America's Online Pursuits

The changing picture of who's online and what they do

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A broad analysis of over three years' worth of Pew Internet Project data illustrates shifting trends in Internet use by Americans.

Among our findings about change in the Internet world over time:

- **Online activity has consistently grown over the course of our research.** Internet users discover more things to do online as they gain experience and as new applications become available. This momentum often fuels increasing reliance on the Internet in everyday life and higher expectations about the way the Internet can be used in matters both mundane and mighty.

- **Despite this growth in activity, the growth of the online population itself has slowed.** There was almost no growth over the course of 2002 and there has been only a small uptick in recent months to leave the size of the online U.S. adult population at 63% of all those 18 and over. More than three-quarters of those between the ages of 12 and 17 use the Internet.

- **Different people use the Internet in different ways.** Within the online population, specific demographic groups have comparatively high incidence levels for certain online activities. For example:

    - High proportions of female Internet users have done activities such as seeking health or religious information on the Internet, while a large percentage of male users have sought news, financial information, sports news, and political news.

    - Among minority Internet users, a large portion of African-Americans has done research for school and sought religious and spiritual information.

    - English-speaking Hispanic users report high levels of instant messaging and downloading music compared to African-Americans and whites.

    - Those from high-income households and who have college degrees are

more likely than those with more modest incomes and education to do a host of things online, including looking for government information, doing online banking, and participating in online auctions.

▪ The young like instant messaging and downloading music. Older Internet users are more likely than younger users to get health information and seek material at government Web sites.

◼ **Experience and the quality of online connections matter.** Those with more experience online and those who have high-speed connections at home generally do more online more often than those with lower levels of experience and those with dial-up connections. The growth of the cohort of veteran users, those with at least three years of online experience, has been striking. Nearly three-quarters of Internet users have at least three years of experience.

◼ **Online Americans' experience with the commercial side of the Internet has expanded dramatically in spite of the economic slump.** Financial and transaction activities such as online banking and online auctions have grown more than any other genre of activity.

◼ **Email continues to be the "killer app" of the Internet.** More people use email than do any other activity online. Many report their email use increases their communication with key family and friends and enhances their connection to them.

◼ **Big news stories drive lasting changes in the news-seeking audience online.**

Close to two-thirds of Americans now go online to access the Internet.

The number of American adults going online grew by 47% between our March 2000 and August 2003 surveys. However, growth in Internet penetration was relatively flat over the course of 2002.

◼ Overall, 63% of adult Americans use the Internet. The online population expanded from roughly 86 million Americans in March 2000, to 126 million in August 2003.[1]

◼ The size of the online population *on a typical day* grew from 52 million Americans in March 2000 to 66 million in August 2003 – an increase of 27%.

◼ In March 2000, 49% of American men and 44% of American women were online. By August 2003, 65% of men were online compared to 61% of women. But there are more women than men in the online population because there are more women in the country than men.

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[1] Survey results are used to estimate the approximate number of American adults, in millions, who were engaging in Internet activities during a particular period. These figures are derived from the Census Bureau's estimates of the number of adults living in telephone households in the continental United States. The Census Bureau updates these estimates at the end of each year. The schedule of estimates that were used in this report to calculate the number of people doing any given activity online was as follows: 188 million American adults was used as the baseline for estimates from our March 2000-December 2000 surveys, 191 million for February 2001-December 2001 surveys, 193 million for January 2002-December 2002 surveys, and 200 million for March 2003 to the present. In some cases, the approximated number of people doing an activity may differ from previously published estimates due to the timing of the Census Bureau's releases.

- 87% of U.S. Internet users said they have access at home and 48% said they have access at work in our August 2003 survey.

- 31% of Internet users who go online from home have broadband as of August 2003.

> "Broadband user" — Internet user who has a high-speed DSL, cable, wireless, T-1, or fiber optic connection at home

Internet use still differs significantly across some demographic groups.

- **Internet adoption has increased in all demographic groups, but there are still pronounced gaps in Internet use along several demographic lines.** Older Americans are much less wired than younger Americans; minorities are less connected than whites, those with modest amounts of income and education are less wired than those with college educations and household incomes over $75,000, those with jobs are more likely than those without jobs to have access, parents of children under 18 living at home are more likely than non-parents to be online, and rural Americans lag behind suburban and urban Americans in the online population. Disabilities also keep some Americans from using the Internet.

- **There is great fluidity in the Internet population.** About a quarter of Americans live lives that are quite distant from the Internet – they have never been online, and don't know many others who use the Internet. At the same time, many Americans who do not use the Internet now were either users in the past or they live in homes with Internet connections.

Email continues to trump all as the most popular use of the Internet.

Internet users overwhelmingly rely on email as their communication tool of choice; more than nine in ten online Americans have sent or read email. In comparison, about one-half of all Internet users have tried instant messaging and one-quarter has participated in chat rooms or online discussions.

- About 102 million Americans were **email** users in December 2002, up 31% from 78 million in March 2000.

- **Instant messaging** has grown by about 33% — from 39 million who had ever tried IM as of March 2000, to 52 million in the summer of 2002. IM continues to appeal primarily to younger users.

- The number of people who have participated in **chat rooms** and online discussions increased by 21%.

Information-seeking activities have grown across the board since 2000 — most by 50% or more.

Overall, information-seeking activities are more prevalent among users with higher income and education levels, those with more experience online, and those with broadband access at home.

■ More than eight out of ten Internet users have searched the Internet to **answer specific questions**.

■ Spurred by an increase in content and the momentum of important **news** events in recent years, the online news population grew by 50%.

■ As Americans developed expectations about finding vital information on the Internet, those seeking **health information** online grew by 59%. There were about 46 million Americans who had looked for health or medical information online as of March 2000, and the figure grew to 73 million who had done so by December 2002. In fact, the figure is closer to 93 million, if a variety of health-related searches are asked of Internet users.

■ The number who seek **religious information** online has nearly doubled. While 18 million Americans had sought religious or spiritual information online by March 2000, approximately 35 million (94% more) reported they had done so by November 2002.

■ The number of those who have **used government Web sites** grew by 56% between 2000 and 2002.

■ Those who have searched for **political news** and information online grew by 57% between 2000 and 2002.

■ Over half of all Internet users have done **research for school or training online** — in March 2000 that translated to roughly 47 million Americans who had used the Internet that way. By September 2002, those who had done education-related research had grown by 34% to 63 million Americans.

■ The population of those who have done **work or research for their job** online (not including email) grew by 45% between March 2000 and November 2002. About 42 million had used the Web for work in 2000, and 61 million had done so in 2002.

As the online marketplace has matured; financial and transaction-based activities have grown more than any other type of online pursuit.

Similar to the pattern we have found with information-seeking activities, financial and transaction-based activities are most popular among users with greater income and education levels, those with more experience online, and those with broadband access at home.

- More than eight out of ten Internet users have **researched a product or service** online.

- Despite the burst of the dot-com bubble in 2000, **e-purchasing** continues to expand. In all, the number of people who had made purchases online grew by 63% since 2000.

- One of the fastest-growing activities we have tracked relates to **travel**. The number of online Americans who had bought tickets or made reservations for travel online grew by 87% between 2000 and 2002.

- The number of those who had sought **financial information** online, such as stock quotes or mortgage interest rates increased by 32% between 2000 and 2002.

- **Online banking** increased by 127% — more than any other activity about which we asked 2000 and 2002. In March 2000, just 15 million had tried some form of online banking, but by October 2002, 34 million had done so.

- About one in ten Internet users has **bought or sold stocks** online.

- **Online auction** participants have almost doubled since 2000 — there were about 24 million bidders and purchasers in the auction population by December 2002, up 85% from 13 million since March 2000.

Online Americans continue to explore new hobby and entertainment activities on the Internet.

In general, these online pursuits are more popular among the younger segments of the Internet population and those who have high-speed connections at home. Another common trend is that a higher proportion of online African-Americans and online English-speaking Hispanics do these activities compared to online whites, possibly because those online minority populations are younger than the white population.

- Three out of four Internet users have sought information about a **hobby** or interest online. The number of hobby seekers increased by 40% between March 2000 and January 2002 — from 65 million to 91 million.

- The number of online Americans who say they sometimes go online for no particular reason, just to **browse for fun** or to pass the time, has increased by 44% since March 2000. These recreational users of the Web grew from 54 million in March 2000, to 78 million in January 2002.

- The number of Internet users who **downloaded music** increased by 71% between 2000 and 2002. About 21 million online Americans had downloaded music files onto their computer as of the summer of 2000. By October 2002, there were an estimated 36 million users who had acquired music files this way.

- The online **sports** audience expanded by 73% between 2000 and 2002.

- Those who have **played games** online have increased by 45% — from 29 million in March 2000, to 42 million in June-July 2002.

America's Online Pursuits: Summary of Findings at a Glance
Close to two-thirds of Americans now go online to access the Internet; the growth in penetration slowed dramatically over the course of 2002, but has inched up slightly in 2003.
Internet use still differs significantly across some demographic groups.
Email continues to trump all as the most popular use of the Internet.
Information-seeking activities have grown across the board since 2000 – most by 50% or more.
As the online marketplace has matured, financial and transaction-based activities have grown more than any other type of online pursuit.
Online Americans continue to explore new hobby and entertainment activities on the Internet.
Source: Madden, Mary and Lee Rainie. America's Online Pursuits. Washington, DC: Pew Internet & American Life Project, December 28, 2003.

Overall Growth of Online Pursuits *Estimated growth in users who have ever done these activities (2000- 2002)*		
	First time we asked this	*Most recent time*	*Growth*
Activity	**Have done this (millions)**	**Have done this (millions)**	**%**
Bank online	15 *(March 2000)*	34 *(October 2002)*	127%
Look for religious or spiritual info	18 *(March 2000)*	35 *(November 2002)*	94%
Buy or make a reservation for travel	31 *(March 2000)*	58 *(December 2002)*	87%
Participate in an online auction	13 *(March 2000)*	24 *(December 2002)*	85%
Check sports scores or info	30 *(March 2000)*	52 *(September 2002)*	73%
Download music files to your computer	21 *(June–July 2000)*	36 *(October 2002)*	71%
Buy a Product	41 *(March 2000)*	67 *(December 2002)*	63%
Look for health or medical info	46 *(March 2000)*	73 *(December 2002)*	59%
Look for political news or info	30 *(March 2000)*	47 *(November 2002)*	57%
Look for info from a government site	40 *(March 2000)*	66 *(November 2002)*	56%
Research a product or service	64 *(March 2000)*	97 *(December 2002)*	52%
Get news	52 *(March 2000)*	78 *(December 2002)*	50%
Research for your job	42 *(March 2000)*	61 *(November 2002)*	45%
Play a game	29 *(March 2000)*	42 *(June-July 2002)*	45%
Surf the Web for fun	54 *(March 2000)*	78 *(January 2002)*	44%
Look for info on a hobby or interest	65 *(March 2000)*	91 *(January 2002)*	40%
Buy or sell stocks	10 *(March 2000)*	14 *(September 2002)*	40%
Research for school or training	47 *(March 2000)*	63 *(September 2002)*	34%
Send an instant message	39 *(March 2000)*	52 *(June-July 2002)*	33%
Get financial info	38 *(March 2000)*	50 *(September 2002)*	32%
Send or read email	78 *(March 2000)*	102 *(December 2002)*	31%
Search to answer a question	79 *(Sept -Dec 2000)*	98 *(September 2002)*	24%
Participate in a chat room or discussion	24 *(March 2000)*	29 *(June-July 2002)*	21%

Source: Pew Internet & American Life Project Surveys, March 2000-December 2002. Please see methodology section for sample sizes and margins of error for each survey. Note: Listening to music online is not included in this chart because the most recent data we have is from 2001. Creating content online has also been excluded due to the relatively short period of time in which we have asked about it.

Daily Growth of Online Pursuits *Estimated growth in users who do these activities on a typical day (2000- 2002)*		
	First time we asked this	**Most recent time**	*Growth*
Activity	**Do on a typical day (millions)**	**Do on a typical day (millions)**	**%**
Bank online	4 *(March 2000)*	8 *(October 2002)*	100%
Buy a Product	3 *(March 2000)*	6 *(December 2002)*	100%
Download music files to your computer	3 *(June–July 2000)*	6 *(October 2002)*	100%
Look for info from a government site	6 *(March 2000)*	12 *(November 2002)*	100%
Check sports scores or info	7 *(March 2000)*	14 *(September 2002)*	100%
Research a product or service	12 *(March 2000)*	21 *(December 2002)*	75%
Look for political news or info	9 *(March 2000)*	15 *(November 2002)*	67%
Look for religious or spiritual info	3 *(March 2000)*	5 *(November 2002)*	67%
Play a game	5 *(March 2000)*	8 *(June-July 2002)*	60%
Research for your job	14 *(March 2000)*	22 *(November 2002)*	57%
Get news	19 *(March 2000)*	29 *(December 2002)*	53%
Look for info on a hobby or interest	15 *(March 2000)*	22 *(January 2002)*	47%
Surf the Web for fun	18 *(March 2000)*	26 *(January 2002)*	44%
Search to answer a question	16 *(Sept -Dec 2000)*	22 *(September 2002)*	38%
Participate in an online auction	3 *(March 2000)*	4 *(December 2002)*	33%
Research for school or training	9 *(March 2000)*	12 *(September 2002)*	33%
Send an instant message	10 *(March 2000)*	13 *(June-July 2002)*	30%
Participate in a chat room or discussion	4 *(March 2000)*	5 *(June-July 2002)*	25%
Send or read email	45 *(March 2000)*	54 *(December 2002)*	20%
Look for health or medical info	6 *(March 2000)*	7 *(December 2002)*	17%
Buy or make a reservation for travel	1 *(March 2000)*	1 *(December 2002)*	0%
Get financial info	13 *(March 2000)*	12 *(September 2002)*	-8%
Buy or sell stocks	3 *(March 2000)*	1 *(September 2002)*	-67%

Source: Pew Internet & American Life Project Surveys, March 2000-December 2002. Please see methodology section for sample sizes and margins of error for each survey. Note: Listening to music online is not included in this chart because the most recent data we have is from 2001. Creating content online has also been excluded due to the relatively short period of time in which we have asked about it.

Contents

Three-quarters of Internet users have looked for information on their hobbies or interests.

Two-thirds of users have gone online just for fun.

About a third of users download music files.

Slightly more users have listened to music online.

The use of the Internet to check sports scores or information has increased significantly, particularly among young people.

Online gaming has grown modestly but steadily.

About a fifth of users create content for the Internet, and most of them have high-speed connections.

Part 6. Conclusions

Major changes in technologies of access, the maturation of Internet users, and the development of new applications and content are three likely factors that have contributed to the growth of online pursuits.

Different demographic groups use the Internet in different ways.

The Internet is the killer app.

Methodology

Appendix

Acknowledgements

About the Pew Internet & American Life Project:

The Pew Internet Project is a nonprofit, non-partisan think tank that explores the impact of the Internet on children, families, communities, the work place, schools, health care, and civic/political life. The project aims to be an authoritative source for timely information on the Internet's growth and societal impact. Support for the project is provided by The Pew Charitable Trusts. The project's Web site: www.pewinternet.org

About Princeton Survey Research Associates:

PSRA conducted the surveys that are covered in this report. It is an independent research company specializing in social and policy work. The firm designs, conducts, and analyzes surveys worldwide. Its expertise also includes qualitative research and content analysis. With offices in Princeton, New Jersey, and Washington, D.C., PSRA serves the needs of clients around the nation and the world. The firm can be reached at 911 Commons Way, Princeton, NJ 08540, by telephone at 609-924-9204, by fax at 609-924-7499, or by email at ResearchNJ@PSRA.com

Part 1.

Introduction

Americans' everyday applications of the Internet continue to expand over time.

The Pew Internet & American Life Project has been studying Americans' Web usage and its impact on society since March 2000. As a central element of its research, the project has been identifying and measuring a host of Internet trends and activities that characterize the online world. In some cases, such as getting health information or downloading music online, we have released in-depth reports that provide historical context, demographic analysis, and policy implications for a particular online phenomenon. For other topics, such as online banking, we have provided brief data memos that document the growth of a certain online activity. And in some cases, we have examined an activity (such as creating content for the Web) in the context of a particular population (home broadband users).

In all, we have asked Americans about more than 50 different types of Internet activities in our tracking surveys — everything from instant messaging to searching for a home online — between March 2000 and August 2003. Over the years we interviewed more than 64,000 American adults about their Internet use. The information contained in this report is intended to function as an overview of the demographic material we have gathered about Internet users through August 2003 and the 25 core activities we have tracked with some frequency through December 2002. Each section provides snapshots of how the prevalence of a particular activity has changed over time, pointers to our previous findings on the topic, and basic demographic trends.[2] A full rundown of our latest findings about each activity can be found on our Web site.[3]

Throughout this report, our survey results are used to estimate the approximate number of American adults, in millions, who were engaging in Internet activities during a particular period. These figures are derived by applying the results from our nationally representative surveys to Census Bureau's estimates of the number of adults living in households with telephones in the continental United States. The Census Bureau updates these estimates at the end of each year. The schedule of estimates that were used in this

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[2] The demographic analysis across racial categories is generally limited to Internet users who are white, African-American or English-Speaking Hispanic because we typically do not gather enough respondents from other racial minority backgrounds in each survey to conduct meaningful analysis of these smaller groups.

[3] The table that lists the percentage of Internet users who have "ever done" all 50-plus activities we have probed is available at: http://www.pewinternet.org/reports/chart.asp?img=Internet_Activities_11.6.03.htm. The table that lists the percentage of users who do those activities on a "typical day" is available at: http://www.pewinternet.org/reports/chart.asp?img=Daily_Activities_11.7.03.htm.

report to calculate the number of people doing any given activity online was as follows: 188 million American adults was used as the baseline for estimates from our March 2000-December 2000 surveys, 191 million for February 2001-December 2001 surveys, 193 million for January 2002-December 2002 surveys, and 200 million for March 2003 to the present. As with all survey results, these figures are estimates. Any given figure could be somewhat larger or smaller, given the margin of sampling error associated with the survey results used in deriving these figures.

Part 2.

Web Use and Communication Activities

Close to two-thirds of Americans now go online to access the Internet.

- 63% of Americans now go online — last measured in our August 2003 survey.

- That amounts to 47% growth in the U.S. adult population using the Internet, from 86 million in March 2000 to 126 million in August 2003.

- 52% of Internet users go online on a typical day, as of August 2003. That figure amounts to 66 million people and has grown from 52 million who were online during a typical day in March 2000.

- 87% of U.S. Internet users said they have access at home, and 48% said they have access at work in our August survey.

- 25% said they use the Internet at times from some place other than home or work in our March–May 2003 survey.

- 31% of Internet users who go online from home have broadband as of August 2003.

- African-Americans and seniors are among least likely to go online.

- Internet use is strongly tied to higher levels of education and household income.

- Parents are more likely than non-parents to use the Internet.

With fewer new users logging on, the Internet population matures

When the Pew Internet & American Life Project first started measuring Internet usage in March 2000, 46% of American adults (roughly 86 million people) had logged on to access the Web or to send and receive email. That portion was more than three times the size of the online population documented by the Pew Research Center for The People & The Press in 1995 — just 14% of Americans were identified as "online users" at that time.[4]

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[4] The Pew Research Center for The People & The Press used to be called the Times Mirror Center for The People & The Press. Its data were carried over to the Pew Research Center when it became funded by the Pew Charitable Trusts in 1996. For additional information about Internet adoption, please see: "Technology in the American Household: Americans Going Online…Explosive Growth, Uncertain Destinations." October 16, 1995. Note: The 1995 figures combine responses to two separate questions to determine the percentage of online Americans: (1) Do you or anyone in your household ever use a modem to connect to any computer bulletin boards, information services such as CompuServe or Prodigy, or other computers at other locations? (2) Do you, yourself, ever use a computer at (work) (school) (work or school) to connect with computer bulletin boards, information services such as America Online or Prodigy, or other computers over the Internet? Available through the Pew Center for People and the Press: http://www.people-press.org

Internet use proliferated through the late 1990s and into 2000. By August 2003, the Pew Internet Project's survey found that 63% of American adults were online. Taking the overall growth of the U.S. population into account, that represented an estimated 126 million people, up 47% from the 86 million who were online in our first survey in March 2000.

However, most of that growth occurred over the course of 2000 and slowed dramatically in the fall of 2001 and thereafter, suggesting that the dramatic growth of Web use in America had tapered off. As the Internet increasingly became a part of everyday life for Americans, there were no longer droves of new users rushing online. Instead, small fluctuations in the overall population indicated that as new people came online, others were dropping off. This flattening trend appeared across all demographic groups and not just among those who were early adopters and have reached high penetration levels, such as upper-income and upper-education groups.

After Rapid Growth, Americans' Internet Adoption Slows
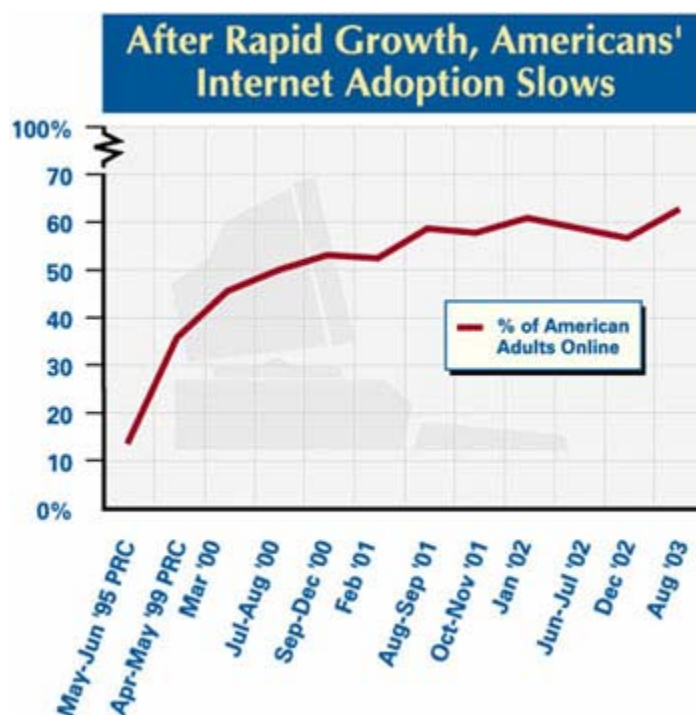
The same slowing has also been evident among those who use the Internet on a typical day. While these "daily" users grew by over 10 million Americans between March 2000 and December 2002, the proportion of all Internet users who go online on an average day remained slightly under 3 in 5 throughout 2002.

