



How Women-Owned Businesses in Iowa are Using Technology



November 2013

Women-owned businesses are a growing portion of the economy in America, as well as in Iowa. Nationally there are approximately 7.8 million businesses that are owned and operated by women.¹ In Iowa there are an estimated 71,000 women-owned businesses; and though the share of women-owned businesses has grown over the past several years, that growth has been slower than in other parts of the country.^{2,3}

The state of Iowa and numerous organizations across the state recognize the need to support women entrepreneurs. One example is Ascent Iowa, which is working with the Iowa Economic Development Authority to identify, document, and analyze data on women-owned businesses to create jobs, drive economies, and strengthen communities.

To help promote the emergence of women-owned businesses in the state, it is important to look at how they are using technology and its numerous applications. Many businesses use broadband to find new customers, advertise their goods and services to buyers around the world, and look for ways to cut costs and maximize their profits. If women-owned businesses in Iowa are not using these tools, then they are at risk of falling behind their competitors in other states.

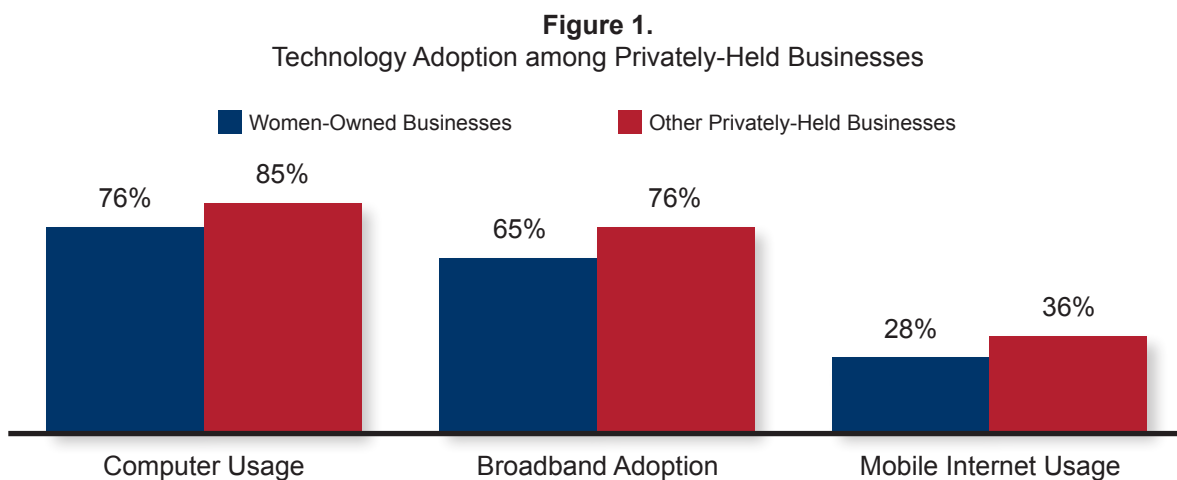
As part of its 2013 Business Technology Assessment, Connect Iowa examined technology usage among women-owned businesses. Our study shows that although women-owned businesses can greatly benefit from the use of broadband, many of them still are not connected. By promoting efforts to address the barriers to broadband adoption among these women-owned businesses, Iowa can increase revenues across the state and make it easier for women entrepreneurs to grow their businesses.

Among the findings from this report:

- Nearly **two-thirds (65%)** of women-owned businesses in the state use broadband for business purposes.
- Women-owned businesses use the Internet to research ways to make their businesses more efficient **seven percentage points higher** than privately-held businesses that are not owned by women.
- Women-owned Iowa businesses that subscribe to broadband and maintain a website report median annual revenues that are **\$200,000 higher** than businesses that do not use broadband at all.
- More than **four out of ten (43%)** women-owned businesses that do not use broadband believe that their business can do everything they need without broadband.

Technology Adoption among Women-Owned Businesses

According to Connect Iowa's 2013 Business Technology Assessment, nearly two-thirds (65%) of women-owned businesses in the state use broadband for business purposes (Figure 1). That translates to an estimated 46,000 women-owned businesses in the state that use broadband for business.



