E-Biz: Strategies for Small Business Success

by

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E-BIZ.COM: Strategies for Small Business Success

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EXECUTIVE SUMMARY

Technology, telecommunications and the Internet are transforming the way people work and live and conduct business. As a result, business is undergoing a structural change. The advent of affordable technology and telecommunications has enabled small firms to compete with big business. In particular, the Internet provides even the smallest business with access to information and to markets.

This analysis is based on data from two surveys sponsored by the National Federation of Independent Business (NFIB) and by the Center for Women's Business Research (CWBR) and case histories reported in current periodicals. The findings of this study support the hypothesis that e-business affords new opportunities for success for small firms and particularly for niche businesses.

The Internet stimulates business owners to rethink their business strategy. The more innovative entrepreneurs — the early adopters — see the Internet as a way to market niche products and reach distant customers in ways that were not available in the past. Their pioneering innovations foretell a structural change in industrial organization for both small and large firms.

The smallest firms gain the most by reorganizing as an e-business. For a small business, revenues cover the costs of setting up and operating a Web site. The power of the keyword search means that a business can target customers who need niche products without the wasteful expense of mass mailings. Instead, customers find them. Finally, business owners can live in isolated locations and reach customers worldwide.

The report is organized in two sections. Section I provides an overview of small e-business with key points highlighted. Interested readers can find additional detail in Section II.

Key Findings

- **The Internet offers unparalleled new opportunities for small businesses.**
  - 57 percent of small firms use the Internet.
  - 61 percent of those have a Web site

- **The larger small firms are spearheading the change.**

  - 77 percent with 20 to 249 employees have a Web site compared with 58 percent of those with 1 to 9 employees

- **Leading edge entrepreneurs are demonstrating imaginative ways to conduct e-business.**

  - 35 percent of small businesses sell online. They are innovating new ways to enhance their product and service offerings and expand their markets.

- **A Web site gives entrepreneurs access to markets at low cost.**

  - 67 percent gained new customers
  - 62 percent improved competitive position
  - 56 percent increased total sales
  - 56 percent attracted new types of customers

- **Web sites are cost effective for small niche businesses.**
  - 65 percent of firms make a profit or cover their Web site costs. The expense to set up and maintain a small business Web site is small and can be covered by revenues.

- **Small businesses sell primarily to Internet consumers.**
  - Less than 10 percent of online commerce is Business-to-Business.

- **The smallest firms with fewer than ten employees benefit the most from being online.**
  - 35 percent gain 10 to 99 percent of current sales directly or indirectly from their Web sites.

- **Keyword searches link customers to small businesses on the Web.**

  Businesses selling niche products and services avoid the expense of finding the customer because customers can so easily find them.

- **Web sites are a growing trend.**

  - 65 percent of businesses have been online for one year or less.
  - 32 percent of firms not yet online expect to use the Internet within the next year.

- **"Success" is a relative term for small business entrepreneurs.**

  Sole proprietors have more freedom to define success by their personal measure than do corporate owners reporting to investors. Many operate a business to support a lifestyle in the location they prefer rather than to earn the highest possible profit.

- **Some businesses do not want to grow.**

  The Internet allows owners who do not want to grow their businesses to earn primary or supplementary income or to just "keep their hand in."

- **Some businesses want to "right size."**

  Like Patagonia, some ask "How do we become the absolute best in the world at something and what size do we need to be the best?"

- **Some businesses will never engage in e-commerce.**

  - 76 percent of firms that do not go online do not see any benefits. There will always be firms whose products or services do not lend themselves to selling online.

- **Business owners wanting to grow, the so-called "gazelles" will face hurdles.**

  To grow, businesses can only compete by strategically reorganizing their business operations. They will need outside funding to cover the costs of setting up a fully integrated online business.

- **Firms that want to grow require capital to integrate front- and back-end processes.**

  Growing to a big business requires sophisticated management and strategic planning. Owners assume risk when they scale up from a business that one or few people can operate profitably to a big business with many employees. Success may well demand a brick-and-mortar presence as well as a fully developed Web site.

- **"Mindset" more than technological forces, market forces, financial capital or policy, determines E-biz success.**

  While the shapers or early adopters seize these new opportunities, the adapters opt out. They are businesspersons who wait for the pioneers to develop new e-business models and learn from the innovators' mistakes.

- **Time favors e-business growth.**

  Upcoming generations accept technology and telecommunications as a given. Meanwhile, small business owners are seizing the new opportunities the Internet offers.

  - 35 percent sell on a Web site
  - 61 percent purchase goods and services
  - 80 percent gather information
  - 83 percent use e-mail

- **Entrepreneurs who have chosen to be players are excited about e-business, the new way of doing business.**

- **Continuation of a laissez-faire policy will encourage small e-business formation.**

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We are experiencing a "structural shift" in which "information technologies have begun to alter the manner in which we do business and create value, often in ways not readily foreseeable even five years ago." 1999

"And even when [technologies] are anticipated, their effect on economic growth is difficult to predict, in part because their pace of diffusion and application is so uncertain." 2002

Alan Greenspan, Chairman, Federal Reserve Bank

INTRODUCTION

Small business, and particularly homebased business, has benefited from new technologies that have decentralized computing and telecommunications. In the past only Big Business could acquire the sizable capital required for commerce dependent upon mainframe computers and other costly business equipment. But since the 1980's the advent of affordable personal computers has enabled small firms to compete with the giants. First, the cost of equipping a home office has dropped to below $2,500 and the capabilities of business tools have soared. Second, about 1994 a stunning application for the personal computer, the Internet, began to catch people's imagination. E-mail, plus the Internet and the cell phone offered *connection* that extends globally from *any* location—an office building, a home office, a car or boat. That easy connection provides individuals with new access to <u>information</u> and to <u>markets</u>. As small business entrepreneurs were the first to notice, "reach out and touch someone" had potential for even the smallest homebased business.

Amazon.com, started in a basement, has been able to grab the online book business leaving the long-time Barnes and Nobles giant playing catch up. Those cautiously following behind the early innovators of e-commerce are repeating the familiar pattern of new technology adoption—the stepwise process of browsing Internet sites, getting one's own page and finally setting up interactive e-commerce with full back-end integration. It is still easy to set up a Web site. But it could be too late for newcomers to approach Amazon, which commands its market, even though it has taken six years to turn a profit.

In fact, the promise of the Internet has changed from the euphoria of instant riches to the dismay of failed dot.coms. Our challenge is to understand how small firms, including homebased businesses, will fare as e-commerce matures. Since the U. S. Small Business Administration (SBA) conducted two literature reviews in 1999 and 2000, many firms have failed, notably dot.com businesses that were conducted solely on the Internet (SBA 1999; SBA 2000). The Gartner market research group predicts that "as many as 60 percent of business-to-consumer dot-com companies formed between 1997 and 2000 will dissolve by 2005—a 50 percent increase over the historical dissolution rate" (Golmolski 2000).

This study is based on the more optimistic hypothesis that e-business affords opportunities for success for small firms and particularly for niche businesses. "…since 1993, commercialization of the Internet has made the advantages of electronic commerce and electronic business practices—once available to only of [sic] the largest companies—more affordable to small and medium sized firms" (Morrison 2000). This research takes a long-range view, examining the current status of e-business and, to the extent possible, forecasting future trends.

What we do not know is how Internet commerce can survive as one giant, tax-free discount store. As the U. S. Small Business Administration Office of Advocacy points out, "Internet sales account for less than 1 percent of total retail sales in the U. S. economy" but "online retail marketing is showing about 200 percent annual growth"(SBA 1999). Even if revenues reach a predicted $327 billion in the year 2002, it is not clear which firms will benefit. This research responds to the need "to better understand what small businesses are experiencing with e-commerce and know where they are heading".

What are the determining factors for success? Will success or failure in e-business depend on technological factors, market forces, financial capital or policy? Or does e-business require a new mindset that takes time to evolve?

To understand whether e-commerce is indeed an opportunity for success or if it raises false hopes, we look at innovative firms using anecdotal reports from periodicals. For insights on trends we rely on data from market research firms. Most importantly, we present data from two surveys fielded in 2001 sponsored by the National Federation of Independent Business (NFIB) and by the Center for Women's Business Research (CWBR).

Small E-business

DEFINITION

Businesses can be modeled in different ways. They can be differentiated by size – big versus small in terms of revenues or numbers of employees – or they can be classified by stages of growth ranging from business start-up to maturity. In this study we analyze use of the Internet by small businesses having up to 250 employees and those operated by women and men. We adopt the Census Bureau definition of e-business: "It is reliance on the use of computer networks, and the benefits this can provide, that is the "bottom line' difference between electronic and other kinds of business" (Mesenbourg 1999). Operating an e-business can range from using a personal computer and e-mail to operating as a dot.com business.

CONTRIBUTION

- ***Small business employees half of all workers and does one-fifth of e-commerce spending***

Small business makes a significant contribution to employment and to commerce. Ninety-five percent of small businesses have fewer than 100 employees and employ about half of the U. S. workforce (Lawrence 2000). This year, small businesses will account for one-fifth of e-commerce spending. Six out of 10 small businesses say that some of their employees will use the Internet this year, according to the research firm IDC (Gantz 2001). About 60 percent of small businesses with online access have a Net presence, either a homepage or a Web site. But only about one-third of them sell goods online – with 23 percent anticipating that online sales will affect their bottom line. The proportion of total sales made online is greatest for firms with fewer than 10 employees, which highlights "the very real potential of the Internet to generate sales even for the smallest SBs" (Smith 2000)

Organization of this Report

Part I: Overview

Reflecting the fast-paced world, the reader interested only in the research highlights can scan the bulleted summaries in ***Part I: Overview***. The opening section, ***E-Business Status 2002,*** documents the value of Web sites as found in a national small business survey sponsored by the *National Federation of Independent Business* (NFIB). A second survey, sponsored by the *Center for Women's Business Research* (CWBR), provides insights in how men and women business owners use the Internet.

The section ***Small Business Transformation*** examines causes of success or failure of e-businesses. Innovative niche businesses illustrate the imaginative ways even the smallest firms can successfully engage in e-commerce. But what are the factors that deter companies from participating or that lead to businesses failure? Is it a lack of technology readiness, market forces or are there financial considerations? Or is the reason that more small firms do not participate a matter of the owner's mindset, a reluctance to dive into e-commerce.

The section ***Trends in E-Business*** takes the sparse data that is available to assess e-commerce trends. ***E-Business Strategies for Success*** summarizes the analysis with business strategies for achieving success and avoiding failure. Part I of the report concludes with ***Policy Considerations***.

Part II: Details

The interested reader with time can gain more detail in Part II. The first section describes the NFIB and CWBR surveys. Web site costs and benefits are shown in tables and figures. A comparison of how women and men use the Internet describes their frequency of going online and the benefits they report. The second section of Part II, ***Case Studies of Innovative Practices***, illustrates the variety of ways small business owners are leveraging their businesses. The final section provides supplementary information on ***E-Commerce Share of Total Commerce.***

Part I:
Overview

"The Internet remains a place where you can start with nothing and soon challenge the gods."

Mark DiMassimo
DiMassimo Brand Advertising

E-BUSINESS STATUS 2002

Two surveys enable us to look at the potential of e-business for firms stratified by employee size, gender and location. The sponsors, the *National Federation of Independent Business* (NFIB) and the *Center for Women's Business Research* (CWBR), are interested in the potential that e-business offers their respective constituencies, namely small firms having one to less than 250 employees (NFIB) and women business owners (CWBR).

The Use and Value of Web Sites

- ***Gender differences in use of the Internet have disappeared. Age differences have not.***
  Entrepreneurs under age 40 are much more likely to be online than those over 65 years of age (CWBR). Internet users are well educated men and women. Most have college or graduate degrees.
- ***Larger firms have Web sites now.***
  Larger firms are spearheading the use of computers and the Internet for business and they have Web sites *(Table I-1)*. Nearly all firms with at least 20 employees use computers (91 percent) and more than 70 percent use the Internet (NFIB). More than three-fourths of online firms have Web sites (77 percent). Smaller businesses lag behind. Still, over half of the firms with at least one employee beside the owner use the Internet, and of those, 58 percent have Web sites. Whether or not the business is homebased makes little difference as to Internet use (CWBR).

Table I-1 Internet and Computer Use by Employee Size

Percent of Employer Firms

percent	1 to 9 Employees	10 to 19 Employees	20 to 249 Employees	All Firms
Use Internet for business	55	60	70	57 N = 752
Use computer in business **(If not Internet users)**	60	73	91	64 N = 308
Have Web site **(of Internet users)**	58	60	77	61 N = 444

Source: *National Federation of Independent Business*

- ***Manufacturing firms lead in technology use.***
  Fifty-seven percent of all employer businesses use the Internet *(Table I-2)*. Of those that do not, 64 percent do use computers. Technology adoption varies by industry. For example, 67 percent of manufacturing companies use the Internet; 83 percent of manufacturers not online have computers. Retail firms have the lowest participation online (45 percent) and even in their computer use (53 percent). However, about one-third of retailers sell online if they have a Web site, which is about the same rate as all other industries but manufacturing.

Table I-2 Internet and Computer Use by Industry

Percent of Employer Firms

Industry percent	Use computer in business	Use Internet for business	Use E-mail for business	Business Web site	Sell goods and services on Web site
All Firms YES	64	57	83	61	35
Construction	75	59	73	37	24
Manufacturing	83	67	93	79	38
Retail	53	45	83	62	34
Service	69	56	85	58	35
Other	60	67	84	68	36
N	308	752	444	444	288

Source: *National Federation of Independent Business*

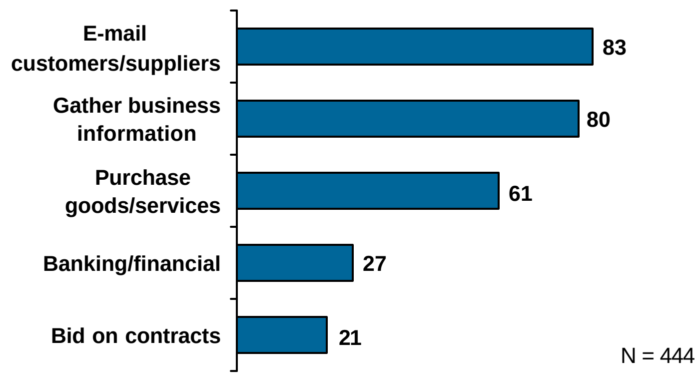
- ***Businesses use the Internet for e-mail and to get information.***
  E-mail is now essential for business. Companies slow to get online have been prodded by customers and suppliers who have shifted to e-mail as their preferred mode of communication. Once online, firms learn how easily they can gather business information. However, many are still reluctant to make transactions online. As *Figure I-1* shows, although 80 percent or more firms are using the Internet to

communicate and gather information, only 61 percent purchase goods and services. Far fewer do their banking or bid on contracts online (NFIB).

Most business owners never recruit new employees or conduct Web-based meetings or presentations (CWBR). Their online purchases average only about 14 percent of total company purchases. The most surprising finding was that only 13 percent of businesses routinely use the Internet to sell products and services and even fewer, to seek out business opportunities (9 percent women; 6 percent men). Nearly half of businesspersons "never" use the Internet to sell.