> The percentage of Internet users who said they went online "yesterday" in our surveys is also referred to as those who go online on a "typical day."

Over time, levels of Internet experience have shifted as well. In March 2000, 18% of Internet users had been online for 6 months or less, 21% had been online for 1 year, 33% for 2-3 years, and 28% had used the Internet for more than 3 years. In contrast, our December 2002 data revealed that the large majority of online Americans had reached "veteran" status; just 1% had used the Internet for less than a year, 6% for about 1 year, 23% for 2-3 years, and 68% had been online for more than 3 years. And most recently, when we surveyed in August 2003, 2% had used the Internet for less than a year, 5% for about 1 year, 19% for 2-3 years and 74% had been online for more than 3 years.

The way people connect to the Internet has also evolved. Though most online Americans still log on from home (87% of U.S. Internet users had access at home and 48% had access at work in our August 2003 survey), about a third are doing so with high-speed connections. That translates to roughly 39 million American adults who now have some type of high-speed access at home (as of August 2003). In comparison, 25% of home Internet users said they had high-speed connections in our December 2002 survey, and just 6% of home Internet users had broadband when we first started asking about it in June 2000.

During the formative stages of Web use, men were much more prominent in the online world than women. According to Pew Research Center from 1995, 18% of adult men were online in America, while only 10% of adult women were Internet users. Women have since reached parity within the population of Internet users. In August of this year, 65% of men and 61% of women were online. Since there are more women in the United States than men, this meant that the Internet population was about 51% female. However, male Internet users have been more likely than online women to access the Web on a typical day.

> "Veteran" Internet user – someone who has been online for more than 3 years.

Change has also occurred in the racial and ethnic composition of the Internet population. Whites predominated in the mid-1990s, minorities saw high growth rates at the turn of the century, and the growth in all groups slowed in 2002. Whites hit 63% for Internet penetration in January 2002, dipped somewhat in the months after that, then hit 64% in August 2003. English-speaking Hispanic users, who demonstrated marked growth, reached 61% in September 2002 and then 62% in August 2003.[5] Overall, African-Americans have also exhibited considerable growth over the past 3 years, but their penetration rates still remain well below whites and Hispanics. In December of 2002 45% of African-Americans said they were online, and in August 2003, 51% said so.

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[5] The Pew Internet Project has changed the way it defines race since 2000. English-speaking Hispanics are defined as those who respond "yes" to the following question: "Are you, yourself, of Hispanic or Latino origin or descent, such as Mexican, Puerto Rican, Cuban, or some other Latin American background?" Now, "white" is defined as "white, non-Hispanic" and "black" as "black, non-Hispanic." Previously, our definitions of white and black included those of Hispanic or Latino ethnicity within them.

African-American Users Remain the Least Connected
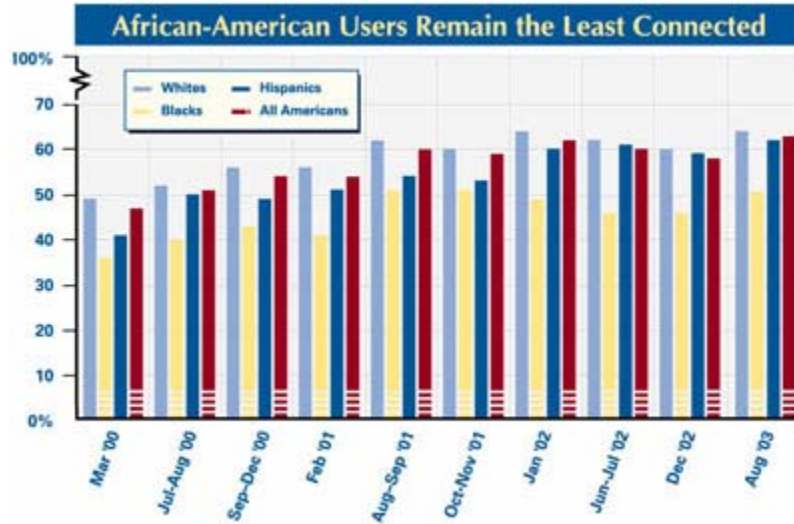
When it comes to age, those who are 18-29 have been among the most wired demographic groups from the onset of Internet growth. By March 2000 when we began our surveys, 64% of these young adults were already online, which compared to 56% of 30- to 49-year olds, 36% of the 50-64 age group, and 12% of those aged 65 and over. Internet use among young adults blossomed over the next 2 years and reached 80% penetration in January of 2002. It then contracted back to 72% by December of that year, but rose back up to 83% in August 2003. The 30-49 age group also leveled off over 2002, so that 67% were online in December. But by August of this year, 73% of 30- to 49-year olds said they used the Internet. Similarly, the 50- to 64-year olds stabilized at exactly 55% for all but one survey period during 2002 but then grew to 59% in our August survey. The least wired age group, those 65 and over, has come online slowly but steadily since 2000, and showed only negligible growth over the course of 2002 and 2003 — 20% of seniors were online in December 2002, and 22% reported use of the Internet in our August 2003 survey.

Younger Users are More Wired, but Older Users Show Some Growth
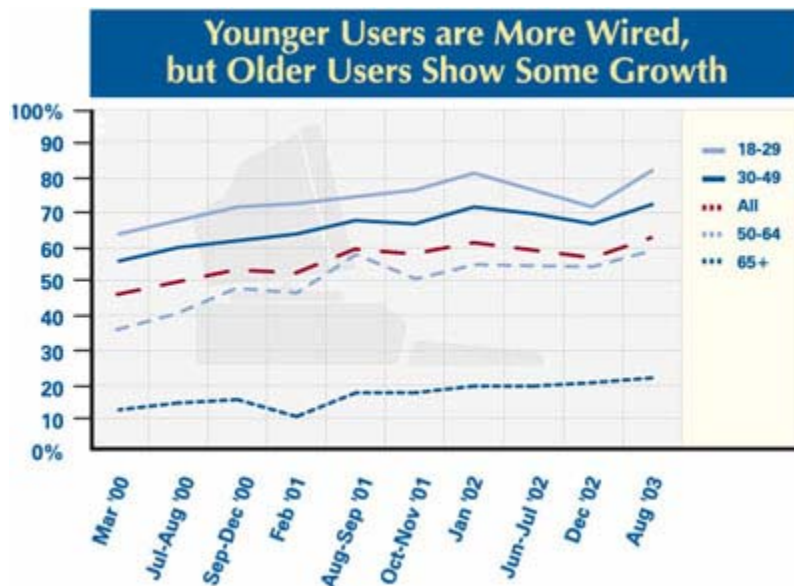
Other demographics confirm the slowdown in Internet growth.

The data from the various education and income groups further confirms the slowed growth of the online population in 2002. Of particular note was a decline in the number of people with less than a high school degree who are online. Thirty-one percent said they were online in our January 2002 survey, while just 19% said they were Internet users in December 2002. By our August 2003 survey, those with less than a high school degree had gone back up to 26%, but that is still less than half the percentage of high school graduates who said they use the Internet.

We have repeatedly found in our research that those with higher income and education levels are much more likely to be Internet users. As was noted in our "Ever-Shifting Internet Population" report[6], when income is considered independent of all other factors, having a household income above $50,000 annually predicts Internet use. Similarly, a high level of education was also shown to be a strong predictor of Internet use.

Parents have time and again been more likely to access the Internet than non-parents; 55% of parents and 42% of non-parents said they were online in our March 2000 survey compared to 75% of parents and 57% of non-parents who reported usage in August 2003.

> For more information on the evolution of Internet use, please see the appendix for a full list of Pew Internet & American Life Project Reports.

Almost all who are online have sent or read email.

- 93% of Internet users have sent or read email according to our December 2002 survey.

- That amounts to 31% growth from 78 million in March 2000 to 102 million in December 2002.

- African-Americans are among the least likely to say they use email.

- More in upper education and income groups use email than those in lower socio-economic groups.

- High-speed connections and experience online matter most when looking at Internet users' frequency of emailing.

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[6] Please see, "The Ever-Shifting Internet Population: A new look at Internet access and the digital divide." Pew Internet Project, April 2003. Available at: http://www.pewinternet.org/reports/toc.asp?Report=88.

Email remains the most popular Internet activity

Sending and reading email is by far the single most popular use of the Internet. More than nine out of ten Internet users, or approximately 102 million Americans, use email, and half of the online population is sending or reading email on an average day. Learning to use email is often the inaugural activity for new users and is often the impetus for non-users to take the leap and come online.
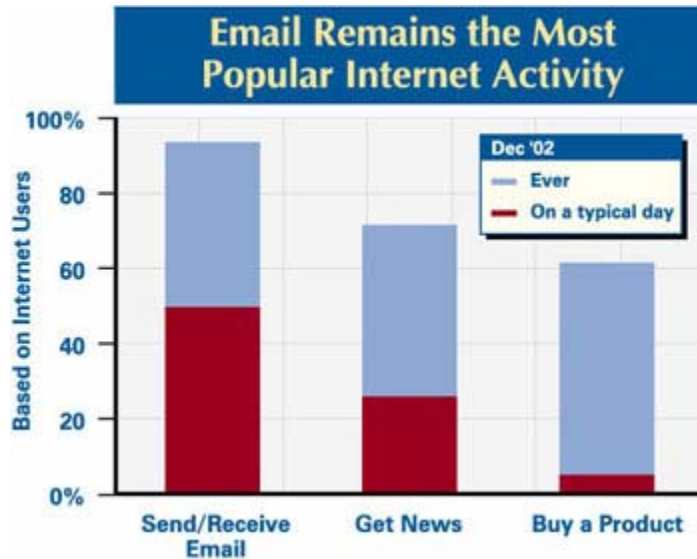
The use of email has become such a seamless part of everyday life for Americans that it seems hard to imagine life without it. Having an email address is the norm, and checking one's email inbox has become almost as routine as stepping out one's front door to check for "snail" mail.

When the Pew Research Center polled Americans in 1995, only 72% of online Americans said they had used email, but 5 years later, in our March 2000 survey, that number had leapt to 91%. While the percentage of Internet users who had used email did not change dramatically over the next 3 years, the online population continued to grow, and the number of emailers swelled by roughly 24 million people between 2000 and 2002. The number of online Americans who send or read email on a typical day grew from 45 million in March 2000 to 54 million in December 2002.

We have documented the power and impact of email in our reports. For example, we have found that the use of email reinforces Internet users' social connectedness to family and friends; the longer a user is online, the more likely she is to cite the positive effect email has on her social ties.[7] Email has also become an effective tool at the workplace;

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[7] For more information on email and social ties, see: "Tracking Online Life: How Women Use the Internet to Cultivate Relationships with Family and Friends," available at: http://www.pewinternet.org/reports/toc.asp?Report=11.

the vast majority of work emailers say it helps them communicate better on the job.[8] Further, we have reported that email has helped citizens communicate more efficiently with their local government officials; among other benefits, email is helping officials better understand their constituents and helping to facilitate public debate.[9]

In the first report the project issued, "Tracking Online Life: How Women Use the Internet to Cultivate Relationships with Family and Friends," we noted that the social impact of email was particularly pronounced among women. Women were much more likely than men to say that email had played a role in improving relationships, and they were also more likely to say that they looked forward to checking their email. That positive attitude toward email has been reflected in female Internet users' slightly more aggressive uptake of email over the course of our research. In December 2002, for example, 95% of female Internet users said they used email, while only 90% of male Internet users said so. However, men and women were equally as likely to say they receive or send email on a typical day.

African-American Internet users have been less likely than white users to say they use email. In our June–July 2002 survey, for example, 87% of online African-Americans said they used email, compared to 93% of online whites. This trend is even more apparent on any given day online; 39% of African-American users were emailing on a typical day in November 2002, while 54% of white users were doing so.

Email usage by online English-speaking Hispanics has also differed most noticeably on a typical day. In November 2002, for instance, 94% of Hispanics had used email compared to 93% of whites. However, on a typical day during that survey period, 39% of online Hispanics were sending and reading email, while 54% of white users were doing so.

Even though many other online activities hold limited appeal to senior citizens, email has been completely embraced by Internet users over the age of 65. Often encouraged by younger family members to start using email, wired seniors can be fervent message senders. In our surveys, their use of email has typically held steady or marginally surpassed the overall trend of all users. This is also true of seniors who use email on any given day.

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[8] For more information on work email, see: "Email at work: Few feel overwhelmed and most are pleased with the way email helps them do their jobs," available at: http://www.pewinternet.org/reports/toc.asp?Report=79.

[9] For more information on how local officials use email, see "Digital Town Hall: How local officials use the Internet and the civic benefits they cite from dealing with constituents online," available at: http://www.pewinternet.org/reports/toc.asp?Report=74.

More Seniors Use Email Than Do Other Activities Online
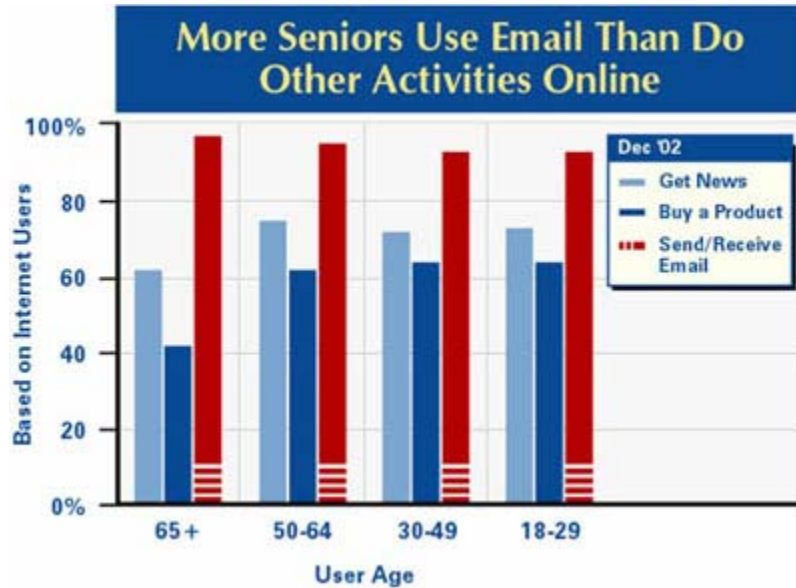
Other demographics

Over time, education and income levels have become less important factors distinguishing heavy email users from others. For example, while 39% of high school graduates were sending email on a typical day in December 2002, 61% of college graduates were doing so. Thirty-seven percent of users living in households earning less than $30,000 per year sent or read email on a typical day last December, compared to 58% of users living in households earning $75,000 or more.

Experience online has also come to matter most when looking at the frequency of email use — 28% of those who have been online for 1 year or less sent or read email on a typical day in December while 49% of those with 4-5 years of experience did so.

High-speed Internet connections appear to influence the rate of email use as well; broadband users send and receive email more frequently than dial-up users. In December 2002, 70% of home broadband users were sending or reading email on a typical day while just 47% of dial-up users were doing so.

For more information on email use, please visit the following Pew Internet & American Life Project Reports:

Email at Work: Few feel overwhelmed and most are pleased with the way email helps them do their jobs.
http://www.pewinternet.org/reports/toc.asp?Report=79

Spam: How it is hurting email and degrading life on the Internet
http://www.pewinternet.org/reports/toc.asp?Report=102

About half of Internet users send Instant Messages.

■ 46% of online Americans have sent instant messages according to our June–July 2002 survey.

■ That represents growth of 33% from 39 million in March 2000, to 52 million in June-July 2002.

■ Young adults and Internet veterans are among the most fervent IM users. (Our special study of teenagers showed they are the most fervent IM users of all.)[10]

■ There are more IM users in lower education and income groups than in many other online activities.

■ A high proportion of online Hispanics are IM users.

■ Those with broadband access and those with high levels of experience online are more likely to have used IM compared to dial-up users and those with less experience online.

Instant messaging programs allow Internet users to have real-time conversations with other "buddies" who are online at the same time. While instant messaging (also referred to as IM) has overwhelmingly been the province of teenagers, nearly half of all American adults who are online have sent an instant message at one time or another. When we last asked about this activity in the summer of 2002, about 52 million people (46% of all Internet users) had tried some type of instant messaging and about 10 million (11% of Internet users) were exchanging IMs on any given day online. That is up from 39 million (45% of Internet users) who had used IM in March 2000 and 10 million (12% of Internet users) who used it on a typical day. Comparatively, when we interviewed teenagers in November and December 2000, three-quarters (74%) had used IM and a third (35%) said they did so *every* day.

Instant messaging is far from outpacing email, but we have repeatedly found that Internet users are almost twice as likely to use IM as they are to take part in a chat room. Furthermore, they are three times as likely to use IM on a typical day compared to chatting.

Instant messaging has appealed similarly to both men and women as an online communication tool. Overall, IM is slightly more common among women than men. However, men are more likely than women to be IM-ing on any given day.

Similar to the racial trends in chatting online, IM-ing is especially popular among English-speaking Hispanic users. More often than not, Hispanics have been the most enthusiastic users of IM compared to African-American and white users. In the summer

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[10] See "Teenage Life Online: The rise of the instant-message generation and the Internet's impact on friendships and family relationships." (Pew Internet Project, June 2001)
http://www.pewinternet.org/reports/toc.asp?Report=36

of 2002, 64% of English-speaking Hispanic users said they had used IM, while only 46% of whites and blacks reported doing so. The difference was even more pronounced for those who were using IM on a typical day (23% of English-speaking Hispanics, 10% of whites, and 7% of blacks).[11]

In keeping with our findings on teens' disproportionately high usage of IM, the greatest variations among instant messaging use are most evident when comparing activity levels across different age groups. Considering that some of the teens we interviewed in 2000 are now young adults, it is not surprising to see that by the summer of 2002, 18- to 29-year-olds were by far the most enthusiastic adult users of IM.
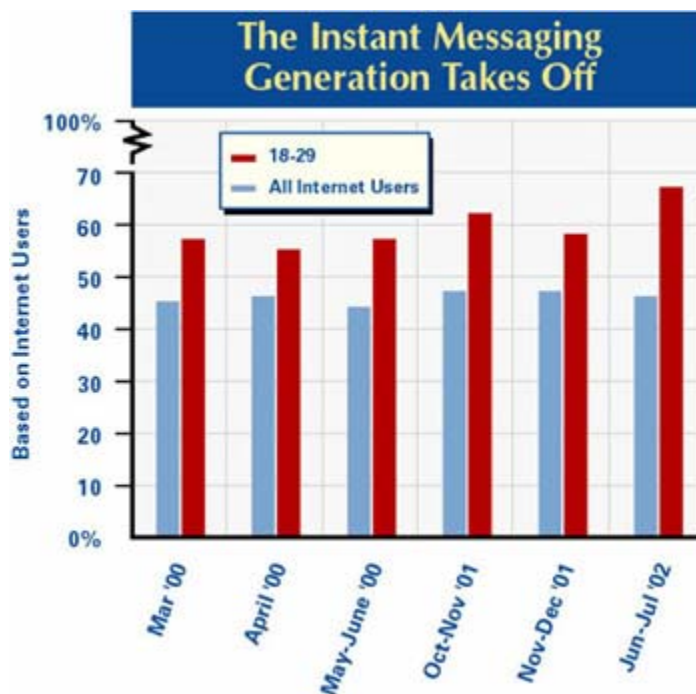
Other Demographics

Because instant messaging has been such a youth-oriented activity, it is understandable that there are higher proportions of IM users in the lower education and income groups. When we last asked about IM in 2002, half of those with a high school education or less had used IM, while only 39% of those with a college degree had done so. Similarly, 54% of those who had a household income below $30,000 used IM, compared to 44% of those with income levels of $75,000 and above.

We have repeatedly found that when it comes to adults, instant messaging is an activity where experience matters. Our 2002 data showed that those with 4 or more years of experience were almost three times as likely to have used IM on an average day compared to those with only 1 year (or less) of experience online. Broadband users were

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[11] The n for online English-speaking Hispanics in the June-July 2002 survey was 96.

somewhat more ardent instant messagers than dial-up users; 16% of them used IM on a typical day, while 12% with dial-up connections did so.

For more information on Instant Messaging and Youth, please see the Instant Messaging section of the Pew Internet Project report:

Teenage Life Online: The rise of the Instant Message generation and the Internet's impact on friendships and family relationships
 http://www.pewinternet.org/reports/toc.asp?Report=36

About a quarter of Internet users have taken part in chat rooms or online discussions.

- 25% of users have participated in chat rooms or online discussions, according to our latest figures from a survey in June–July 2002.

- The number of people who have used chat rooms or online discussions has grown a modest 21% — from 24 million in March 2000, to 29 million in June-July 2002.

- Men are more likely than women to have used chat rooms or online discussions.

- Chat rooms and online discussions are most popular among young adults, and minority Internet users.

- Relatively high proportions of those in lower income groups and those with lesser educational attainment have used chat rooms and online discussions.

- Compared to IM, a very small percentage of Internet users take part in chat rooms or online discussions on a typical day online.

Participation in chat rooms and online discussions plateaus

Engaging in chat rooms or online discussions has grown minimally over the course of our research, but more than a quarter of Internet users — roughly 29 million Americans — said they had used this mode of communication the last time we polled this question in the summer of 2002. That compares to 52 million who said they used instant messaging during that period and 106 million who used email. The proportion of Internet users who were taking their discussions online was actually slightly higher in March 2000 (28%) than in 2002 (25%), but because the total online population has grown, the estimated number of people doing this activity grew by approximately five million Americans in that time (from 24 million to 29 million).

A relatively small proportion of Internet users take part in chat rooms or online discussions on a typical day. Just 4% reported doing so in the summer of 2002, compared to 11% who were sending instant messages and 46% who were sending and reading email on an average day during that period. Overall, the estimated number of users taking their discussions online on a typical day grew from 4 million to 5 million between 2000 and 2002.

Online discussions can take place in a variety of different settings and the topics that people choose to engage range from lighthearted gossip to serious elicitations about severe medical conditions. Aside from social and health-related issues, Americans will discuss just about anything online; we have found that pop culture, hobbies, politics and religion are just a few of the many things people bond over and debate about online. In addition, many Web sites now offer online help and consultation via chat technologies as a standard feature. For example, users can readily ask questions of librarians, nurses, and computer experts or participate in live discussions with celebrities via the Internet.

