



Office of Advocacy

A Voice for Small Business

Self-Employment and Computer Usage

A profile of computer ownership based on the
2000 Current Population Survey Internet and
Computer Use Supplement

April 2003

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Office of Advocacy
U.S. Small Business Administration
Washington, D.C.
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Foreword

Small businesses are integral to the economic health of the United States, accounting for 51 percent of private sector output. Self-employment creates opportunities for individuals to become entrepreneurs and enables them to be innovative and bring new ideas, products and services to the marketplace. Self-employed individuals who owned computers numbered 10.5 million in 2000, and over 80 percent of these were connected to the Internet. The number of self-employed who had access to the Internet grew by 50 percent between 1998 and 2000. This report analyzes the most recent available data on self-employed individuals with computer ownership.

Self-employment and Computer Usage was prepared by Victoria Williams, economist, under the general supervision of Dr. Chad Moutray, director and chief of economic research. Dr. Charles Ou, Dr. Richard Boden, and Brian Headd made helpful suggestions, and Rebecca Krafft edited the report. Please direct any comments on this report to the Office of Economic Research at (202) 205-6532. For more information on small business visit the Office of Advocacy's home page at www.sba.gov/advo.

Executive Summary

Self-employment is important to the well-being of the nation's economy. It boosts the economy by creating jobs while bringing unique products and services to the market. The spread of computer and information technology usage among the U.S. population and businesses since 1990 has been remarkable. This trend has helped make self-employment more attractive, as technology has lowered start-up costs in some industries and the Internet has enabled connections and communications that were the stuff of science fiction only a decade ago.

The use of computers and the Internet has become the norm among U.S. businesses, households, and society in general. Although in-depth data on this topic remains scarce, data from the U.S. Bureau of the Census provides considerable detail on it. This report relies on the Current Population Survey, Internet and Computer Use Supplements from 1998 and 2000 to show the major changes that took place over a two-year period.

- Self-employed persons with computers numbered 10.5 million in 2000 compared to 9.2 million in 1998.
- Between 1998 and 2000, self-employed computer ownership increased by 14.7 percent. Access to the Internet by the self-employed grew 50.4 percent during these two years.
- In 2000, 83.2 percent of self-employed individuals had Internet access. Of these, 72.5 percent used a regular or dial-up service for Internet access.
- The three most important uses of the Internet by the self-employed were in 2000 were sending and receiving email, accomplishing job-related tasks; and searching for information.
- Computer prices dropped continuously throughout the 1990s. Between 1990 and 1994, prices of computers and peripherals fell by an average of 12.8 percent yearly. Between 1995 and 1999, computer prices plummeted twice as much, by an average of 24.1 percent annually.
- In 2000, nearly two-thirds (64.3 percent) of self-employed households had one computer, 23.3 percent had two computers, and 12.4 percent had three or more computers.
- In 2001 self-employed persons that were home-based businesses numbered 5.9 million and represented 29.7 percent of the self-employed.
- One-quarter of all capital expenditures by small and medium-size firms was spent on computer and communications equipment in 1998.
- Two-thirds (65.9 percent) of self-employed businesses with computers were unincorporated, and 34.1 percent were incorporated in 2000.

Introduction

The spread of personal computers and Internet technology among the U.S. population and U.S. business over the past decade has been phenomenal. The spread of technology has made owning a business even more attractive and accessible to would-be entrepreneurs. This report is divided into three sections. The first section quantifies the number of self-employed individuals with computers in the United States and measures their growth. The second section explores the factors that influence computer ownership, usage, and connectivity by self-employed persons. The third section discusses the characteristics of self-employed computer owners.

Number of Self-Employed with Computers

Self-employment, as used in this report, refers to both incorporated and unincorporated businesses and represents the primary occupation of the individuals surveyed. These self-employed individuals may or may not have employees.¹ Some work from home, while others run their businesses from other locations. In 2000, 10.5 million self-employed households owned or leased a computer, according to the Census Bureau's Current Population Survey (CPS) Internet and Computer Use Supplement.² Of these, 65.9 percent were unincorporated, and 34.1 percent were incorporated. Self-employed businesses are found in different legal forms of ownership, but the CPS supplement data does not distinguish among these.

Who owned the newest computer in these households? Almost all respondents (9.4 million or 89.4 percent) replied that the computer was owned by someone in the home; 880,000 self-employed individuals (8.4 percent) said the computer was owned by a home-based business; 173,000 self-employed persons (1.6 percent) said the computer was owned by an employer; and 62,000 households (less than 1 percent) were in the unclassified category.

The CPS Work at Home Supplement indicated that in 2001 self-employed persons that were home-based numbered 5.9 million. They represented 30.0 percent of self-employed individuals.

Growth of Self-Employed Computer Ownership

As a percentage of the civilian labor force, self-employment represented 7.8 percent in 2000 compared to 7.0 percent in 1998.³ Self-employed persons numbered 10.5 million in 2000 compared to 9.2 million in 1998, an increase of 14.7 percent.⁴ Almost all the growth between 1998 and 2000 was generated by the incorporated self-employed. Self-employed persons with computer ownership grew by almost 15.0 percent between 1998 and 2000.⁵ (See Appendix Table B.5.)