Figure I-1 Online Activities of Employer Firms

Percent of Employer Firms



Source*: National Federation of Independent Business*

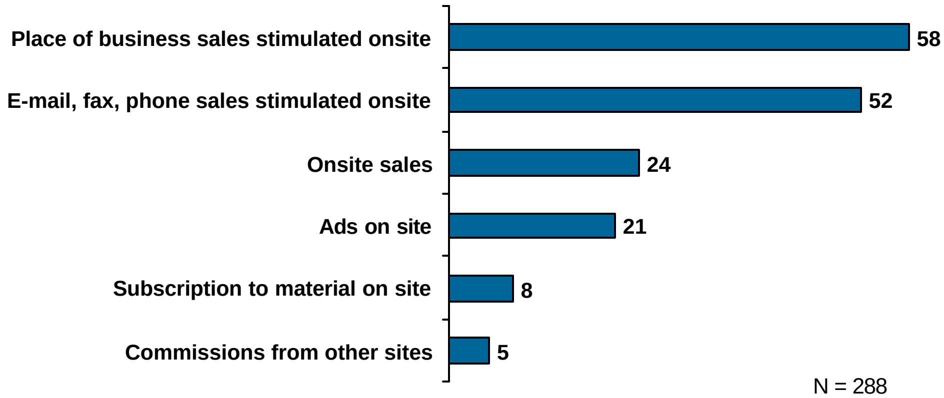
- ***Web sites stimulate sales.***

Only 24 percent of businesses with Web sites generate revenue from onsite sales. Most businesses say that Web sites stimulate purchases either at the place of business (58 percent of firms) or by e-mail, fax or phone (52 percent) *(Figure I-2)*. Recognizing this trend, Best Buy's TV ads encourage shoppers to browse online before coming to their stores to make a purchase. Twenty-one percent of firms earn additional income by allowing ads on their Web sites. Less than ten percent of companies generate revenue from Web-related subscriptions or commissions.

The source of revenues varies somewhat by industry. Web sites stimulate sales at their place of business for sixty-three percent of construction firms, while only four percent profit from ads. In contrast, 74 percent of retail businesses find that Web sites stimulate sales in their stores and/or by e-mail or phone (60 percent). Thirty-six percent earn revenues from ads. Also 36 percent of businesses in retail report sales completed online.

Figure I-2 Sources of Revenue from Web Site

Percent of Employer Firms

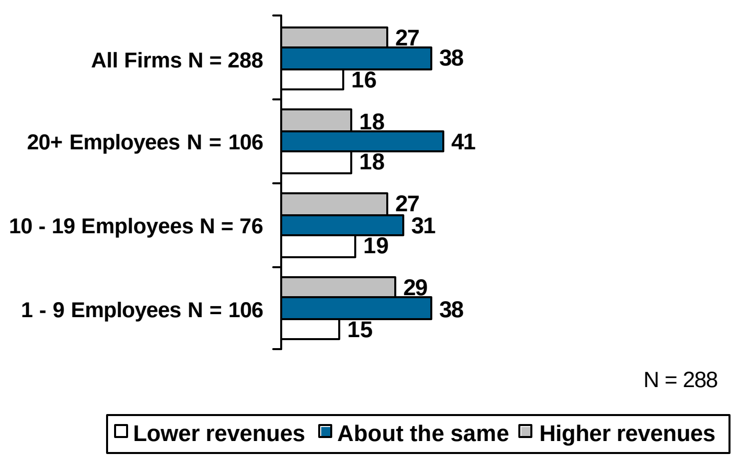


Source: *National Federation of Independent Business*

- ***Web sites more than pay for themselves.***
  Most businesses, but not all, recover their Web site costs (NFIB). Twenty-seven percent of businesses made a profit from their Internet presence over the past three to six months, that is, their online revenues exceeded the costs of operating and promoting the site *(Figure I-3)*. One reason is that most firms spend relatively little on their Web sites.

Figure I-3 Web Site Revenues Compared with Cost of Site

Percent of Employer Firms by Size



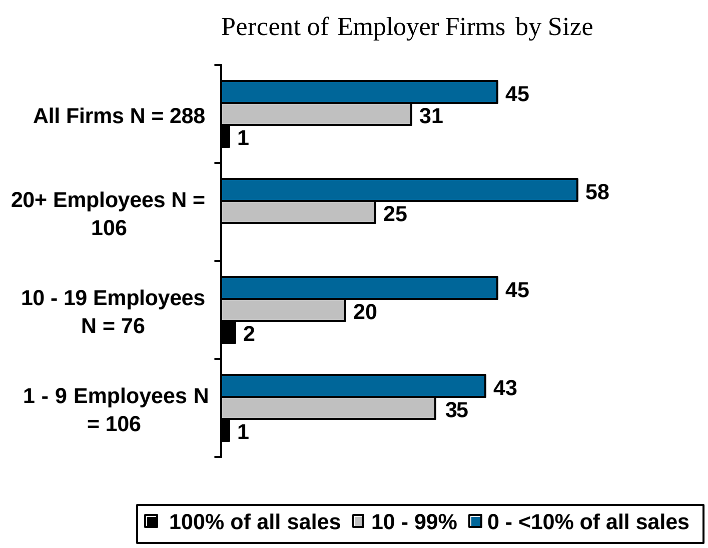
Percentages do not sum to 100 because Don't Know and Refused not shown. Numbers rounded.
Source: *National Federation of Independent Business*

Surprisingly, over one-third of businesses have no idea how much they have spent on building a Web site. Even the larger firms do not monitor their dollar and time costs. Similarly, over one-third of firms, including those with up to 250 employees, do not know how much time their employees spent. Those that do, say the amount is small. In fact, over one-third of all firms spend less than $50 and one day's time per month to maintain their sites.

- ***Small businesses sell primarily to Internet consumers.***
  Regardless of size, fifty-one percent of small firms say that business-to-business (B2B) sales account for less than 10 percent of their total Internet commerce. Only nine percent of all small businesses sell entirely to other businesses. Unexpectedly, even within the construction industry online sales are primarily to consumers.
- ***Internet sales make a small contribution to total sales.***
  Figure I-4 shows that online activity accounts for less than 10 percent of total sales for forty-five percent of all firms (NFIB). The smallest firms with fewer than ten employees benefit the most from having a Web site. Thirty-five percent of those firms gain from 10 to 99 percent of their current sales either directly or indirectly from their Web site. At most, one or two percent of firms derive their revenues exclusively from Internet sales. Interestingly, manufacturing stands out for its Internet sales. More than half of manufacturing businesses achieve from10 to 99 percent of current sales as a result of their Web site.

Figure I-4 Current Sales as Result of Web Site

Direct or Indirect Internet Sales by Employee Size



Percentages do not sum to 100 because Don't Know and Refused not shown. Numbers rounded.
Source: *National Federation of Independent Business*

An Internet presence tends to increase gross revenues *(Table I-3)*. Generally, men achieve higher business returns than women, although being on the Internet gives women approximate parity with men in the range from $100,000 to one million. Substantially more male-owned firms grossed over one million; women tended to own companies that made less than $50,000.

Table I-3 Gross Revenues and Internet Use

Percent of Women- and Men-Owned Firms

Gross revenues Year 2000	Internet Users		Non-Users	
percent	Women N = 256	Men N = 238	Women N = 100	Men N = 109
Less $50K	12	7	23	14
$50K – less than $100K	11	6	12	15
$100K – less than $500K	22	24	13	28
$500K – less than $1M	14	17	8	17
$1M or more	23	33	6	12

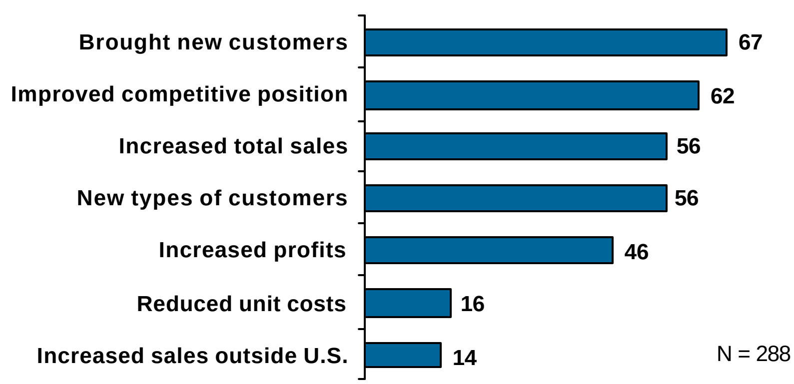
Responses do not sum to 100 percent because Don't Know and Refused responses not shown. Numbers rounded.
Source: Center for Women's Business Research

- ***Web sites attract new customer types.***

  Web sites are beneficial for most firms that have them (NFIB). Although they have yet to increase profits for every business, over 60 percent of owners say their sites have brought new customers and improved their competitive position *(Figure I-5)*.

Figure I-5 Benefits to Business from Web Site

Percent of all Firms (1 to 249 employees)



Source: *National Federation of Independent Business*

Over half of all firms with Web sites have increased total sales. Most importantly, the Web sites have attracted new types of customers, which could help expand the business in new directions.

Business owners say the Internet saves them time. They get the information they need and can respond to clients faster. Women apparently are taking advantage of the Internet to level the playing field for women-owned firms (CWBR). They outnumber men, 40 to 27 percent, in recognizing that being online widens the range of business opportunities. Understandably, more women then men also value the time flexibility they attribute to the Internet.

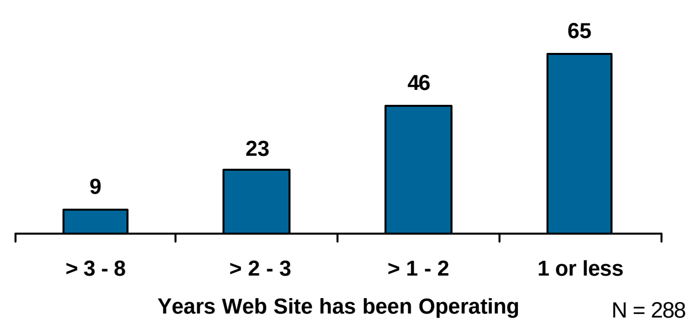
- ***Web sites are a growing trend.***

Although fewer than nine percent of firms have had Web sites for as long as eight years, there has been a steady increase in online participation (NFIB). Sixty-five percent of firms have had Web sites for one year or less. *Figure I-6* suggests a continuing upward trend in employers adding Web sites for their businesses. About 28 percent of sites operated by men or women firms have been on the Internet for more than three years (CWBR). Interestingly, one-third of the sites has been changed or upgraded four or more times.

Nearly all sites offer basic information about the company's business, products and services. Most provide the ability for visitors to e-mail questions or comments. Notably, over half provide a detailed product or service catalog with descriptions and pictures of the company's products or services. About half also offer a toll-free number for ordering and more than one third, the ability to order online.

Figure I-6 Web Site Trend

Percent of All Firms (1 to 249 employees)

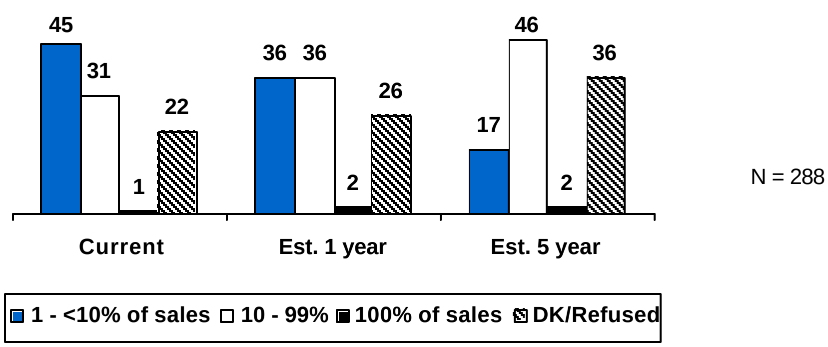


Source: *National Federation of Independent Business*

- ***More firms expect to go online.***
  Irrespective of firm size, 32 percent of employers expect they will use the Internet for business-related activities within the next year (NFIB). Of those expecting to go online, 45 percent also anticipate having a Web site. Only 32 percent say they definitely will not have a Web site within the next year. Three percent of those without sites had not made up their mind.
- ***Internet sales will grow slowly but will never be the only revenue source.***
  More than one-third of businesses cannot say the impact that Internet sales have now, much less predict percentage sales five years from now *(Figure I-7)*. Only one or two percent of firms expect all their future income to come from maintaining a Web presence. However, the relative share of sales will shift to the Internet. In five years the number of firms with sales in the 10 to 99 percent range will increase from 31 to 46 percent. But anticipated revenue from their Web sites will grow slowly, with little change in the coming year. Firms with 10 or more employees were more optimistic than smaller firms in their projections of e-commerce growth.

Figure I-7 Current and Estimated Future Sales from Internet

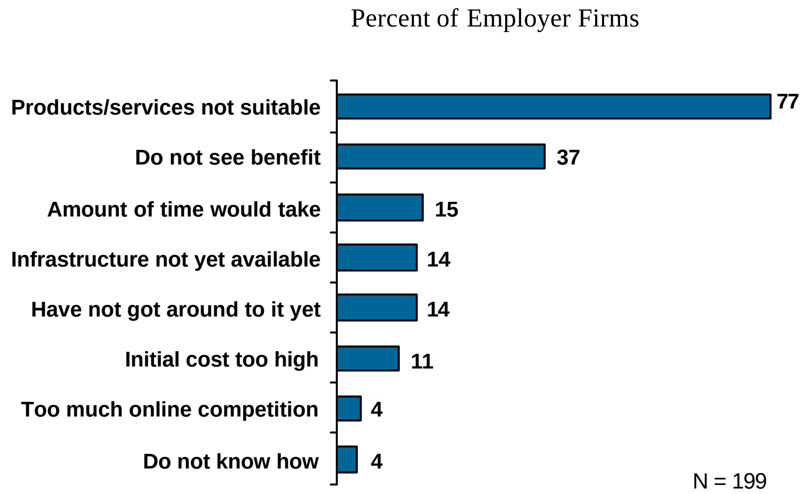
Percent of Firms (1 to 249 employees)



Source: *National Federation of Independent Business*

- ***Employers say that some products and services are not suitable for selling online.***
  Some businesses do not see an advantage in conducting e-commerce even if they go online *(Figure I-8)* (NFIB). They feel their products and services are just not suitable to sell online (77 percent). Firms of all sizes agreed.

Figure I-8 Reasons for Not Selling Directly from Web Site



Multiple responses allowed.
Source: *National Federation of Independent Business*

- ***Firms will not go online or use computers unless they see benefits.***

Businesses not participating online expressed a very similar point of view as those not selling on the Internet (NFIB). Seventy-six percent of those executives who do not expect to use the Internet within the coming year simply do not see any benefits. Their lack of participation is not because they do not know how to do it. Very few thought the cost of service was too high (7 percent) or that the infrastructure is not yet available (2 percent). Only five percent said they just have not thought about it. Similarly, over half of firms thought their products would not sell online and 45 percent did not see any possible benefits from having a Web site. However, more than one-third of businesses just had not got around to building a Web site.

Similarly, over half of firms that are not using computers now, see no reason for having one (54 percent). If they need one, 15 percent of executives already have a personal computer at home that, presumably, they could use for the business.

Fifty-five percent of businesswomen and 62 percent of men do not see the need for placing their business on the Internet (CWBR). Nineteen percent of the women say they have no time to learn about it compared with only 10 percent of men. However, women are much more concerned about privacy than men. Ten percent of businesswomen but only three percent of business men report privacy as one reason they are not using the Internet. Dislike of computers or not having equipment yet were mentioned by only a few percent of either men or women.

SMALL BUSINESS TRANSFORMATION

> *"The primary economic impacts of the electronic economy are expected to manifest themselves at the level of individual businesses.…For individual businesses, the use of electronic business processes potentially affects what they purchase, what they produce, the way they produce it, their marketing and selling activities, and their productivity and profitability"*
>
> *Measuring the Electronic Economy*
> U. S. Census Bureau

Technology, telecommunications and the Internet are transforming the way people work and live and conduct business. Www.dogbooties.com is a particularly interesting example.