The archivable nature of online discussions makes them a valuable resource for documenting public reaction to significant historical events. Following the events of September 11th, many Americans turned to chat rooms as a place to discuss the tragedy. The transcripts of these exchanges provide a powerful record — containing personal stories, opinions, and reflections — of the way people responded and interacted after this traumatic period.[12]

However, this potential for electronic documentation also causes some users to shy away from sharing their thoughts online for fear that their comments could be traced or otherwise be used against them. Others feel that the relative anonymity of chat rooms and online discussions provides safe harbor to discuss issues that they may not feel comfortable talking about in face-to-face interactions.

In contrast to what we have found with email and instant messaging, men have been somewhat more likely than women to participate in chat rooms or online discussions. In a 2002 survey, 28% of online men had conversed online, while 22% of online women said they had done so. On a typical day, men and women have become equally likely to chat and engage in online discussions —4% of each group did so in 2002.

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[12] For more information on how the Internet was used after September 11th, please see: "The Commons of the Tragedy: How the Internet was used by millions after the terror attacks to grieve, console, share news, and debate the country's response," available at: http://www.pewinternet.org/reports/toc.asp?Report=46.

Men More Likely to Chat Online
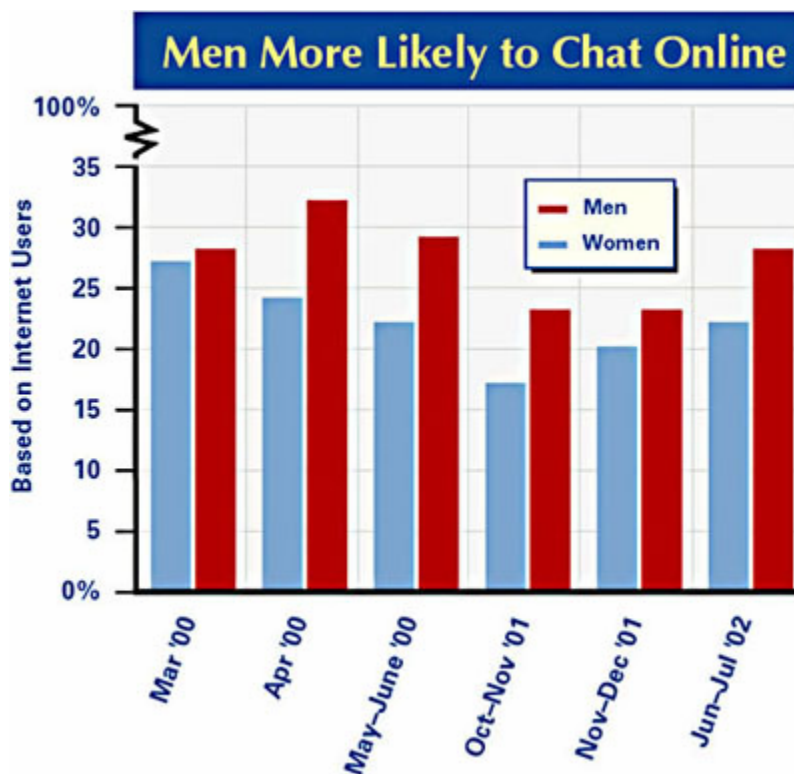
Over time, there has been evidence that online English-speaking Hispanics and online African-Americans are more likely to have participated in online discussions and chat rooms compared to online whites. In the June–July 2002 survey, 40% of English-speaking Hispanic users had engaged in online conversations, while 35% of African-American users and only 22% of white users had done so.[13]

As is the case with instant messaging, teens and young adults clearly occupy most of the traffic to chat rooms and other online discussions. In our research on teens in mid-2001, we found that 55% of online teens had visited a chat room (they were not asked about participation in an online discussion other than chat rooms). In our 2002 research on adult Internet users, 47% of 18- to 29-year-olds said they communicated via online discussions and chat, but less than half as many, only 21% of the next age bracket (30- to 49-year-olds) said they had done this. That age gap has been consistently reproduced every time we ask this question, with users over the age of 50 being the least likely to use these communication tools.

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[13] The n for online English-speaking Hispanics in the June-July 2002 survey was 96.
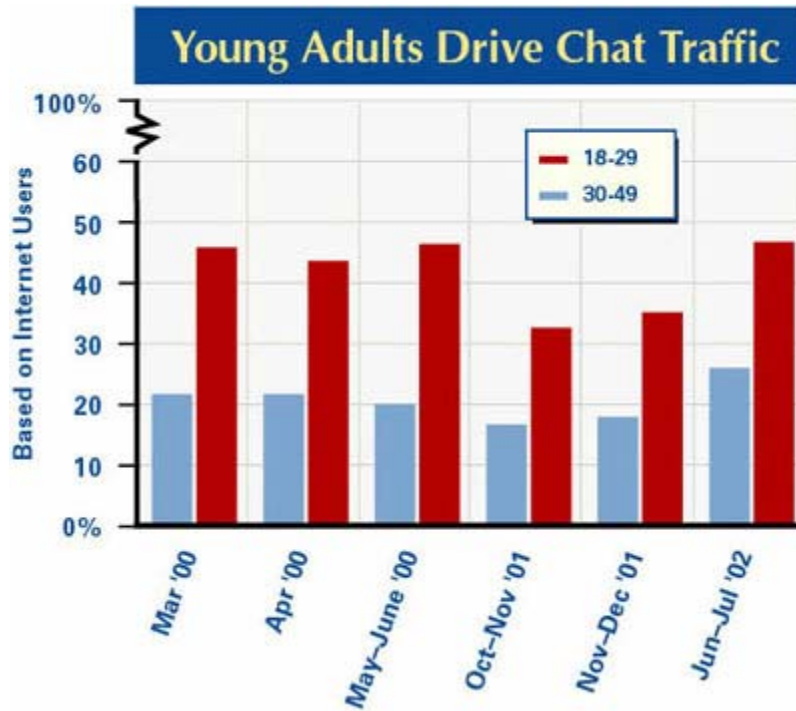
Other demographics

Those with the least education and lowest income levels are among the most likely to have participated in online conversations. In the summer of 2002, 27% of Internet users with high school educations had participated in chat rooms or online discussions, while just 17% of college graduates reported doing so. During the same survey, 39% of Internet users in households earning under $30,000 per year had tried chatting online, but just 19% of those in households earning $75,000 or more had done this.

Connection speed seems to affect the frequency with which a user is likely to converse online, but broadband users are generally no more likely to have tried chat or online discussions than dial-up users.

Another finding that may be linked to age is that users with less experience online have become more likely to use these communication features. In addition, single online parents are more likely to say they have had conversations on the Internet than married parents who are online. Likewise, Internet users in college are twice as likely to have online discussions compared to the overall online population.[14]

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[14] For more information on parent Internet users, please see "Parents Online," available at: http://www.pewinternet.org/reports/toc.asp?Report=75. For more information on college Internet users, please see "The Internet Goes to College," available at: http://www.pewinternet.org/reports/toc.asp?Report=71.

Part 3.

Information Utility Activities

Most Internet users have searched for answers to specific questions.

- 83% of users have done a search online to answer a specific question, according to our latest survey on the subject in September 2002.

- The number of those who have used the Internet to answer questions grew 24% from 79 million to 98 million between the fall of 2000 and September 2002.

- English-speaking Hispanic users are among least likely to use the Internet this way.

- There are more searchers among those with higher education levels (college degrees) than among those who completed high school.

- Those with the most experience online and those with broadband connections are more likely than others to do online searches for information on any given day.

The act of using the Internet to answer basic questions is second only to email in its popularity as an online activity and easily one of the most essential functions of the Internet. More than eight out of ten online Americans say they have searched the Web for answers to their questions. That translated into 98 million Americans who had turned to the Web for their queries in September 2002, up from 79 million in late 2000. About a fifth of Internet users or about 22 million people go online on a typical day for this reason, according to our survey in September 2002 (up from 16 million in 2000).

Often one of the first activities that new users try, searching is an important step in how newcomers to the Web come to value the Internet as an everyday reference for finding useful information. Also, it is an important exercise in learning how to sift through the sometimes unreliable or irrelevant information that one can encounter during Web browsing. In the past, we have identified this activity as part of the early "search and learn" mode that allows new users to become comfortable with the fundamental workings and navigation of the Web.[15]

Internet searching is an umbrella activity that encompasses many of the other more specific activities we ask about. For example, the people who do this activity might also say they use the Internet to look for health information, do research for school, or research a product. These searches might begin by using a general search engine like Google or by navigating directly to a more specialized resource site like WebMD.

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[15] As discussed in "New Internet Users: What They Do Online, What They Don't and Implications for the Net's Future." Available at: http://www.pewinternet.org/reports/toc.asp?Report=22.

When using a search engine, users need not have a specific question in mind, but may simply type a subject or name of interest into the search field. In January 2002, we asked: "Do you ever use an online search engine to help you find information on the Web?" At that time, 85% of Internet users had used search engines and 29% were using these searching tools on a typical day.[16] The act of searching the Internet to answer questions appeals equally to men and women. However, over time, men have become increasingly more likely to report that they do these focused searches on a typical day (22% of online men do this on an average day vs. 15% of online women in September 2002).

African-American Internet users have become more likely to conduct Internet searches since we first started polling on this activity. The last time we asked this question, 85% of online blacks said they went online for answers, while 84% of white users said so. In comparison, English-speaking Hispanic Internet users have remained the least likely to search; the portion that says they submit their queries online has consistently been around 73%.[17]
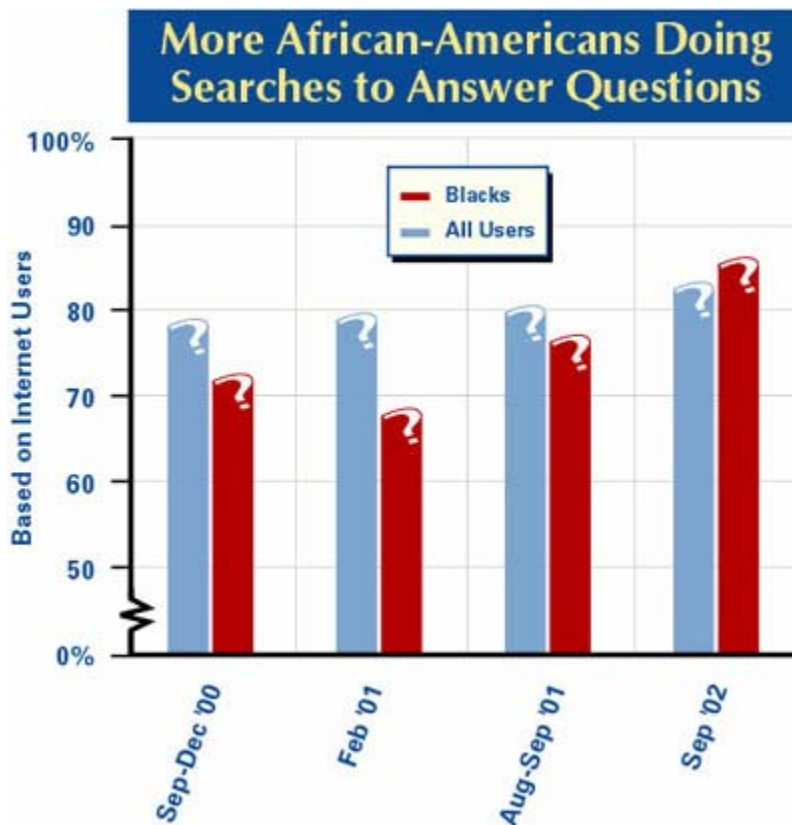
Age is of little import when it comes to posing one's questions online. All users aged 18-64 have generally been equally as likely to say they have conducted online inquiries to

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[16] For more on search engines, please see "Search Engines: A Pew Internet Project Data Memo." Available at: http://www.pewinternet.org/reports/toc.asp?Report=64.

[17] In the September 2002 survey, the unweighted n for English-speaking Hispanic Internet users was 90 and the unweighted n for African-American users was 90.

find the answers they need; a little over eight in ten said they did so in September 2002, up slightly from 2000. Online Americans who are 65 and older have been less likely to do Internet searches compared to their younger counterparts. Still, the vast majority of wired seniors have probed their questions online; 7 in 10 wired seniors said they had made these queries in our September 2002 survey.

Other demographics

The higher an Internet user's level of education, the more likely it is that she has used the Internet to help answer a question. For instance, we found in mid-2002 that 80% of those with high school educations said they had used the Internet to answer questions, compared to 87% of those with a college degree.

Similarly, the more experience online that an Internet user has, the more likely it is he has gone online to answer questions on any given day. In September 2002, 23% of Internet users who had been online for 4 or more years reported searching for answers to specific questions on a typical day, compared to only 4% of those with 1 year or less of online experience who did so.

Having access to a high-speed connection at home can make one's online searching a more seamless part of everyday life. Our September 2002 data indicate that a higher proportion of broadband users go online for answers and do so more often than dial-up users. Twenty-six percent of home broadband users went online the day prior to the survey to search for an answer to a question they had, while 18% of dial-up users did so.

For more information on Internet searching, please visit the following reports and see appendix:

Search Engines: A Pew Internet Project Data Memo
http://www.pewinternet.org/reports/toc.asp?Report=64

The Broadband Difference: How online Americans' behavior changes with high-speed connections at home
http://www.pewinternet.org/reports/toc.asp?Report=63

New Internet Users: What they do online, what they don't and implications for the Net's future
http://www.pewinternet.org/reports/toc.asp?Report=22

The vast majority of Internet users have gone online to get news.

- ■ 71% of Internet users have gone online to get the news, according to our survey in December 2002. This represents growth of 50% from 52 million who reported getting news online as of March 2000 to 78 million who had done so, as of December 2002.

- ■ Online men are more likely than online women to get news from the Internet.

- A greater proportion of those with high household incomes and high levels of education have used the Internet to get news compared to those with less income and education.

- Those with high-speed connections at home and those with greater levels of experience online are more likely to do online news searching.

Online newsgathering expands, fueled by major public events

Approximately 78 million Americans had used the Internet to get news as of December 2002. This was up from 52 million who had gotten news online as of March 2000. At that time, 60% of Internet users got news online and in December 2002, 71% had done so. For comparison's sake, getting news online is more popular than buying a product or looking for health information online. Still, the act of getting news is done by fewer people than the act of researching a product online before buying it, for example.

The frequency of newsgathering also grew steadily over the time we have been conducting surveys. In March 2000, roughly 19 million Americans were getting news online on a typical day. By December 2002, that number had grown to about 29 million.

The Pew Research Center has been tracking Americans' interest in online news since 1995. According to a survey conducted between May and June of 1995, 6% of Internet users were getting news off the Web every day, while 30% said they read news online at least weekly.

Major public events have repeatedly been the impetus that has expanded online news consumption to new arenas. For example, Campaign 2000 established the Internet as a key source for timely election news and information. We reported in December of that year that one-third of the online population had gone online specifically for election news during the 2000 campaign. In 2001, in the days immediately following the events of September 11th, many Americans relied on the Web for the latest coverage, and the percentage of all Internet users who got news online on a typical day tilted up from 22% (in August) to 27%. And by March 2003, in the days leading up to the Iraq war (March 12-19), the online news audience jumped from 26% of the Internet population on a typical day in February 2003 to 37% on a typical day at the dawn of the war.

Men with Internet access have been more fervent online news users compared to women, but that gap narrowed most noticeably in the period following September 11th and appeared to be closing again over the course of fall 2002. In December, 73% of online men said they had used the Internet at some point to get news, while 69% of online women had done so. Thirty percent of male users got news on a typical day in December compared to 22% of women. However, female Internet users' demand for news has grown more than men's.

More Men Consume Online News, but Growth for Female Audience Strong
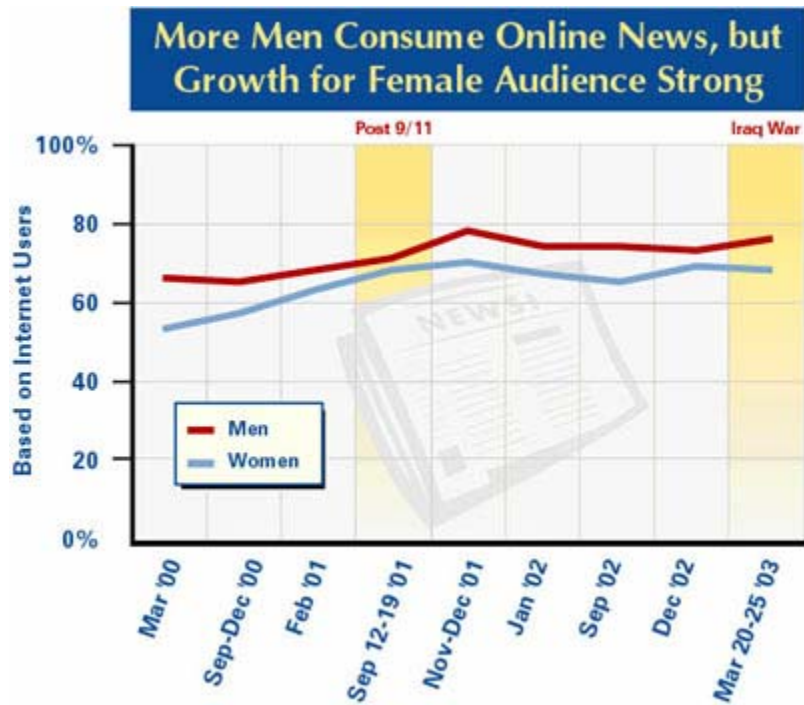
Likely reflecting the impact of the September 11th attacks, all of the various racial groups expressed peak activity in seeking news online during the late months of 2001. In contrast to what we have found with other information-gathering activities, online whites have not had greater levels of overall experience with online news-seeking when compared to online African-Americans and English-speaking Hispanics. By November 2002, for instance, 65% of online whites had sought news online compared to 76% of online African-Americans and 68% of online Hispanics.

While online Americans aged 30-49 have consistently been the most likely to seek news online compared to other age groups, users aged 50-64 and those aged 18-29 have exhibited the most growth in news seeking over the course of our research. Seventy-four percent of Internet users in the 50-64 age group had gone online for news, according to our December 2002 survey, compared to just 57% who had done so in March 2000. News seekers aged 18-29 also grew very rapidly; 72% sought news in December up from 56% in March. Wired seniors and users who are 30-49 have shown less variation in their news-seeking habits. However, it is important to note that this activity is among the most popular online pastimes for users aged 65 and over.

Other demographics

As is the case with many information-gathering activities, Internet users with higher education levels and greater household incomes are more likely than others to have sought news online. For example, in December 2002, 78% of users with a college degree had gotten news online, while just 64% of those with a high school degree had done so. Comparatively, the differences among the various economic groupings of users were less

stark; 77% of those with household incomes of $75,000 or more had sought news online, and 67% of those with incomes under $30,000 had done so.

Internet veterans are generally more likely to seek news than users with less experience online. In December, half of new users with less than one year of experience had sought news online, compared to three-quarters of users with 4-5 years of experience. Similarly, those who have home broadband access are more likely to be online news-seekers compared to users who have dial-up connections; 81% of high-speed users had sought news online in our December 2002 survey, compared to 70% of those with dial-up access.

For more information on online news seeking and use, please see the following Pew Internet Project reports:

The Internet and the Iraq War: How online Americans have used the Internet to learn war news, understand events, and promote their views
http://www.pewinternet.org/reports/toc.asp?Report=87

The Commons of the Tragedy: How the Internet was used by millions after the terror attacks to grieve, console, share news, and debate the country's response
http://www.pewinternet.org/reports/toc.asp?Report=46

Internet Election News Audience Seeks Convenience, Familiar Names
http://www.pewinternet.org/reports/toc.asp?Report=27

Olympics Online: The Old Media Beat the New Media
http://www.pewinternet.org/reports/toc.asp?Report=24

There has been a surge in use of the Internet for health or medical information.

- 66% of Internet users have said "yes" when we asked the simple question: Do you ever use the Internet to get health or medical information? However, when we asked about 16 specific kinds of health searches (seeking diet and fitness information, material about health insurance, mental health information, etc.), the percentage of Internet users who had done health searches came to 80% in the December 2002 survey.

- The number of those who have done health searches online grew at least 59%, from a figure of 46 million in March 2000 to 73 million in December 2002.

- Online women are much more likely than online men to have done health searches using the Internet.

- Online whites are generally more likely than online African-Americans and English-speaking Hispanic users to say they have searched for health information online.

■ Young adult users are the least connected to health information compared to older users, and wired seniors' interest in online health information has jumped markedly in recent years.

Two in three Internet users search for health information online

The Internet has increasingly become an important source of health-care and medical information for the majority of online American adults. Those health seekers who turn to the Internet as a reference for health information grew substantially from 54% in March 2000, to 66% of the online population in December 2002. This is a conservative measure of the online health-seeking population because it only accounts or people who said "yes" to our simple question: Do you ever use the Internet to get health or medical information? When we probed more extensively on a variety of types of health searches, we found that 80% of Internet users had done some kind of health searches online. The analysis in this report will focus on those who answered the simple question, not those who said "yes" to items in our battery of questions.

The act of doing medical research online is hardly an everyday thing. Except for those who are chronically ill, most people only need to access medical information the few times a year (or even less frequently) that they or someone they love is ill. The number of those who seek health information on a typical day increased marginally — from 6 million to 7 million people — and their representation within the online population held constant at around 7%.

The efficiency and convenience of online health searches are both factors that have influenced the overall growth of this activity. In "Vital Decisions: How Internet users decide what information to trust when they or their loved ones are sick," we reported that the majority of health seekers (82%) were successfully finding the information they needed online "most of the time" or "always."[18] Further, most found it quickly—often in under an hour.

The Internet has become a critical health research tool for many, but it is far from replacing the traditional doctor/patient relationship altogether. Health seekers consult the Web on an as-needed basis, and very few go online in lieu of seeing a doctor. Instead, most use the information they find online to supplement their offline care.

In "Vital Decisions," we also reported that the number-one reason health seekers went online was to look for advice on someone else's behalf. Whether it was a friend, spouse, child, or parent, 81% of health seekers said they went online because someone they knew was diagnosed with a medical condition. In comparison, 58% of health seekers had gone online in response to being diagnosed with a new health problem of their own. In our

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[18] Fox, Susannah. "Vital Decisions: How Internet users decide what information to trust when they or their loved ones are sick." (Pew Internet Project: May 2002) Available at:
http://www.pewinternet.org/reports/toc.asp?Report=59.

December 2002 survey, 70% of online parents had sought health information online, compared to 64% of non-parents.