Home-based business individuals in 2000 represented 8.4 percent of self-employed persons with computers, a decrease of 3.9 percent since 1998. The number of incorporated and unincorporated home-based business owners decreased in 2000; the incorporated experienced a 4.9 percent decrease compared to a 9.3 percent decrease by the unincorporated. It is worth noting that over 40 percent of all newly sold personal computers (PCs) have been going into U.S. homes. Increased sales of PCs to the home market have stimulated employment growth in supporting industries, including PC wholesaling and retailing, prepackaged software, and information retrieval services.⁶ Geographically, the Northeast experienced the most growth in the number of

self-employed persons with computers between 1998 and 2000, 17.8 percent. Self-employed PC ownership in nonmetropolitan areas grew by 30.6 percent during the same period.

Factors Influencing Self-Employed Computer Ownership

The falling computer prices of the late 1990s resulted in dramatic PC sales growth. Not only have PC prices been declining in both real and nominal terms, PC processing power (in terms of CPU speed, memory and disk space) has been rising.⁷ Meanwhile, the speed of Internet access per dollar has also been rising due to faster modems and the advent of cable modems. In the 1990s, computer prices dropped continuously: prices for computers and peripherals fell an average of 12.8 percent yearly between 1990 and 1994; and between 1995 and 1999, computer prices plummeted twice as much, by an average of 24.1 annually.⁸ This price plunge was caused by several independent factors:⁹

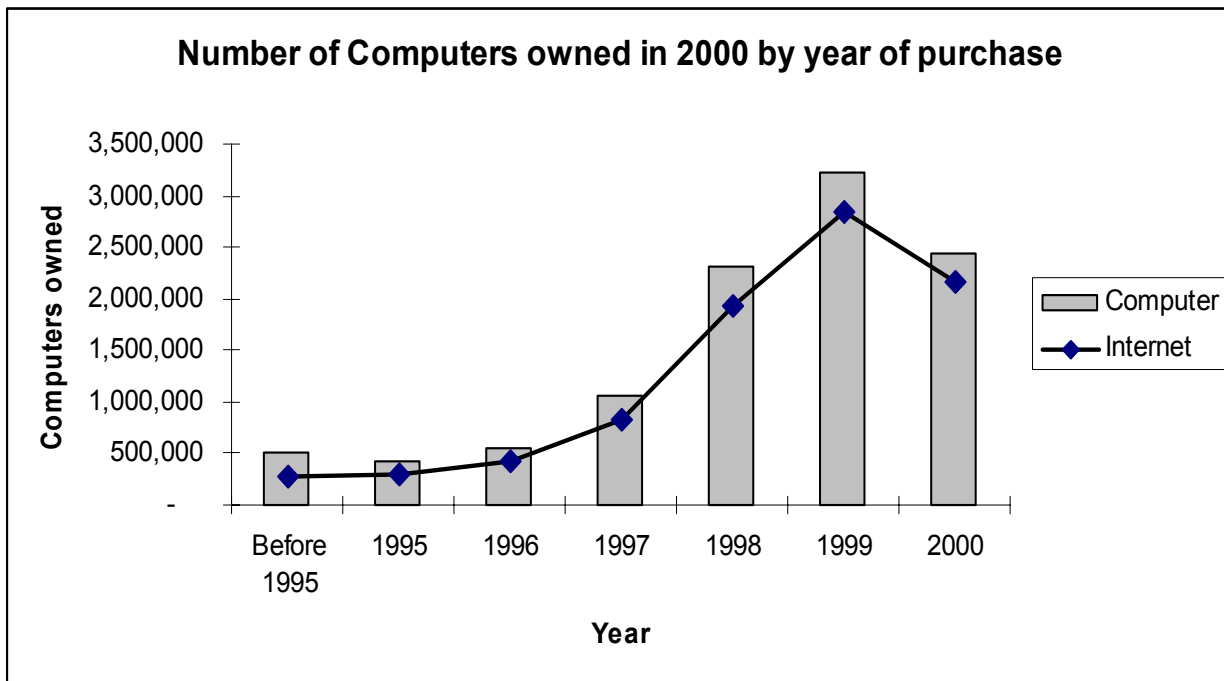
- the historical rate of price decline driven by technological change,
- the Y2K problem and the fast growth of the Internet, along with the need for businesses to establish an Internet presence for electronic commerce,
- transitory factors, such as the Asian currency crisis, that complemented the other factors in their downward pressure on prices, and
- changes in market formation that has accentuated price and technological competition in both computer systems and components.

Computer Ownership by the Self-Employed

Self-employed computer ownership skyrocketed in the late 1990s. Rapid advancing technology goods lowered the cost of capital for high-tech capital goods relative to other capital goods.¹⁰ As a percent of total self-employment in 2000, 23.2 percent had a new computer, compared with 30.6 percent in 1999, 21.9 percent in 1998, and 10.7 percent in 1997. The survey showed that between 1998 and 2000, computer ownership by self-employed persons increased by 14.7 percent (Appendix Table B.5). Over 50 percent of the self employed who had a computer in 2000 acquired their PCs during 1998 and 1999, with 1999 representing the year when most PCs were acquired. (See Figure 1.)

Home-based individuals were more likely to have a new computer, compared to those who worked for an employer business. In 2000, nearly two-thirds (64.3 percent) of self-employed individuals had one computer, 23.3 percent had two computers, and 12.4 percent had three or more computers. 54.4 percent of self-employed home workers in 1997 used a computer for work done at home.¹¹ Self-employed persons in 2000 with at least one computer represented 64.3 percent; in 1998 they represented 69.3 of individual households.

Figure 1



Source: U.S. Small Business Administration, Office of Advocacy based on unpublished data from the U.S. Department of Commerce, Bureau of the Census, Current Population Survey, Internet and Computer Use Supplement 2000.