Dogbooties.com reaches customers worldwide for the company's niche product, booties and other products for sled dogs or for any dogs that have tender paws need protection from the cold or simply have owners who want them to appear stylish. This may not seem to be a product that many people need, but actually the business has competitors such as www.huskyexpress.net, www.gonewildkennels.com and www.REI.com, a major sporting goods chain. The company illustrates the elements of the business, economic and social transformation that is taking place:

First, marginal "Mom and Pop" businesses are changed into profitable niche business. A husband and wife founded and operate the business. In past times, "Pop" usually ran the business in his own name while "Mom" helped out. That is no longer true. Women have become partners in name, legal status and function. Second, owners can live in an isolated location and reach customers worldwide.

Third, because of the power of the keyword search, the business can target customers who need niche products like dog booties without the wasteful expense of mass mailings. Instead, customers find them, simply by typing in the word "dog booties." And fourth, for a small business, revenues cover the costs of setting up and operating a Web site.

- ***The Internet stimulates business owners to rethink their business strategy.***
  As the study *The Future of Small Business: trends for a new century* reports "Smaller firms frequently pioneer many new business-applications for technological innovations and lead larger firms in the use of the PC and the Internet" (Oliver 2000). Those more innovative entrepreneurs, the early adopters, see the Internet as a way to market niche products and reach distant customers in ways that were not available in the past. Although these

examples make the Internet sound like a playground for entrepreneurs, in fact, the innovations foretell a structural change in industrial organization.[1]

- ***Small business innovators use the Internet to leverage existing businesses and add value.***

  Owners use the web to build an existing business, for example, by offering gifts, plants and balloons, which boost sales of floral arrangements (*www.kcflorist.com)*. By dramatizing its message "We're not really selling boats—we're selling a lifestyle," a boat builder stimulates insurance sales and participation in regattas (*www.sumerset.com*) (Inc. Tech 2000).

- ***They use the power of the keyword search to reach distant markets with niche products.***

  Niche businesses like *www.dogbooties.com* gain visibility through the Internet that would be difficult to achieve any other way. The company *www.casketfurniture.com* offers "…entertainment centers that can be promptly converted into coffins, usually by just removing the shelves" (Business Week 2001b). Taking a low-fat cookie onto a Web site brought in $800,000 in combined retail and direct sales (*www.nopudge.com*) (SBC 2001a).

- ***Innovators make imaginative use of the Internet's visual capabilities***.

  Entrepreneurs market real estate, bed and breakfast rooms and their designs for custom fireplaces using streaming video to give "you are there" virtual tours (*www.callelizabeth.com*, *www.innaccess.com/view*, *www.dukefire.com*). Or they post construction photos that allow customers to catch production errors before they become serious, which results in cost savings for the business.

- ***They join associations to gain size and build credibility.***

  Even, and especially, emerging firms can successfully engage in e-commerce. Associations such as ABEBooks.com or Amazon.com provide tools to help individuals organize their businesses. They also provide access to markets to sell, in this case, out-of-print books (*www.abebooks.com/home/doneysbookshelves*, *www.amazon.com/shops/joannesbookshelf*).

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[1] See also Part II, Case Studies of Innovative Practices, page 48.

Success/Failure Factors for E-Business Transformation

Innovative niche businesses illustrate the imaginative ways even the smallest firms can successfully engage in e-commerce. But what are the factors that deter companies from participating or that lead to businesses failure? Is it a lack of technology readiness, market forces or are there financial considerations? In fact, a key reason for individual businesses not participating in the transformation a matter of the owner's mindset, a reluctance to dive into e-commerce.

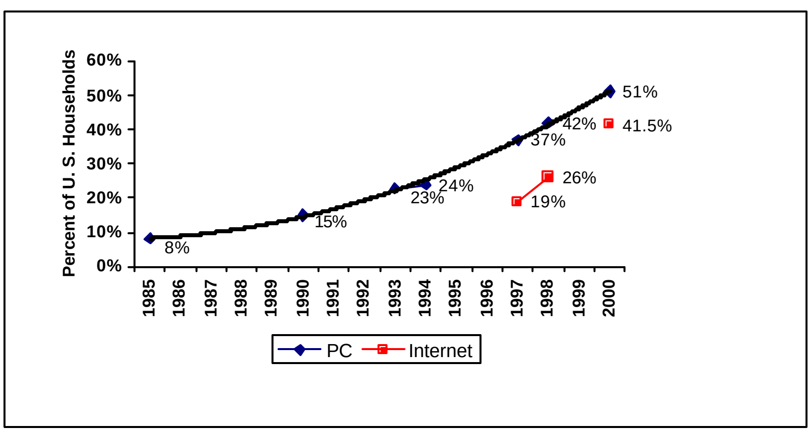
TECHNOLOGY READINESS FOR E-COMMERCE

- ***The majority of households have a computer.***

As confirmed in the NFIB and CWBR surveys and other research, most small businesses have computers, but e-commerce is just getting started (See, for example, Buckley and Mentes (2000)). The readiness of business to do e-commerce is critical, but success depends upon customer response. The number of households equipped to shop online has risen sharply. As *Figure I-9* shows, 43.6 million or 42 percent of all homes were online in August 2000 (U.S. Department of Commerce). By June 2001, Gartner Dataquest found 61 percent of all homes using the Internet (Grice 2001).

Figure I-9 Technology Penetration in Households

Percent



Source: NTIA and ESA, U.S. Department of Commerce, using U.S. Bureau of the Census Current Population Survey supplements (U.S. Department of Commerce 2000)

The gender gap has closed with women now 51 percent of the Internet population. Older individuals are catching up. Even lower income households are gaining online access. Thus, the growth of potential shoppers continues. Small enterprises will also benefit from increases in the number of people with Internet access worldwide.

- ***Broadband and wireless should stimulate e-commerce.***

  Access to broadband, "always on" high speed access to the Internet should also increase online sales. However, optimistic forecasts of rapid penetration of broadband have been severely dampened by the failure or drawing back of the telecom providers. Wireless access may be significant in the future, but at this time, mobile phones are "tools of the young" (PC Magazine 2001a).

- ***A backlash to technology could occur.***

  The 2.9 million e-mails sent in 1996 are predicted to exceed *35 billion daily* by 2004 (Berry 2001). The online shopping habit also may grow. However, resistance to the costs of technology can be anticipated even from a population addicted to e-mail. As monthly bills from broadband, cell phones, digital cable and Internet-connected wireless phone and PDA combinations may exceed the consumers'—and even the small business owners' budgets. Individuals may also resist being "always on" 24 hours a day, seven days a week, thanks to technology.

MARKET FORCES

To conduct e-business, both the seller and the buyer not only must be equipped with technology to use the Internet but willing to transact some level of business-to-business (B2B) or business-to-consumer (B2C) commerce electronically. Concerns such as maintaining privacy and fear of credit card fraud may dissipate as familiarity with Internet commerce grows. Clearly the economic climate for doing business is a major factor in the willingness to participate in e-commerce.

- ***Whether businesses like it or not, the Internet, is changing industrial organization.***

  According to Fortune columnist David Kirpatrick, business should ignore the journalistic hype that boosted the Internet on its way up and badmouthed it on the way down (Kirkpatrick 2001). The *Future of Small Business* study concluded that "Overall, the PC and the Internet favor smaller businesses by allowing them to match big-business efficiencies, thus enhancing the ability of smaller businesses to communicate with suppliers and customers, lower costs, and broaden markets" (Oliver 2000). The Internet is changing industrial organization.

  Web buyers are the more affluent shoppers, which is positive news since they not only spend more per transaction but are less fearful of economic downturns. Online shopping continued despite the September 11th terrorist attacks. Third quarter 2001 e-commerce sales were up eight percent from 2000, while total retail sales increased less than two percent (U.S. Department of Commerce 2001a).

- ***For both businesses and consumers, engaging in e-commerce grows with familiarity.***

  Supporting the findings in the NFIB and CWBR surveys, evidently business owners new to the Internet do a lot of browsing (Smith 2000). Buying and selling online comes with familiarity. Thus, "Only 58 percent of small businesses that came online in 1999 or 2000 ordered online, versus 80 percent of those that have been online since 1995".

  Observable milestones indicating participation in e-commerce as a business strategy include ownership of a personal computer, use of e-mail, use of the Internet, and having a Web page. Additional Web site milestones include developing a brochure site, which the firm upgrades by steps to reach full capability of handling and fulfilling orders. Thus, businesses can tip toe into e-commerce by becoming habituated to e-mail, add a Web-page brochure and progress incrementally towards offering total transaction control including the shopping cart "face" that customers see and the hidden back-end that provides essential infrastructure and inventory management.

- ***E-commerce share of sales is still small.***

  Online activity for most employer firms accounts for less than ten percent of sales (NFIB). According to market research reports, so far, small businesses are using the Web to sell less to other businesses (16 percent) than to consumers (18 percent of online small businesses) (Anderson 2001). But that may change. Forrester Research predicts that by 2003, 1.8 trillion in business-to business commerce will occur online versus just $144 billion in business to consumers (stockscommuter.com 2000).

  - ***Selling to consumers requires knowing your products, your customers and new distribution channels.***

  Forty-nine percent of Internet users buy online according to a 2001 University of California at Los Angeles Internet study (UCLA 2001). Over half (55 percent) spend from $15 to $175 per month. The most experienced users—those online for five years or more—made five times as many purchases as online newcomers, 20 compared to four per year. Online shoppers are expected to spend more than $72 billion in 2002, a 41 percent jump from 2001 and as much as $170 billion by 2005 (shop.org 2001; shop.org 2002).

  Even with the right product, different channels may be needed to reach customer segments. The experience of MarBec, a Missouri Appliance factory outlet, is telling in light of management guru Peter Drucker's view that so far, "from the point of view of the economy, the Internet is just another distribution channel ...." (Schonfeld 2001). MarBec sells on eBay, uBid and its own Web site. For MarBec, each distribution outlet is doing quite well but the eBay customers are "very savvy people who have really researched and know their stuff; the uBid customers are not as savvy" (Personal communication 2001b).

FINANCIAL IMPACTS

- ***Small businesses rely on their own resources for start-up funds.***
  The smallest firms typically capitalize their new enterprises with personal or family savings (Pratt 1999). Large businesses must find venture capital funding. Second and third rounds of funding are even more difficult to obtain than start-up capital.
- ***Online companies fail when they cannot get their second round of venture capital.***
  "The companies now failing are doing so for capital reasons, not because of mismanagement" according to Bill Burnham, with Softbank Venture Capital in Mountain View, CA (Whitestone 2000). Web mergers.com reports that since January 2000, 592 significant Internet companies — those that are publicly traded or have formal funding — have failed (Kopytoff 2001). The companies are "victims of investors' reluctance to pump more money into businesses with little prospect of turning a profit any time soon." A Frontline report contended that many fledgling dot.coms were lured prematurely into IPOs (Frontline 2000).
- ***The question is still how to make e-commerce pay.***
  Users accustomed to free services are not easily transformed into paying customers. That is particularly apparent in content sites. The strategy that has been proved to work for prestigious resources such as the New York Times and Wall Street Journal, is to offer customized, detailed information that has perceived value for the buyer.

  The same approach works for small businesses. For example, The Horseman's Advisor, which bills itself as "simply the best source of information on taking care of horses in the world," posts free abstracts but requires a $29.94 annual membership fee to gain access to full articles and other member-only materials (Horseman's Advisor 2001). The site claims a 98 percent membership renewal rate.
- ***Small firms can set up a web site for a few hundred dollars hosting fee.***
  The power of the Internet for small firms is that an entrepreneur can design, host and maintain a Web site at so little cost. Another option is to associate with similar enterprises. Doney's bookstore buys more than adequate integrated services for less than $500 per year (Personal communication 2001a). But Doney's, like many businesses, intends to remain small. For those firms obtaining capital is not a limitation. The owners fund their businesses from their personal and family savings.
- ***To grow requires capital because the business must be transformed.***
  Exchanges on a mega scale can occur when product information, order processing and status are integrated with sales functions; on-line billing and invoice viewing and

printing options are added together with automated e-mail response and other customer care; and finally, multiple back-end systems interfaces and middleware complete the integrated e-commerce business (Calogero 2001). However, the costs soar as each function becomes more sophisticated. Verizon estimates that the "next generation e-Business investments" will require "$100 million front-end [plus] $1.0 billion for middleware and back-end."

Small firms that plan to grow need capital ranging in magnitude from out-of-pocket expense money to multiple rounds of outside financing. The implications of the current state of e-business suggest that some small firms may choose not to grow but to remain small and specialized.

MINDSET: WHY AREN'T MORE SMALL BUSINESSES ENGAGING IN E-BUSINESS?

Based on the new survey data reported above, projections of e-commerce look overoptimistic. The explanation may be that business owners actively using the Internet to reach and sell to new markets are the shapers, or early adopters, of e-business. Like the pioneers who first saw personal computers as a business tool, they are innovative entrepreneurs with the curiosity and vision to understand ways the Internet could enhance their business.

Typically early adopters of new products are trailed by more cautious participants. Thus, participation in e-commerce as a business strategy can be gauged by a firm's use of technology and adoption of procedures for conducting business on the Internet. For example, from 1999 to 2000, Verizon found that the number of online businesses that had established a brochure Web site to promote their firms increased from 8 to 21 percent while the number that had established a Web site to sell products remained at 13 percent (eMarketer 2000). Even so, 48 percent in the year 2000 said the site had met or exceeded expectations compared with 33 percent the previous year.

Overall the small-business sector has benefited by being "more nimble in adjusting to changes and in taking advantage of new business opportunities and methods" (Oliver 2000). Smaller firms "ignore the future at their own peril."

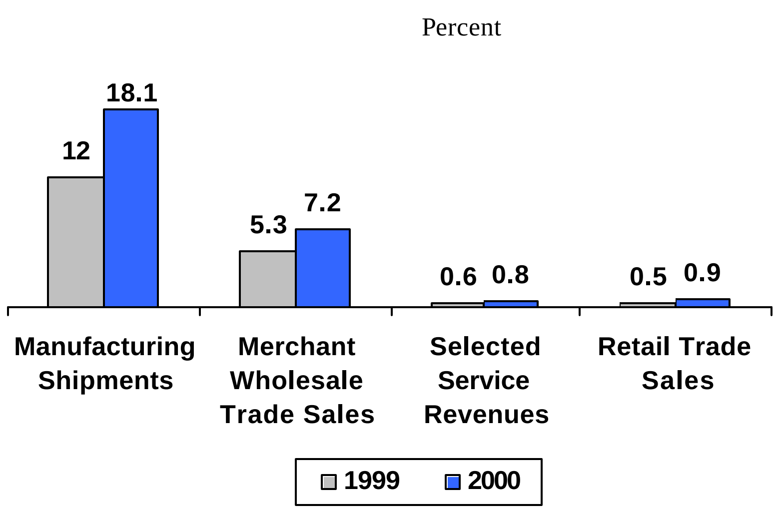
TRENDS IN E-BUSINESS

E-Commerce Share of Total Commerce for all Business

- ***Nearly all e-commerce is business-to-business (B2B).***

When large as well as small business is considered, the impact of e-commerce is far more significant for some industry sectors than for others. The U. S. Department of Commerce assumes that manufacturing and wholesale trade is largely between businesses and that retail and service e-commerce activity is entirely between businesses and consumers (*U.S. Department of Commerce* 2002a). Manufacturing led all sectors. As *Figure I-10* shows, business-to-business (B2B) e-commerce shipments accounted for 18.1 percent or $777 billion of the total value of all manufacturing shipments. Although online retail has garnered most attention, business-to-consumer (B2C) e-commerce sales accounted for only 0.9 percent, $29 billion, of total retail trade. However, online retail is growing at a faster rate.

Figure I-10 E-Commerce Sales as Percent of Total Value



Source: U.S. Bureau of Census (U.S. Department of Commerce 2002a)

MANUFACTURING

Also, within industry categories, some sectors benefit substantially more from e-commerce than do others. Thirty-eight percent of e-commerce manufacturing sales are for *transportation equipment.* Nearly half of transportation equipment sales transactions occur online.

