EXECUTIVE SUMMARY

Introduction

The use of the Internet for business transactions has grown dramatically over the past few years. Approximately three out of five companies are using e-commerce to some extent and an additional one-fifth say they intend to participate in the future. Although estimates vary, there is strong consensus about continued growth, with optimistic projections of B2B e-commerce sales ranging from $634 billion to $3.9 trillion for 2003. Further, as many as 80% of business transactions could occur online by 2003 (Report of the U.S. Government Working Group on Electronic Commerce, 2000). While there is no doubt that e-business transactions will continue to increase, the rate of expansion may decrease given the current economic slowdown and the contraction experienced by the high tech sector.

Despite growing Internet use by all businesses, there have been virtually no comprehensive studies on the use of e-commerce by minority-owned businesses. Minority business enterprises (MBEs) are an increasingly critical component of the U.S. economy. African-American, Asian-American, Latino and Native-American businesses are growing at a rate of 30%, four times faster than the growth rate of majority–owned U.S. firms; MBE revenues rose 60% to $335.3 billion in 1997 compared with a 40% increase for all U.S. firms over the same period (U.S. Bureau of the Census. 1997 Survey of Minority-Owned Businesses). Minority businesses are a significant growth sector of the market and, as such, it is important to understand how these businesses are participating, or are positioned to participate, in the Digital Economy.

This study constitutes the first attempt to assess the use of Internet technology for e-commerce among the larger minority-owned businesses, i.e., those with annual sales of at least $500,000. While this group includes only a small segment (5.58%) of the entire universe of MBEs, it was selected because of its economic importance. This particular subset generates about 76% of the output produced by minority-owned firms and provides about 70% of their total employment. In addition, these firms are more viable, easier to contact, more stable and have greater longevity than smaller firms.

The Minority Business Development Agency's (MBDA's) Phoenix database was used to develop a national sampling frame of 39,098 minority-owned businesses. The MBDA uses the Phoenix database in its electronic contract matching-system. The database is constructed using the Dun's Market Identifiers (DMI) compiled by Dun & Bradstreet Corporation (D&B). Because companies included in the database have a good-to-excellent credit rating and sound credit history, the sampling frame used for the study is imperfect, at best, which limits the generalization of the research findings. On average, these companies had annual sales between $3.3 million and $4.9 million and employed between 22 and 34 persons full time. Interviews were conducted with 1,673 business executives from 500 Latino, 406 African-American, 480 Asian-American, and 287 Native-American firms.

In general, the study addressed the following questions:

- To what extent do minority businesses use Internet technology to sell goods and services?

- What are the impediments to greater use of e-business strategies?

- What challenges do minority businesses face when engaging in ecommerce?

- What are some possible strategies for increasing e-commerce usage?

Conclusions

In general, the survey indicates that minority entrepreneurs interviewed understand the benefits of Internet technology in their business strategies, but may perceive market-based challenges to increased use of e-business strategies. This segment of MBEs uses computers in their businesses at levels similar to non-minority businesses of roughly similar size. These businesses are connected to the Internet and have websites at rates comparable to those of non-minority businesses. This, along with other survey data, suggests that large minority businesses appreciate how e-commerce can be useful to their business and are positioned to increase their usage of e-business.

However, for many minority entrepreneurs, there are market-based challenges that must be overcome. While a significant percentage of the large businesses surveyed have access to technology, a much smaller number use e-commerce to sell online. Although there are various reasons for this, many entrepreneurs do not see the potential return for further investment in the technology, given their customer base. For example, many of these businesses sell to minority consumers, who may not have the technology to purchase online. In addition, between 20-24% of the entrepreneurs indicated that the product or service did not lend itself to e-commerce. The study suggests that, in order for these entrepreneurs to participate more fully in e-commerce, they must perceive that there are increased market opportunities justifying further investment.

Findings

E-commerce Awareness: More than 60% of the surveyed businesses recognized and understood the benefits of e-commerce (e.g., bigger markets, higher profits, lower costs, remaining competitive, etc.). With the exception of Native-Americans, these companies had a greater likelihood of having a website after controlling for the business executive's years of managerial experience, education, birthplace, age, perceptions and personal use of e-commerce, and for company characteristics (e.g., proportion of minority customers served, profitability, longevity of the firm, and annual sales) as well.

Computer Use: Approximately 90% of minority businesses relied on information technology and computers to do their work. On average, employees in African-American

businesses had the highest rate of computer usage (71%) and those in Latino businesses had the lowest (52%). This is somewhat comparable to computer usage by all small businesses, which two recent studies have placed at 85% (IDC, 1999) and 66% (D&B, 2000).

Internet Connectivity: The survey estimates that between 91% and 79% of minority businesses were connected to the Internet, depending upon the ethnicity of the owner. These figures are comparable to 1999 Dun & Bradstreet research indicating that 93% of firms with 26-100 employees had Internet connectivity, as well as 70% of all firms (D&B, 2000).

Website Availability: These minority businesses had websites at a rate comparable to that of non-minority businesses of roughly similar size. Between 56% and 42% (varied by ethnic group) of minority businesses had websites. Research on overall small and medium size businesses indicates that 53% of small businesses and 47% of medium size businesses have web capability (see Arthur Andersen and Associates, 1999, and Dun & Bradstreet, 1999). Minority businesses of a larger size (as measured by annual sales) and with higher use of e-mail were more likely to have a website after controlling for other factors. In addition, the larger the proportion of minority customers, the lower the likelihood of having a website. On average, minority firms with websites had such sites for approximately two years.