Connection Type

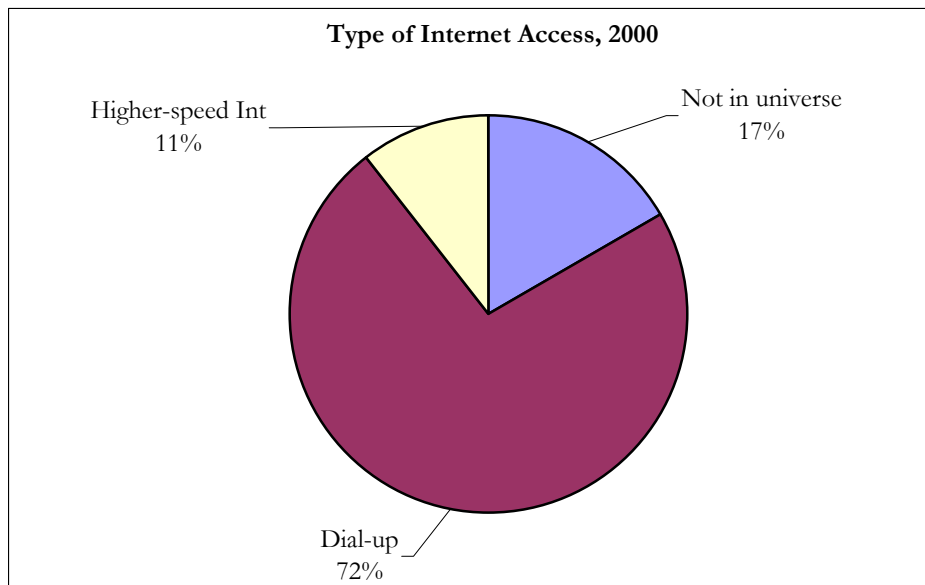
Internet access by businesses is high, and it has increased with computer usage and ownership by self-employed persons. Nevertheless, there is a considerable gap in the type of access that businesses acquire. It is important to note that the speed of Internet access per dollar has also been rising due to faster modems and the advent of cable modems. On a national level, when the CPS Internet Supplements for 1998 and 2000 are compared, it is clear that total self-employed Internet access increased by 50.4 percent between 1998 and 2000 (Appendix Table B.5). Some self-employed individuals have high-speed connections while others had regular dial-up service. Based on the CPS Internet Supplement, 83.2 percent of self-employed individuals had access to the Internet; 72.5 percent of self-employed persons accessed the Internet through a regular or dial-up service, and only 10.7 percent accessed the Internet through a higher speed service. (See Figure 2.)

Home-based self-employed persons are less likely to have a high-speed connection. Out of the total number of self-employed with Internet access, home-based businesses represented less than 10 percent (8.7 percent), and almost all of them accessed the Internet through a dial-up service.

Small and medium-sized firms invested about a quarter of their total capital expenditures on computers and communications equipment.¹² On average, home-based businesses invested about

\$1,100 on Internet technology.¹³ The Federal Communications Commissions reported that high-speed lines connecting homes and small businesses to the Internet increased by 63 percent during the second half of 2000, a total of 7.1 million high-speed lines. Of these, 5.2 million were residential and small business subscribers.¹⁴

Figure 2



Source: U.S. Small Business Administration, Office of Advocacy based on unpublished data from the U.S. Department of Commerce, Bureau of Census, Current Population Survey Internet and Computer Use 2000.

Computer Usage by the Self-Employed

Sending and receiving email continues to be the most important use for small businesses with computer and Internet access.¹⁵ The three most important uses of the Internet by the self-employed were:

- email;
- job related tasks; and
- searching for information (see Table 1).

Self-employed individuals were concerned about Internet confidentiality: 43.1 percent of self-employed persons were very concerned, 30.6 percent indicated that they were somewhat concerned, and only 15.3 percent were not concerned. These figures increased slightly since 1998, except that the “not concerned” category decreased 5.5 percent in 2000. Small businesses that used computers in 1998 represented 76.3 percent and the smallest businesses (0 – 4 employees) represented 70.8 percent during this period.¹⁶

Table 1

Internet Use at home by the Self employed, 2000			
	Incorporated	Unincorporated	Total
Total	100.0	100.0	100.0
For E-mail	61.9	65.3	64.1
Job related	9.6	9.3	9.4
Search for information	8.4	7.6	7.9
Check news, weather	6.9	6.9	6.9
N/A	5.5	4.6	4.9
Shop, pay bills	2.2	2.3	2.3
Education	2.2	1.5	1.8
Other	1.3	0.9	1.1
Job Search	0.5	0.8	0.7
Don't know	0.9	0.2	0.5
Making phone calls	0.4	0.2	0.3
Games/Entertainment	0.2	0.1	0.2

Source: U.S. Small Business Administration, Office of Advocacy based on unpublished data from the Department of Commerce, Bureau of Census, Current Population Survey Internet and Computer Use 2000.⁷