WHOLESALE TRADE

Drugs and sundries lead e-commerce sales in the *Merchant Wholesale Trade* industry. Although overall e-commerce accounts for only eight percent ($213 billion) of sales, it represents nearly one-third of all sales of *drugs and druggists' sundries* with a value of $66 billion. Surprisingly, drug sales exceed *wholesale computer sales* on the Internet.

SERVICE INDUSTRIES

Travel is by far the most popular online *Service* industry. Twenty-four percent of sales are e-commerce transactions. Only two percent of *securities and commodity* sales, for example, occur online even though the category ranks second in percent distribution of e-commerce sales.

RETAIL TRADE

By definition, non-store retailers dominated e-commerce activity in the *Retail Trade* sector. Nearly three-fourths of e-commerce transactions in the retail industry were

Table I-4 Electronic Shopping and Mail-Order Houses

Leading Seven Sectors 2000

NAIC	Value of Sales billion		E-commerce as Percent of Sales	Percent Distribution of E-commerce Sales	Percent Distribution of Total Sales
	Total	E-commerce			
Total Retail Trade	3,061	29	0.9		
Non-store retailers	162	22	13		
Electronic shopping & mail-order houses Total	**108**	**21**	**20**	**100**	**100**
Computer hardware	26	6	23	28	25
Other merchandise[1]	17	2	14	11	16
Books & magazines	4	2	49	10	4
Clothing & access.	14	2	14	9	13
Office equip. & supp.	7	1	21	7	6
Music & videos	4	1	29	6	4
Computer software	4	1	31	5	3

Source: *U. S. Census Bureau, 2000 Annual Retail Trade Survey (U.S. Department of Commerce 2002a).*
[1]Includes jewelry, sporting goods, collectibles, souvenirs, automobile parts, hardware, lawn & garden equipment & supplies

made by *electronic shopping and mail order*. *Table I-4* shows the breakdown. Some types of businesses even as early as 1999 were gaining nearly one-third to one-half of their revenues from the Internet. E-commerce as percent of sales continues to rise. While *computer hardware* ranks first in share of both total sales and e-commerce sales, the *other merchandise* category, which ranges from jewelry to garden supplies, rose to second place (columns 5 and 6). Although *books and magazines* contribute only 10 percent of non-store retail sales, online sales contribute just under half. E-commerce is increasingly important even to categories such as *clothing and accessories* and *office supplies*.

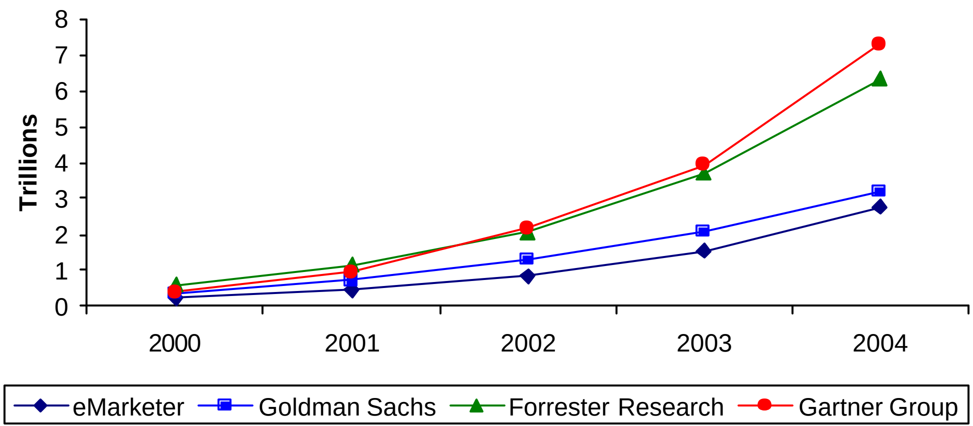
Global E-Commerce

According to the market research firm IDC, "We are in the middle of the transition to the real New Economy" (Gantz 2001). "We have four times as much opportunity ahead as we had behind," based on a $560 billion dollar e-commerce economy from 1997 to 2000 and a projected e-commerce economy of $2.2 trillion for the period 2001 to 2004. The questions are what will be the e-commerce share of the total economy and what will be the small business share of that e-commerce.

Traditionally, government surveys and censuses of businesses provide the statistics reflecting contribution to the economy and market share. However, "While the current macro level baseline captures the output of the electronic economy, it typically can not identify that output separately" (Atrostic et al. 2000). Thus from government surveys we know the market share of small business across industry sectors, but not the small business share of electronic commerce.

Market research firms survey smaller samples but they do so more frequently. eMarketer, a provider of e-market statistics, bases its projections on data the company reviews from federal and market research surveys. In this study we have examined e-business on the level of the individual business. The measurement challenge is to understand the impact of small business e-commerce on the total economy. That is a necessary goal both to guide small business owners and to provide a basis for policy-making. Unfortunately, "In the absence of official statistics, private estimates abound, and diverge from each other by as much as a factor of ten" (Atrostic et al 2000). As *Figure I-11* illustrates, projections of B2B world-wide e-commerce range from an optimistic $6 to7 trillion by 2004 to a conservative $3 to 4 trillion (eMarketer 2001a).

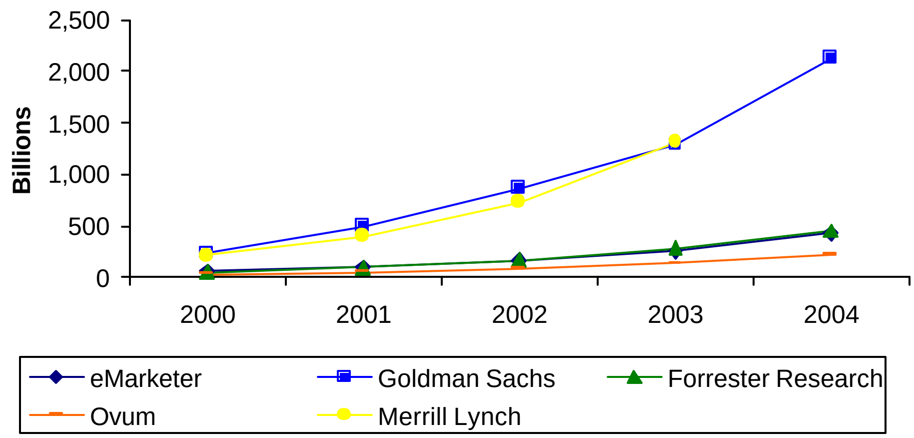
Figure I-11 Business-to-Business World E-Commerce Forecasts



Source: *eMarketer, 2001a*

As with the B2B forecasts, the predictions for size of e-commerce revenues from worldwide business-to-consumers (B2C) commerce cluster in two ranges (eMarketer, 2001b). They reach a high of two trillion dollars and drop to a low of $250 billion (*Figure I-12*).

Figure I-12 Business-to-Consumer World E-Commerce Forecasts



Source: *eMarketer, 2001b*

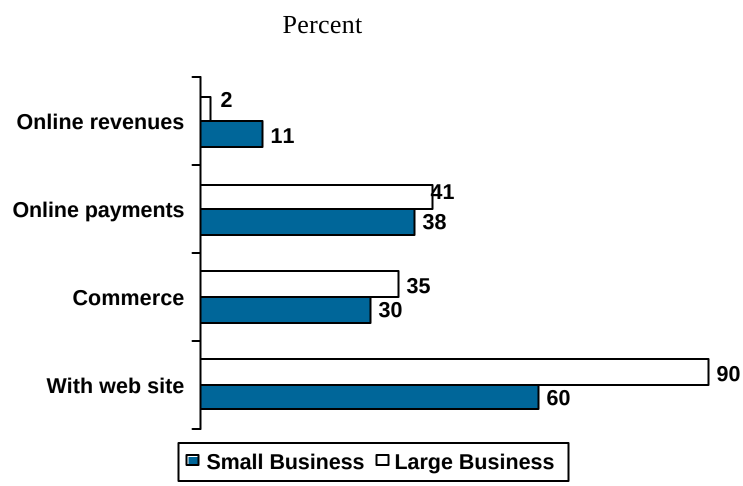
Small Business Share of E-Commerce

SMALL BUSINESS PARTICIPATION COMPARED WITH LARGE BUSINESS

Ninety percent of all large firms but only 60 percent of small businesses have Web sites. As shown in *Figure I-13,* firms of all sizes have been slow to conduct e-commerce or make online payments possible. Although the numbers are small it is striking that more than twice as many small businesses as big firms have online revenues.

However, large firms conduct e-business in a different way than most small firms. The trend is toward integration with customer relations management (CRM), meaning total integration of business to facilitate efficient customer-friendly e-commerce. That creates a problem in that new systems often cost more to implement than expected and ongoing expenses to maintain the systems may be as high as 40 to 60 percent of the original investment (Gomolski 2001).

Figure I-13 Participation in E-business

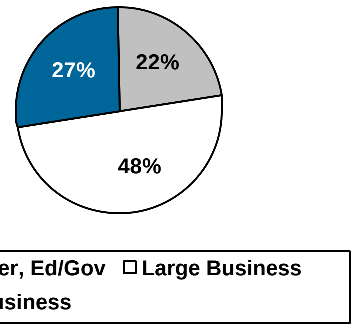


Source: *IDC eWorld 2001, US (Gantz 2001)*

ESTIMATING SMALL BUSINESS POTENTIAL E-COMMERCE REVENUES

There is no federal data on the small business share of e-commerce. The market research firm IDC estimates that small businesses account for a 27 percent share compared with 48 percent attributed to large firms *(Figure I-14).* Assuming that share will remain the same over time, by 2004 the more than one-fourth of revenues generated by small firms will reach $864 billion based on eMarketer's forecasts of total global e-commerce.

Figure I-14 Small Business Percent of Internet Commerce



Source: *IDC eWorld 2001, US (Gantz 2001)*

E-BUSINESS STRATEGIES FOR SUCCESS

"It is because of the Internet that I say you ain't seen nothin' yet."

Thomas Friedman

Opportunities for Small Businesses

- ***The Internet offers fundamentally different opportunities for small business.***

  Sumerset Custom Houseboats (www.sumerset.com) gives the small firm increased market area and add-on sales that generate more revenue by sponsoring regattas and posting construction photos on its Web site. In contrast, a large boat builder, *Bollinger Shipyards* (www.bollingershipyards.com), which makes Coast Guard patrol boats, profits by applying e-business, not to reach new customers, but to cut costs (Thomas 2001). Setting up a new $7 million computer system shaved nearly 15 percent off the time to build a boat by centralizing and speeding up procurement.

  In those examples, small business increases its bottom line from increased revenues; big business, this company of 1,900 employees, profits from decreased costs. In this study we have only glanced at big business so we cannot assert that this generally applies, but it would be an interesting comparison for further study.

LEARNING FROM THE E-BUSINESS PIONEERS

- ***The E-business pioneers are innovators.***

  The e-business pioneers are the so-called "shapers," the individuals who respond enthusiastically to new technologies by innovating new practices. *New York Times* columnist and author Tom Friedman cites eBay, as "a good example of a shaper in the economic realm…It came out of nowhere and within three years created a new set of rules and forms of interaction by which consumers would buy and sell things on the World Wide Web" (Friedman 2000).

  As the example of Doney's bookstore depicts, small businesses can compete successfully even in product categories dominated by megasites such as Amazon.com. One winning strategy is to form associations such as ABE books or join umbrella organizations such as eBay.

  E-business pioneers are savvy. They target narrowly defined buyers who search online to find specialty products. That includes—surely the winner of the niche business competition—sled dog mushers who buy dog booties at dogbooties.com. The knowledgeable husband and wife firm also operates a fabric outlet. Serious business owners, they sought guidance from a Small Business

Economic Development Center to seek the SBA loan that has allowed the seven-year old business to expand. They say "The Internet allows us to reach all over the world inexpensively" (SBC 2001b). Before the Internet, dogbooties.com would have remained a marginal "mom and pop" hobby with its prospects for growth additionally handicapped by its remote Minnesota location.

MINDSET IS KEY TO SUCCESS

- ***The e-business "adapters" lag behind.***

  In these early stages of e-business, the attitudes with which entrepreneurs respond as eager innovators or more reluctant adapters appear key to success. Senator Christopher Bond, an ardent advocate for small business, comments that B2B transactions already are worth at least $177 billion, compared with the $20 billion business-to-business commerce. "The small business community cannot afford to ignore this virtual gusher of economic crude" (Small BusinessDepot.com 2000).

  While the shapers seize these new opportunities, the adapters opt out. They are businesspersons who wait for the pioneers to develop new e-business models and learn from the innovators' mistakes. Some take their products and services online; others do not.

Trends and Counter-trends to Growth of E-Business

"SUCCESS" IS A RELATIVE TERM

Lifestyle preferences influence the response of small business owners to new e-business opportunities. Individuals with one hundred percent ownership have more freedom to define success by their personal measure—which for many is not the highest possible profit—than do businesses reporting to investors.

- ***Some businesses do not want to grow.***

  Contribution to family income is the measure of a successful enterprise for the smallest businesses. "Almost every small-time operator with a low-budget Web site has generated new customers and new income. An extra $300 or $400 a month … can make quite a difference to many a one-person operation" (Business Week 2001b).

- ***Some businesses want to "right size."***

  The well known outdoor clothing company, Patagonia, says the "real question is not How do we become biggest to compete? but, How do we become the absolute best in the world at something and what size do we need to be the best?" (Inc. July 2001). A major consideration for many small business owners is the lifestyle tied to the business. Gene Gage, founder and President of Papa Geno's Herb Farm earns revenues of $500,000. The optimal size for his business would be a "couple of million bucks a year" so as to build equity to pass along to the kids and "have a comfortable middle-class existence" with no suit and tie.

- ***Firms that want to grow require capital to integrate front and back end processes.***
  Growing to a big business requires sophisticated management and strategic planning. Owners assume risk when they scale up from a business that one or few people can operate profitably to a big business with many employees. Success may well demand a brick-and-mortar presence as well as a fully developed Web site.
- ***Some businesses will never engage in e-commerce.***
  There will always be firms whose products or services do not lend themselves to selling online. A CEO whose company processes vegetables for restaurants would not buy farm products sight unseen: She says "You have no idea of the quality by just pushing a button" (Personal Communication 2001a).

SLOWED SUPPORT FOR E-BUSINESS

E-business has not escaped current technology and market forces. Small businesses feel the impact of downturns in the overall economy. Dissemination of technologies and telecommunications such as broadband that enable online commerce is slowing. Some of the early dot.com companies that offered support services to small businesses are failing. For example, PayPal built its popularity on giving customers a free secure and easy way to pay online. Now customers must pay for that convenience. A critical factor that will slow small business share is the number of small business owners who will test the Internet waters but hesitate to dive in.

POLICY CONSIDERATIONS

"I don't think you can regulate anything like the Internet very well….. I think the fact that we have not opted for regulation is very important."

President Bill Clinton 2000

"We need to understand how powerful the Internet can be to commerce and growth… The role of our government is to create an environment in which the entrepreneur can flourish, in which minds can expand, in which technologies can reach new frontiers."

President George W. Bush 2001

THE UNANSWERED QUESTION: TO REGULATE OR NOT?

A laissez-faire philosophy is still the generally shared view. But as Economist W. Brian Arthur, professor at the Santa Fe Institute, says "To define [the proper role of government] rather than set a lot of rules, we need some overall policies….The big issue is innovation and having no incentive either to innovate or produce products of quality because there's an abusive monopoly" (Southwick 2000).

Arthur predicts that, because we have an international virtual community that no national government can control, "What is likely to happen is that some close-knit, informal group of people will start setting up policies."