Women are considerably more likely than men to search for medical and health answers online. Over time, that gap has become slightly more pronounced; in December 2002, 74% of women had sought health information online, while only 58% of men had done so. These gender differences are not as consistently well-defined with those who look for health information on an average day, but overall, women are more avid "daily" health seekers.
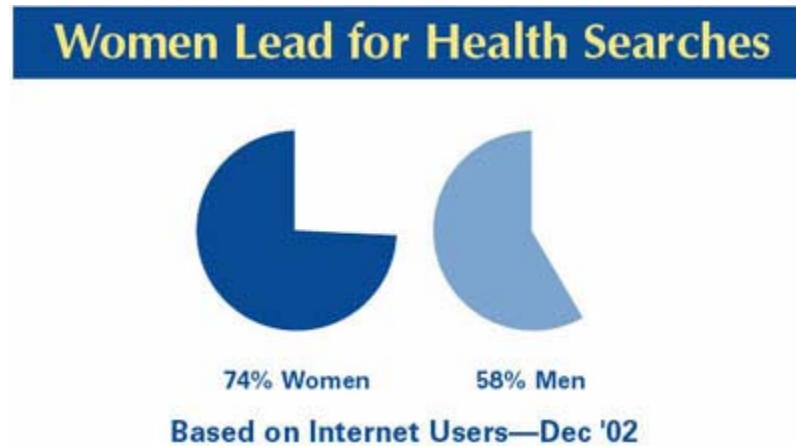
While racial differences in accessing health information have fluctuated over the course of our research, English-speaking Hispanics and African-Americans who are Internet users have often been less likely than whites to look for health information online. However, when we last reported on the demographics of health seekers in July 2003, we found that, when other demographic factors were held constant, race was not a deciding factor in determining the likelihood that one would be health seeker.[19] Instead, education levels accounted for much of the variation in experience with health-seeking online. While those with lower levels of education have become more experienced with this activity over time, they still tend to be less likely to research health questions online compared to users with higher educational attainment. Differences according to income have been less pronounced.

> Our most recent findings on searching for health information were published in the July 2003 report, "Internet Health Resources."

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[19] The health seekers referred to in the July 2003 report were identified by asking about a variety of health related searches one could do online, rather than our standard question that asks, "Do you ever look for health or medical information?" For more information, please see the report, "Internet Health Resources," available at: http://www.pewinternet.org/reports/toc.asp?Report=95.

Those who are aged 18-29 have been the least connected of all the age groups to health resources online. This is possibly related to the fact that younger Internet users tend to have fewer health problems and therefore have less motivation to seek such information online or elsewhere. Those in the middle-age groups are still the most likely to turn to the Web as a reference for their health concerns, but seniors are catching up with them quickly. While those who are 65 and over generally lag far behind their younger counterparts in most activities, searching for health information online has become dramatically more important for this age group over the course of our research. When we first began measuring this activity in March 2000, a mere 46% of online seniors had sought answers to their health questions online.[20] But by the June-July 2002 survey period, that number rose to 74%.

Young Adults Least Connected to Health Info Online

Based on Internet Users
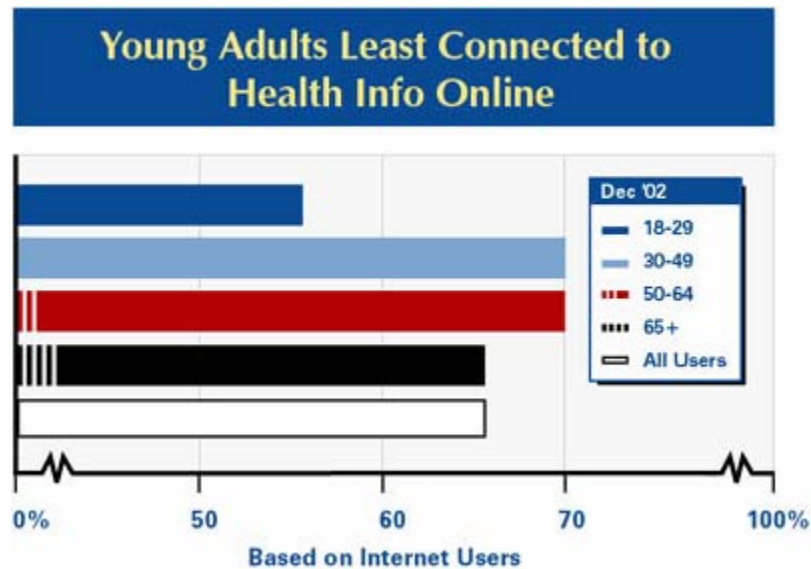
Other demographics

Exposure to health information varies according to the amount of time a user has spent online; those with more years of experience navigating the Web are more likely to delve into health and medical content.

The broadband effect has repeatedly been evident with this activity as well; for example, 74% of home broadband users had searched for health or medical information online at the end of 2002 while just 67% of dial-up users had done so.

For more information on Online Health, please see the following Pew Internet Project reports:

Vital Decisions: How Internet users decide what information to trust when they or their loved ones are sick.
http://www.pewinternet.org/reports/toc.asp?Report=59

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[20] The unweighted n for Internet users aged 65 and over was 71 in the March 2000 survey.

> *Internet Health Resources: Health searches and email have become more commonplace, but there is room for improvement in searches and overall Internet access*
> http://www.pewinternet.org/reports/toc.asp?Report=95
>
> *Exposed Online: Why the new Federal Health Privacy regulation doesn't offer much protection to Internet users*
> http://www.pewinternet.org/reports/toc.asp?Report=49
>
> *The Online Health Care Revolution: The Web helps Americans take better care of themselves.*
> http://www.pewinternet.org/reports/toc.asp?Report=26

Nearly one-third of Internet users look for religious or spiritual information.

- 30% of Internet users have sought religious information online as of November 2002.

- That represents growth of 94%, from 18 million who had sought religious information as of March 2000, to 35 million who had done such searches as of November 2002.

- More online women than online men have done religious searches on the Web.

- African-American users are more likely than other groups to have searched for religious information online, especially African-American women.

Approximately 35 million Americans, or 30% of Internet users, had used the Web as a religious resource when we surveyed the topic in November 2002. That was up significantly from the 21% of Internet users we measured in March 2000 (18 million Americans) and the 25% of Internet users (28 million Americans) who were looking for religious or spiritual information in August–September 2001. However, those who seek religious information on a typical day grew only slightly, from about 3 million to 5 million Americans between 2000 and 2002.

In the past, we have reported extensively on the different things religion surfers do online. Our last report on religious surfing, "CyberFaith: How Americans Pursue Religion Online," reported that the majority of these "religion surfers" look for information about their own faith (67%), but half also use the Web to research outside of their faith. Similarly, solitary activities like mailing prayer requests and downloading religious music are also very popular pastimes for religion surfers (38% have done each of these activities), while more socially-oriented activities such as seeking spiritual guidance via email (21%) or participating in a religious chat room (10%) have not been as widespread.

Women have been more apt to say they are religion surfers than men, a trend that has become increasingly evident over time. Still, men and women are equally as likely to say they search for religious information on an average day.

In "CyberFaith," we reported that, according to data from August–September 2001, there were no dramatic differences among the various racial groups of religion surfers. However, the percentage of African-American Internet users who are religion surfers has since grown and it is apparent now that they are more likely than Internet users in other groups to access religious and spiritual material online. Our most recent research on this topic shows that African-American Internet users are twice as likely to seek religious information compared to English-speaking Hispanic Internet users (47% vs. 24%). Comparatively, white Internet users are also much less likely to perform faith-based queries than African-American users; some 28% of online whites have sought religious or spiritual information online.
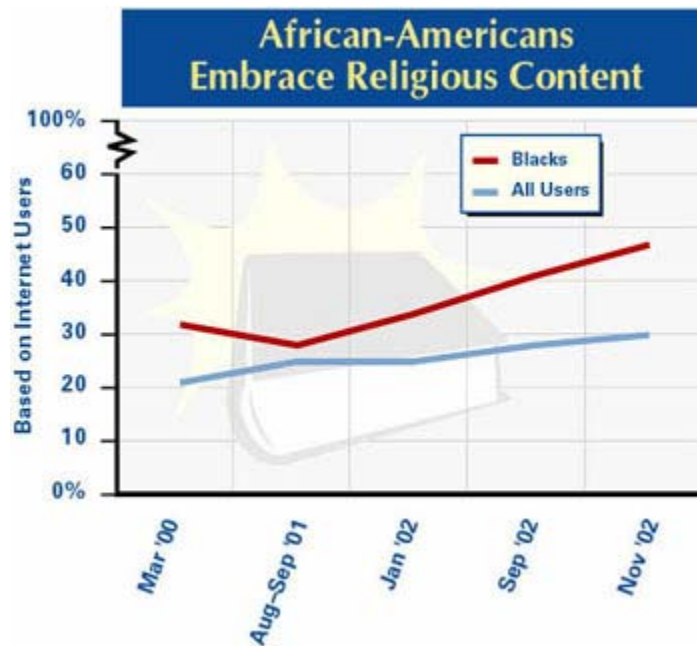
Young adult Internet users (18- to 29-year-olds) have been the least interested in using the Internet as a religious and spiritual resource. Instead, those aged 30-49 and 50-64 have been the most likely religious surfers. In November 2002, for example, only 24% of wired 18- to 29-year-olds had sought religious content, while 33% of wired 30-to 49-year-olds had done so.

Young Users Are Less Interested in Religious Surfing
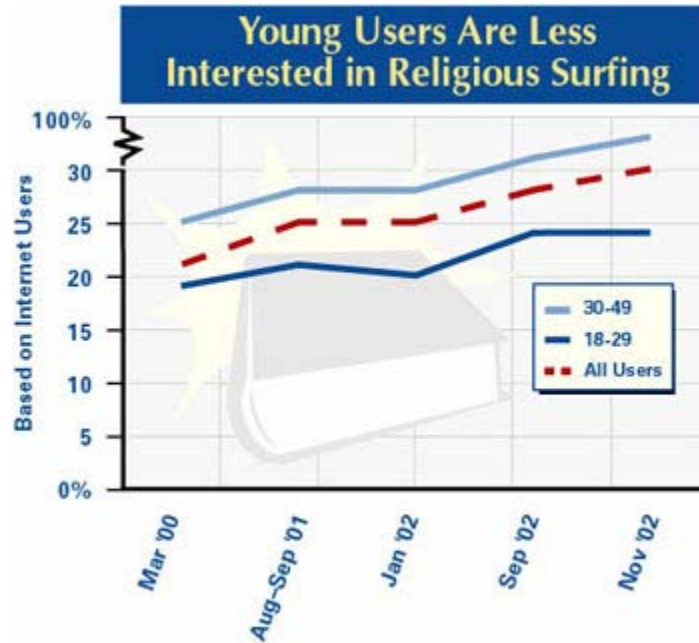
Other demographics

Religious surfers have generally become evenly represented across every educational and economic group. Yet, in our November 2002 survey economic variations were notable. The last time we polled this question, 34% of Internet users with a household income of less than $30,000 had sought religious information online, compared to 27% of those with an income of $75,000 or more who had done so.

We noted in 2001 that online experience did not correlate with higher levels of religious searching. However, our data from 2002 suggest that experience might have some connection to online religious surfing. In November, 19% of users with a year or less of experience online had searched for religious information, compared to 31% of those who had been online for 2-3 years. Further, those with 6 or more years of online experience were twice as likely to look for religious information compared to users who had been online for 1 year or less.

In a departure from a trend common among other information-seeking activities, having a high-speed connection does not increase the likelihood that a user will take faith-based inquiries to the Web. However, one finding that does fall in line with recurring trends is that parents search for religious content more than non-parents.

For more information on Americans' pursuit of religious and spiritual information online, see the following Pew Internet Project reports:

CyberFaith: How Americans Pursue Religion Online
http://www.pewinternet.org/reports/toc.asp?Report=53

> *Wired Churches, Wired Temples: Taking Congregations and Missions into Cyberspace*
> http://www.pewinternet.org/reports/toc.asp?Report=28

More than half of users have logged onto government Web sites.

- 56% of Internet users have visited government Web sites as of November 2002.

- That represents 65% growth from 40 million who had accessed government Web sites as of March 2000, to 66 million in November 2002.

- The number of Americans who seek government information on a typical day online doubled (from 6 million to 12 million) between 2000 and 2002.

- A high percentage of Internet users aged 30-64 have used online government resources.

- Those with higher incomes and education levels are more likely to have used government sites compared to those with lower incomes and educational attainment.

- There is a greater incidence of seeking government information among users with home broadband connections and higher levels of experience online.

In November 2002, 56% of Internet users said they had visited a government Web site in search of information.[21] That translated into approximately 66 million Americans who had accessed government resources online, up 65% from 40 million in March 2000. About 12 million online Americans (10% of all Internet users) were seeking information from government Web sites on a typical day in November 2002, up 100% from the 6 million (7% of all Internet users) who were doing so in March 2000.

There have been significant investments at the federal, state, and local level in developing e-government resources online and that effort is reflected in the corresponding growth of this activity in recent years. More Americans have sought information from government Web sites than have sought financial information online, made travel reservations, sent instant messages, or gotten sports information online. Furthermore, we have found that the vast majority of government Web site users are satisfied with what they find on the sites; 80% found what they were looking for during their last visit to a government site.[22]

Government Web site users take advantage of this new access to government with a multitude of personal, professional, and civic goals in mind. In our April 2002 report on e-citizens, the most frequently cited uses of these sites were: getting tourism and recreational information, doing research or work for school, downloading government forms, finding what services a government agency provides, and seeking information about public policy and other issues of interest. In addition to these information-seeking

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[21] Pew Internet & American Life Project Tracking Survey, November 2002.
[22] Larsen, Elena. "The rise of the e-citizen: How people use government agencies' Web sites." (Pew Internet Project: April 2002.) Available at: http://www.pewinternet.org/reports/toc.asp?Report=57.

activities, many users have engaged in proactive efforts through these sites such as sending comments to government officials, filing taxes, and renewing licenses.

However, while the government continues to update and expand their online services, many Americans have yet to visit these sites and are still learning about what they might have to offer. While the most pronounced growth for this activity occurred between 2000 and 2001, the end of 2002 coincided with a lull in growth that fell in line with the stagnation of the online population.

For the first two years that we polled on this activity, men were far more likely than women to go online for government information. Yet the trend for 2002 suggests that there is now little difference in the number of men and women who use e-government resources.
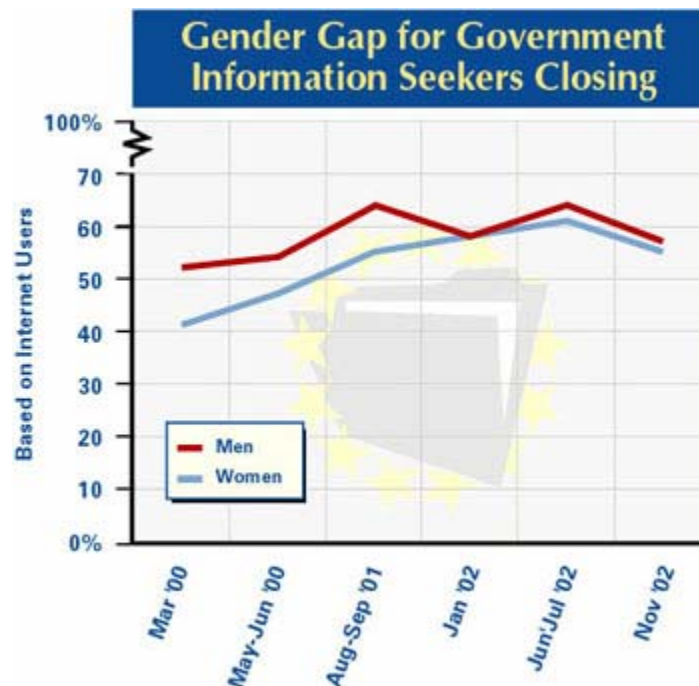
Overall, online whites have been more likely to say they have accessed government information on the Internet compared to online African-Americans and English-speaking Hispanics. There has been greater variation among those who visit government Web sites on a typical day, but our latest data showed that whites were also the most avid "daily" government information seekers. In November 2002, 11% of online whites sought government information on a typical day, compared to 4% of online African-Americans and 8% of online English-speaking Hispanics. And government information seeking is one activity where age clearly matters. Those who are 30-49 and 50-64 have time and again been the most eager to access e-government resources. Conversely, the youngest and oldest Internet users have been the least prone to be government Web site visitors.
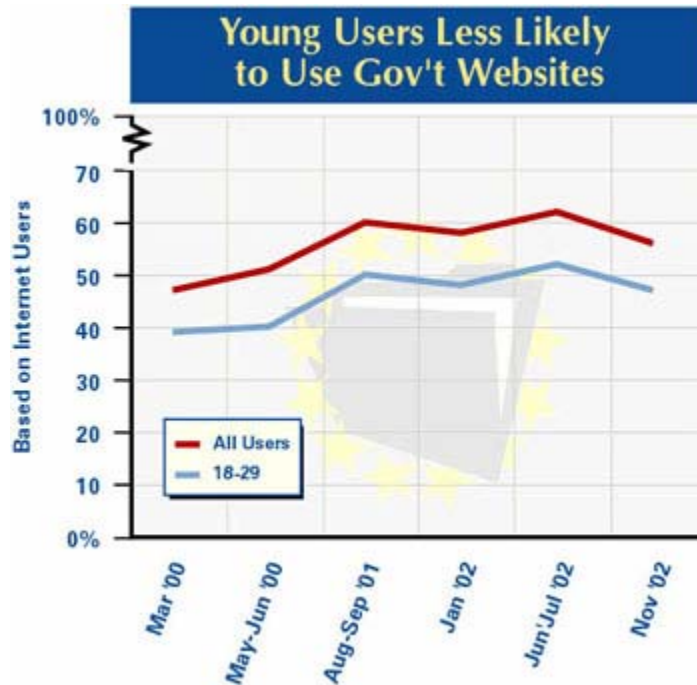
Other demographics

Internet users with higher education levels and those who live in households with higher incomes are more likely to seek information from government Web sites. This tendency has been evident since we first started polling on this activity in March 2000; however, since then, the education gap has lessened while the income gap has increased. A related factor to income and education, the more experience an Internet user has online, the greater the likelihood that he or she will have utilized e-government resources.

As with other information-seeking activities, those with high-speed Internet access at home and those who have more experience using the Internet are more likely to participate. In the November 2002 survey, 64% of home broadband users had searched for information on a government Web site and 56% of dial-up users had done so. Likewise, 48% of those with 2-3 years of experience online had tried visiting a government Web site for information, compared to just 30% of users who had been online for one year or less.

For more information on Americans' use of government Web sites and information see the following Pew Internet Project reports:

Digital Town Hall: How Local Officials use the Internet
http://www.pewinternet.org/reports/toc.asp?Report=74

The Rise of the E-Citizen: How People Use Government Agencies' Web Sites
http://www.pewinternet.org/reports/toc.asp?Report=57

> *Dot-Gov Goes Retail*
> http://www.pewinternet.org/reports/toc.asp?Report=35

The number of people who have looked for news or information about politics has increased by more than 50%.

- 40% of Internet users have looked for political information online as of November 2002.

- That represents growth of 57% from 30 million who reported getting political news and information in March 2000, to 47 million who reported such searches as of November 2002.

- More online men than women have used the Internet for political news and information.

- The largest proportions of political information seekers are in the highest education and income groups.

- Those with a lot of Internet experience and those with broadband connections are among the most likely to get political news and information online.

Searching for political news and information online has been a steadily expanding activity in recent years. Fueled by the overall maturation of the Internet audience, increased broadband penetration, and news events surrounding the 2000 and 2002 election seasons, the political information-seeking population grew by roughly 17 million Internet users between March 2000 and November 2002.[23] In the same period, those who seek political information on a typical day grew from 9 million to 15 million.

During the 2002 elections, about four in ten Internet users said they had turned to the Web for political news and information. Their reasons for taking to the Web were varied, but, as we noted in our "Untuned Keyboards" report from March 2003, the most commonly cited reason (chosen by 49% of political information seekers) was convenience. Second to that, 37% of political information seekers said they looked online because they didn't get the information they wanted from traditional news sources such as the daily newspaper or the network TV news. Once online and searching, the vast majority of these users want to find more information on candidates and their issues (64% of political-information seekers said this in November 2002).

However, the project has also found that these political-information seekers or "online citizens" are generally not satisfied with the yields of their searches. Compared to health information seekers and those who seek information from government agency Web sites,

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[23] These growth factors are explained in more detail in the March 2003 Pew Internet & American Life Project Report, "Untuned Keyboards: Online Campaigners, Citizens and Portals in the 2002 Elections," available at: http://www.pewinternet.org/reports/toc.asp?Report=85.

political information seekers are much less likely to say they found what they were looking for during recent searches.[24]

Male Internet users have time and again been more likely than female users to seek news and information about politics online. In November 2002, 43% of male users had turned to the Web for political content, while 36% of female users had done so. Likewise, the same trend applies for those who seek political information on a typical day.
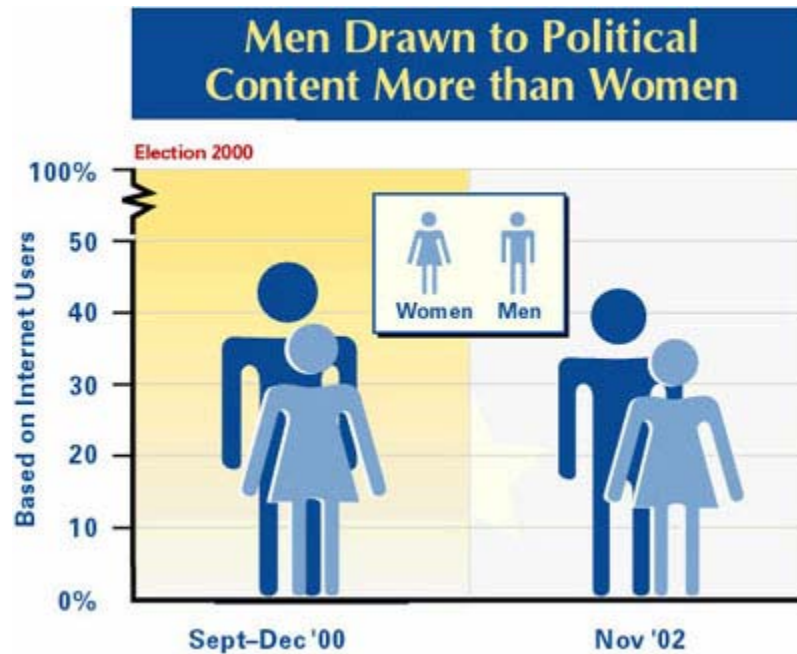
Whites, English-speaking Hispanics, and African-American Internet users have often been equally as likely to say they seek political information on the Web. However, in our November 2002 sample, during the last election season, 42% of online whites said they had searched for political news or information, while just 34% African-American users and 29% of online English-speaking Hispanics said so.