Characteristics of Self-Employed Computer Owners

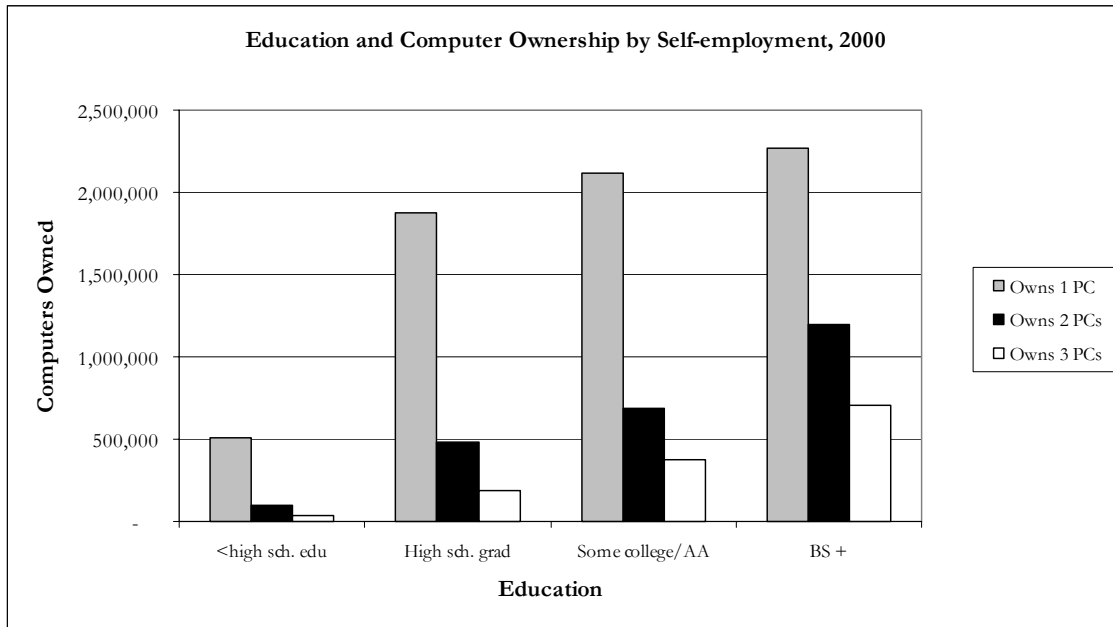
The use of computers and information technology differs based on the gender of the business owner. For example, male business owners were 65.2 percent more likely to have a computer and dial-up Internet access service than women business owners. Self-employed men were twice as likely to have a higher-speed Internet connection compared to their female counterparts in 2000. Self-employed women were more likely to be very concerned about computer confidentiality issues when compared to men.

Education seemed to play a vital role in self-employment. The more educational background, the more likely one was to be engaged in some form of entrepreneurial activity, and most likely to have access to the Internet. The 2000 CPS Internet Use Supplement indicates that 39.6 percent of self-employed persons had a bachelor's degree or higher. (See Appendix Table B.2.) Also, higher levels of education were strongly associated with the number of computers that self-employed individuals owned (see Figure 3). Marital status also played a large role in owning a business. Self-employed persons who were married accounted for 79.2 percent of business owners in 2000, followed by individuals that have never been married. It is important to note that there was an enormous gap (68.1 percent) between self-employed households that were married and single.

Geographically, most self-employed persons were located in the South, while the West accounted for most of the home-based businesses. Self-employed persons were more likely to live in metropolitan areas versus nonmetropolitan areas, and those that resided in the South and metropolitan areas were most likely to have Internet access. Self-employed individuals were

more likely to be involved in retail trade; construction; and business services, including automobile and repair services. (See Appendix Table B.6.)

Figure 3



Source: U.S. Small Business Administration, Office of Advocacy based on unpublished data from the Department of Commerce, Bureau of Census, *Current Population Survey Internet and Computer Use 2000*.

Men were more likely to be self-employed than women, and it is worth noting that education seemed to be closely related to income and self-employment. (See Appendix Table B.2.)

The percentage of self-employment for both sexes remained unchanged between 1998 and 2000. Male self-employment accounted for 65.4 percent of total self-employment, versus 34.5 percent for women. Male-dominated industries mirrored those mentioned earlier, but females tended to dominate in retail trade, and in business services, including auto and professional services. Two-thirds of the self-employed were in managerial and professional technical services; male-owned businesses represented 63.3 percent of this total. Service occupations were dominated by self-employed women. In addition, computer ownership was high (67.0 percent) among those in the managerial and professional technical services.

Women were likely to be self-employed at an earlier age than their male counterparts. Most self-employed persons were between the ages of 35 and 44, and they represented 31.4 percent of total self-employment, which was slightly higher than the 45-54 age category (the early boomer generation), who represented 30.2 percent of the self-employed. Retirees (65 and over) represented 5.8 percent of self-employed individuals in 2000. Males 65 and older (presumably retired) were more likely to be self-employed persons than their female counterparts. Self-employed women appeared to be younger and resided in the western region of the United States. Men aged 45-54 were more likely to be self-employed than women.

Between 1998 and 2000, minority self-employed computer ownership increased by 16.6 percent, and black self-employment experienced the greatest increase. Nonminority self-employed individuals represented the majority of the self-employed in 2000. They accounted for 91.4 percent of the self-employed, while blacks represented 4.0 percent, and 4.5 percent were “other.”¹⁷ Hispanics represented 4.7 percent of self-employed individuals with computers. The predominant occupation of most black self-employment was services; for Asian or Pacific Islanders, it was managerial, professional, and technical work.

The more educated and higher income self-employed individuals were more likely to own more than one computer and have Internet access. Self-employed persons with higher income were more likely to own more than one computer in 1998 and 2000 (see Appendix Table B.4). Self-employed income increased by 11.3 percent between 1998 and 2000 (see Appendix Table B.3).

Conclusion

Based on the analysis of the survey and of previous research, the price of computers is expected to continue to decrease as computer technology advances. As the Congressional Budget Office observed, not only will the technology of computers improve, but the uses to which consumers and businesses put computers and information technology will expand at the same time. In other words, computers will continue to be in demand as long as they meet the needs of the market and consumers.