Selling Online: While a significant number of the firms surveyed had websites, a much smaller percentage were selling goods and services online. Depending on the race or ethnicity of the owner, between 10% and 13% of minority businesses were engaging in electronic commerce. With the exception of Native-Americans, the longer a firm had a website, the greater the likelihood that it was selling online after controlling for the business executive's years of managerial experience, education, age, perceptions and personal use of e-commerce, and company characteristics (e.g., longevity of the firm).

B2C Sales: Most minority firms involved in e-commerce participated in business to consumer (B2C) transactions rather than business to business (B2B) sales. As many as 59% of Native-American firms were operating in the B2C market, followed by Latino businesses (50%) and African-American businesses (47%). A sizeable number of these consumers were people of color; the proportion of minority customers varied from 46% to 31%, depending upon the ethnic group of the business owner.

B2B and B2G Sales: Relative to other minority businesses, Asian-American and Native-American firms were more involved in B2B commerce and African-American firms were more active in the business to government (B2G) sector.

Services and Products Sold: In general, the businesses surveyed sold services, rather than products, over the Internet. With the exception of new and used cars and industrial supplies, the bulk of online sales by minority firms consisted of services such as travel agencies, hotel and motels and business services. Of lesser importance were

popular e-business products such as electronic parts, home furnishings, jewelry, office equipment and insurance.

Online Revenues: With the exception of Latinos, over one-half of minority firms reported to be generating sufficient online revenues to cover the cost of promoting and operating the site or to break even. Asian-Americans were the most likely (35%) to have revenues in excess of costs and African-Americans were the least likely (14%). In addition, at this point, sales generated by online transactions are relatively low and the data suggest that there is untapped opportunity to increase them. The estimated median sales obtained from online transactions varied from $131,000 to $76,000, depending upon the group.

Investment in Technology: MBE investment in e-commerce technology was relatively small. With the exception of Latino businesses, the median initial cost was approximately $2,000. Latino businesses reported a median start-up cost of $1,169. However, the average start-up costs ($67,000) for Latinos far outdistanced that for other firms, suggesting that Latino firms are on average investing more capital to acquire the technology.

Technology Operating Costs: The median operating costs ranged from $1,299 per year to $750 per year. In general, the minimal investment in technology suggests that these companies had not integrated their backend functions (e.g. accounting, inventory management, shipping and delivery) with their sites.

Perceived Benefits of E-commerce: Less than one-third of the firms surveyed indicated that there were no benefits to e-commerce or that they did not understand the benefits. While the majority of business executives viewed e-commerce as an important tool to remain competitive in the new economy, one-third expressed doubt, disagreed with the idea, or did not understand its potential. These companies were less likely to have a website, especially Native-Americans, and, in the case of Latino firms, less likely to be engaged in e-commerce.

Market-Based Challenges to E-commerce: Minority businesses indicated that the primary reasons for not having an e-commerce site included the following: the product or service offered by the company does not lend itself to e-commerce (20%-24%); there is no need for e-commerce; or the company does not want it (11%-15%). This suggests that while many companies may be correct in their decision to stay away from e-commerce based on the firms' customers and products, others may not enter this lucrative market due to ignorance, uncertainty, or simply apathy.

Primary Barriers to E-commerce: Primary barriers to greater use of e-business technology included: Absence of company infrastructure, e.g., software capabilities (10% to 17%), concern with too much competition (5% to 9%), a wait-and-see attitude (4% to 9%), lack of expertise (4% to 7%), too costly (3% to 6%), legal constraints (3% to 4%;), not feeling comfortable with the technology (1% to 3%), and security related issues (1% to 2%). In addition, over 50% of nonparticipants did not foresee getting involved in e-

commerce any time soon. Further, those planning to implement e-commerce were going to wait an average of 1.5 years to do it. These two statistics denote caution as well as indecision in the part of many of these businesses.

Recommendations

The Internet market, e-commerce especially, is in a formative stage and will continue to grow and change rapidly. Thus, the following recommendations are tentative and reflect the information and challenges uncovered in this report.

- It is critical to educate minority-owned businesses on the benefits of e-commerce and to address concerns about its viability and application. In particular, the study indicates that the majority of businesses surveyed have computers, access to the Internet and websites at rates similar to those of majority-owned businesses of roughly similar size. However, a much smaller number currently are engaging in online sales and the low level of technology investment suggests a lack of technology integration into overall business operations.

- Solutions to this must be market-based, identifying the potential return on investment in technology. If investing is not viable for a business, these businesses should explore the opportunities of using third party providers of e-business services.

- Because the barriers uncovered in the report affect primarily companies without a website, attempts should be made to target these businesses with information and technical assistance on developing e-commerce.

- Additional research should be undertaken on e-commerce participation among businesses of all sizes by race and ethnicity. These data will be useful in tracking progress among small businesses, especially minority and women-owned business enterprises. While many Internet economy indicators monitor the dollar volume of online transactions, most of these estimates are the product of Internet consulting firms, and may require additional sampling. The research also should address the validity issue associated with imperfect sampling frames commercially available.

- The private sector, corporations and foundations should partner with government and become more active players in bridging the digital divide. As implied by the study, the digital divide may be discouraging minority-owned businesses with a large minority clientele from participating in e-commerce.

- Government should continue to pursue online government procurement, but it should ensure that minority-owned businesses share in the benefit of this promising e-government innovation.

- Because of similar race, ethnicity, culture or language, minority-owned businesses may have a competitive edge in serving emerging markets in the United States and abroad. If so, minority business enterprises should exploit their competitive advantage by using the Internet more aggressively to provide product exposure and increase business in these areas.