There has not been great variation among the different age groups of Internet users for this activity, but young adults (18-29) tend to be less likely to be political information seekers. This is most apparent among those who are likely to search for political information on a typical day. In November 9% of all wired 18- to 29-year-olds sought political content the day prior to the survey, while 15% of wired 30- to 49-year-olds did so.

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[24] This finding is also covered in the "Untuned Keyboards" report. Fifty-five percent of political information seekers said they found the information they were seeking or did what they wanted to do during their last search for that kind of information. Seventy-eight percent of health information seekers said this with respect to their last search for health information and 80% of those who use government Web sites and sought government information said this.

Other demographics

Internet users who have graduated college have been more likely to follow politics online than those who don't hold a college degree. However, the difference across income groups has been less apparent — only those Internet users in the highest income bracket (households earning $75,000 or more per year) have been markedly more likely to search for political content online than other online Americans.

The more experienced the Internet user, the more likely he or she is to search for political information on the Web. Users with three or more years of experience online take to the Web for political content in much higher numbers compared to newer users. Last election season, users with just 2-3 years of experience online were twice as likely to seek political content compared to those with 1 year or less under their belt (29% vs. 14%).

Those who have high-speed Internet connections at home are also more likely to delve into political content while online. For example, in our November 2002 survey, 51% of broadband users had sought political content, while 38% of dial-up users had done so.

For more information on how Americans use the Internet to gather political information, see the following Pew Internet Project reports:

Untuned Keyboards: Online Campaigners, Citizens and Portals in the 2002 Elections
http://www.pewinternet.org/reports/toc.asp?Report=85

Modest Increase in Internet Use for Campaign 2002
http://www.pewinternet.org/reports/toc.asp?Report=82

Internet Election News Audience Seeks Convenience, Familiar Names
http://www.pewinternet.org/reports/toc.asp?Report=27

More than half of Internet users have done research for school or training.

- 53% of Internet users have done research for school or training online as of September 2002.

- That represents growth of 34% from 47 million who said they had done this kind of research online as of March 2000, to 63 million Americans who reported doing this as of September 2002.

- A higher proportion of minority Internet users than whites have done research for school or training.

- Young adults are much more likely than older Internet users to have done this type of research online.

■ There is a higher incidence of doing online research for school or training among those with the most education and experience online.

At any given time when we ask Americans about this activity, over half of all Internet users say they use the Web to do research for school or training. In March 2000, this meant that about 47 million Americans were logging on to get information related to their education. And by September 2002, after the online population had swelled to 61%, we could estimate that there were approximately 63 million Americans using the Internet for school or training research. That is more than did research for their job or got financial information online during that period, but is still less than those who got health information or who had bought a product online. In a related finding, as of our March–May 2002 survey, 7% of Internet users had taken a course online for college credit, and 6% had taken some other type of online course.

About one in ten online Americans report use of the Web for educational research on a typical day. This has remained consistent throughout our surveys. In March 2000 that translated to 9 million users, while an average day in September 2002 saw 12 million users taking to the Web in search of information relevant to their educational pursuits. As we have found in our past research, students now rely heavily on the Internet to help them do their schoolwork, some teachers use the Web to facilitate their instruction, and others use the Web in conjunction with continuing education courses or job-related training. Computers with Internet connections are now commonplace in many American classrooms and some teachers now require some form of online participation from their students.

The amount of educational material available to students on the Web is monumental. Libraries have invested vast amounts of time and resources to making catalogs, documents, and research tools available online. Universities' Web sites have contributed an enormous body of knowledge in the form of digital archiving projects, online research initiatives, discussion lists, and blogs to name a few. In addition, government and non-profit Web sites, health, commerce, media, entertainment, personal sites, etc. all contribute to the wealth of knowledge available for those researching on the Web.

At the same time, though, many of the most tech-savvy teens complain that the resources and teaching aids available on the Web are not well-understood or well-used in most classrooms. The majority of educational Web use by teen-aged students occurs outside of the classroom.[25]

Our data has consistently shown that minority users are more likely to use the Internet for research related to their education compared to whites. In our report on African-Americans and the Internet based on data gathered March–August 2000, we found that online blacks were 20% more likely than online whites to have conducted school

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[25] Levin, Douglas and Sousan Arafeh. "The Digital Disconnect: The widening gap between Internet-savvy students and their schools." (Pew Internet Project: August 2002.) Available at: http://www.pewinternet.org/reports/toc.asp?Report=67.

research or training on the Web.[26] Our September 2002 survey further confirmed this finding; online blacks were 24% more likely than whites to do this type of educational research (63% vs. 51%).

Online English-speaking Hispanics' use of the Web for school and training has also repeatedly been higher than online whites' usage. Data from surveys conducted March–December 2000 show that 61% of Hispanic Internet users had done research for school while just 51% of white users had done so.[27] In September 2002, a slightly smaller portion of online Hispanics, (56%) reported use of the Web for school research, while online whites remained at 51%.[28]

In addition, we have found that Asian American users are considerably more likely to have conducted school or training-related research compared to whites. When data from March–December 2000 was combined to yield a group of 486 English-speaking Asian American respondents (who typically constitute a very small portion of our sample during each survey period), we found that 68% of Asian-American Internet users had used the Web to do educational research, compared to 51% of white users.[29] Asian-American users were also twice as likely as white, English-speaking Hispanic, and African-American users to conduct research for their school or training on an average day.

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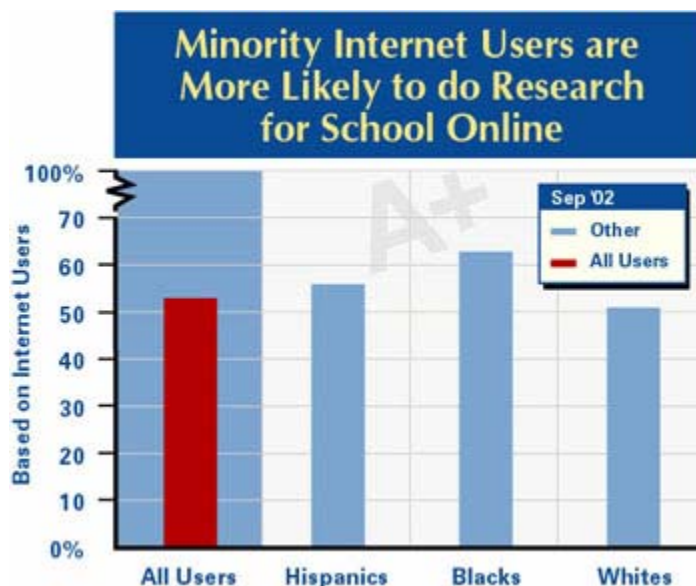
26 Spooner, Tom. "African-Americans and the Internet." (Pew Internet Project: October 2000.) Available at: http://www.pewinternet.org/reports/toc.asp?Report=25.
27 Spooner, Tom. "Hispanics and the Internet." (Pew Internet Project: July 2001.) Available at: http://www.pewinternet.org/reports/toc.asp?Report=38.
28 In the September 2002 survey, the unweighted n for English-speaking Hispanic Internet users was 90 and the unweighted n for African-American users was 90.
29 Spooner, Tom. "Asian-Americans and the Internet." (Pew Internet Project: December 2001.) Available at: http://www.pewinternet.org/reports/toc.asp?Report=52.

Considering that the majority of American adults who are enrolled in school or other classes are between the ages of 18 and 29, it is understandable that this segment of the online population is also far and away the most likely to do research for school on the Internet. About 7 in 10 Internet users between the ages of 18 and 29 say they have used the Web to find information for school at any given time when we ask this question. The likelihood that an Internet user will use the Web to do research for school or training decreases with age, a trend that is also evident among those who conduct education-based research on a typical day. In September 2002, just 53% of wired 30- to 49-year-olds were seeking information for school online, compared to 70% of users aged 18-29.

Other demographics

There has not been great variation among users with different income levels who conduct research related to their education online. On the other hand, a user's education level might have some bearing; users in our September 2002 survey who had at least some college education were more likely to turn to the Web to do research for school. Comparatively, that marks a shift from some of our earlier findings; in the fall of 2000, for example, users with less than a high school education and those with college degrees were equally as likely to have done research online.

The longer a user has been online, the more likely he is to use the Web for school or training research. In September 2002, users who had been online for at least 4 years were more than twice as likely to carry out educational research online compared to those who had only 1 year of Internet experience.

Many students have access to a high-speed Internet connection through their schools or training centers, so it is not surprising that the home broadband factor does not weigh as heavily with this information-gathering activity. In September 2002, 57% of online Americans with high-speed connections at home reported taking to the Web for school-related research and 52% of dial-up users did so.

For more information on how Americans use the Internet for school, see the following Pew Internet Project reports:

College Students and the Web
http://www.pewinternet.org/reports/toc.asp?Report=73

The Internet Goes to College: How Students are Living in the Future With Today's Technology
http://www.pewinternet.org/reports/toc.asp?Report=71

The Digital Disconnect: The Widening Gap Between Internet-Savvy Students and Their Schools
http://www.pewinternet.org/reports/toc.asp?Report=67

The Internet and Education
http://www.pewinternet.org/reports/toc.asp?Report=39

About half of online Americans have done work-related research online.

- 52% of Internet users say they have done research for their job online as of November 2002.

- That represents growth of 45% from 42 million who reported doing work research in March 2000, to 61 million Americans who reported such online activity in November 2002.

- The higher the household income and the higher the user's education level, the more likely it is that she has done job-related research online.

- Those with the most experience online and those with broadband connections are more likely than others to do work-related research online.

As more and more Americans gain the capability to go online from both their home and their workplace, an increasing number are performing some of their job-related tasks with the help of the Internet. The proportion of the online population that has used the Web for work has not changed dramatically during the period of our research. About half of all Internet users had done work-related research online at any given period between 2000 and 2002. In March of 2000, the 49% of Internet users who said they had done work online equaled approximately 42 million Americans. But the last time we asked about this activity in November 2002, taking the overall growth of the online population into account, the 52% of Internet users who had used the Web for work equaled roughly 61 million Americans. On a typical day online, the number of Internet users doing work or research for their job grew from 14 million in March 2000 (16% of all Internet users) to 22 million in November 2002 (19% of all Internet users).

With the increased popularity of telecommuting and the advent of wireless Internet technologies, online work and research for one's job can potentially take place just about anywhere. However, as we reported in our longitudinal study in March 2002, a modest number of Internet users — one in seven — said their use of the Internet resulted in an increase in the amount of time they spent working at home. One in ten said the Internet actually increased the time they spent working at the office.[30]

Male Internet users report doing job-related research and other work online in greater proportions than female Internet users. This is possibly related to the greater percentage of men in the workforce, as reflected in our sample. Also, we have found that male Internet users are more likely to say they go online from their workplace. However, there have been considerable variations in job-related research gap over the course of our studies. In November 2002, the difference was slight; 54% of male users did work or research for their job compared to 50% of female users.

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[30] Horrigan, John and Lee Rainie. "Getting Serious Online: As Americans gain experience, they use the Web more at work, write emails with more significant content, and pursue more serious activities." (Pew Internet Project: March 2002.) Available at: http://www.pewinternet.org/reports/toc.asp?Report=55.

More Men Report Doing Work Online Than Women
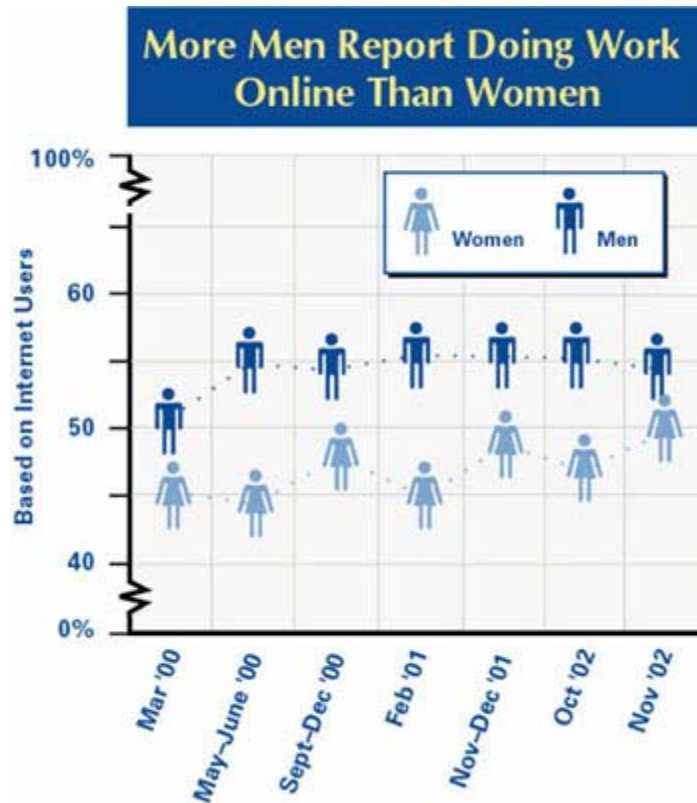
African-American Internet users are the least likely to say they have used the Web for work activities. However, this hasn't always been the case; in 2000, in particular, there were only marginal differences between the various racial groups of Internet users when it came to doing work online. But when we last asked this question in November 2002, only 41% of online blacks said they had done this activity, compared to 53% of both the white and English-speaking Hispanic groups of Internet users.

While the lives of young adults tend to be extremely saturated with new technologies, many of them are still in school or not yet immersed in the type of working environment that might require the use of the Internet. Therefore, it is not surprising that we have found these youngest users are the least likely to say they use the Web for purposes related to their job. Conversely, the next demographic age bracket, 30- to 49-year-olds, have the highest proportion of those who say they use the Internet for work-related tasks.
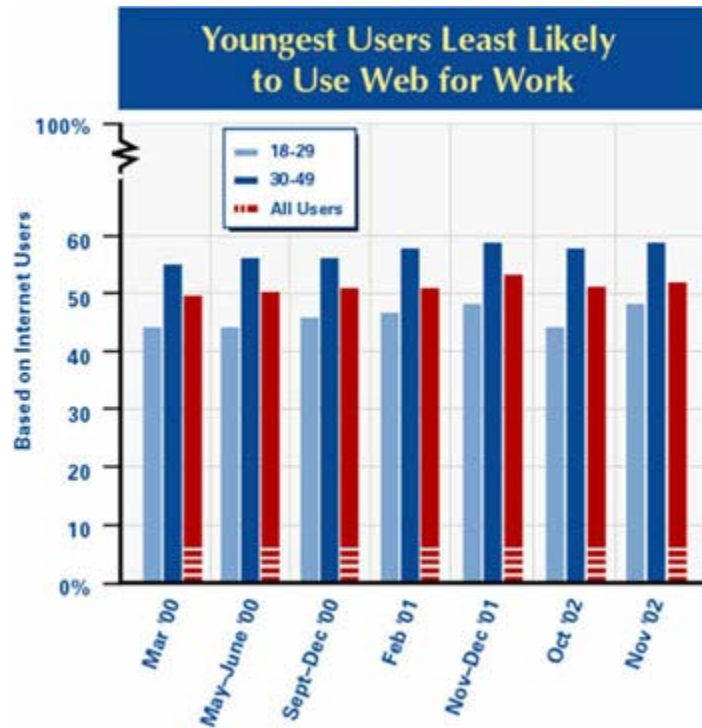
Other demographics

Not surprisingly, those with higher levels of education and income have consistently been more likely to use the Web for work. For example, in November 2002, 75% of those with at least a college degree had done work online, while only 37% of those with a high school education had done so. Forty-three percent of Internet users with an annual household income of less than $30,000 used the Web for their job during this period, compared to 67% of those with incomes of $75,000 or more.

Those with the most experience online and those with broadband connections are more likely than others to do work-related research online. In November, Internet users with 4-5 years of experience were twice as likely to use the Web for work as those who have been online for 1 year or less. In that same period, 65% of broadband users were doing work online compared to just 48% of dial-up users.

For more information on how Americans use the Internet at work, see the following Pew Internet Project reports:

Email at Work: Few feel overwhelmed and most are pleased with the way email helps them do their jobs
http://www.pewinternet.org/reports/toc.asp?Report=79

Wired Workers: Who They Are and What They're Doing Online
http://www.pewinternet.org/reports/toc.asp?Report=20

Part 4.

Financial and Transaction Activities

Use of the Internet to research a service or product has increased significantly.

■ 83% of Internet users have researched a product online as of December 2002.

■ That represents growth of 52% from 64 million who had done product research online as of March 2000, to 97 million who said they had done such research as of December 2002.

■ Online men are more likely than online women to have used the Internet for product-related research.

■ The higher an Internet user's household income and education level, the more likely it is that he has done product-related research.

■ Those with the most experience online and those with broadband connections are more likely than others to do product-related research.

While researching a product or service has consistently been one of the most popular online activities since 2000, the number of Internet users who have turned to the Web as a resource for product information has increased notably since 2000. In March 2000, 74% of Internet users (about 64 million people) said they had looked for product information and in December 2002, 83% of users (about 97 million) reported they had done such online searches. Similarly, 14% of Internet users (about 12 million) reported looking for product information on a typical day in March 2000, while 19% (about 21 million) said they did so in December 2002.

Our prior research has shown that the majority of Americans (63%) have come to expect that businesses will provide product information through a Web site. Further, almost half of all Americans (46%) say they are more likely to go to a physical store to buy a product if that store provides information about its wares online, regardless of whether those products are available for purchase through the Web site.[31]

Men with Internet access have invariably been more avid product information-seekers than women, though that rift has reduced substantially to less than half the size it was in 2000. This might be a result of the fact that women are relative newcomers to the Internet and had not yet become comfortable with product searches online. Women demonstrated over twice as much growth as men did for this activity between March 2001 and

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[31] Horrigan, John and Lee Rainie. *"Counting on the Internet: Most expect to find key information online."* (Pew Internet Project: December 2002.) Available at: http://www.pewinternet.org/reports/toc.asp?Report=80.

December 2002, at which time 85% of male Internet users said they had searched for product information online, while 81% of female users reported doing so.

While there were noticeable discrepancies between the levels of product researching among the various racial groups in early 2000, by the May-June survey period of that year, all groups hit 73%. Since then, there has been relatively equal growth across the board, with each group varying no more than one percentage point from the trend line of all Internet users.

In 2000, when the Internet population was still relatively young, online product researching was most common among the 30-49 age cohort. But by December 2002, everyone under age 65 was equally as likely to have searched for product information online. Though wired seniors' interest in researching products on the Web has grown considerably over the course of our research, they are still the most reluctant to consult the Web for product information.

Wired Seniors Least Likely to do Product Research Online

58% 65+   83% All Users

Based on Internet Users—Dec '02
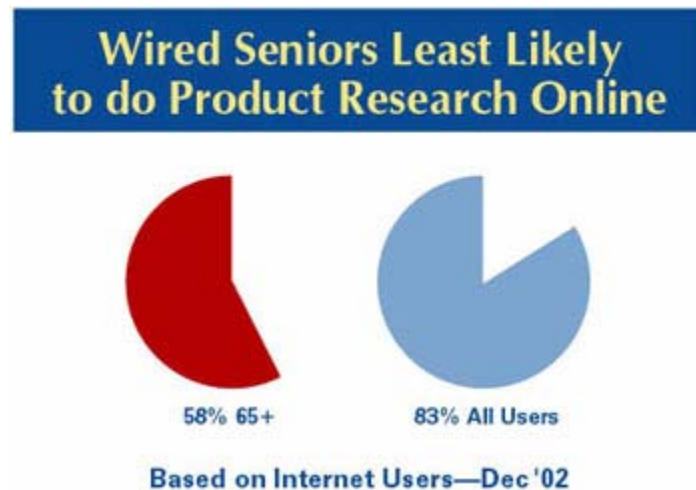
Other demographics

Those users who occupy the higher income and education brackets have been more likely to seek out product and service information online compared to those with lower earnings and less schooling. At the end of 2002, for instance, our survey found that 86% of online college graduates had researched products online, while 78% of users with a high school degree had done so. Similarly, 87% of users in households earning $75,000 or more said they had taken to the Web to investigate a product, while 78% of those with household incomes under $30,000 had done so.

Those with the most experience online and those with broadband connections are more likely than others to do product-related research. Long-time users of the Web are most likely to have accessed product information online; in December 2002, 89% of those with 6 or more years of experience had researched a product, but just 66% of those who had been online for under a year did so. Home broadband users have also been more

enthusiastic product information-seekers. In the December survey, 92% of those with high-speed access at home and 83% of those with dial-up access had done product research.

For more information on product research online, see the following Pew Internet Project reports:

Counting on the Internet: Most expect to find key information online, most find the information they seek, many now turn to the Internet first
http://www.pewinternet.org/reports/toc.asp?Report=80

Getting Serious Online: As Americans Gain Experience, They Use the Web More at Work, Write Emails with More Significant Content, Perform More Online Transactions, and Pursue More Serious Activities
http://www.pewinternet.org/reports/toc.asp?Report=55

E-purchasing has been growing steadily, despite the economic slump and drop in consumer confidence.

- 61% of Internet users have bought a product online as of December 2002.

- That represents growth of 63% from 41 million Americans who had bought products online as of March 2000, to 67 million who had participated in e-commerce as of December 2002.

- The number of Americans who make purchases on a typical day online doubled (from 3 million to 6 million) between 2000 and 2002.

- Online African-Americans are among the least likely to make online purchases.

- Those living in households with high incomes and those with high levels of education are the most likely to buy goods online.

- Those with the most experience online and those with broadband connections are more likely than others to do online shopping.

Despite the economic slump in recent years, e-purchasing has been a steadily growing activity for online Americans. In March 2000, 48% of Internet users, or roughly 41 million Americans, said they had bought a product online. Four percent were doing so on a typical day. Almost three years later, in December 2002, 61% of Internet users had made an online purchase, which translated into about 67 million Americans. Those who were buying products on an average day rose to 5%, reflecting a doubling of the daily online buying population from 3 million to 6 million Americans.