The improvement in computers and technology over the recent years made computer ownership more affordable in the late 1990s. As a result, computer ownership soared during that period, although other factors such as the Y2K problem and the Asian currency crisis may have also contributed to this spike. Computer ownership did not mean that there was Internet access, but Internet connectivity meant computer ownership, so the number of computers owned will always surpass the number of Internet connected self-employed individuals.

Self-employed persons with higher levels of education and income in 1998 and 2000 were more likely to own more than one computer. These findings are similar to those of Caselli and Coleman, who discovered that computer adoption strongly depended on having high levels of education in the labor force.¹⁸ Most self-employed women with computers were likely to be younger, and self-employed males with computers tended to have higher education and were more likely to reside in metropolitan areas.

Endnotes

¹ Self-employed persons and self-employed individuals are used interchangeably throughout this report.

² This figure may differ from published data and other CPS supplements. This is based upon an unweighted number of 5,010 individuals. The CPS Internet and Computer Use Supplement tracks computer penetration in the United States on a household basis. Computer ownership and access to the web was based on individuals living in households who responded “yes” to the question, Is there a personal computer or laptop in this household? In the survey respondents were also asked about their use of the Internet.

³ The civilian labor force excludes the unemployed labor force, and self-employment data here comes from CPS Internet Supplement.

⁴ Based on unpublished data from the CPS Internet and Computer Use Supplement. The unweighted number to the December 1998 CPS Internet Use Supplement of individuals is 4,485.

⁵ A 1996 report by the Office of Advocacy of the U.S. Small Business Administration also found that the fastest growing segment of self employed persons was the incorporated, which grew by 32.0 percent between 1988 and 1994. See *The State of Small Business: A Report of the President, 1996*, Chapter 3, <http://www.sba.gov/advo/stats/stateofsb1996.pdf>.

⁶ A report published in the *Monthly Labor Review* discovered that PC industries grew by an average of 2.7 percent and by almost 10 percent in 1995. (See Laura Freeman, “Job Creation and the Emerging Home Computer Market,” <http://www.bls.gov/opub/mlr/1996/08/art6full.pdf>.)

⁷ The Consumer Price Index (CPI) as measured overstates the impact of inflation in the market basket since it uses a fixed weight. Also, the CPI cannot be able to adjust for the changes made in the quality or quantity of a good or services.

⁸ Kevin L. Kliensen, “Was Y2K Behind the Business Investment Boom and Bust,” The Federal Reserve Bank of St. Louis, January/February 2003, <http://research.stlouisfed.org/publications/review/03/01/Kliesen.pdf>.

⁹ This report looks at the productivity as a result of computer usage. *The Role of Computer Technology in the Growth of Productivity*, Congress of the United States, Congressional Budget Office, May 2002.

¹⁰ “Was Y2K Behind the Business Investment Boom and Bust.”

¹¹ Based on Work at Home Supplement 1997, U.S. Statistical Abstract, U.S. Department of Labor, Bureau of Labor of Statistics.

¹² Patricia Buckley and Sabrina Montes, U.S. Department of Commerce, Economics and Statistics Administration, *Main Street in the Digital Age: How Small and Medium-sized Businesses are Using the Tools of the New Economy*, February 2002, <http://www.esa.doc.gov/508/esa/MainStreetDigitalAge.htm>.

¹³ U.S. Small Business Administration, Office of Advocacy, *Small Business Expansions in Electronic Commerce*, June 2000, http://www.sba.gov/advo/stats/e_comm2.pdf.

¹⁴ A Federal Communications Commission report provides data and information on small and residential provider services but does not define what a small business is and does not distinguish between the two. See *Trends in Telephone Service*, Industry Analysis Division Common Carrier Bureau, http://www.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/IAD/trend801.pdf.

¹⁵ Studies from Dun & Bradstreet and the National Federation of Independent Businesses (NFIB) also show this trend in small businesses. Dun & Bradstreet, *20th Annual Small Business Survey Summary Report*, 2001. National Federation of Independent Business, *The Use and Value of Websites*, Volume I, Issue 2, 2001. *NFIB-Internet Study: E-Commerce*, March 2000.

¹⁶ Marianne P. Bitler, Alicia M. Robb, and John D. Wolken *Financial Services Used by Small Businesses: Evidence from the 1998 Survey of Small Business Finances*, April 2001. This is the first time that the Survey of Small Business Finance has tried to capture how small firms are using the Internet for banking and other purposes. Small business refers to businesses with fewer than 500 employees.
(<http://www.federalreserve.gov/pubs/oss/oss3/ssbf98/april2001bulletin.pdf>)

¹⁷ “Other” includes American Indian and Asian or Pacific Islander, but excludes Hispanics, since Hispanics are considered an origin. Due to the sample size, American Indian and Asian have been combined here.

¹⁸ Francesco Caselli and Wilbur John Coleman II, *Cross-Country Technology Diffusion: The Case of Computers*, NBER Working Paper No. w8130, February 2001.

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Appendix A: Data Source

Most of the data used in this report comes from the U.S. Department of Commerce's Bureau of the Census, taken from the December 1998 and August 2000 Current Population Survey (CPS): Internet and Computer Use Supplement which sampled approximately 48,000 households. The CPS Internet and Computer Use Supplement is the most comprehensive database used to measure computer and Internet usage of small businesses or self-employed individuals in the United States. It can be used to identify the number of households that are self-employed with computer and Internet usage. The downside to this database is that analysis could only be made on self-employed persons, not businesses.