1 US Census, http://www.census.gov/newsroom/releases/archives/business_ownership/cb10-184.html

2 American Express OPEN (2012). The state of women-owned businesses report: http://www.womenable.com/userfiles/downloads/2013_State_of_Women-Owned_Businesses_Report_FINAL.pdf

3 71,000 women-owned businesses in the state of Iowa represents women-owned businesses with paid employees and without paid employees.

In addition, just over three out of four (76%, or 54,000 women-owned businesses) use a computer for their daily business functions. Nearly three out of ten (28%) women-owned businesses in Iowa use mobile broadband for business functions. This translates to approximately 20,000 women-owned businesses in Iowa.

These rates are all lower compared to other privately-held businesses that are not owned by women – computer ownership is 9 percentage points lower, broadband adoption is 11 percentage points lower, and mobile Internet use is 8 percentage points lower.

Internet Activities of Women-Owned Businesses

More than four out of five (81%) women-owned businesses that use the Internet purchase or place orders online (Table 1). That is the most used application among women-owned Internet-connected businesses.

Women-owned businesses use the Internet to connect with customers more often than businesses owned by men; using the Internet to communicate with customers is more common than among privately-held businesses that are not owned by women. The most notable difference between women-owned businesses and those that are not owned by women is with using the Internet to research ways to make their businesses more efficient. Women-owned business are seven percentage points higher in using that particular application than privately-held businesses that are not owned by women.

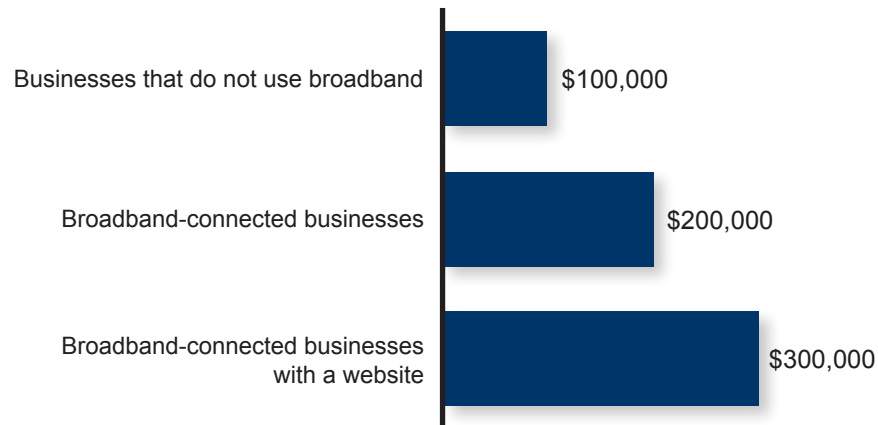
Table 1.
Online Activities by Women-Owned Businesses with an Internet Connection

Online Business Activities	% of Women-Owned Businesses that Conduct the Activity (among those that use the Internet)	% of Other Privately-Held Businesses Not Owned by Women that Conduct the Activity (among those that use the Internet)
Purchasing or placing orders for products or services	81%	76%
Communicating with our current customers	79%	76%
Researching ways to make our business more efficient	74%	67%
Marketing and advertising of products and services	65%	62%
Conducting business with local, state, or federal government offices	59%	58%
Selling, or accepting orders for products or services	55%	56%
Billing or bill payment	52%	51%
Providing customer support for our products or services	51%	49%
Conferencing or other online meeting applications	37%	48%
Accepting real time payments such as credit card and debit payments	41%	33%
Bidding on contracts	29%	30%
Advertising current job openings	19%	33%
Accepting job applications	20%	29%
None of these	1%	2%

The Impact of Technology on Revenues among Women-Owned Businesses

Across Iowa, women-owned businesses that subscribe to broadband report median annual revenues that are \$100,000 higher than those that do not use broadband (Figure 2). In addition, women-owned Iowa businesses that subscribe to broadband and maintain a website report median annual revenues that are \$200,000 higher than businesses that do not use broadband at all.