The central policy is that "the Internet should remain a 'free trade zone' to the greatest extent possible, unhindered by excessive regulations; and the private sector should play the primary role in shaping the electronic commercial environment" (Cisco undated a). Perhaps so, but Congressional involvement has increased from considering four Internet-related bills seven years ago to 456 bills last year "on topics ranging from Internet taxation to broadband access, trade, immigration, privacy, and copyright protection" (Clendaniel 2001). Thirty percent of U. S. adults polled by Wired magazine said that government should be proactive in regulating or further developing the Internet; 61 percent thought that government should let the Internet develop on its own (Breslau 2000).

TAX POLICY

- ***Some business charge tax on Internet sales, but not all.***

The NFIB survey found that only 20 percent of small businesses charge tax on their Internet sales. Despite the prevailing laissez-faire sentiments, some spokesmen, such as Harris Miller, President of the Information Technology of America Association, believe that "The argument that there should be no regulation because the Internet is so young and fragile…is wearing thin." For example, one proposed solution is that

"…we should…call for the enactment of a national sales tax of 3 to 5 percent on e-commerce, to be collected by sellers and distributed to the states." (ECompany 2000). The General Accounting Office estimates that without e-commerce taxation, five percent of sales tax revenues in 2003 may go uncollected (Shop.org 2001).

Although states have expressed concern that "…the rising volume of sales over the Internet may affect the administration of state and local sales taxes; and telecommunications, international taxation, and international trade policies" there is the practical problem that at the present time they "simply can not be identified separately" (Atrostic 2000). "The value of output of specific industries, such as the manufacturing and retail sectors, are…official statistics" but as yet there are no estimates of the fraction of that output that can be attributed to electronic sales.

Wired magazine's Digital Citizen survey reported that 49 percent of all adults felt that Internet sales should be taxed, but only 41 percent of Internet users agreed (Breslau 2000). President Bush shares former President Clinton's opposition to taxes on Internet access. However, eventually questions concerning taxes, privacy and other legal issues will have to be addressed (Jones 2001).

In November 2001, Congress extended the moratorium on Internet taxes through October 31, 2003. Nonetheless, the Gartner group believes that Internet taxes will begin to take effect as the Web matures and the value of e-commerce grows (Cowles 2001). Existing taxes on catalog sales, for example, represent a compelling precedent for States favoring an Internet tax.

PRIVACY ISSUES

- ***The flip side of accessibility is maintaining privacy.***

The benefits the Internet offers to business are well stated by Larry Ellison, CEO of Oracle: "A few years ago, it dawned on me that the Internet was this extraordinary global network where all of our employees were suddenly accessible, attached to the same network. Everyone we were trying to sell to, everyone we were trying to serve, everyone that worked for us. We can create policies and procedures and implement them and voice them all over the world….in 60 seconds" (Business Week 2001a.)

As Internet commerce grows issues of concern include e-mail, Web tracking and intellectual property rights. Pending legislation, for example, includes sending of unsolicited mass mailings called "spam." Eighteen states have enacted anti-spamming laws, each a bit different (Campanelli 2001). The downside is that when laws are enacted, costs are generated for business.

With the goal of achieving a balance between consumer protection and business requirements, industries such as Cisco, not surprisingly, propose selfregulation. As of 1999, "65.9 percent of the 7,500 most popular Web sites had posted privacy policies…up from 14 percent the year prior" (Ciscob).

Those arguments become moot when national security is threatened. Congress is wrestling with how to control use of the Internet by terrorists while maintaining the right of privacy.

LEGAL ISSUES

As e-business matures, legal issues arise that relate to new ways of engaging in commerce. For instance, governments engaging in "reverse bidding" instead of written "requests for quotes" reach a broader selection of bidders—and hence the potential for lower prices—but the new bidding procedures may require legislative changes. (Goldstein 2001).

- ***Online payment options benefit small business by stimulating sales.***

  For example, the U.S. Postal Service is offering eBillPay "which lets consumers schedule and make payments as well as receive and pay bills on line…" (SBC 2001b). However, that is seen by private industry as "potentially harmful competition."
- ***Small business will also benefit from electronic signatures.***

  The E-Sign Act S.761 allows a firm to computerize the process of signing contracts to buy and sell products and services (Campanelli 2001). It functionally is equivalent to EDI (electronic data interchange), which has been used by business for some time.
- ***Older laws may also apply to an e-business***.

  The Fair Labor Standards Act, FLSA, for example, now applies to every business with two or more employees and a gross income of $500,000 or more (Bahls 2001). The Mail or Telephone Order Merchandise Rule, 1995 FTC, states that merchandise must be shipped within the time advertised or within 30 days of receiving a "properly completed order" (Campanelli 2001).

Conclusions

EBiz.com for Small Businesses

- The Internet offers unparalleled opportunities for small businesses.
- Leading edge entrepreneurs are demonstrating imaginative ways to conduct e-business. They are innovating new ways to enhance their product and service offering and expand their markets.
- The Internet allows business owners who do not want to grow their businesses, to earn primary or supplementary income or to just "keep their hand in."

- Time favors e-business growth. Upcoming generations accept technology and telecommunications as a given.
- Web sites are cost effective for small niche businesses.
- Business owners wanting to grow, the so-called "gazelles" will face hurdles. They can only compete by strategically reorganizing their business. They will need outside funding to cover the costs of setting up a fully integrated online business.

The Bottom Line

Overshadowing all other factors, entrepreneurs who have chosen to be players are excited about e-business, the new way of doing business. Even with all the problems that Amazon has had, when Jeff Bezos, asked if "running Amazon [is] as much fun as it used to be" answered enthusiastically "...yes... I love the rate of change. I love the intellectual challenge. It's fun" (Business Week 2001c). Many small business owners would agree.

PART II: Details

NATIONAL FEDERATION OF INDEPENDENT BUSINESS (NFIB) NATIONAL SMALL BUSINESS SURVEY[2]

Scope: Small business owners' participation in, and future plans for conducting business on the Internet.

Sample: 752 completed interviews with employers were obtained from a Dun and Bradstreet sample of businesses having from one to 249 employees. The employers included 563 men and 189 women. The sample was stratified by employee size of firm with a resulting distribution of 47 percent firms of 1 to 9 employees, 27 percent of 10 to 19 employees and 27 percent of 20 to 249 employees.

Date: The survey was fielded from April 22 to May 18, 2001 by the executive interviewing group of the Gallup Organization.

PROFILE OF EMPLOYER BUSINESSES

- ***Employees build revenues.***

  The more employees a business has, the higher the business revenues. As shown in *Table II-1*, over half of businesses employing at least 20 persons earn more than $1 million. About 43 percent of firms that operate with fewer than 10 employees achieve less than $500,000 in annual revenue. Firm size, in terms of number of employees, does not vary markedly either with the age of the business or of the owner. About fifty-one percent of the smallest firms have operated for less than 11 years, but so have 45 percent of firms with 10 to 19 employees and 41 percent of those employing 20 to 249 workers.

[2]Developed by Joanne H. Pratt and William J. Dennis

Table II-1 Profile of Businesses by Employee Size

Percent of Employer Firms

	1 to 9 Employees N = 352	10 to 19 Employees N = 200	20 to 249 Employees N = 200	All Firms N = 752
Size of Firm (revenue)				
Less than $500K	43	15	12	37
$500 to $999K	10	13	8	10
$1 million and more	10	37	51	17
Age of Business				
Less than 11 years	51	45	41	50
11 to 20 years	28	29	25	27
21 or more	16	30	30	18
Age of Owner				
Younger than 45	42	43	44	42
45 to 54	29	31	30	30
55 and older	22	20	22	22

Responses do not sum to 100 percent because "Refused" and "Don't Know" responses not tabulated. Numbers rounded.
Total = 189 Women, 563 Men owner respondents

WEB SITE COSTS AND REVENUES

- ***Most firms spend relatively little on their Web sites.***

  Even the larger firms are not monitoring their dollar and time costs. That may be because small businesses spend so little on setting up their sites as shown in *Table II-2*. Surprisingly, over one-third of businesses have no idea how much they have spent on building a Web site. Fifteen percent do not spend any money; only 11 percent spend over $2,500. Less than one-fifth of the largest small businesses spent as much as $10,000 on their site.

Table II-2 Dollar Cost to Build Web Site

Percent of Employer Firms

Cost	1 to 9 Employees N = 106	10 to 19 Employees N = 76	20 to 249 Employees N = 106	All Firms N = 288
No cost	16	10	11	15
$1 to $999	23	23	3	20
$1,000 to $2,499	9	13	14	10
$2,500 to $9,999	10	16	11	11
$10,000 or more	7	3	19	8
DK/refused	34	36	42	35
Total	100	100	100	100

Responses do not sum to 100 percent because "Refused" and "Don't Know" responses not tabulated. Numbers rounded.

Also, the amount of time spent on the site is small *(Table II-3)*. Employees of nearly half of firms of any size spent one week or less time building their Web sites. Twenty-one percent of all firms spent less than a day.

Table II-3 Time Cost to Build Web Site

Percent of Employer Firms

Time in hours	1 to 9 Employees N = 106	10 to 19 Employees N = 76	20 to 249 Employees N = 106	All Firms N = 288
0 to <9	22	21	14	21
9 to 40	24	26	24	24
41 or more	17	15	14	18
DK/refused	37	38	38	37
Total	100	100	100	100

Responses do not sum to 100 percent because “Refused” and “Don’t Know” responses not tabulated. Numbers rounded.

Web Site Operating Costs

- ***Firms devote little time or money for Web site maintenance.***

  Consistent with the apparent lack of financial and time commitment to building a Web site, over one-third of all firms spend less that $50 per month to maintain their sites *(Table II-4).*

Table II-4 Monthly Operating Cost of Web Site

Percent of Employer Firms

Cost	1 to 9 Employees N = 106	10 to 19 Employees N = 76	20 to 49 Employees N = 106	All Firms N = 288
Less than $50	39	23	19	34
$50 to $99	7	13	11	8
$100 to $499	14	19	16	15
$500 or more	11	7	16	11
DK/refused	30	39	35	32
Total	101	101	97	100

Columns do not sum to 100 percent because of rounding.

Moreover, as shown in *Table II-5* over half of all firms devote less than one day a month in time on their sites. One quarter of firms spend less than one hour a month.

Table II-5 Monthly Time Cost to Maintain Web Site

Percent of Employer Firms

Time in hours	1 to 9 Employees N = 106	10 to 19 Employees N = 76	20 to 249 Employees N = 106	All Firms N = 288
0 to less than 1	27	39	22	27
1 to 8	25	21	19	24
9 to 40	24	17	32	24
41 or more	7	4	9	7
DK/refused	18	20	17	18
Total	101	101	99	100

Columns do not sum to 100 percent because of rounding.

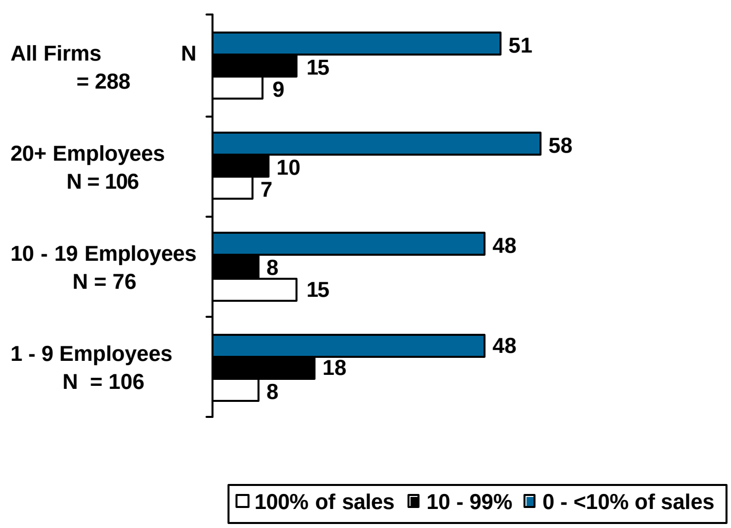
Web Site Sales

- ***Small businesses sell primarily to consumer Internet customers.***

Fifty-one percent of firms say that B2B sales account for less than 10 percent of their total Internet commerce *(Figure II-1)*. Only nine percent of all small businesses sell entirely to other businesses.

Figure II-1 Percent of Internet Sales that are Business-to-Business

Percent of Employer Firms



Percentages do not sum to 100 because Don't Know and Refused not shown. Numbers rounded.

Web Sites Benefits

As *Table II-6* shows, change in real volume sales do not vary markedly by employee size of firm.

Table II-6 Change in Real Volume Sales over Past Two Years

Percent of Employer Firms

Change	1 to 9 Employees N = 352	10 to 19 Employees N = 200	20 to 249 Employees N = 200	All Firms N = 752
Increased by 30% or more	17	24	16	18
Increased by 20 to 29%	14	13	10	13
Increased by 10 to 19%	22	22	34	23
Changed less than 10%	22	21	24	22
Decreased by 10% or more	9	8	7	9
DK/refused	17	13	9	16
Total	101	101	100	101

Columns do not total 100 percent because of rounding.

Business owners of all sizes expect their Internet sales to grow slowly and, at least in the next five years, not reach 100 percent of their sales.

Table II-7 Projected Internet Sales as Percent of Total

Percent of Employer Firms

Sales	1 to 9 Employees N = 106	10 to 19 Employees N = 76	20 to 249 Employees N = 106	All Firms N = 288
Current Internet sales (percent of total sales)				
0 to less than 10%	43	45	58	45%
10 to 99%	35	20	25	31
100% or more	1	2	-	1
One year projected Internet sales (percent of total sales)				
0 to less than 10%	36	31	40	36
10 to 99%	35	32	35	36
100% or more	3	2	-	2
Five year projected Internet sales (percent of total sales)				
0 to less than 10%	16	24	28	17
10 to 99%	47	43	42	46
100% or more	2	3	1	2

Responses do not sum to 100 percent because “Refused” and “Don’t Know” responses not tabulated. Numbers rounded.

CENTER FOR WOMEN'S BUSINESS RESEARCH SURVEY: ONLINE AND IN FOCUS[3]

Focus Comparison of current status and attitudes towards use of the Internet by women and men business owners.

Sample Nationally representative sample of 1000 economically active male and female business owners stratified by gender and revenue size of firm.

Date Interviews were conducted from May to June 2001.

Women-Owned Business Trends

Women-owned businesses continue to grow faster than those owned by men, according to U. S. Census data. In 1997 the 5.4 million women-owned firms employed 7.1 million persons and earned $819 billion in receipts (SBA 2001). Using comparable definitions, from 1992 to 1997 "the number of women-owned firms increased by 16 percent compared with an increase of less than 2 percent in firms owned by men." About 84 percent of women-owned businesses had no employees, but that is changing. Those with employees reported by the Census Bureau grew more than three times faster than firms without employees.

The argument can be made that the potential efficiencies of doing business online would help compensate for the lack of employees and therefore level the playing field for women-owned businesses. A study sponsored by the Center for Women's Business Research updates the extent to which women and men are using the Internet for their businesses.

PROFILE OF WOMEN- AND MEN-OWNED BUSINESSES

Compared with the male business owners, women in the sample were slightly younger and they owned younger businesses with smaller revenues *(Table II-8).* More women operated business and other services firms.

[3] Joanne Pratt contributed to the development of survey.

Table II-8 Profile of Women- and Men-Owned Firms

Percent

percent	Women N = 356	Men N = 347
Business Type		
Goods/products	17	24
Business services	25	23
Other services	58	54
Size of Firm (revenue)		
Less than $500K	46	43
$500 to $999K	12	17
$1 million and more	19	26
Age of Business		
Less than 10 years	41	31
10 to 19 years	32	31
20 or more	22	36
Age of Owner		
Younger than 45	36	32
45 to 54	35	36
55 and older	26	31

Responses do not sum to 100 percent because Don't Know and Refused responses not shown. Numbers rounded.

WOMEN AND MEN ENTREPRENEURS USE OF THE INTERNET

Gender differences in use of the Internet have disappeared. About two-thirds of men and women use the Internet for their business *(Table II-9)*. About half have Web sites.