CPS data are the source of the household-based statistics on the labor force that are published by the U.S. Department of Labor's Bureau of Labor Statistics. The CPS data includes individuals' class of work and a variety of personal characteristics such as age, education, gender, and marital status, occupation, industry, income, and geographic information on which tabulations could be performed, but has limited information about the nature of any self-employment activity. The survey lacks information on receipts and payroll, or employment associated with self-employment. Also, in the household-based surveys, the unit of analysis is the individual person; therefore information on the type of business or number of employees is not available. This report is one of the few studies that have attempted to look at self-employment through the lens of computer ownership and usage.

Questions that were used in the Computer and Internet Use Supplement follow.

Is there a personal computer or laptop in this household?

- 1 Not in Universe
- 1 Yes
- 2 No

How many computers or laptops are there in this household?

- 1 Not in universe
- 1 One
- 2 Two
- 3 Three or more

Is this (the newest) computer owned or leased?

- 1 Not in universe
- 1 Owned
- 2 Leased

Who (owns/leases) this (the newest) computer?

- 1 Not in universe
- 1 Someone in the household
- 2 Home business

- 3 Employer
- 4 Other

In what year was the (newest) computer obtained?

- 1 Not in universe
- 1 2000
- 2 1999
- 3 1998
- 4 1997
- 5 1996
- 6 1995
- 7 Before 1995

How do you currently access the Internet at home?

- 1 Not in universe
- 1 Regular, or "dial-up" telephone service
- 2 Higher-speed Internet access service

How concerned are you that personal information you provide to an Internet service provider may not be kept confidential?

Universe = All

- 9 N/A
- 3 Refused
- 2 Don't know
- 1 Very concerned
- 2 Somewhat concerned
- 3 Not concerned

Which of your Internet uses are the three most important?

- 9 N/A
- 3 Refused
- 2 Don't know
- 1 Not in universe
- 1 For E-mail
- 2 To take educational courses, do research for school
- 3 To check news, weather, or sports
- 4 For making phone calls
- 5 To search for information, such as government, business, health, or education
- 6 To search for jobs
- 7 To do job related tasks
- 8 To shop, pay bills, or other commercial activities
- 9 Other
- 10 Games/Entertainment/Fun

Appendix B: Data Tables

Table B.1: Profile of Self-Employed Households That Own Computers, 2000

Table B.2: Characteristics of Self-Employed Computer Owners by Gender, 2000
(percent)

Table B.3: Self-Employed Computer Ownership by Income, 1998 and 2000 (Percent)

Table B.4: Number of Computers Owned by the Self-Employed by Education Level,
1998 and 2000 (Percent)

Table B.5: Self-Employed Computer Ownership and Internet Access by State, 1998 and
2000

Table B.6: Self-Employment and Computer Ownership by Industry, 1998 and 2000

Table B.1: Profile of Self-Employed Households That Own Computers, 2000

Category	Amount ¹	Category	Amount ¹
Total number of households with a self-employed individual and a computer in the home: 10,530,000			
Status of Business		Urban/Rural	
Self-Employed, Incorporated	3,593,915	Metropolitan	8,259,760
Self-Employed, Unincorporated	6,932,333	Nonmetropolitan	2,231,204
PC Owner		Geographic Region	
Someone in the home	9,410,855	Northeast	1,904,058
Home business	879,943	Midwest	2,344,692
Employer	172,982	South	3,343,609
Other	62,467		
Age of Head of Household		Marital Status	
Under 25	309,972	Married	8,341,802
25-34	1,487,486	Widowed	152,379
35-44	3,304,072	Divorced	802,465
45-54	3,182,261	Separated	125,677
55-64	1,627,329	Never Married	1,103,927
65 or Over	615,131		
Internet Connection		Number of Computers	
Regular or dial up	7,633,292	One	6,768,196
Higher-speed connection	1,125,199	Two	2,455,350
No connection	1,767,757	Three	1,302,702
Education		Race	
Did not graduate high school	637,753	White	9,624,470
High school graduate	2,545,066	Black	424,473
Some college or Associate Degree	3,174,654	American Indian	58,405
Bachelor's Degree or Higher	4,168,778	Asian or Pacific	418,900
Ethnicity		Gender	
Hispanic	494,847	Male	6,888,960
Non-Hispanic	10,030,000	Female	3,637,288
Income		Concern for Internet Confidentiality	
Less than \$20,000	607,135	Very concerned	4,499,722
\$20,000 - \$29,999	702,604	Somewhat concern	3,199,665
\$30,000 - \$39,000	934,339	Not concerned	1,596,088
\$40,000 - \$49,999	771,609	Refused	124,751
\$50,000 - \$59,999	955,368	Don't know	120,709
\$60,000 - \$74,000	986,635	N/A	911,870
\$75,000 or more	4,049,125		

(1) Note total in this table does not match the earlier numbers mentioned since it excludes those individuals that did not respond to the question.

Source: U.S. Small Business Administration, Office of Advocacy based on unpublished data from the Department of Commerce, Bureau of Census, Current Population Survey Internet and Computer Use 2000.