As noted in our December 2002 report, "Counting on the Internet," this *increase* in e-purchasing occurred alongside a substantial *decrease* in overall consumer confidence in the whole U.S. economy during the same period. Consumer comfort levels and satisfaction in the online world appeared to be rising, even as the offline markets were sagging; in September 2002, 85% of those who had ever bought products online said that they "always" or "most of the time" were able to find and buy the products they were

seeking. However, it is important to note that while most Internet users have embraced the transition to e-commerce, the overall volume of online sales has generally constituted a very small portion of the total retail market in America.[32]

The growth in online consumer activity between 2000 and 2002 can also be attributed to the fact that the Internet population was still in the process of maturing. Our research has repeatedly shown that as Internet users gain experience, they are increasingly at ease with making online purchases and are more likely to spend money on the Web. For example, while 67% of Internet users with 4-5 years of experience had bought products online as of December 2002, just 45% of those who had been online for 2-3 years had done so.

Online women have caught up to men in online shopping. In our December 2002 survey, 63% of online men said they had made purchases online, while 60% of online women said they had done so. On any given day between March 2000 and December 2002, one would find roughly the same portion of men and women buying products online.

On average, African-American Internet users have less experience online compared to other racial groups. Their less aggressive e-purchasing patterns reflect this relative newness to the medium. Online blacks have time and again been less likely than online whites and English-speaking Hispanics to have ever purchased a product online. In our December 2002 survey, 63% of white Internet users and 58% of Hispanic Internet users said they had bought items online while only 45% of African-American users had done so.[33]

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[32] Horrigan, John and Lee Rainie. *"Counting on the Internet: Most expect to find key information online."* (Pew Internet Project: December 2002.) Available at: http://www.pewinternet.org/reports/toc.asp?Report=80.

[33] The unweighted n for African-American Internet users was 78 and the unweighted n for English-speaking Hispanic Internet users was 86 in the December 2002 survey.
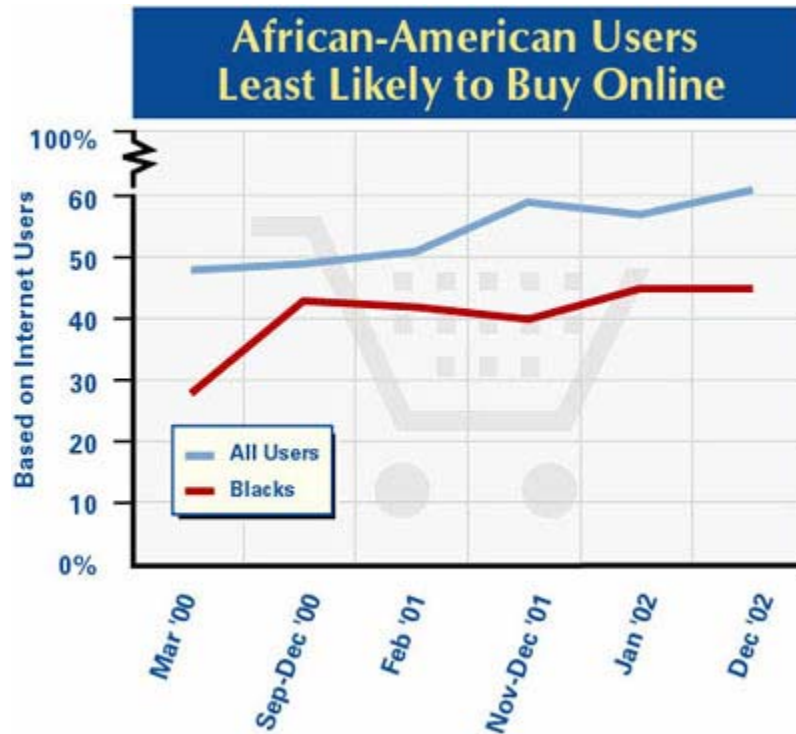
Wired seniors, who tend to have less experience online and are less trusting of the online world, have also been considerably less likely to buy products online compared to the rest of the online population. Users aged 30-49 have generally been the most avid online shoppers, but recent data shows that the same portion of both 18- to 29-year-olds and 30- to 49-year-olds (63%) had bought products online by December 2002.

Other demographics

Online Americans with higher income and education levels, factors that are also tied to Internet experience, are more apt to be online shoppers. As of last December, 50% of wired high school graduates had bought a product on the Internet, while 71% of college graduates had done so. The income gap was similar; 49% of users in households earning $30,000 or less had tried shopping online, compared to 74% of those living with incomes of $75,000 or more.

Home broadband users are more likely to purchase products online and with much more frequency than dial-up users. Four out of five users with high-speed Internet connections had bought a product online in December 2002 compared to three out of five dial-up users. At that time, home broadband users were three times as likely as dial-up users to make an online purchase on any given day.

For more information about online purchasing, see the following Pew Internet Project reports:

Holidays Online – 2002Email grows as a seasonal fixture and e-shopping advances
http://www.pewinternet.org/reports/toc.asp?Report=83

Women Surpass Men as E-Shoppers During the Holidays
http://www.pewinternet.org/reports/toc.asp?Report=54

The Holidays Online: Emails and e-greetings outpace e-commerce
http://www.pewinternet.org/reports/toc.asp?Report=29

Buying or making a reservation for travel is one of the fastest-growing activities online.

- 53% of Internet users have made travel reservations online as of December 2002.

- That represents growth of 87% from 31 million who reported making reservations and other travel purchases on line as of March 2000, to 58 million who had done such activity as of December 2002.

- Those with college educations and in higher household income brackets were more likely than others to have made travel reservations and purchases online.

- Those with the most experience online and those with broadband connections are more likely than others to spend money for travel online.

Buying and making travel reservations online has been one of the fastest-growing activities on the Web. In March 2000, 36% of Internet users had logged on to make their travel plans. This activity has continued to grow in popularity over the years and by December 2002, we found that over half of all Internet users (53%) had purchased or otherwise secured travel reservations. That spike in activity represents 87% growth during that period — from 31 million to 58 million users — easily surpassing the 63% growth of those who had bought a product online. However, roughly the same number of users (1 million) bought or made a reservation for travel on a typical day in March 2000 as did in December 2002.
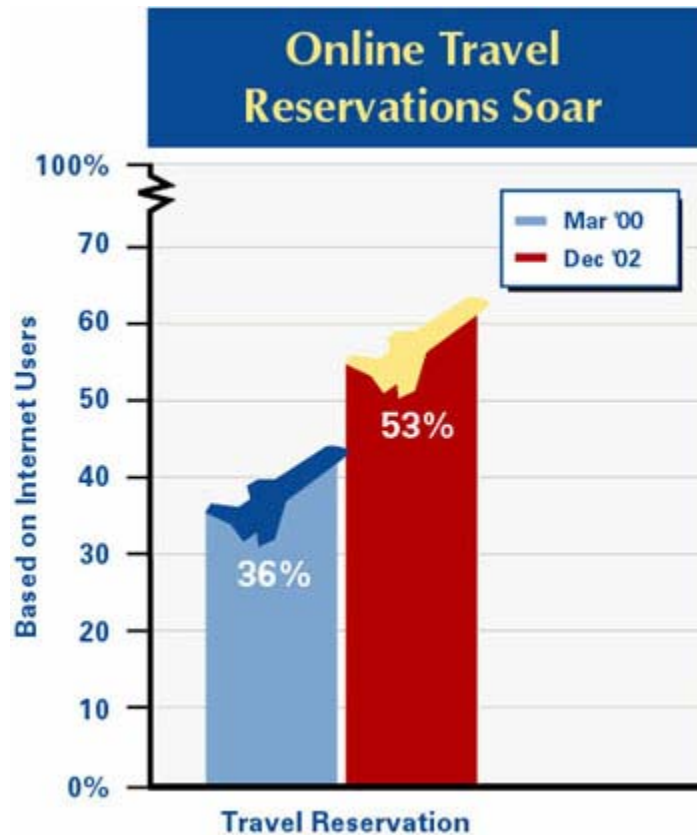
Making reservations for travel services such as airline tickets, hotel rooms, and rental cars has become an increasingly normalized online activity in recent years. Sites like Orbitz, Travelocity, and Expedia have become the first destination for many Internet users who are considering travel. As Internet users become comfortable with making transactions online and realize some of the conveniences offered by e-ticketing, travel reservation numbers continue to rise.

Even for those who are still wary of making travel purchases online, the Internet can help inform these consumers and travelers as they research and plan their trip. Vast amounts of information on transportation, accommodations, and attractions are available online to those who are considering travel. In one of our early surveys (July–August 2000), we asked people if they ever use the Web simply to find information about travel and found that 68% had done so.

When it comes to making travel reservations and purchases online, men and women are equally as likely to do so. Each time we ask this question, there is no significant difference in the percentage of male and female Internet users who have done this activity.

One distinguishing characteristic of this activity is that it has become equally popular among all Internet users between ages 18 and 64 — a little over half of all these Internet users had booked their travel online in 2002. However, young adults did not dominate as

the early adopters for this activity as they have with many other functions of the Web, possibly because they have less disposable income available for traveling or perhaps because they do not have jobs requiring work travel. As is the case with other transaction-related activities, wired seniors continue to trail behind their younger counterparts — about one-third of all Internet users over age 65 have made travel reservations or purchases online.

In general, there have not been dramatic differences among the various racial groups of Internet users who make travel reservations and purchases online. However, there was some indication in our 2002 surveys that English-speaking Hispanic Internet users had become more enthusiastic about making travel plans on the Web. In December 2002, for instance, 59% of online Hispanics said they had used the Internet at some point to make a travel purchase online, compared to 48% of African-American users and 52% of online whites.[34]

Other demographics

Throughout our surveys, we have repeatedly found that Internet users with higher education and income levels are more likely to go online to make travel reservations and purchases. In December 2002, 67% of Internet users with college degrees had bought or reserved travel services online, compared to just 40% of high school graduates. Similarly, 68% of those in the highest income bracket (Internet users who live in households making $75,000 or more) had booked their travel online, while 36% of users with household incomes under $30,000 had done so.

Our data has also shown that veteran users (those with three or more years of experience online) are significantly more likely to book travel online, as are those with high-speed Internet connections at home.

There are more people getting financial information online, but the total percentage of users who have sought financial information has not increased.

- 42% of Internet users have used the Internet to get financial information such as stock quotes or mortgage rates as of September 2002.

- That represents growth of 32% from 38 million who had reported getting financial information online as of March 2000, to 50 million in who had done so by September 2002.

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[34] The unweighted n for African-American Internet users was 78 and the unweighted n for English-speaking Hispanic Internet users was 86 in the December 2002 survey.

- Online men are more likely than online women to have hunted for financial information online.

- A large portion of Internet users aged 65 and over has sought financial information on the Internet.

- Those most likely to do financial searches online have higher household incomes and higher levels of education.

- Those with the most experience online and those with broadband connections are more likely than others to seek financial information online.

In March 2000, approximately 38 million online Americans had used the Web to get financial information such as stock quotes or mortgage interest rates. By September 2002, the number of people who had sought financial content online had expanded to about 50 million Americans. Yet, while this activity has seen important growth that has coincided with the overall increase in the online population, the percentage of Internet users who have sought financial information online has changed very little; about four in ten users said they had done this in both our March 2000 and December 2002 surveys. And those likely to get financial information on a typical day decreased slightly during this period (from 15% to 10% of all Internet users).

With scrolling stock quotes now a standard feature on Instant Messenger software and sites like Interest.com now offering daily updates on mortgage rates, it is easy to see why the Internet has become a convenient resource for acquiring the latest financial information. Even as early as 2000, the research firm Harris Interactive found that Web sites ranked second only to newspapers as the most important source of financial information for retail banking customers.[35]

It is clear that more online men than women are drawn to financial information. For example, in September 2002, 51% of male Internet users had sought financial content, while 33% of female users had done so. Similarly, we have also found that men are more likely to buy or sell stocks online. However, in comparison, we have not found the same disparity among Internet users who bank online or those buy products online; men and women are equally likely to do both of these activities.

Over time, there has been a growing indication that African-American Internet users are less likely than white users to have sought financial information compared to white users. In September 2002, 44% of online whites said they had used the Web as a financial information resource, compared to 36% of online blacks. English-speaking Hispanics' financial information-seeking has fluctuated considerably over time, but more often than not, they meet or exceed the activity level of all users.[36]

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[35] Hucko, Dan. "Internet Study Reveals More Banking and Brokerage Customers Turning to the Web for Key Financial Information." (Harris Interactive Press Release: September 21, 2000.) Available at: http://www.harrisinteractive.com/news/allnewsbydate.asp?NewsID=149.

[36] In the September 2002 survey, the unweighted n for English-speaking Hispanic Internet users was 90 and the unweighted n for African-American users was 90.

Relative to other Internet activities, the act of seeking financial information online has great appeal to Internet users aged 65 and over; more online seniors surf for fiscal information than buy products or seek religious content online. In our "Wired Seniors" report,[37] we noted that online seniors' enthusiasm for financial content rivaled that of the general Internet population in 2000. Since then, the evidence suggests that seniors' thirst for financial information has actually been outpacing other users. In September 2002, 52% of users aged 65 and over said they had gone online for money-related information, while just 42% of the general online population had done so. In comparison, the youngest users, who tend to have the least financial responsibilities, are also the least interested in perusing financial information online; only 28% of 18- to 29-year-olds said they had sought financial content.

This type of age gap — where oldest users are the most experienced with an activity and young adults occupy the least interested camp — is not common. In fact, looking for financial information and seeking health information online are the only two Internet activities we have tracked for which wired seniors' usage clearly exceeds that of wired 18- to 29-year-olds.

Other demographics

As is the case with other money-related activities such as online banking or buying and selling stocks online, Internet users with higher education and income levels are much more likely to have sought financial information online compared to those with less education and lower household income levels. In September 2002, 33% of online Americans with a high school education had sought financial information online, compared to 54% of college graduates with Internet access. Similarly, just 21% of Internet users with household incomes below $30,000 used the Web as a financial reference, while 59% of those with incomes over $75,000 did so. This difference is also evident in the intensity of usage among these groups; those with the most income and education were three times as likely to seek financial information on a typical day compared to users in the lowest income and education brackets.

It is not surprising then that our data show that users with more Internet experience and access to broadband Internet connections at home (factors that both relate to higher income and education levels) are more likely financial seekers than are new users and those with dial-up connections.

> For more about how Americans use the Internet to seek out financial information, see:
>
> *Online Banking: A Pew Internet Project Data Memo*
> http://www.pewinternet.org/reports/toc.asp?Report=77

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[37] Please see "Wired Seniors: A fervent few, inspired by family ties." Pew Internet Project, September 2001.
http://www.pewinternet.org/reports/toc.asp?Report=40

Online banking has grown more than any other Internet activity.

- 30% of Internet users have done banking online as of October 2002.

- That represents growth of 127% from 15 million Americans who had done online banking as of March 2000, to 34 million who had done it as of October 2002.

- The number of people who do online banking on a typical day doubled from 4 million to 8 million Americans between 2000 and 2002.

- Those with higher household income and higher education levels are more likely than others to have done banking online.

- Those with the most experience online and those with broadband connections are more likely than others to do online banking.

In our October 2002 survey, we found that approximately 34 million Americans, or 30% of Internet users, had tried online banking. That reflects an impressive growth spurt of roughly 20 million Americans since we first started polling this question in March 2000. At that time, only 17% of Internet users (15 million) had tried banking online. But in October 2002, 30% of Internet users (34 million) said they had managed their finances online. As we reported in our "Online Banking" data memo from 2002,[38] online banking and online travel purchases — both convenience features of the Internet — grew more than any of the other activities we tracked between 2000 and 2002.

While online banking, a fairly novel activity in 2000, had great potential for growth — the 127% increase between 2000 and 2002 is exceptional. Other popular activities, such as buying a product online and getting news online, grew by less than half that rate during the same period. Similarly, the number of users banking on a typical day online grew by 100% (from 4 to 8 million) while daily online news seeking grew by 53% (from 19 to 29 million).

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[38] Please see "Online Banking: A Pew Internet Project Data Memo." November 2002.
http://www.pewinternet.org/reports/toc.asp?Report=77

Online Banking Grows More Than Any Other Activity

[Bar chart titled "Online Banking Grows More Than Any Other Activity." Y-axis labeled "Based on Internet Users" from 0% to 100%. Legend: Mar. '00 (light blue), Oct. '02 (dark red). Categories: Get News (~60% Mar. '00, ~68% total Oct. '02), Buy a Product (~48% Mar. '00, ~61% total Oct. '02), Banking (~17% Mar. '00, ~30% total Oct. '02).]
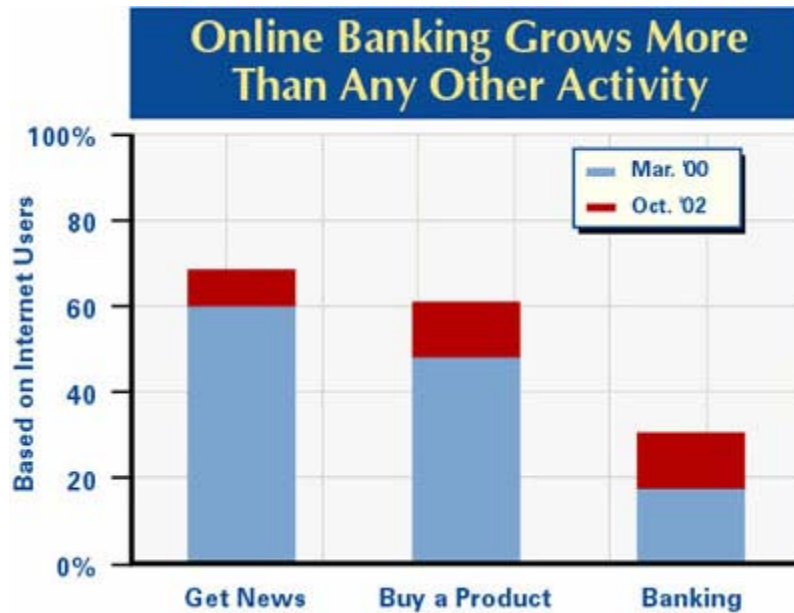
Online banking is about confidence as well as convenience. It takes time and experience for Internet users to become comfortable with online transactions and to trust the security and privacy measures put in place by their financial institutions. The longer an Internet user has been online, the more likely he is to migrate his banking to the Web. In addition to convenience, we have found that saving money motivates users to bank online — 30% of e-bankers said in September 2002 that this was a "very important" reason why they decided to bank online.

Men have been somewhat more likely to bank online over the course of our research on this activity. We previously reported that, in September 2002, 35% of male Internet users had banked online, compared to 30% of female Internet users.

In our "Online Banking" data memo, based on data from September 2002, we noted that there were not substantial racial differences among those who manage their finances over the Internet. And while younger Internet users have certainly been the most ardent about online banking, wired seniors have also come to embrace this activity. Their slow but steady uptake suggests that they are gradually being won over by the potential benefits of banking online. They have consistently been the least likely of all the age groups to go online to take care of their banking needs, but their numbers increase each time we ask this question. Since 2000, more wired seniors started banking online than any other demographic group.

Other demographics

Online banking has been driven by Internet users with higher income and education levels. For example, by October 2002, 35% of online Americans living in the highest-income households ($75,000 or more a year) were banking online, compared to just 21% of users in the lowest-income households (less than $30,000 per year). Education also

figured in the mix; while only 27% of Internet users with a high school education had used Internet banking, 37% of users with college degrees had done so.

Those with broadband connections are more likely than others to do online banking. In October 2002, 43% of broadband users vs. 29% of dial-up users said they had done some of their banking online.

> For more about how Americans use the Internet to do online banking, see:
>
> *Online Banking: A Pew Internet Project Data Memo*
> http://www.pewinternet.org/reports/toc.asp?Report=77

Relatively few Americans buy or sell stocks, but the numbers have increased.

- 12% of Internet users have bought or sold stocks online as of September 2002.

- That represents growth of 40% from 10 million Americans who reported they had done online stock trades as of March 2000, to 14 million who reported such activity as of September 2002.

- Online men are more likely than women to do online stock trading.

- The highest incidence of stock trading online takes place among those with high household incomes and high levels of education.

- Those with the most experience online and those with broadband connections are more likely than others to trade stocks on the Internet.

Between March 2000 and September 2002, the population of Internet users who go online to buy or sell stocks, bonds, or mutual funds grew by approximately 4 million people. However, the proportion of Internet users who say they trade financial investments online did not change noticeably; at any given time since we have asked about this activity, about 12% of online Americans say they have bought or sold stocks online. A much smaller portion — between 1% and 3% of Internet users — make these exchanges on a typical day.

The downturn of the stock market in recent years has likely had an impact on the conservative growth of online trading. Still, sites such as Scottrade.com and Ameritrade.com have been well-trafficked destinations for Internet users looking to manage their financial investments online and save money on transaction costs.[39] Online trading services such as these often provide deep discounts on the charges normally associated with brokering offline.

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[39] Nielsen//NetRatings AdRelevance. "Nielsen//NetRatings' Week in Review." (January 12, 2003.) Available at: http://www.imediaconnection.com/content/features/012703c.asp.

Just as men show more interest in seeking financial information online, male Internet users are more likely than women to have bought and sold stocks online. In fact, they have been twice as likely to do so during any given survey period when ask this question. Most recently, in September 2002, 17% of online men had made stock exchanges, compared to just 8% of online women.
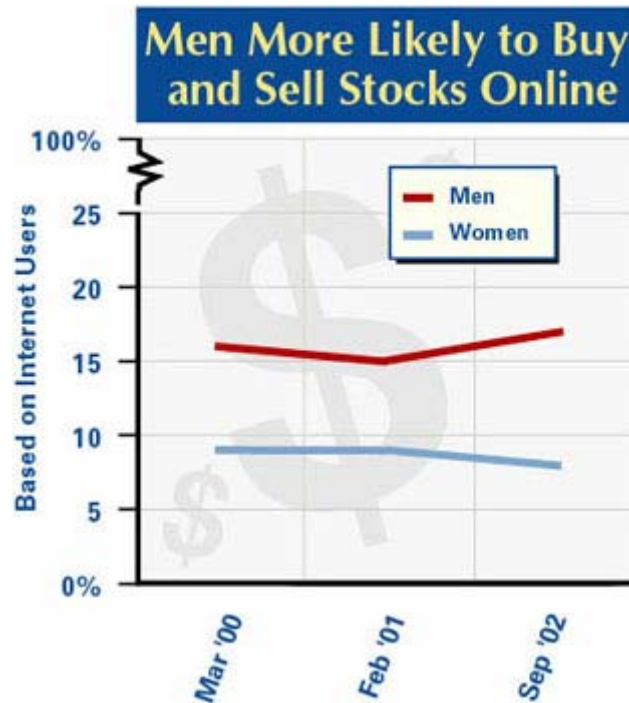
There has been little evidence to suggest differences between the various racial groups of Internet users who do financial trading online. In September 2002, 12% of online whites said they had bought or sold stocks online, compared to 10% of online blacks and 11% of online English-speaking Hispanics.[40]

Age does not figure very significantly in this activity. However, users aged 30-49 took the lead on buying and selling stocks via the Web in 2002.