Table II-9 Internet and Computer Use by Women and Men

Percent

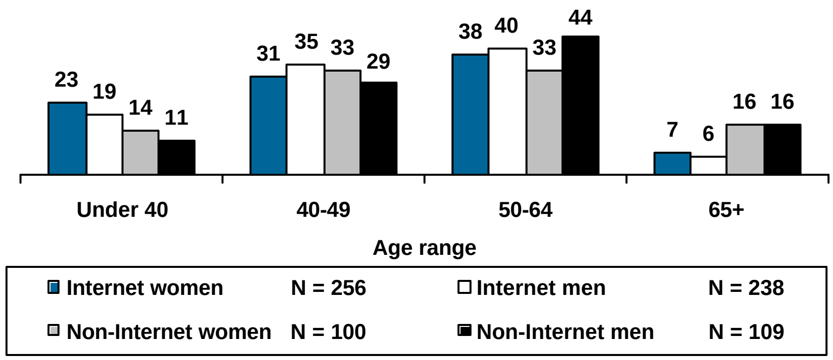
percent	Women	Men
Use Internet for business	63 N = 356	62 N = 347
Use Internet for personal	68	64
Have Web site (of Internet users)	50 N = 256	54 N = 258

Responses do not sum to 100 percent because Don't Know and Refused responses not shown. Numbers rounded.

Individuals who use the Internet tend to be younger than non-users *(Figure II-2)*. Entrepreneurs under age 40 are much more likely to be online than those over 65 years of age. In the 40 to 64 age range there is less disparity between business owners who do and do not use the Internet.

Figure II-2 Internet Use by Age Range

Percent of Women- and Men-Owned Firms

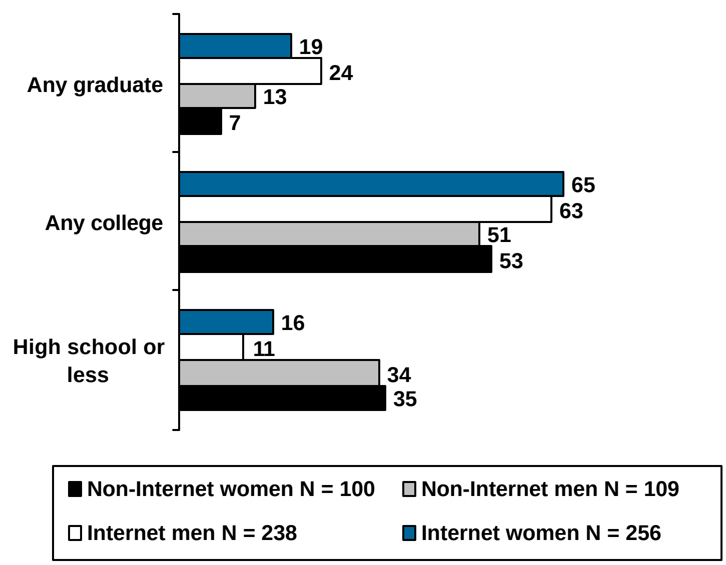


Responses do not sum to 100 percent because Don't Know and Refused responses not shown. Numbers rounded.

Most Internet users are well educated men and women with college or graduate degrees *(Figure II-3)*.

Figure II-3 Internet Use by Education

Percent of Women- and Men-Owned Firms



Responses do not sum to 100 percent because Don't Know and Refused responses not shown. Numbers rounded.

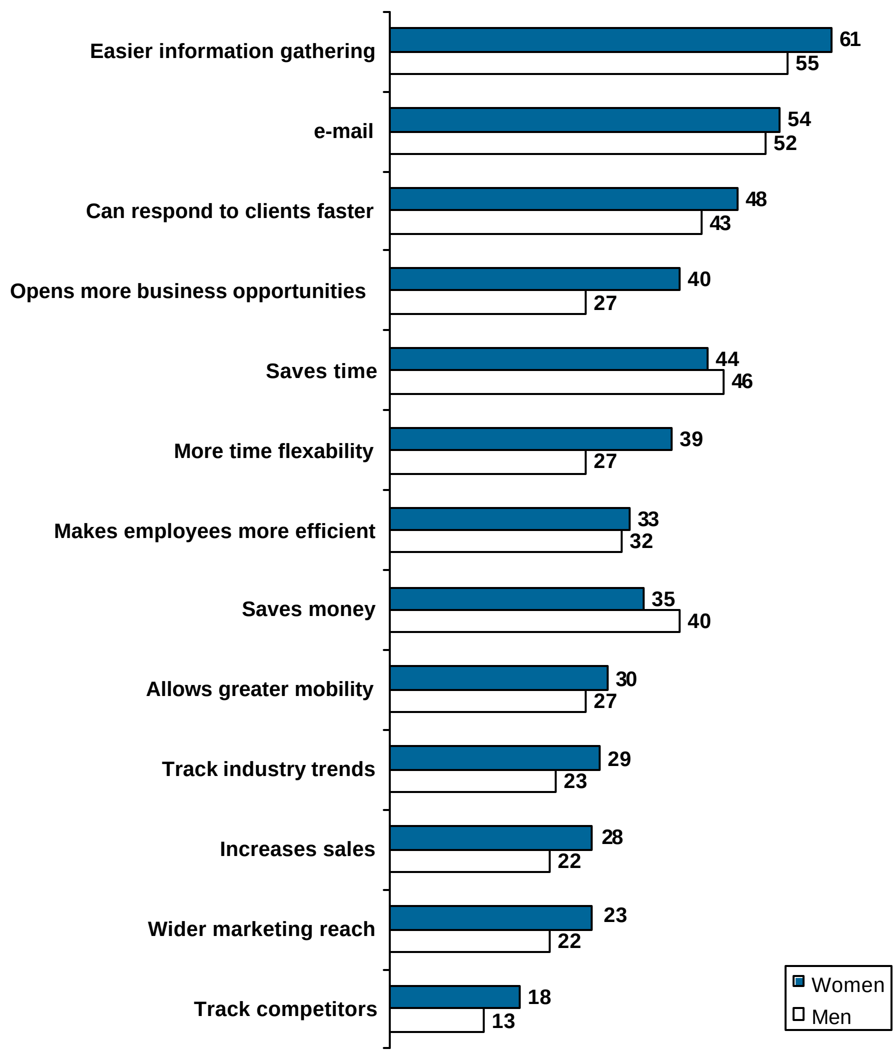
FIRMS WITH WEB SITES

Potential Benefits of a Web Site

Figure II-4 illustrates the many benefits that the Internet provides to businesses in addition to information gathering and e-mail. Strikingly, increased sales and wider marketing reach were considered "not important" by 35 to 40 percent of respondents. The respondents' belief that the Internet "opens up a wider range of business opportunities" seems inconsistent with those ratings. Access to such opportunities was considered "somewhat important" by 42 percent of businessmen and "very important" by 40 percent of businesswomen.

Figure II-4 "Very Important" Benefits of the Internet

Percent of Women- and Men-Owned Firms
Multiple choices allowed



Online Activities

Although business owners cite numerous benefits of the Internet *(Figure II-4)*, in practice, they do not go online very often (*Table II-10)*. More than one-third of businessmen and women use e-mail "very frequently," but that is their main reason

Table II-10 Frequency of Internet Use

Percent of Women- and Men-Owned Firms
N = 256 women; N = 238 men

percent	Never	Occasionally	Somewhat frequently	Very frequently
E-mail				
Women	9	27	28	36
Men	8	28	26	38
Transmit files/documents				
Women	32	30	16	22
Men	26	33	17	25
Conduct fact-finding research				
Women	12	35	34	19
Men	9	41	31	19
Collaborate with business partners or suppliers				
Women	33	31	19	17
Men	33	31	18	19
Sell products and services				
Women	49	25	14	13
Men	48	23	15	13
Purchase products and services				
Women	26	45	22	8
Men	26	45	16	13
Seek business opportunities				
Women	35	39	16	9
Men	37	37	20	6
Bid for contracts				
Women	59	22	12	5
Men	61	23	11	5
Hire/recruit employees				
Women	83	9	4	2
Men	79	10	8	3
Conduct online meetings				
Women	83	11	4	2
Men	81	12	4	2

Responses do not sum to 100 percent because Don't Know, Refused and Not applicable responses not shown. Numbers rounded.

for going online. About one-third of them conduct fact-finding research "somewhat frequently." But 45 percent of business owners purchase products and services for their businesses only occasionally. The majority of firms never recruit new employees, conduct Web-based meetings or presentations or bid for contracts.

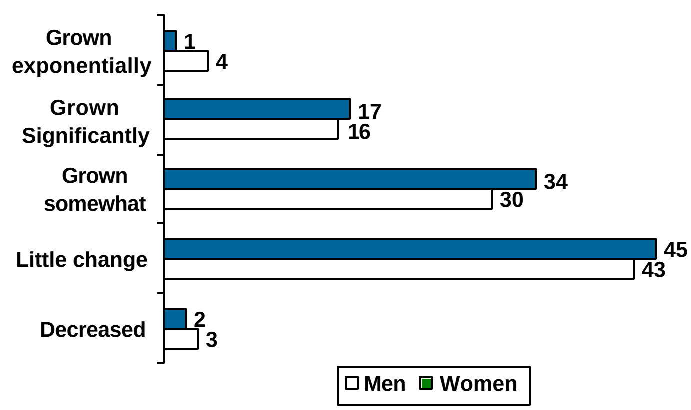
The most surprising finding was how few businesses use the Internet to sell products and services or even to seek out business opportunities. Nearly half of businesspersons "never" use the Internet to sell.

As shown in *Figure II-5*, very few business owners reported that the level of activity on the Internet grew exponentially over the past 12 months. About forty-five percent reported there had been little change.

Figure II-5 Level of Activity on the Internet

Past 12 months

Percent of Women- and Men-Owned Firms



Responses do not sum to 100 percent because Don't Know, Refused and Not applicable responses not shown. Numbers rounded.

The firms already using the Internet are younger than those that are not. Women Internet users have owned their firms for an average of 13 years; men for 16 years. Of the non-users, the women-owned firms average 18 years and the male-owned, 20 years.

The sharpest contrast between Internet and non-Internet firms is found in the construction industry and in professional, scientific, technical services. Eleven percent of women Internet users are in construction compared with only six percent of men. Of non-users, one percent of women are in construction; nine percent of men are in that industry.

In the professions, 11 percent female Internet users are accountants, computer system designers, in law, research and other professions compared with 19 percent of businessmen. Only four percent of women and six percent of men who do not have their firms on the Internet are in these professions.

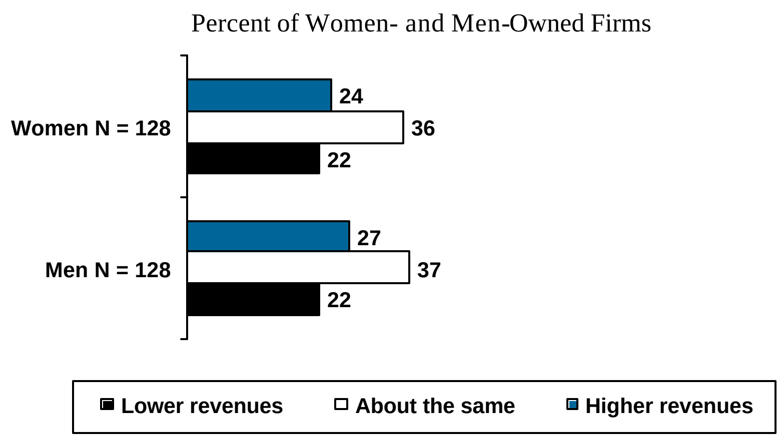
Net Revenue over Cost of Web Site

- ***Most businesses, but not all, recover their Web site costs.***

  About one-quarter of businesses profited from their Internet presence over the past three to six months, meaning that their online revenues exceeded the costs of operating and promoting the site *(Figure II-6)*. One-third of businesses found that they about broke even, while about one-fifth said their costs were greater than total online revenues. About 19 percent of men and of women did not know or refused to compare their costs with revenues. The numbers mirror those of the NFIB study shown in Part I, *Figure I-3*.

Figure II-6 Web Site Revenues Compared with Cost of Site

Past 3 to 6 months



Responses do not sum to 100 percent because Don't Know, Refused and Not applicable responses not shown. Numbers rounded.

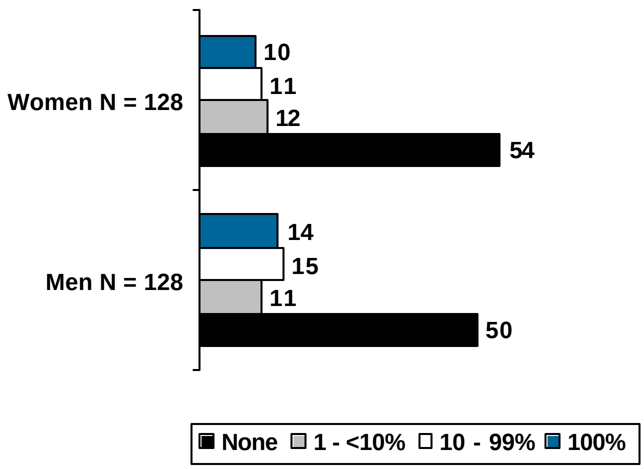
Web Site Sales

- ***Small businesses sell to both business and consumer Internet customers.***

As shown in *Figure II-7* only ten to 14 percent, respectively, of all female and male-owned small businesses sell entirely to other businesses. Again, the results from the two surveys of business owners are similar: Nine percent of the NFIB firms sell only B2B *(Figure II-1).*

Figure II-7 Business-to-Business Internet Sales

Percent of Women- and Men-Owned Firms



Responses do not sum to 100 percent because Don't Know, Refused and Not applicable responses not shown. Numbers rounded.

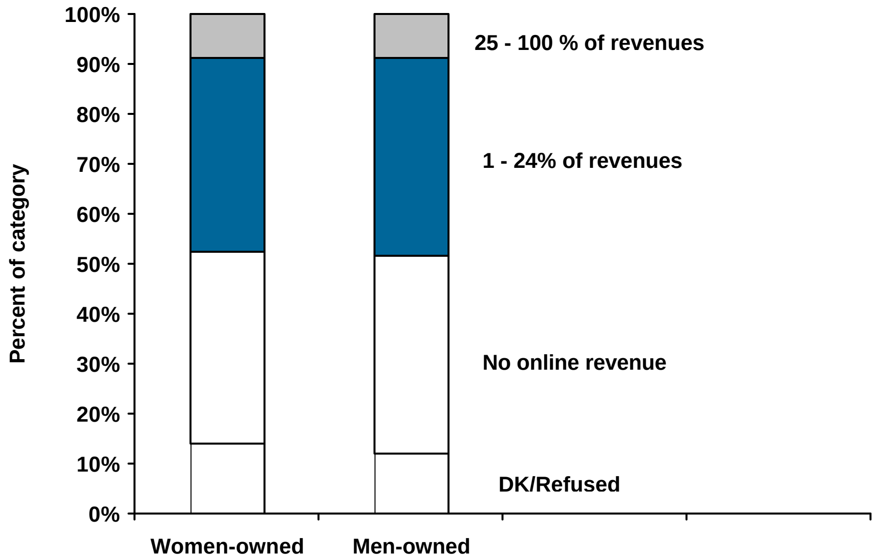
Revenues from Internet Sales

For both men- and women-owned firms, the percentage of revenue produced directly from online sales is relatively small *(Figure II-8).* Fewer than 10 percent of businesses make more than 25 percent of total revenue online.

More men-owned than women-owned firms sell business to business (26 percent compared with 19 percent). Half of all firms sell only to consumers.