Table B.2: Characteristics of Self-Employed Computer Owners by Gender, 2000 (percent)

	All	Male	Female
Marital Status			
Married	78.6	79.2	77.6
Widowed	1.4	0.9	2.6
Divorced	7.6	7	8.7
Separated	1.2	1	1.6
Never Married	10.5	11.4	8.8
Other	0.6	0.5	0.8
Metropolitan Status			
Metropolitan	78.5	79.1	77.3
Non-metropolitan	21.2	20.7	22.2
Not Identified	0.3	0.3	0.5
Geographic Region			
Northeast	18.1	18.7	16.8
Midwest	22.3	22.6	21.7
South	31.8	33.1	29.2
West	27.9	25.5	32.3
Education Background			
No high school diploma	5.5	7	4.2
High school graduate	24.2	23.9	24.6
Some College or Associate Degree	30.2	28.3	33.7
Bachelor's degree or more	39.6	40.7	37.5
Age			
Under 25	2.9	2.8	3.1
25–34	14.1	13.1	16.1
35–44	31.4	30.6	32.8
45–54	30.2	30.7	29.3
55–64	15.5	16.5	13.6
65 or over	5.8	6.3	5.1

Source: U.S. Small Business Administration, Office of Advocacy based on unpublished data from the Department of Commerce, Bureau of Census, Current Population Survey Internet and Computer Use, 2000.

Table B.3: Self-Employed Computer Ownership by Income, 1998 and 2000 (Percent)

Income from Self-Employment, 2000	Number of Computers		
	One	Two	Three or More
Less than \$20,000	76.9	18.7	4.4
\$20,000 - \$29,999	78.0	16.7	5.3
\$30,000 - \$39,000	77.1	14.9	8.0
\$40,000 - \$49,999	71.2	18.7	10.1
\$50,000 - \$59,999	69.9	22.4	7.7
\$60,000 - \$74,000	66.1	20.8	13.1
\$75,000 or More	51.9	29.2	18.9
Total	63.3	23.5	13.2

Income from Self-Employment, 1998			
Less than \$20,000	82.4	10.2	7.4
\$20,000 - \$29,999	81.1	12.8	6.1
\$30,000 - \$39,000	81.8	11.1	7.2
\$40,000 - \$49,999	76.0	16.5	7.5
\$50,000 - \$59,999	69.6	22.5	7.9
\$60,000 - \$74,000	70.1	21.6	8.3
\$75,000 or More	58.4	26.3	15.3
Total	69.0	20.4	10.6

Growth in Income, 1998 and 2000	1998		2000		Absolute Change	Percent Change
	Total in Category	Percent of Total	Total in Category	Percent of Total		
Less than \$20,000	509,576	6.3	607,135	6.7	97,559	19.1
\$20,000 - \$29,999	686,049	8.5	702,604	7.8	16,555	2.4
\$30,000 - \$39,000	941,266	11.6	934,339	10.4	(6,927)	(0.7)
\$40,000 - \$49,999	852,371	10.5	771,609	8.6	(80,762)	(9.5)
\$50,000 - \$59,999	875,153	10.8	955,368	10.6	80,215	9.2
\$60,000 - \$74,000	961,718	11.9	986,635	11.0	24,917	2.6
\$75,000 or More	3,266,837	40.4	4,049,125	45.0	782,288	23.9
Total	8,092,970	100.0	9,006,815	100.0	913,845	11.3

Note: Total in this table does not match the numbers mentioned earlier since it excludes those individuals that did not respond to the question.

Source: U.S. Small Business Administration, Office of Advocacy based on unpublished data from the Department of Commerce, Bureau of Census, Current Population Survey Internet and Computer Use, 1998, 2000.

Table B.4: Number of Computers Owned by the Self-Employed by Education Level, 1998 and 2000 (Percent)

	2000			
	Number of Computers Owned			
	One	Two	Three or More	Total
Less Than High School Diploma	79.3	14.7	6.0	100
High School Graduate	73.8	18.8	7.4	100
Some College or Associate Degree	66.7	21.6	11.7	100
Bachelor's Degree or Higher	54.4	28.7	16.8	100
Total	64.3	23.3	12.4	100

	1998			
	Number of Computers Owned			
	One	Two	Three or More	Total
Less Than High School Diploma	87.5	6.9	5.6	100
High School Graduate	78.1	16.5	5.4	100
Some College or Associate Degree	73.0	18.3	8.6	100
Bachelor's Degree or Higher	59.5	25.7	14.8	100
Total	69.3	20.4	10.3	100

Source: U.S. Small Business Administration, Office of Advocacy based on unpublished data from the Department of Commerce, Bureau of Census, Current Population Survey Internet and Computer Use, 1998, 2000.

Table B.5: Self-Employed Computer Ownership and Internet Access by State, 1998 and 2000