Figure 2.
Median Annual Revenues among Women-Owned Businesses

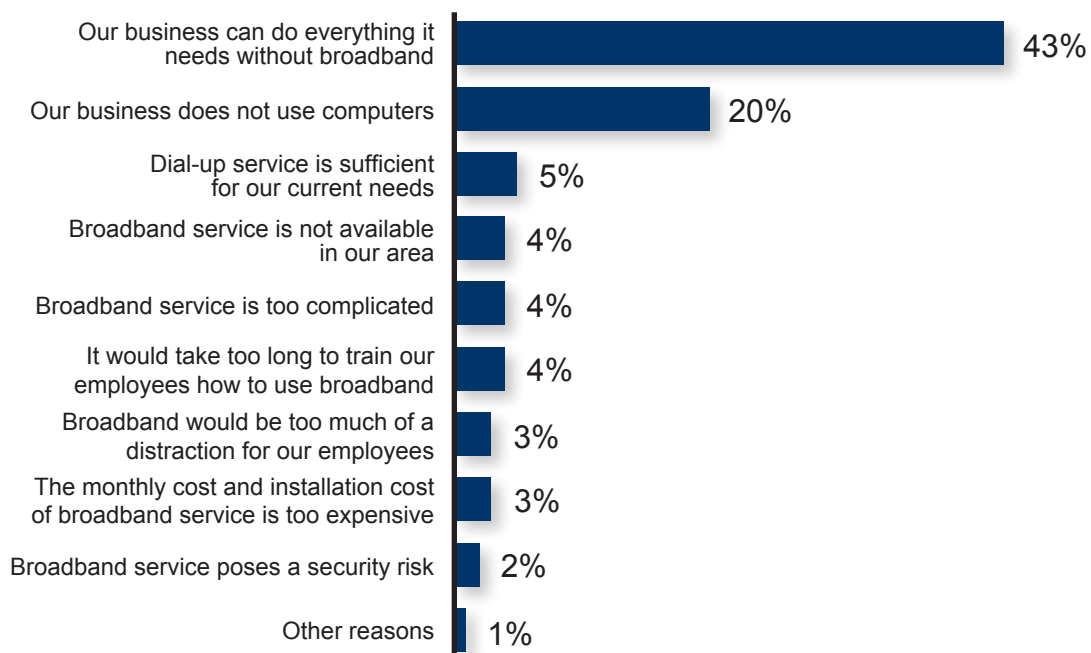


Barriers to Broadband Adoption

Approximately 25,000 women-owned businesses in Iowa do not use broadband, and they report a variety of reasons for not subscribing.

More than four out of ten (43%) women-owned businesses that do not use broadband believe that their business can do everything they need without broadband (Figure 3). This represents 11,000 women-owned businesses that cite their main reason for non-adoption as their perceived lack of need for the service.

Figure 3.
Main Barriers to Broadband Adoption by Women-Owned Businesses



One out of five women-owned businesses (20%) that do not use broadband say their main reason for not subscribing is that they do not use computers. Smaller percentages of non-adopting women-owned businesses say that their current dial-up service is sufficient (5%), it would take too much time to train their employees (4%), concerns that the Internet is too complicated (4%), a lack of available broadband service (4%), installation costs (3%), fears that broadband would pose too much of a distraction (3%), and perceived security risks (2%) as reasons for not subscribing.

Conclusion

Women-owned businesses in Iowa have lower rates of computer ownership, broadband adoption, and mobile Internet usage than businesses that are not owned by women. Approximately 25,000 women-owned businesses in Iowa do not adopt broadband for their business. Most of these non-adopting women-owned businesses say that they don't have a need for the Internet or that their business does not have a computer.

Yet the women-owned businesses that have broadband are taking advantage of the many benefits it offers. For example, women-owned businesses that have broadband and a web presence are earning median annual revenues \$200,000 higher than women-owned businesses without broadband. Additionally, many women-owned businesses are using broadband to reach out to their customers and make their businesses run more efficiently. By supporting initiatives that promote broadband adoption among all businesses (through improved digital literacy training and workshops that show how successful businesses are using broadband), Iowa can help every business in the state grow and prosper.



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Methodology

Between April 1 and April 16, 2013, Connect Iowa conducted a telephone survey of 800 business establishments across the state. A business establishment is defined as a single physical location at which business is conducted or services or industrial operations are performed. Upon reaching a business establishment, the surveyor asked to speak with the “person most knowledgeable about [the] organization’s technology use.” On average, these surveys took approximately 10 minutes to complete. Data were collected by Thoroughbred Research of Louisville, KY.