Figure II-8 Percent of Company's Revenues that Come Directly from Online Sales

Percent of Women- and Men-Owned Firms
N= 128 women; 128 men



CASE STUDIES OF INNOVATIVE PRACTICES

As the following examples illustrate, small businesses are using the Internet to build an existing business, add value to their product or service, reach distant markets, operate a niche business, build credibility and offer innovative products and services. Small firms also successfully arrange reciprocal marketing, cut costs, leverage a "bricks" business with "clicks" and sell through associations.

Build an Existing Business

- ***New York Metro Weddings***, *www.newyorkmetroweddings.com*, was started in 1996 as a referral service for wedding suppliers (Smith 2001). Band leader Lou Drucker needed a new audience for his music. Frustrated by the lack of results from print ads for his music services, he and his wife chose weddings as a subject that would draw many visitors to a Web site.

  Beth Drucker spends 50 hours per week working on the site including interviewing vendors and experts to get site content. She also sends e-mail newsletters to remind people they are there. Although paying a flat fee for submission to search engines didn't work well, the Druckers found a way to work with people who could customize submissions.

  The start-up cost was $3,000. Now averaging 300,000 visitors per month, the business started turning a profit in 2000.
- ***Katz Floral Design***,*www.kcflorist.com*, sells flowers as a FTD licensee, but also offers gifts, plants and balloons. The major benefit of having a Web site is that the Kansas City business generates nearly $20,000/day in sales outside its home area. With only eight employees, owner Katz "has proven that the Internet can allow the little guy to play big – and he's done it on a shoestring…" The Web site has 4,000 to 6,000 pages with close to 100,000 hyperlinks. (SBC 2000).
- ***FTD.com,*** *www.FTD.com***,** achieves B2C success by running a lean operation with little overhead (Lortek 2000). Brand recognition and a solid distribution network keep advertising and marketing expenses low. FTD.com reported profits of $253,000 on revenues of $18.2 million for the third quarter of 2000. Orders taken on the Web site are forwarded to one of 6,500 florists nationwide, including Katz Floral Design. With a commission from every sale, FTD has gross profit margins of 31 percent.

  Moving from print and TV advertising to direct marketing and e-mail marketing meant that customer acquisition costs fell from $36 to $17 a quarter over the past year. The company can deliver the same day to nearly 10 percent of U. S. households, usually in four hours or less and to 150 countries by the next day.

- ***Sumerset Custom Houseboats,*** www.sumerset.com**,** is a local boat building business in Sumerset, Kentucky. The company of 200 employees began using the Internet to dramatize its message "We're not really selling boats—we're selling a lifestyle." (Inc. Tech 2000). Construction photos posted on the Web show owners every stage of their boat in progress. They also stimulate "keeping up with the Jones'" upgrades from other customers. The Web presence has provided the opportunity to make add-on sales, for example, insurance and participation in regattas. Another benefit has been the cost savings that have resulted from customers being able to catch production errors before they become serious.

Add Value to Product or Service

- ***Elizabeth Gray-Carr, realtor***, www.callelizabeth.com, has business revenues of $250,000 in commissions reflecting $12 million in annual home sales (Inc. Tech 2000). Since the business invested $5,000 to gain a Web presence, the site has evolved from "just another marketing tool…. [to] a tool for dissemination of information."

  To make the site work, Ms Gray-Carr had to answer e-mail promptly and had to refer clients to the site rather than mail them a paper brochure. The major plus of the Web is being able to show 360-degree viewing of homes. She now has the potential of continuing the customer relation post-sale by offering advice about moving vans, baby sitters, utility turn-ons plus other information and help. Her need to add the capability of electronic signatures may in the future be met by the U.S. Postal Services' NetPost.Certified, which creates an authenticated electronic signature on a smart card.

Reach Distant Markets

- ***Stacia New York***, www.stacianewyork.com, owned by Stacy Johnson, uses her Web site, to sell her original fashions to markets beyond her one store in Brooklyn (Blankstein 2001). The business has six employees.

  The Web site pays for itself. With a shopping cart from startup the site brings in about 2 percent of annual earnings. "I am breaking even," Ms Johnson says. "I'm not spending millions to produce it nor am I making millions. Whatever I spend, I make back." Accepting credit card payments on her Web site is another incentive to not only browse but buy. Customers "don't get freaked out" being suddenly sent to another Web site. That also lets Ms Johnson maintain her own data base, meaning that she can handle Web purchase exchanges in her shop and in the future, include customer preferences. That way, the business can give service that you don't get "at a department store or a boutique unless you spend $10,000." She will add a second brick and mortar location on the West Coast within next two years.

Leonard Bess, faculty member at the Fashion Institute of Technology comments in *Small Business Computing*, that "…smaller companies have the most to gain from using the Web as a marketing medium." The Web is far cheaper than the cost of traditional advertising to reach the fashion press and buying public. "You won't find small designers advertising in magazines or catalogs, but they can reach a large market through the Internet…they can manage that within their budget…I liken it to guerrilla or grassroots marketing. They're bypassing the traditional methods in order to get their message out into the market."

- ***No Pudge Brownies***,*www.nopudge.com*, brought in $800,000 in combined retail and direct sales when this low-fat product added a Web site. (SBC 2001a). Owner Lindsay Frucci expresses the amazement of selling cookies on the Internet: "I can't imagine running this business without the technology. If you had told me five years ago that I'd be this into it, I wouldn't have believed it…"

Offer Innovative Products and Services as Niche Business Dot.coms

- ***Casketfurniture.com,*** *www.casketfurniture.com*, gains visibility through the Internet, which would be difficult to achieve any other way. The firm offers "display cabinets, coffee tables, even entertainment centers that can be promptly converted into coffins, usually by just removing the shelves" (Business Week 2001b). The company is profitable with $50,000 in sales in 2000 and claims a potential market of 2.6 million people who die each year in the U. S!
- ***TradeOut.com***, *www.tradeout.com*, is one of the early online exchanges that deal in excess inventory, but aimed at B2B rather than B2C (Green 2000). The business cross-promotes with eBay by providing "Power Sellers," about 100,000 individuals who run businesses solely on eBay, with a way to buy in bulk and then sell items on eBay. The owner has gone from 350 to 3200 buyers just from 1999 to 2000. In 2000, according to Jupiter Research and Bain consulting Group, the total value of excess goods was $400 billion; value of excess goods sold online was $16 billion.
- **CompuNet Credit Services,** *www.compunetcredit.com*, falls into another category of niche internet-only businesses, those that provide customized data. Cindy Aldridge created "the first nationwide database of the payment histories and practices on shippers, brokers, and manufacturers" in Lake Havasue City, AZ (Wiesendanger 2000). The service gives truckers almost-instant feedback of potential clients, which solves problems truckers have in matching loads with trips and getting paid. The site

sells individual credit reports for $25. Ms Aldridge is expanding the company by adding dockreport.com, which gives conditions at loading and shipping docks. In 1999 revenues totaled $2.75 million.

- ***Flighttime.com***, www.flighttime.com, a Web site for booking charter flights, has adopted a similar business model. Jane McBride, CEO and co-founder Patricia Zinkowski match up private planes with people who can afford charter flights (Wiesendanger 2000). The company acts as a clearinghouse for 2,000 charter operators. The 15-year old business added a Web site reasoning that "an easy-to-use site that priced customized itineraries might persuade big purchasers of travel, such as corporate travel managers and retail agents, to give charter a try."

  The Waltham, Massachusetts company, founded in 1985, earned $35 million in revenues in 1999. In comparison, Web site revenue totaled $5 million in six months. The hardest decision for the owners was to get equity financing after 15 years, but "keeping our eye on the ultimate goal, which is an IPO…we can't get there without more capital. You have to ask yourself: 'Do I want to own 100 percent of a $35 million company or 20 percent of a $2 billion company?'"

Build Credibility

- ***Gatsby Coachworks***, www.gatsbycars.com, custom builds Gatsby Cabriolets and Gatsby Griffins at a starting price of $34,500 (Yahoo Internet Life 2000). A Web site allows a small company only three or four years old the ability to look like a company 40 years old, giving it business credibility. It also provides a worldwide presence. The company has sold parts to Canada, Paris, Austria and Poland. It uses pictures on the Web to negotiate deals with clients while talking on the phone. All customers so far have come from Web. In addition, the company purchases hard-to-find parts like wheels on the Web.
- ***Nick's Auto Repair Inc.***, www.nicksautorepair.com, would seem an unlikely type of business to benefit from a Web site (Inc Tech 2000). On the contrary, this company located in Boulder, CO, relies on its Web presence to establish credibility in a field not known for that virtue. The company gains trust by posting the names, backgrounds and photos of the staff and a history of the company back to 1978. The site also attracts customers for its content, such as three pages of detailed information about engines.

Cut Operating Costs

Even industries that are not obviously information-intensive can improve efficiencies by innovating new procedures. For example, a textile business no longer waits for samples to trickle in by mail. Instead the company "collaborates with suppliers using digital imaging over the Internet, making decisions in five minutes" that used to take days (Business Week 2001).

Leverage Bricks Business with Clicks

- ***Cameraworld.com,*** *www.cameraworld.com*, started as a high-end little photo shop in Portland, OR in 1997. After taking the business online in 1998, "The Net propelled Camera World out of its tiny niche into a much larger potential audience of general consumers…but the biggest factor was...adding direct-mail catalogs…" according to marketing VP Tom Steele (Hamm-Greenawalt 2001). The Internet lists 13,000 items compared with 2,000 in their catalog. After flat sales for five years, in the first year on the Web the customer base has doubled and revenues increased from $61 million per year to $79 million. The staff has increased from 90 to 160. "We basically leveraged our existing operation, and that's what made it so natural," says CEO Terry Strom.
- ***The Flying Noodle Inc.,*** *www.flyingnoodle.com*, web site now accounts for 75 percent of sales (Inc. Tech 2000). The initial cost was $13,000. Automating credit card charges has increased repeat business—60 percent buy again after the first order.

Selling through Associations to Compete with Big Business: a detailed example

Found on a search for an out-of-print cookbook, Doney's Bookshelves is linked to Canadian-owned ABEBooks.com. Buyers can pay by credit card through the bookseller association site or by e-mailing or calling the member store. In this instance, the store is a home with inventory stored upstairs. The owner goes to the Salvation Army or Goodwill and buys books for a quarter that she can sell for a dollar. She uses the income to support herself and her disabled veteran husband. She has an illness that prevents her working for long periods of time and for some intervals of time. Asked about Amazon and Barnes and Noble, she responded "Oh, they buy from me!" Payment is taken care of for her, with the service cost included in the $40/month fee that she pays to be on the ABEBooks Web site. A $40 fee also allows listing of up to 10,000 titles. Doney's was started as an Internet business. The owner has never had a store.

ABEBooks.com offers a fee schedule based on the number of books listed. Fees range from $20 required to list 1 to 500 books to $100 monthly for 30,001 or more books. The site educates business novices with instructions for listing books, free HomeBase 2 software for inventory management, a free home page for each member and free customer service for booksellers. The site provides payment methods including acceptance of credit cards. The instructions addressed to booksellers are friendly and welcoming.

According to NetProfit, "ABE is the world's largest network of independent booksellers; our extended family currently includes well over 7,000 used and antiquarian booksellers. With an inventory of over 25 million books, ABE truly has more used, rare and antiquarian books than anywhere else." ABEBooks also earns revenue from BarnesandNoble.com and other partnerships (NetProfit 2000). It is striking how well this business model appears to work for what has traditionally been viewed as a mom and pop industry: "No centralized corporation, after all, can match the collective ability of the world's independent bookmongers to sift through the tag sales, estate sales and flea markets where most old books lie hidden and undervalued" (Dibbell 2000).

Contrary View

Some store-front antiquarian booksellers find to the contrary that not only has belonging to an Internet association not paid off, but that the Internet book sales are causing stores like theirs to fail. They contend that rare books must be seen and felt, pointing to e-mails they have received from disappointed individuals who had bought books online.

E-COMMERCE SHARE OF TOTAL COMMERCE

As was discussed in Part I, the impact of e-commerce is far more significant for some industry sectors than for others *(Figure I-10). Tables II-11* through *II-14* show the detailed e-commerce share of total commerce for the manufacturing, wholesale trade, selected services and retail.

MANUFACTURING

Within industry categories, some sectors benefit substantially more from e-commerce than do others *(Table II-11)*. While less than 15 percent of sales of computer and electronic products and of chemicals occur online, the e-commerce share of transportation equipment sales soared from 21 to 46 percent from 1999 to 2000.

Table II-11 Manufacturing E-business Share of Total Commerce

Leading Sectors 2000

NAIC	Value of Sales billion		E-commerce as Percent of Sales	Percent Distribution of E-commerce Sales
	Total	E-commerce		
Manufacturing Total	**4,218**	**777**	**18**	**100**[1]
Transportation equipment	639	294	46	38
Computer, electronic products	513	78	15	10
Chemicals	452	53	12	7
Food products	434	55	13	7
Machinery	296	40	14	5

Source: *U. S. Census Bureau, 2000 Annual Survey of Manufacturers (U.S. Department of Commerce 2002a).*
[1] *Only top 5 shown*

WHOLESALE TRADE

Drugs and sundries lead e-commerce sales in the Merchant Wholesale Trade industry *(Table II-12).* Although overall e-commerce accounts for only eight percent of wholesale trade sales, it represents nearly 40 percent of all sales of drugs and related sundries with a value of $66 billion. Moreover, total sales of drugs are only slightly higher than computer sales ($167 compared to $165 million) but surprisingly online sales of drug are more than three times wholesale computer sales.

Table II-12

Merchant Wholesale Trade E-business Share of Total Commerce

Leading Sectors 2000

NAIC	Value of Sales billion Total	Value of Sales billion E-commerce	E-commerce as Percent of Sales	Percent Distribution of E-commerce Sales
Merchant Wholesale Trade Total	**2,750**	**213**	**8**	**100**[1]
Drugs & druggists' sundries	167	66	40	31
Motor vehicles, parts	200	40	20	19
Professional & equipment repair & supplies	283	28	10	13
Computer, equipment & supplies	165	18	11	9

Source: *U. S. Census Bureau, 2000 Annual Trade Survey (U.S. Department of Commerce 2002a)*
[1] *Only top 4 shown*

SERVICE INDUSTRIES

Travel is by far the most popular online Service Industry *(Table II-13)*. Nearly one-fourth of sales are e-commerce transactions. Securities and commodity, for example, ranks second in percent distribution of e-commerce sales but only two percent of sales are by e-commerce.

Table II-13 Selected Service Industries E-business Share of Total Commerce

Leading Sectors 2000

NAIC	Value of Sales billion Total	Value of Sales billion E-commerce	E-commerce as Percent of Sales	Percent Distribution of E-commerce Sales
Selected Service Industries	**4,663**	**37**	**0.8**	**100**[1]
Travel & reservation services	26	6	24	17
Securities & commodity	245	6	2	15
Publishing	233	5	2	13
Computer systems design	175	4	2	10
Couriers & messengers	53	3	5	7

Source: *U. S. Census Bureau, 2000 Services Trade Survey (U.S. Department of Commerce 2002a).*
[1] *Only top 5 shown*

RETAIL TRADE

Among the top 50 retail sites, brick-and-mortar retailers outnumber Internet-only retailers (Yao 2001). Of the top retail sites in March 2001, 56 percent were brick and mortar retailers, while 44 percent were Internet-only retailers. By definition, non-store retailers dominated e-commerce activity in the Retail Trade sector *(Table II-14).* Motor vehicle parts dealers accounted for 12 percent of total online sales but represented only 0.2 percent of sales within that sector. Three-fourths of e-commerce transactions in the retail industry were made by electronic shopping and mail order.

