually small, self-employed individuals). As of 2003, almost 72 percent of businesses (or nearly 20 million firms) were sole proprietorships, but they accounted for 13 percent of profits and only 4 percent of business receipts. These firms are generally quite small, with annual revenues averaging about $53,000 per firm and less than $14,000 in annual profits.[1]

Overall, men own the majority of small businesses, leaving women with sole or majority ownership of 6.5 million, or 28 percent of nonfirm U.S. businesses and equal, joint ownership of another 2.7 million businesses in 2002 (Census, 2002). The number of women-owned businesses increased 20 percent (or by 1.1 million businesses) from 1997 to 2002, compared with an increase of 16 percent (or 1.8 million businesses) for male-owned firms. Yet, minorities and women are less likely to own businesses than are white males and the businesses they do own generate far lower sales (Figure 1). In 2006, approximately 1 in 7 employed white men worked in their own business, compared with about 1 in 15 employed African-American men, 1 in 13 employed Hispanic men, and 1 in 14 employed women.[2i] Moreover, even among small business owners, minority- and women-owned businesses are less likely to survive and prosper (Fairlie & Robb, 2007).

The presence of a digital divide could help explain these continuing gaps if minorities and women have less access to computers and computer use is an important element of business success. Empirical evidence generally indicates a positive impact of computer use on performance (e.g., Black & Lynch, 2004, 2001; Brynjolfsson & Hitt, 2003; Greenan & Mairesse, 2000; Lehr & Lichtenberg, 1998), although some studies find little connection between computer use and firm performance (e.g., Bitler, 2001; Cappelli & Neumark, 2001). The focus of this study is on whether the digital divide extends to computer use in small businesses. This chapter contributes to the literature by using new data specifically collected to assess the possibility of a business divide. We answer two questions.

1. Are small businesses owned by African Americans, Hispanic Americans, and women