	1998		2000		Percent Change, 1998–2000	
	Computer Ownership	Internet Access	Computer Ownership	Internet Access	Computer Ownership	Internet Access
Total	9,177,093	5,827,259	10,530,000	8,762,243	14.7	50.4
Alabama	129,950	85,694	135,438	105,130	4.2	22.7
Alaska	30,759	22,833	28,568	25,492	(7.1)	11.6
Arizona	196,996	133,309	194,336	165,917	(1.4)	24.5
Arkansas	75,220	27,600	72,536	52,962	(3.6)	91.9
California	1,336,636	920,638	1,547,046	1,319,372	15.7	43.3
Colorado	242,866	150,888	235,303	199,197	(3.1)	32.0
Connecticut	117,578	75,278	157,416	141,597	33.9	88.1
Delaware	32,072	21,828	33,344	31,287	4.0	43.3
District of Columbia	16,580	12,125	14,777	14,376	(10.9)	18.6
Florida	492,702	360,362	594,529	537,061	20.7	49.0
Georgia	276,632	165,122	245,820	200,650	(11.1)	21.5
Hawaii	44,479	29,073	41,068	35,423	(7.7)	21.8
Idaho	74,408	38,783	76,739	57,174	3.1	47.4
Illinois	330,498	229,865	440,353	372,817	33.2	62.2
Indiana	146,870	108,341	205,819	152,156	40.1	40.4
Iowa	135,873	57,792	127,668	93,698	(6.0)	62.1
Kansas	83,246	48,350	103,781	83,329	24.7	72.3
Kentucky	93,845	58,350	156,364	128,058	66.6	119.5
Louisiana	96,528	42,005	138,135	109,046	43.1	159.6
Maine	54,470	33,956	76,391	57,584	40.2	69.6
Maryland	185,782	106,062	189,683	160,947	2.1	51.7
Massachusetts	217,826	139,616	227,992	190,847	4.7	36.7
Michigan	294,206	177,389	358,352	301,051	21.8	69.7
Minnesota	226,004	133,152	254,824	183,271	12.8	37.6
Mississippi	52,442	29,544	58,941	45,403	12.4	53.7
Missouri	160,258	112,590	156,063	115,325	(2.6)	2.4
Montana	55,962	34,958	58,535	44,352	4.6	26.9
Nebraska	69,260	26,931	89,694	63,325	29.5	135.1
Nevada	46,395	25,272	34,932	32,062	(24.7)	26.9
New Hampshire	57,710	35,035	68,359	61,907	18.5	76.7
New Jersey	256,876	168,010	359,407	329,606	39.9	96.2
New Mexico	71,331	47,801	72,831	55,478	2.1	16.1
New York	529,639	381,629	566,366	503,058	6.9	31.8
North Carolina	185,779	119,417	244,852	208,047	31.8	74.2
North Dakota	30,534	13,249	34,746	29,540	13.8	123.0
Ohio	338,524	157,771	322,517	274,689	(4.7)	74.1
Oklahoma	93,768	66,940	139,867	124,381	49.2	85.8
Oregon	156,644	101,652	201,880	176,852	28.9	74.0
Pennsylvania	309,192	196,390	364,858	314,045	18.0	59.9
Rhode Island	35,911	26,980	45,525	39,966	26.8	48.1
South Carolina	97,714	64,297	145,305	124,409	48.7	93.5
South Dakota	34,102	18,076	37,593	26,947	10.2	49.1
Tennessee	178,091	100,791	152,134	110,704	(14.6)	9.8

Table B.5: Self-Employed Computer Ownership and Internet Access by State, 1998 and 2000

	1998		2000		Percent Change, 1998–2000	
	Computer Ownership	Internet Access	Computer Ownership	Internet Access	Computer Ownership	Internet Access
Texas	670,641	384,297	735,649	578,588	9.7	50.6
Utah	106,143	69,268	98,782	79,251	(6.9)	14.4
Vermont	37,088	27,737	37,744	35,044	1.8	26.3
Virginia	192,349	129,821	242,352	168,201	26.0	29.6
Washington	233,739	161,417	313,055	262,528	33.9	62.6
West Virginia	43,203	25,708	43,884	37,561	1.6	46.1
Wisconsin	178,926	111,059	213,282	173,877	19.2	56.6
Wyoming	22,843	12,208	30,815	24,904	34.9	104.0

Source: U.S. Small Business Administration, Office of Advocacy based on unpublished data from the Department of Commerce, Bureau of Census, Current Population Survey Internet and Computer Use, 1998, 2000.

Table B.6: Self-Employment and Computer Ownership by Industry, 1998 and 2000

Industry	1998	2000	Percent of Total		Absolute Change	Percent Change	Percent of Internet by Industry, 2000
			1998	2000			
Agriculture, Forestry, and Fishery	770,369	1,020,605	8.4	9.7	250,236	32.5	74.2
Mining	18,021	18,290	0.2	0.2	269	1.5	90.9
Construction	1,271,403	1,428,624	13.9	13.6	157,221	12.4	76.8
Manufacturing, Durable Goods	342,734	324,259	3.7	3.1	(18,475)	(5.4)	83.2
Manufacturing, Nondurable Goods	223,376	244,783	2.4	2.3	21,407	9.6	83.9
Transportation	330,752	312,464	3.6	3.0	(18,288)	(5.5)	81.7
Communications	18,222	43,037	0.2	0.4	24,815	136.2	98.8
Utilities and Sanitary Service	17,554	18,118	0.2	0.2	564	3.2	59.8
Wholesale Trade	404,729	439,389	4.4	4.2	34,660	8.6	90.4
Retail Trade	1,194,321	1,500,501	13.0	14.3	306,180	25.6	79.4
Finance, Insurance, and Real Estate	755,370	859,708	8.2	8.2	104,338	13.8	90.4
Business Services, Inc. Automobile and Repair Services	1,131,291	1,277,617	12.3	12.1	146,326	12.9	86.4
Personal Service Exc. Private Households	442,272	605,242	4.8	5.7	162,970	36.8	80.9
Entertainment	231,034	256,102	2.5	2.4	25,068	10.9	79.8
Hospitals	11,932	12,533	0.1	0.1	601	5.0	73.2
Medical Services	564,168	527,967	6.1	5.0	(36,201)	(6.4)	92.3
Educational Services	84,118	118,018	0.9	1.1	33,900	40.3	87.8
Social Services	350,705	365,872	3.8	3.5	15,167	4.3	79.7
Other Professional Services	1,014,724	1,153,118	11.1	11.0	138,394	13.6	90.9
Total	9,177,093	10,526,247	100.0	100.0	1,349,154	14.7	83.2