Sample quotas were established by company size (5 brackets) and industry sector (8 sectors). Within these 40 cells, a randomly-drawn sample of businesses listed with Dun & Bradstreet was contacted for the survey. Altogether, this sample included 80 businesses with 50+ employees, 110 businesses with 20-49 employees, 216 businesses with 5-19 employees, and 394 businesses with 1-4 employees. In cases where the respondent’s information regarding the number of employees at the establishment differed from the information provided by Dun & Bradstreet, the respondent’s answer was used in determining business size quotas. Each business establishment was also asked to confirm their physical location (county and state) to establish that the business establishment was physically located within the state. At least four attempts were made to reach a business establishment at each working telephone number on different days of the week and at different times of the day to increase the likelihood of contacting a potential respondent. Connect Iowa surveyed 462 women-owned business to ensure a large enough sample for analysis.

In addition to the size and sector quotas, the data were subsequently weighted using a rim weighting process to ensure that the sample was representative of all employer business establishments statewide, with targets determined according to the 2011 United States Census Bureau’s County Business Pattern report, the most recent data that was available at the time the survey was conducted. Weighting of the survey data and research consultation were provided by Lucidity Research LLC, located in Westminster, MD.

For the purpose of setting quotas and weighting, businesses were categorized by the North American Industry Classification System (NAICS) code associated with each establishment in their Dun and Bradstreet listing. In addition, interviewers confirmed the accuracy of these NAICS code classifications by asking “Our records indicate that this business we have been talking to you about is primarily involved in [name associated with 4 digit NAICS code]. Is this correct?” Businesses are considered part of the High Tech industry sector if the industry associated with their 4 digit NAICS code has a high proportion of technology oriented workers, including engineers, engineering technicians, scientists, science technicians, and managers in engineering, computing/information systems and science. This definition is based on a study published in the July 2005 issue of Monthly Labor Review. “Rural” business establishments are defined as operating in a county that is not a part of a Metropolitan Statistical Area (MSA), as designated by the United States Office of Management and Budget.

The effective post-weighting margin of error = $\pm 3.72\%$ at a 95% level of confidence for the statewide sample. As with any survey, question wording and the practical challenges of data collection may introduce an element of error or bias that is not reflected in this margin of error.

This business survey was conducted as part of the State Broadband Initiative (SBI) grant program, funded by the National Telecommunications and Information Administration (NTIA). The SBI grant program was created by the Broadband Data Improvement Act (BDIA), unanimously passed by Congress in 2008 and funded by the American Recovery and Reinvestment Act (ARRA) in 2009.

Definitions

For this report, “women-owned businesses” are defined as those that meet both of the following criteria:

- Report that they are a privately-held business (as opposed to a publicly-held corporation, government entity, or any other type of business establishment), and
- Answered “yes” when asked “Is the owner, or are any of the owners of this business establishment, a woman?”

Annual revenues are all self-reported as part of the survey.

Technology Adoption Definition

1. Computer users are defined as respondents who answered “yes” when asked “Now, does your company use any type of computer technology to handle any of its business functions (for example: sales, cash receipts, accounting, inventory control or management reporting)?” These respondents were then asked “What types of computers do employees in this business use,” and allowed to give multiple responses.
2. Mobile Internet users are defined as businesses that answered “yes” when asked “Do employees at your business use mobile Internet service on a cell phone or mobile device to handle any of their business functions?”

Businesses that earn sales revenues from online sales are defined as those that met all of the following criteria:

- Report that they use the Internet;
- Report that they use the Internet for “Selling, or accepting orders for products or services” or for “Accepting real time payments such as credit card and debit payments;” and
- When asked “What percentage of your company’s total sales revenue takes place online,” responded with a number equal to or greater than 1%.

APPENDIX A:

Select Sample Sizes

Total	n=
All businesses	800

Women-Owned Categories

Women-Owned	462
Women-Owned with an Internet Connection	339
Women-Owned Businesses with a Broadband Connection	315
Women-Owned Businesses with a Website	231

Privately-Held Businesses Not Owned by Women

Privately-Held Businesses Not Owned by Women	264
Privately-Held Businesses Not Owned by Women that Use the Internet	218