Table II-14 Retail Trade E-business Share of Total Commerce

Leading Sectors 1999

NAIC	Value of Sales billion		E-commerce as Percent of Sales	Percent Distribution of E-commerce Sales
	Total	E-commerce		
Retail Trade total	**2,689**	**15**	**0.5**	**100**[1]
Electronic shopping & mail order	93	12	13	76
Motor vehicle & parts dealers	783	2	0.2	12

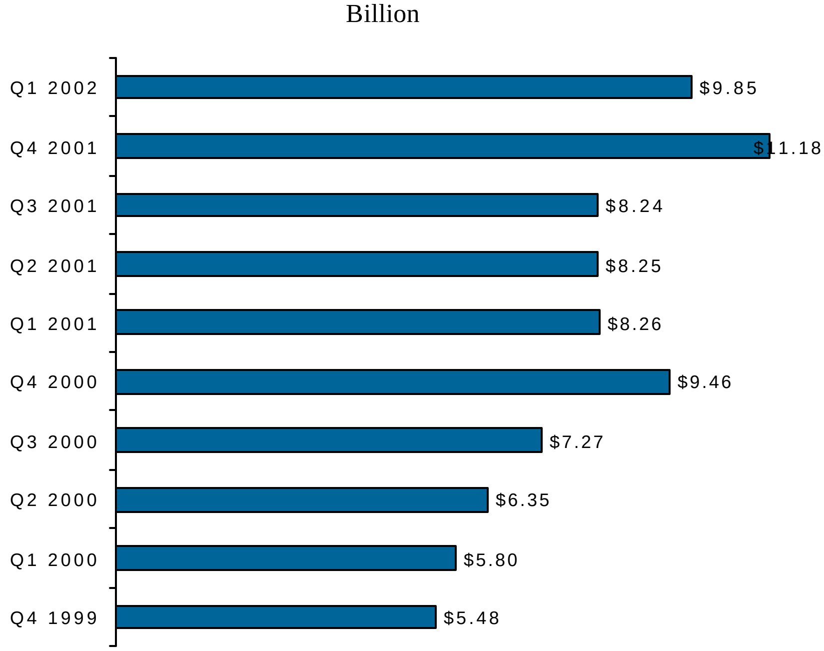
Source: *U. S. Census Bureau, 2000 Annual; Retail Trade Survey (U.S. Department of Commerce (2002a).*
[1] *Only top 2 shown*

Retail Trade Trends

The Department of Commerce reports e-commerce sales for retail but not for other industries. In 2002 retail e-commerce sales reached $9.85 billion for the first quarter, an increase of 19 percent compared with the same quarter one year earlier *(Figure II-9)* (U.S. Department of Commerce 2002).

Significantly, total retail sales are increasing at a slower rate than e-commerce retail sales. Total sales were $744 billion in the first quarter, up only three percent from the prior year. Total e-commerce retail sales reached 35.9 billion in 2001, an increase of 20 percent over 2000.

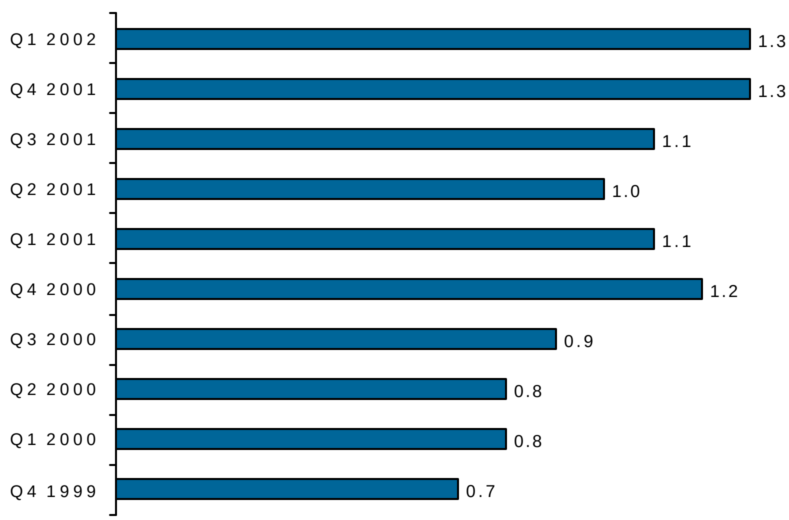
Figure II-9 Quarterly E-Commerce Retail Sales



Source: U.S. Bureau of Census (U.S. Department of Commerce 2002)

As *Figure II-10* shows the e-commerce share of total retail commerce reached 1.3 percent of total sales in the fourth quarter of 2001 and has remained at that level through March of 2002.

Figure II-10 E-Commerce as a Percent of Total Retail Sales



Source: U.S. Bureau of Census (U.S. Department of Commerce 2002)

Anderson, Joi (2001) Types of Products sold by online SBs: use and impact of order accepting web sites. *Small Business Trend Report*. CyberDialogue Yr. 2001, No. 2.

Atrostic B. K., Gates, John and Jarmin, Ron (2000) Measuring the Electronic Economy: Current Status and Next Steps. U.S. Census Bureau, June.

Bahls, Steven C. and Bahls, Jane Easter (2001) Crime and a half: Learn what the Fair Labor Standards Act says about wages and overtime—and avoid breaking the law. *Entrepreneur,* February, 94-97.

Berry, Dal (2001) Practical Broadband for Today's Customer. MIT Enterprise Forum of Dallas-Fort Worth, 29 March.

Blankstein, Amy H. (2001) A Shop Grows in Brooklyn. *SBC*, February, 47-51.

Breslau, Karen (2000) One Nation, Interconnected. *Wired*, May, 136-154.

Buckley, Patricia and Mentes, Sabrina (2002) *Main Street in the Digital Age: How Small and Medium-Sized Businesses Are Using the Tools of the New Economy*. U.S. Department of Commerce, Economics and Statistics Administration, February.

Bush, George W. (2001) Remarks by the President at Electronic Industries Alliance Government Industry Dinner. May 8, Washington, D.C. http://www.whitehouse.gov/news/releases/2001/05/print/20010509.html. Accessed 2/13/02.

Business Week (2001a) The Oracle Speaks: How Larry Ellison sees the future for tech companies. *Business Week,* 26 February, 98.

Business Week (2001b), 16 April, 16, 18.

Business Week (2001c) The company is not the stock. *Business Week*, 30 April, 94.

Calogero, Barry (2001) Implementing for Success, presented at *Managing E-Business for Results* seminar, Robbins*Gioia, Dallas, TX, 15 February.

Campanelli, Melissa (2001) The Wizard of Laws: Get all the brains you can lay your hands on, my pretty, because internet law sure is a headache, *Entrepreneur,* February, 70-73.

Cisco undated (2000a) www.cisco.com/warp/public/779/govtaff/policy/ecommerce/ecommerce.html. Accessed 12/5/00.

Cisco undated (2000b). Georgetown University Privacy Study, July 1999 cited in "Internet Privacy," www.cisco.com/warp/public/779/govtaff/policy/ecommerce/issue/privacy.html. Accessed 12/5/00.

Clendaniel, Edward (2001) Lobbying for Gridlock, *Forbes,* 19 February, 49.

Cowles, Ron (2001) Prepare Now for Internet Sales Taxes in 2003. November 20. www.gartner.com. Accessed 12/3/01.

CWBR. *Online and In Focus*, 2001 Survey. Center for Women's Business Research.

Davis, Jessica (2000) Revenge of the brick-and-mortar due in a mall near you this holiday season, *Infoworld*, 20 November, 102. Accessed 2/26/01.

Dibbell Julian (2000) A New Chapter For Old Books: Antiquarians cheer as the Internet breathes new life into the oldest of old media, *E-conomy/online Bookselling*. 5:2.http://www.time.com/time/digital/magazine/articles/0,4753,47491,00.html

DiMassimo, Mark (2000) *Entrepreneur.*

ECompany (2000) A Letter to Washington, January/February, 42-46.

eMarketer (2001a) The eCommerce: B2B Report Executive Summary

eMarketer (2001b) The eCommerce: B2C Report Executive Summary

Friedman, Thomas L. (2000) *The Lexus and the Olive Tree*, Anchor Books, 202.

Frontline (2002). Dot Con, Program #2010 Transcript, Airdate January 24. www.pbs.org/wgbh/pages/frontline/shows/dotcon/etc/script.html Accessed 6/10/02.

Gantz, John (2001) Perception Versus Reality, presented at *eWorld 2001*, IDC Global Research Web conference. April 30, 2001.

Goldstein, Alan (2001) Agencies move forward with reverse auctions, *Dallas Morning News*, 31 January.

Gomolski, Barb (2000) Can you avoid being a victim of the never-ending dot-com fallout? *Infoworld* 11/30/00. www.infoworld.com/articles/op/xml/00/11/13/001113opgartner.xml. Accessed 2/20/02.

Gomolski, Barb (2001) The cost of e-business. www.infoworld.com 12/10/01, 12.

Grant, Elaine Appleton (2000) Digging for Gold, *Inc Tech 2000*, No. 4, 19.

Green, Heather (2000) Keep the Excess Moving, *Business Week*. 20 November, EB 78-EB 82.

Greenspan, Alan (1999) The American Economy in a World Context, Remarks at 35th Annual Conference in Bank Structure and Competition, Chicago, IL. 6 May. http://www.federalreserve.gov/boarddocs/speeches/1999/19990506.htm

Greenspan, Allan (2002) The Economy, Remarks at the Bay Area Council Conference. San Francisco, CA. 11 January. www.federalreserve.gov/boarddocs/speeches/2002/20020111/default.htm Accessed 1/29/02.

Grice, Corey (2001) Net access, broadband: Still booming, Special to ZDNet News. 29 August. http://google.com/search?q=cache:xUTHSK1E0FQC:www.zdnet.com/zdnn/stories/news/0,4586,5096349,00.html+fortune+2001+gartner+61+percent&hl=en. Accessed 2/19/02.

Hamm-Greenawalt, Lisa (2001). Channel Surfing: Retail businesses that venture onto the web get the best and worst of both worlds, *Small Business Computing*, March, 39-43.

The Horseman's Advisor (2001), http://www.horseadvice.com/advisor, Accessed 2/16/02.

Heron, Katherine and Breslau, K. (2000). The Debriefing: Bill Clinton. *Wired*, December, 337. www.wired.com/wired/archive/8.12/clinton.html?pg=3&topic=&topic_set. Accessed 2/1/02

Inc (2000a). The CEO's *Inc*. 500, 58-61.

Inc (2001). July, 47.

Inc Tech 2000.

Jones, Jennifer (2001) IT policy issues on tap for new Congress, *Infoworld*. January 15, p. 12

Kirpatrick, David (2001) Great Leap forward: The Internet is Dead—Long Live the Internet! http://www.fortune.com/indexw.jhtml?channel=artcol.jhtml&doc_id=205381. Accessed 12/1/01.

Kopytoff, Verne (2001) As Web failures fall, experts say it's more than a summer snooze. San Francisco Chronicle, 2 August.

Lawrence, Stacy (2000). Small Business is Big. *The Industry Standard*. July 24. www.thestandard.com/article/0,1902,17006,00.html. Accessed 6/10/02.

Lortek, Laura (2000) Profitable Dot-Coms Not a Myth, Interactive Week. November 20. www.zdnet.com/intweek/stories/news/0,4164,2656898,00.html. Accessed 11/27/00.

Mesenbourg. Thomas L. (1999) Measuring Electronic Business: Definitions, Underlying Concepts, and Measurement Plans. http://www.census.gov/epcd/www/ebusines.htm. Accessed 2/18/02.

Morrison Michael. C. (2000) E-Commerce, Web Design and Development. www.niacc.cc.ia.us/admin/academic/.

NFIB. *National Small Business Survey*, 2001, National Federation of Independent Business Owners.

NetProfit (2000) 1:9 June 28. http://www.profitguide.com/enewsletters/E2.asp?ID=123 Accessed 2/2/01.

Oliver, Richard W. (2000) The Future of Small Business: trends for a new century. Sponsored by American Express, IBM, and National Small Business United in cooperation with RISEbusiness.

PC Magazine (2001a) Mobile Phones: Tools of the Young. *PC Magazine*, 6 March.

PC Magazine (2001b). B2B expected revenues $134 billion in year 2001, about 3 times 2000 and $263 billion in 2002. *PC Magazine* December 19, 2000, 84.

Personal Commu nication (2001a). Personal communication to Joanne Pratt. February.

Personal Communication (2001b). Personal communication to Joanne Pratt. August.

Pratt, Joanne H. (1999). *Homebased Business: the Hidden Economy*, U.S. Small Business Administration.

Schonfeld, Erick. (2001). Peter Drucker Interview – Unabridged. *Business 2.0*, October. www.business2.com/articles/web/0,1653,17104,00.html. Accessed 6/10/02.

Shop.org (2001) Internet Industry and E-commerce Statistics. www.shop.org/nr/StatsUS.html. Accessed 5/9/01.

Shop.org (2002). Online Sales in 2001 Generated Profits for More than Half of All U.S. Retailers Selling Online. www.shop.org/press/061202.html. Accessed 6/13/02.

SBA (1999) *E-commerce: Small Businesses Venture Online*, U. S. SBA Office of Advocacy. July.

SBA (2000) *Small Business Expansions in Electronic Commerce*. U. S. SBA Office of Advocacy. June.

SBA (undated) *The Third Millennium: Small Business and Entrepreneurship in the 21st Century*. U. S. SBA Office of Advocacy.

SBA (2001) Women-Owned Firms Continue Dramatic Growth. *News Release*, U. S. SBA Office of Advocacy. 4 April.

SBC (2000). The SBC 100. *Small Business Computing.* December, 43-58.

SBC (2001a) Brownie Points. *Small Business Computing*. February, 23.

SBC (2001b) *Small Business Computing*. October.

SBC (2001) March.

Small BusinessDepot.com (2000) Why Small Businesses Need to Join eMarketplaces. 22 May.

Smith, Scott S (2001) The Vow Factor: How one dotcom survives – and thrives – in the ultracompetitive wedding market. *Entrepreneur.* February, 176.

Southwick, Karen (2000) Duet, *Forbes***,** 27 November, 64.

State of Small Business Report 1998. http://www.sba.gov/advo/stats/stateofsb1998.pdf

Stocks commuter (2000). www.stockscommuter.com/prores.htm.

Thomas, Owen (2001). Bollinger Shipyards. WWW.ecompany.com, 119-120.

UCLA (2001) The UCLA Internet Report 2001 – Surveying the Digital Future. www.ccp.ucla.edu/pages/internet-report.asp. Accessed 11/29/01.

U.S. Department of Commerce (2000) Falling Through the Net: Toward Digital Inclusion. October.

U.S. Department of Commerce (2001a) Retail Sales in Fourth Quarter 2000 were $8.7 Billion, up 67.1 Percent from Fourth Quarter 1999, Census Bureau Reports. *United States Department of Commerce News*, March 30. www.census.gov/mrts/www/ecom.pdf Accessed 6/7/02.

U.S. Department of Commerce (2002a) “E-Stats.” 18 March. www.census.gov/estats .

U.S. Department of Commerce (2002) Retail Sales in First Quarter 2002 were $9.8 Billion, up 19.3 Percent from First Quarter 2001, Census Bureau Reports. *United States Department of Commerce News*, February 20. www.census.gov/mrts/www/mrts.html. Accessed 2/22/02.

Wiesendanger, Betsy (2000) Star Quality: This year’s Entrepreneurial Excellence Award winners are headlining the boom in women-owned businesses. *Working Woman.* May, 51-64

Whitestone, Randy (2000) Bill Burnham quoted in "Web business closings up, report finds," *Dallas Morning News*. 17 November, 1D.

Yahoo Internet Life (2000) *Yahoo Internet Life*, 99-108.

Yau, Catherine (2001) Reports of The Death of Online Retail Are Greatly Exaggerated, Says Jupiter Media Metrix. Jupiter Media Metrix. May. http://www.jmm.com/xp/jmm/press/2001/pr_052201.xml. Accessed 2/22/02