On the other hand, those with higher incomes and educational attainment are considerably more likely to have done online trading than other Internet users. In September 2002, 17% of Internet users holding college degrees had exchanged stocks online while about half as many of those with a high school degree or less had done this. Twenty percent of Internet users living in households with combined incomes of $75,000 or more had bought or sold stocks — that is four times as many compared to users who fall into the lowest income bracket (households earning less than $30,000 annually). Just 4% of these users had tried online stock trading in September 2002.

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[40] In the September 2002 survey, the unweighted n for English-speaking Hispanic Internet users was 90 and the unweighted n for African-American users was 90.

Other demographics

Over time, we have also found that experienced users gravitate more towards this activity. Not unlike what we have found with online banking, entrusting the transmission of important financial information to online services is not something Internet users take lightly. We have found that it takes time for Internet users to build up trust of the medium and those who engage in this type of financial activity are most likely to be veteran users.

Those with high-speed Internet connections at home, which can speed up the real-time transmission of stock information, are more likely than other users to buy and sell stocks online. In September, twice as many users with home broadband connections (20%) had made these financial exchanges online compared to dial-up users (10%).

Online auction activity has nearly doubled in the past 3 years.

- 22% of users have participated in an online auction as of December 2002.

- That represents 85% growth from 13 million Internet users who had participated in auctions as of March 2000, to 24 million who had done so as of December 2002.

- Online men are more likely than women to have participated in auctions on the Internet.

- A higher proportion of young adults with Internet access have participated in online auctions compared to older users.

- Those with more education, Internet experience, and higher incomes are more likely to participate in online auctions.

Online auction activity has nearly doubled over the course of the past 3 years. In March 2000, a modest 13 million American Internet users had placed a bid, bought an item, or sold an item through an auction Web site. But by December 2002, there were 24 million Americans who had exchanged their wares online. However, those who are likely to participate in auctions on a typical day grew only marginally from 3 million to 4 million people between 2000 and 2002.

While the e-Bay phenomenon has undoubtedly fueled the popularity of online auctions, Yahoo! Auctions and Amazon's auction sites are also popular sites for bidding online. Users who flock to these and more specialized auction sites find and sell everything from clothing and electronics to rare and weird collectibles one would otherwise be hard-pressed to locate in an offline store.

By about a 10-point margin, a greater percentage of male Internet users take part in online auctions compared to female Internet users. This discrepancy is similar to the gender gaps we have observed in other transaction-related activities online. In December 2002, this meant that 27% of online men had engaged in auctions, while 17% of women had done so.

More Men than Women Use Online Auctions
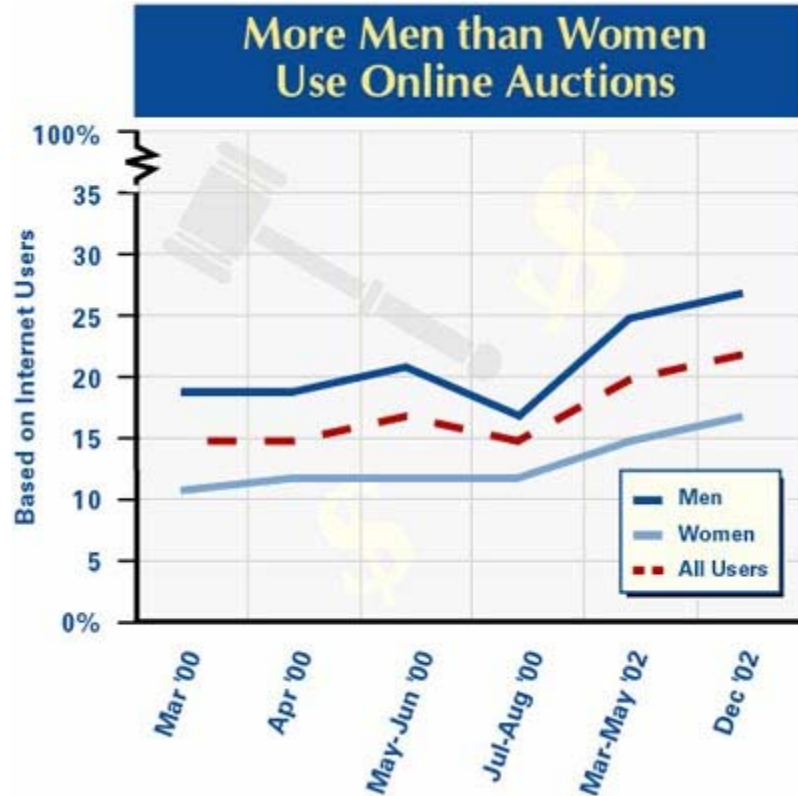
African-American and English-speaking Hispanic Internet users are less likely to say they have participated in online auctions compared to white users. But younger users — who tend to be more comfortable with online transactions — are more likely to have used online auction sites compared to older users. As large numbers of young Internet users continue to saturate the online population, the difference in auction activity among various age groups has become more pronounced over time. In December 2002, 25% of wired 18- to 29-year-olds said they had taken part in an online auction, but just 15% of wired 50- to 64-year-olds said they had done so.

Other demographics

As is the case with other activities that involve financial transactions, those with more education and higher household incomes drive the trend. Additionally, parents are more likely than non-parents to buy or sell items through auction sites, and veteran users (those who have been online for 6 years or more) are more likely than new users to participate in auctions on the Web.

Part 5.

Hobby and Entertainment Activities

Three-quarters of Internet users have looked for information on their hobbies or interests.

- 77% of Internet users have searched for hobby or interest information online as of January 2002.

- That represents growth of 40% from 65 million who had pursued hobby information online as of March 2000, to 91 million who had done so by January 2002.

- Online men are more likely to have done this than online women.

- A lower proportion of online African-Americans have looked for hobby information online than whites or English-speaking Hispanics.

- Young adult users are more likely than older Internet users to have sought hobby information.

- A higher proportion of home broadband users have sought hobby information online than dial-up users.

Approximately three-quarters of those who are online have sought hobby information on the Web at one time or another. Hobby searching has been a popular activity in the online world since we started measuring it in March 2000, and its prevalence shows no signs of waning. However, while the sheer number of people who have sought hobby information swelled (from 65 million to 91 million Americans) as Internet penetration increased between 2000 and 2002, the proportion of Internet users who are hobby-seekers has generally stood between 75% and 80% of the entire Internet population. Similarly, the number of users researching their hobbies on a typical day has increased (from 15 million to 22 million people), but the share of the Internet population that does so has generally been about 19%.

However, when the convenience of high-speed Internet connections enters the picture, users are dramatically more likely to consult the Web for hobby or interest information. What might normally constitute a trivial information search not worthy of the time and patience required for a dial-up session becomes a quick and easy inquiry for high-speed users — any fleeting interest might deserve a quick Google search. Our recent data shows that home broadband users are more than twice as likely to look for information relating to their hobby on an average day compared to dial-up users (41% of broadband users compared to 18% of dial-up users in February 2002).[41]

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[41] Horrigan, John and Lee Rainie. "The Broadband Difference." (Pew Internet Project: June 2002.) Available at: http://www.pewinternet.org/reports/toc.asp?Report=63.

Part 5. Hobby and Entertainment Activities

Pursuing a hobby online can take many forms, and may encompass many of the more specific Internet activities we ask respondents about, such as checking sports scores, looking for information on leisure activities or researching religious and spiritual life. Yet, regardless of a user's unique interest, there is likely to be something online to help him pursue new activities. In our May 2002 report on the use of the Internet at major life moments, we found that 33% of Internet users who had recently started a new hobby said the Internet played a crucial or important role in their taking up a new activity.[42]

Throughout all of our surveys, men have been more enthusiastic hobby pursuers than women. When we last asked about this activity in January 2002, 81% of men had pursued their hobby online, compared to 73% of women. A slightly more prominent gap exists for those who look for hobby information on a typical day (24% of men vs. 14% of women). Likewise, we reported in May 2002 that twice as many men as women claimed the Internet played an important role when they decided to begin a new hobby.

African-American users are significantly less likely to seek hobby information online compared to other Internet users. This trend has been apparent every time we have asked this question of African-Americans who use the Web. Online whites and online English-speaking Hispanics have recently reported the same level of experience with this activity; in January 2002, both groups had hit 78%. However, at that time, only 66% of online blacks said they had done hobby searches on the Web.[43]

The younger the Internet user, the more likely he or she is to have sought out hobby information online. This holds true with all of the adult age brackets, however, our research on teens' online activities revealed that they are significantly less likely to go to hobby Web sites compared to adult Internet users.[44] Though wired seniors tend to trail far behind the younger age demographics when it comes to seeking out information on hobbies, it has still been one of the more popular activities among those aged 65 and over. For instance, there were more wired seniors who had sought hobby information than those who had sought financial info, gone online for fun or bought a product in January 2002.[45]

Other demographics

Combing the vast amount of hobby information available online is popular both among new users and veterans. Education and income generally have a mild effect on how likely people are to visit Web sites that relate to their hobby.

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[42] Kommers, Nathan and Lee Rainie. "Use of the Internet at Major Life Moments." (Pew Internet Project: May 2002.) Available at: http://www.pewinternet.org/reports/toc.asp?Report=58.

[43] In the January 2002 survey, the unweighted n for online African-Americans was 91 and the unweighted n for online English-speaking Hispanics was 97.

[44] Amanda Lenhart, "Teenage Life Online," The Pew Internet and American Life Project, June 20, 2001, Available at: http://www.pewinternet.org/reports/toc.asp?Report=36.

[45] The unweighted n for Internet users aged 65 and over was 96 in the January 2002 survey.

For more information about Americans' pursuit of hobbies online, see the following Pew Internet Project reports:

The Broadband Difference
http://www.pewinternet.org/reports/toc.asp?Report=63

Use of the Internet at Major Life Moments
http://www.pewinternet.org/reports/toc.asp?Report=58.

More Online, Doing More: 16 million newcomers gain Internet access in the last half of 2000 as women, minorities, and families with modest incomes continue to surge online
http://www.pewinternet.org/reports/toc.asp?Report=30

Two-thirds of users have gone online just for fun.

■ 65% of Internet users said they have gone online to browse just for fun as of January 2002.

■ That represents growth of 44% from 54 million Internet users who say they had browsed the Internet just for fun as of March 2000, to 78 million who had done so as of January 2002.

■ Online blacks and Hispanics are more likely than online whites to have browsed the Internet just for fun.

■ Young adult Internet users are more likely to have surfed for fun than older users.

■ Those online Americans with lower levels of education (high school diplomas) and with moderate incomes are more likely to have gone online for fun than those in higher education and income brackets.

■ A greater proportion of newcomers than Internet veterans have wiled away hours online just for fun.

■ Those with broadband access are more likely than dial-up users to have browsed the Internet for fun.

Seventy-eight million Internet users say they sometimes go online for no particular reason, just for fun or to pass the time. That is 65% of the Internet population who have online sessions intended for personal recreation and represents an increase of 24 million people between March 2000 and January 2002. Twenty-two percent of online Americans (26 million people) went online just for fun on a typical day in January 2002, up from 21% (18 million) in March.

Going online for fun can encompass many different types of activities. For example, many of the Internet users who say they surf for fun might end up looking for hobby information, hopping from link to link from sites that have captured their interest, downloading music or playing a game during these recreational sessions.

Men have been marginally more likely than women to go online for fun, particularly in recent survey periods. Prior to that, a steady pattern of differentiation was not apparent. In January 2002, 67% of online men said they had gone online for amusement, and 63% of online women said so.

Whites are the least likely to say they have gone online for no particular reason, just for fun or to pass the time. However, the last time we asked this question (January 2002), a sizable portion of online blacks and English-speaking Hispanics (about 80% of each group) said they had sought amusement on the Web. That compared to a little over 60% of online whites.[46]

Not surprisingly, 18- to 29-year-olds are the heaviest recreational users of the Internet. In January, 86% of these young adults said they would sometimes go online just for fun, compared to just 60% of 30- to 49-year-olds. This undoubtedly reflects the large amount of time this age group spends on leisure activities both on and offline. Of course, this group also includes college students, who we have previously reported are very heavy users of instant messaging, music downloading, gaming and other leisure activities.[47] At the other end of the age spectrum, seniors report varying levels of recreational web surfing compared to other age groups.

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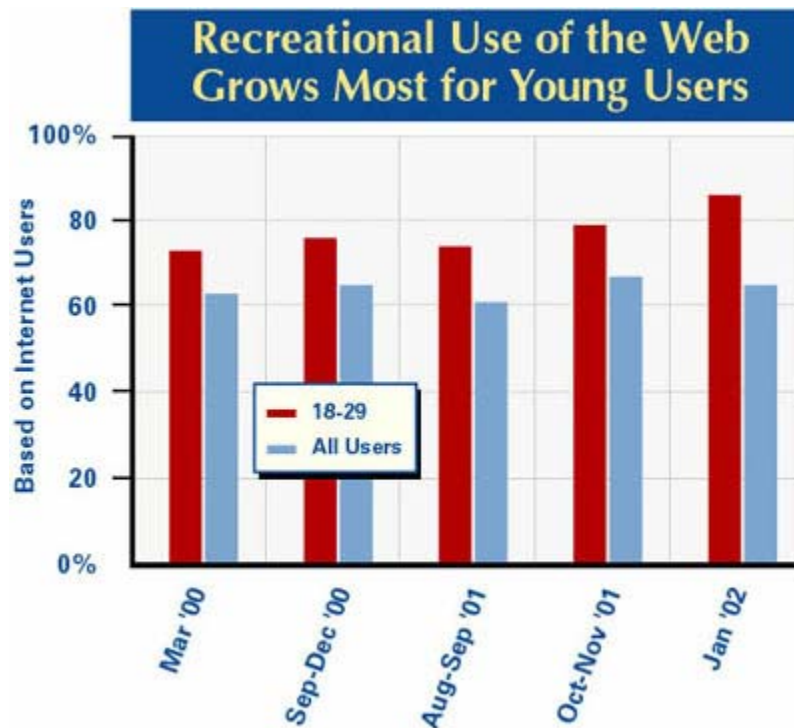
[46] In the January 2002 survey, the unweighted n for online African-Americans was 91 and the unweighted n for online English-speaking Hispanics was 97.

[47] Jones, Steve. "The Internet Goes to College: How students are living in the future with today's technology." (Pew Internet Project: September 2002.) Available at: http://www.pewinternet.org/reports/toc.asp?Report=71.

Other demographics

A trend that is likely influenced by age, those with lower income and education levels report the highest incidence of using the Web for the purposes of entertainment. In January 2002, 70% of users with a high school education said they had gone online just for fun, compared to 56% of online college graduates. And while 75% of users living in households earning less than $30,000 per year had recreational web sessions, 58% of those living in households of $75,000 or more had them.

We have generally found that fun activities are particularly appealing to new users. Newcomers to the Internet often go online from home where there tends to be more time for leisurely use.[48]

Those with high-speed connections at home are more likely than others to do this activity. In a special callback survey conducted in February 2002 for "The Broadband Difference" report, we found that 71% of broadband users had gone online for fun, while 64% of all Internet users (going online with any type of connection) had done so.

Single parents are more likely than married parents to say they have gone online for fun or just to pass the time, and children in single-parent households are more likely than children in two-parent homes to say this.[49]

For more information about Americans going online for fun, see the following Pew Internet Project reports:

The Broadband Difference
http://www.pewinternet.org/reports/toc.asp?Report=63

More Online, Doing More: 16 million newcomers gain Internet access in the last half of 2000 as women, minorities, and families with modest incomes continue to surge online
http://www.pewinternet.org/reports/toc.asp?Report=30

About a third of users download music files.

- 32% of Internet users have downloaded music, as of October 2002.

- That represents growth of 71% from 21 million Americans who had downloaded music as of the summer of 2000, to 36 million who had done so as of October 2002.

- The number of users who download on a typical day doubled from 3 million to 6 million between 2000 and 2002.

- Online men are more likely than women to download music.

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[48] Horrigan, John. "New Internet Users." (Pew Internet Project: September 2000.) Available at: http://www.pewinternet.org/reports/toc.asp?Report=22.
[49] Allen, Katherine and Lee Rainie. "Parents Online." (Pew Internet Project: November 2002.) Available at: http://www.pewinternet.org/reports/toc.asp?Report=75.

- This activity is particularly appealing to online minorities.

- Young adults and teens are the likely downloaders.

- There is a higher proportion of downloaders among those with modest household incomes and with high school diplomas.

- Those with broadband connections are more likely than others to download music.

With the rise and fall of Napster and the subsequent popularity of other file-sharing software programs such as KaZaA and Morpheus, downloading music — the act of copying audio files available on the Internet to the hard drive on one's personal computer — has grown markedly since 2000. In the summer of 2000, there were roughly 21 million American adults who had downloaded music online, which represented less than a quarter of the entire Internet population. But by October 2002, about 36 million American adults, or 32% of those with Internet access, had pulled music files off the Web. On an average day in October, 5% of online Americans (6 million people) were downloading music, up from the 3% (3 million) that reported doing so in the summer of 2000.

There has been much controversy over the morality and legality of downloading music in recent years. The recording industry has blamed music downloading for an estimated $5 billion in losses worldwide in 2002 alone.[50] Yet, it is important to note that our question phrasing does not attempt to differentiate between the types of music files — copyrighted or not, with or without permission — that Internet users are downloading. From the average Internet user's perspective, it is sometimes difficult to distinguish what types of files are legally distributable; while much of the content that is exchanged is copyrighted and not meant for widespread distribution, some popular artists have released free MP3 versions of their songs for promotional purposes and some new artists have circulated their music freely over the Web to build up a fan base.

> Our most recent findings on music downloading were published in the July 2003 data memo, "Music Downloading, File-sharing and Copyright."

However, as we reported previously in 2000, copyright issues have not been of grave concern to these online music fans. More than three-quarters of music downloaders said that they didn't consider what they were doing to be a form of stealing. Furthermore, well over half said they didn't care if the music they got off the Web was copyrighted or not.[51]

Male Internet users have consistently had the greater appetite for downloading music compared to women. That gap had narrowed slightly by the time we polled this activity

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[50] Krim, Jonathan. "File Sharing Forfeits Right to Privacy." (The Washington Post: April 25, 2003.) Available at: http://www.washingtonpost.com.

[51] Lenhart, Amanda and Susannah Fox. "Downloading Free Music: Internet Music Lovers Don't Think It's Stealing." (Pew Internet Project: September 2000.) Available at: http://www.pewinternet.org/reports/toc.asp?Report=23.

in October 2002, but men still held a steady lead; 35% of male Internet users said they had downloaded music, compared to 29% of female Internet users who said so. Men had also downloaded with greater frequency than women during this period; 7% of male users were downloading music on a typical day in October, while only 3% of female users reported doing so.
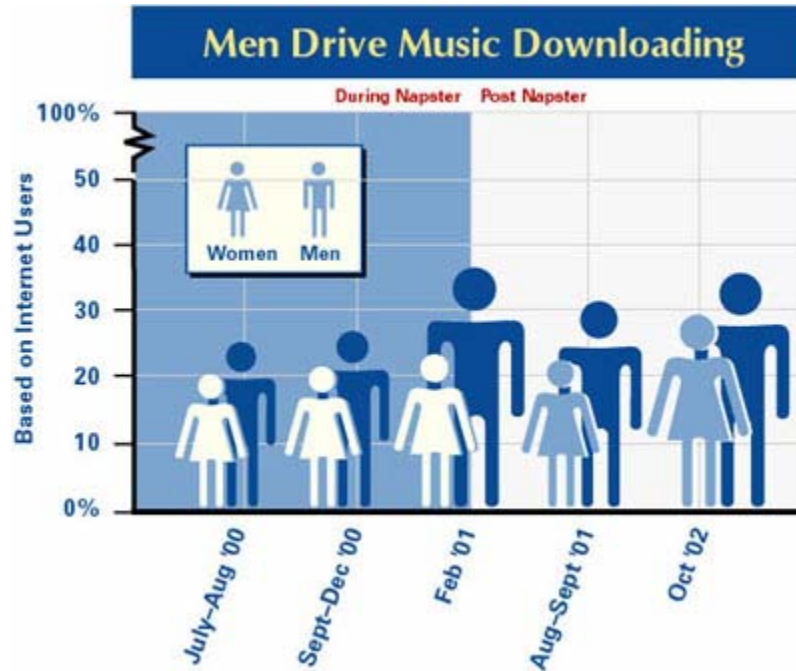
As is the case with other entertainment-related activities, minority user groups report higher levels of downloading music than white Internet users. More often than not, English-speaking Hispanic Internet users have been the most likely racial group to report downloading. In October, 47% of online Hispanics said they had downloaded music, compared to just 32% of all users. Thirty-six percent of online blacks said they had downloaded music in that survey, and only 30% of online whites said so.[52]

Wired young adults have undoubtedly driven the growth of music downloading more than any other adult age group. As we have reported previously, college students, represented in the 18- to 29-year-old demographic, are twice as likely to have downloaded music compared to the general population and they are three times as likely to do so on any given day.[53] College students often have free access to high-speed Internet connections on campus and have utilized those resources to become pioneers and heavy users of file-sharing technologies. The older an Internet user, the less likely he or she is to have downloaded music. While 54% of 18- to 29-year-olds had downloaded music in October 2002, just 29% of 30- to 49-year-olds had done so.

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[52] The unweighted n for online African-Americans in the October 2002 survey was 80. The unweighted n for online English-speaking Hispanics was 71.

[53] For more information on how college students use the Internet, please see: "The Internet Goes to College: How Students are Living in the Future with Today's Technology," available at: http://www.pewinternet.org/reports/toc.asp?Report=71.

Young Adults Embrace Music Downloading
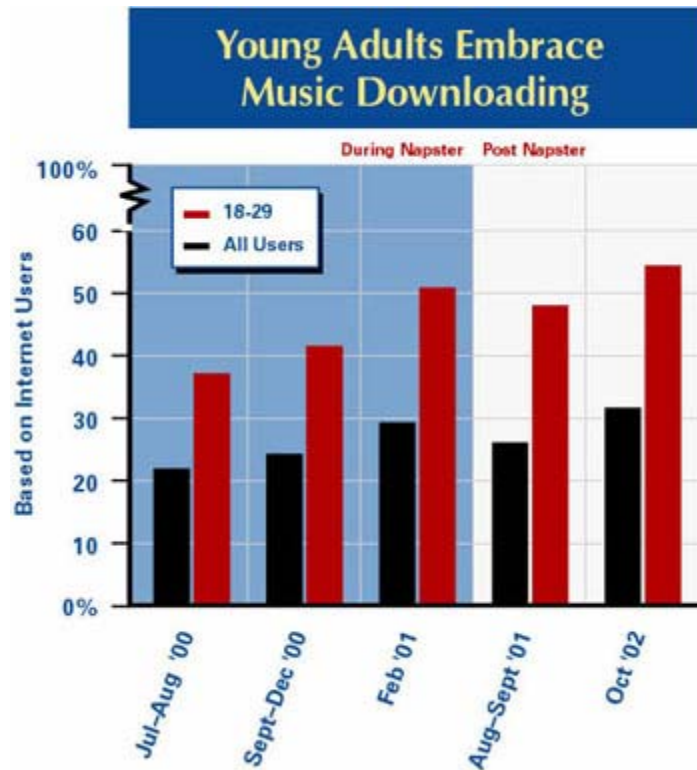
Children and teens have been even more voracious downloaders. In a special survey of 754 children between the ages of 12 and 17 that we conducted in late 2000, we found that 53% of online children had downloaded music. For comparison's sake, only 42% of 18- to 29-year-olds said they had done this. Considering the growth that has occurred across all age groups between 2000 and 2002, it is likely that number of children downloading music has also grown.

Other demographics

A trend that could be related to the high proportions of young adults who download music, Internet users with lower education and income levels are more likely music downloaders compared to those with higher levels of education and income. In our October survey, 39% of users with a high school education or less had downloaded music files, compared to just 25% of those with a college degree. The effect of income is somewhat less pronounced; 38% of users who had household incomes of less than $30,000 had downloaded music, while 30% of those with household incomes of $75,000 or more said they had done so.

In 2000, 2001, and 2002, downloading music was one of the few activities for which experience did not play a key role; it was more or less an equally popular pastime among new users and seasoned veteran users alike. However, in part because of the large amount of bandwidth required for the speedy transfer of large music files, those with high-speed Internet connections are far more likely to have downloaded music than other Internet users. In October, 51% of broadband users had pulled music files off the Web, while only

28% of dial-up users had done so. Even more striking is what occurs on a typical day online: High-speed users were more than four times as likely to download music on an average day compared to dial-up users.

For more information on music downloading, see the following Pew Internet Project reports:

Music Downloading, File-sharing and Copyright
http://www.pewinternet.org/reports/toc.asp?Report=96

The Music Downloading Deluge: *37 million American adults and youths have retrieved music files on the Internet*
http://www.pewinternet.org/reports/toc.asp?Report=33

Downloading Free Music: Internet Music Lovers Don't Think It's Stealing
http://www.pewinternet.org/reports/toc.asp?Report=23

13 Million Americans 'Freeload' Music on the Internet
http://www.pewinternet.org/reports/toc.asp?Report=16

Slightly more users have listened to music online.

- 38% of Internet users said they had listened to music online in our August– September 2001 survey.

- That represents growth of 30% from 33 million who had listened to music online as of the summer of 2000, to 43 million had done so as of August–September 2001.

- Online men are more likely than online women to say they have listened to music on the Internet.

- Music listening is most popular among young adult users and minority groups.

- A relatively high proportion of Internet users in lower income groups and those with lesser educational attainment have listened to music online.

- There is a higher incidence of online music listening among those with broadband connections.

We first began asking about listening to music online in the summer of 2000. At that time, 35% of all Internet users, or roughly 33 million online Americans, said they had listened to music via the Web. A little over a year later, in August–September 2001, a slightly higher percentage, 38% or about 43 million Americans, said they had listened to songs online. The likelihood that an Internet user would listen to music during a typical day online did not change notably between 2000 and 2001; on an average day in August– September 2001, 4% of Internet users were logging on to listen to music. However, considering that audio quality and consistency is largely contingent on Internet connection speed, one might assume that this activity has become more widespread since 2001, as broadband usage levels have risen significantly during that time.

Internet users listen to music online in many different ways. From live Internet radio broadcasts, music store Web sites and other music services, to streaming audio clips available through musicians' or fans' Web sites, there are a myriad of outlets from which one can enjoy music content online. The broadcasts of Web radio stations have become integral aspects of many users' everyday experience online, especially those who value access to a diverse array of music genres and formats not typically available through mainstream radio outlets.

Male Internet users are more likely to have consumed music content on the Web compared to female users. Similar to what we have found with downloading music, men have repeatedly been the most experienced music listeners. The last time we polled this question in 2001, 42% of online men had listened to music online, while only 35% of online women had done so.
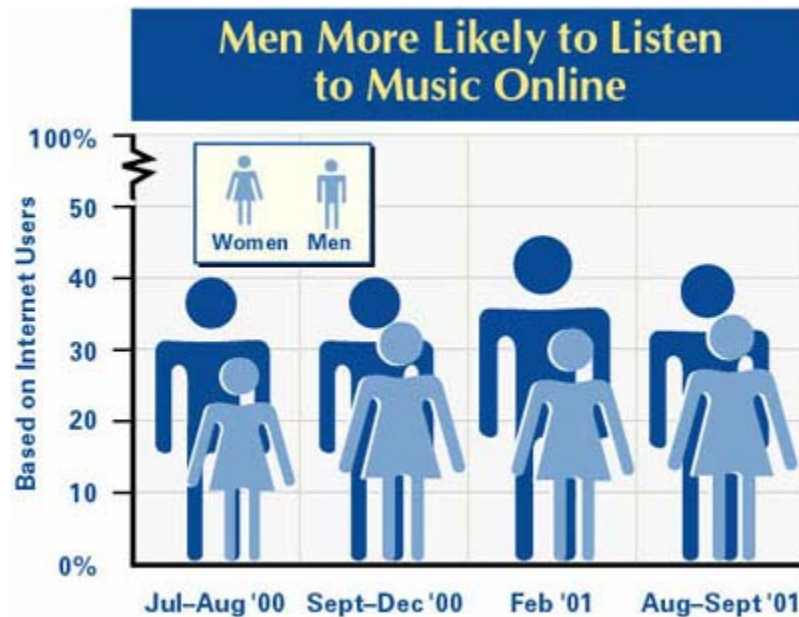
In the time that we have studied this activity, minority user groups have displayed exceptional interest in taking their music listening to the Web. Online English-speaking Hispanics and online African-Americans have exceeded the overall trend of all users, often by 10 or more percentage points. The most recent portrait of online music listening was as follows: 47% of online Hispanics, 51% of online blacks, and 36% of online whites had listened to songs online.[54]

As is the case with many online entertainment activities, time and again, the youngest Internet users have been the most likely to say they are online music listeners. For example, the last time we asked this question, 58% of 18- to 29-year-olds had listened to songs online, while just 35% of 30- to 49-year-olds said they had done this.

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[54] The unweighted n for online English-speaking Hispanics was 89 in the August-September 2001 survey.

Comparatively, 25% of 50- to 64-year-olds said they had listened to music on the Web and 17% of users aged 65 and over said this.[55]
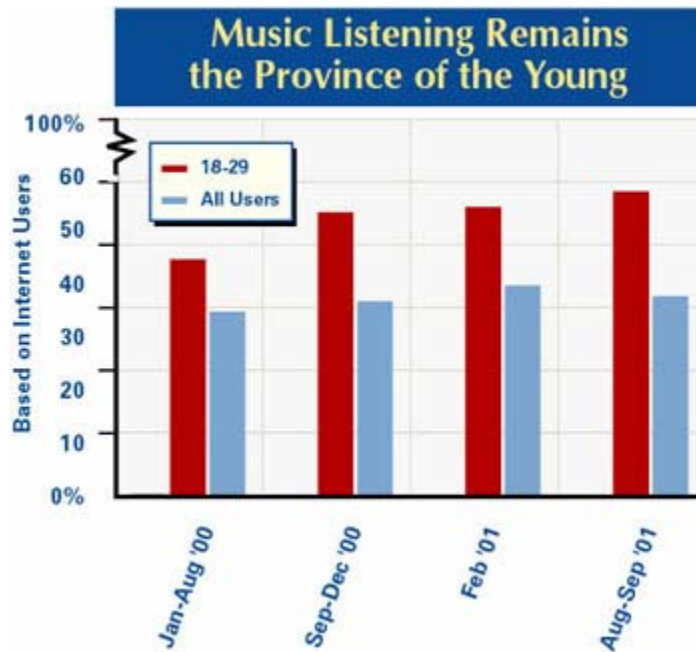
Other demographics

Just as age makes a difference in the likelihood that an Internet user will use the Web as a music resource, there is also variation according to education level; high school graduates and those with some college education who use the Internet are more likely to be online music listeners compared to those who have completed their college education. In August–September 2001, 40% of high school graduates who were online, and 43% of those with some college education said they had listened to music on the Internet, while 34% of college graduates said this.

Income levels also tend to relate to age, but have a somewhat more moderate effect on music listening. Overall, more Internet users with annual household incomes under $30,000 have said they are music listeners compared to those with higher incomes. Also, Internet users with high-speed connections at home have been more likely to listen to music online than dial-up users. As we reported in "The Broadband Difference," a callback survey from February 2002 (not a regular tracking survey) revealed that 58% of home broadband users had listened to music via the Web, while just 37% of all Internet users (going online with any type of connection) had done so.

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[55] The unweighted n for Internet users aged 65 and over was 71 in the August-September 2001 survey.

The use of the Internet to check sports scores or information has increased significantly, particularly among young people.

- 44% of Internet users have checked for sports scores or information online, as of September 2002.

- This represents 73% growth from 30 million Americans in March 2000, to 52 million in September 2002.

- The number of users who check sports scores on a typical day doubled from 7 million Americans to 14 million between 2000 and 2002.

- Online men are more likely than online women to say they have sought sports information on the Internet.

- Young adult Internet users are more likely than older users to seek sports information.

- Minority Internet users are more likely to have sought sports information online than whites.

- Relatively low proportions of Internet users in the lowest income groups have checked sports information online.

- There is a higher incidence of seeking sports content among those with broadband connections and high levels of experience online.

In our September 2002 survey, 44% of all online Americans said they had used the Internet to check for sports scores and information. That is a jump up from the 35% of Internet users who said they had gone online to look for sports scores or information in our March 2000 survey and represents an increase of roughly 22 million people. In the March survey, 8% of users (7 million people) were checking for sports information on a typical day, and by September 2002 that number had gone up to 12% of all users (14 million people.

With content-rich sites that offer up-to-the-minute coverage like ESPN.com and the plethora of sites that cater to fantasy football leagues, the online sports audience has plenty of resources. The Web offers access to a wide array of sports news, analysis, and multimedia clips — on everything from NBA basketball to rough-terrain unicycling.

Overall, men take a much greater interest in following sports online — online men are consistently twice as likely to say they have checked for sports scores and information on the Web and three times as likely to do so on a typical day compared to online women.

Online African-Americans and online English-speaking Hispanics are proportionately more likely to say they have sought sports content on the Internet than online whites. We have repeatedly found that these demographics matter in terms of overall experience with this activity — however, it is not clear that online whites are any less likely to search for sports information on a typical day.

African-Americans are More Likely to Get Sports Info Online
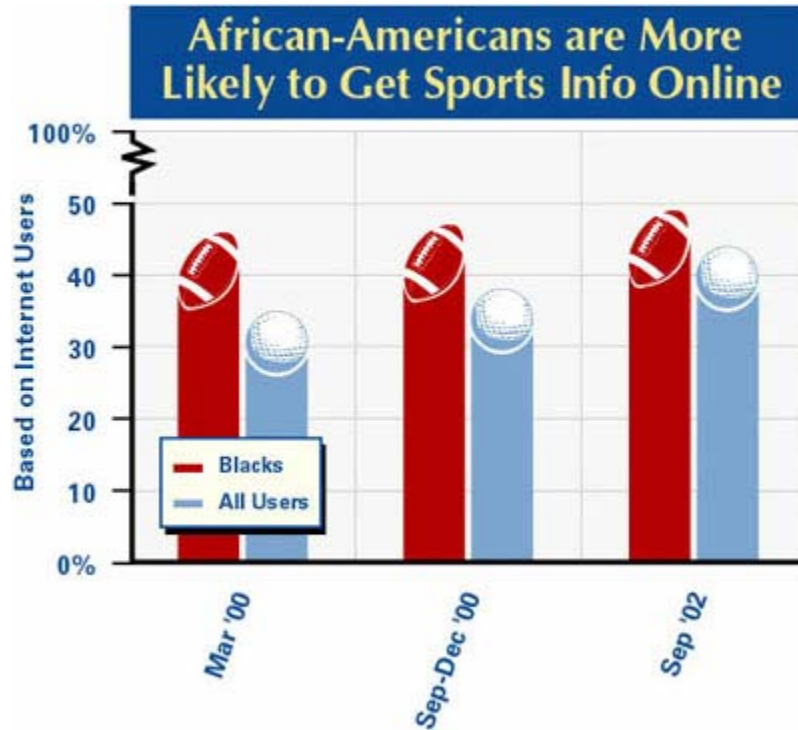
The youngest Internet users are the most likely age cohorts to seek out sports information online. In September 2002, the breakdown looked like this: 51% of wired 18- to 29-year-olds reported checking for sports information, 45% of the 30-49 age bracket, 32% of 50- to 64-year-olds, and 38% of those aged 65 and over.

Other demographics

Variations according to income have not been substantial, but users in the various income groups have shifted their tendency towards this activity over time; those in the highest income groups have become more likely members of the online sports audience. Most recently, 40% of users with household incomes under $30,000 said they had logged on for sports information, compared to 51% of those who live in households earning $75,000 or more.

The number of years an Internet user has been online does appear to make a difference with sports searching once a user reaches the 4-year mark. In September, all users with less than 4 years' experience online were equally as likely to say they had checked for sports scores and information. Specifically, 35% of those with 1 year of experience online had sought sports info, which compared to 37% of those who had been online 2-3 years and 47% of those who had been online for 4 years or more.

Though the difference has not been extreme, in general, more users with home broadband access have sought sports information online compared to their dial-up counterparts. In September 2002, for example, 51% of home broadband users had looked for sports information and 44% of dial-up users had done so.

Online gaming has grown modestly but steadily.

- 37% of Internet users said they have played games online as of September 2002.

- That represents 45% growth from 29 million Americans in March 2000, to 42 million in June–July 2002.

- Online men and online women are equally as likely to have played games online.

- Online gaming is most popular among young adult users and minority groups.

- Relatively low proportions of Internet users in the lowest income groups and those with the least educational attainment have tried online gaming.

- There is a higher incidence of online gaming among those with broadband connections and high levels of experience online.

Online gaming has grown modestly but steadily over the course of our research. Approximately 29 million Americans (34% of Internet users) said they had logged on to play games when we first started asking this activity in March 2000. By the June-July 2002 survey period, that number had grown to roughly 42 million Americans (37% of Internet users). The frequency with which users play online games has also been quite stable; between 6% and 7% of Internet users have been enjoying this pastime on any given day since 2000.

With widespread broadband uptake still on the horizon, it is likely that growth in online gaming will mature more dramatically in the future. Rich audio and graphical content must be transmitted to facilitate many of these networked gaming sessions, so high-speed Internet connections will most likely make this activity more appealing to a broader spectrum of people. Market research firm In-Stat/MDR estimates that online gaming accounted for about 9% of the total Internet traffic sent over the U.S. backbone in 2002, and projects that this percentage will grow as popular applications like Microsoft's Xbox Online (which requires a broadband connection) become more popular.[56]

In contrast to the common perception that gaming is a male-dominated activity, we repeatedly found over the course of 2000 that female Internet users were more likely to say they had played games online. In keeping with this trend, they were also more likely to participate in games on any given day in 2000. However, in 2002, male Internet users caught up with women, making online gaming equally popular for both groups.

Overall, African-American Internet users have been more likely to play online games compared to English-speaking Hispanics and whites. Yet, while about half of all online blacks have consistently said they have played games online since we first started asking about gaming, online Hispanics grew from 39% in the March-May 2002 survey to 54% in June-July 2002, while blacks remained at 48%.[57] Whites, however, have never

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[56] In-Stat/MDR. "Online Gaming Anything but Fun and Games." (Market Alert: March 19, 2003.) Available at: http://www.instat.com/newmk.asp?ID=577&SourceID=00000527000000000000.
[57] The unweighted n for online Hispanics in the June-July 2002 survey was 96.

surpassed 34%, making them the least likely group to engage in these online competitions.
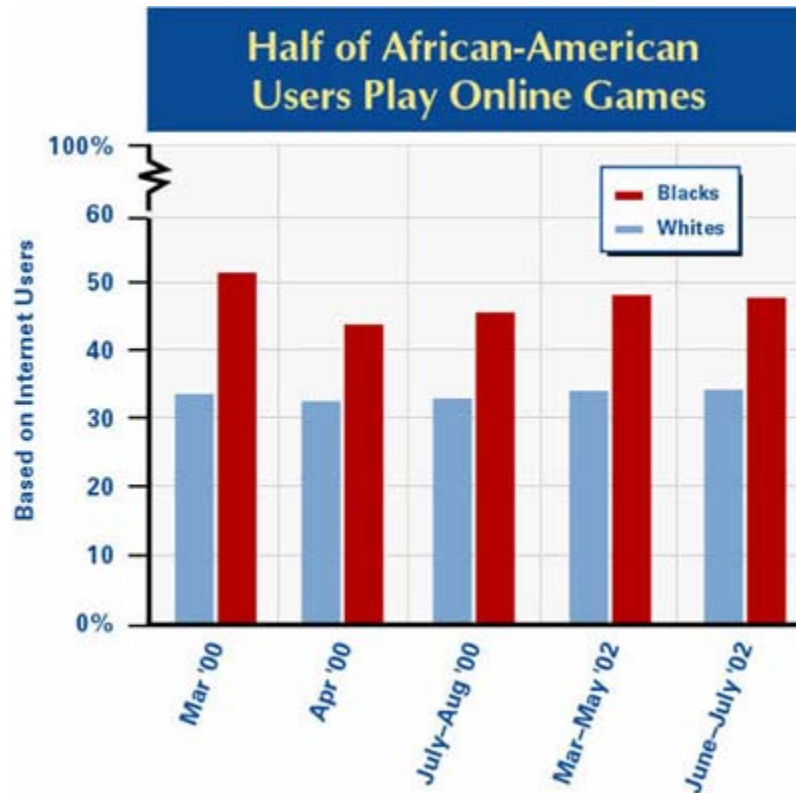
One might expect to find that the youngest group of Internet users is the most savvy with gaming on the Net and is the fastest-growing age demographic for this activity. However, as we have found in our prior research, online gaming is surprisingly popular among wired seniors. In fact, 18- to 29-year-olds are the only group of users whose enthusiasm for games surpasses that of seniors. Although seniors are far less experienced with online games compared to 18- to 29-year-olds between 2000 and 2002, gaming grew more rapidly among wired seniors' than it did for young adult users.

Gaming Appeals to Young Internet Users Most
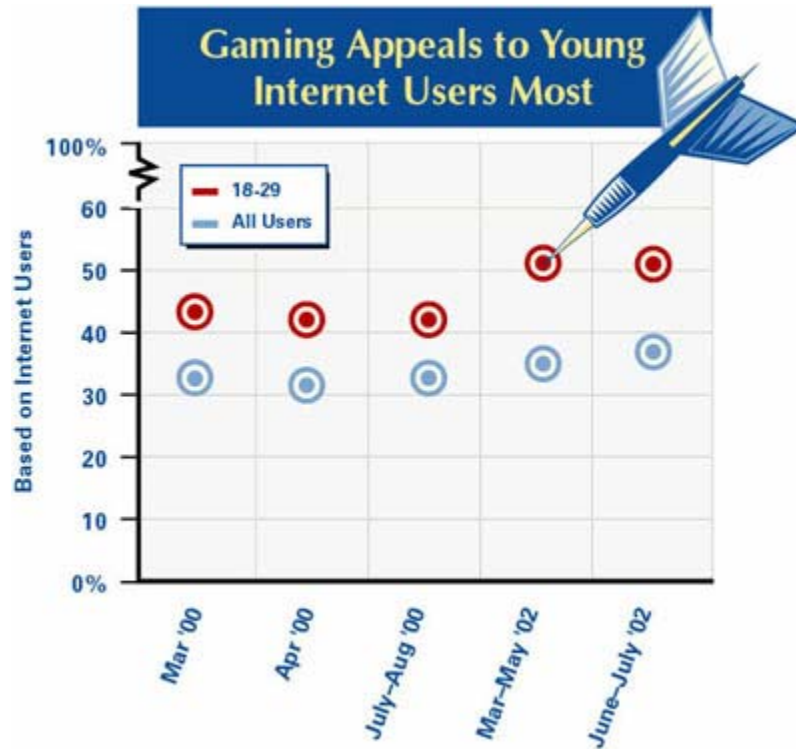
Other demographics

Not unlike other "fun" pastimes on the Web that have a particular appeal to youth (such as chat and IM), those with lower household incomes and education levels are more likely to have played games online. Further, those with at least 1 year of Internet experience and users who have high-speed connections at home have been somewhat more likely to participate in online gaming.

For more information on Internet users and gaming, see:

Let the games begin: Gaming technology and entertainment among college students
http://www.pewinternet.org/reports/toc.asp?Report=93

About a fifth of users create content for the Internet, and most of them have high-speed connections.

■ 19% of Internet users said they had created content for the Internet as of October 2002.

■ We have only asked about this activity for a short period, thus we have not found any growth in the absolute number of people who say they have created content for the Internet.

- More in upper education and income groups have created content than those in lower socio-economic groups.

- Those with high-speed Internet connections at home and those with more experience online are more likely to be content creators.

Approximately 21 million Internet users say they have created content for the Internet, such as helping to build a Web site, creating an online diary, or posting their thoughts on an online bulletin board or other online community. We began collecting data for this activity at the beginning of January 2002, at which time 20% of online Americans said they had created content for the Web.

The popularity of this activity is highly contingent on having access to high-speed Internet connections at home. The last time we polled this question, 34% of broadband users said they had created content for the Web and 11% said they had done so the day before. In comparison, only 4% of all Internet users were creating content for the Internet on a typical day.

Because this is such a broadly defined activity, our sample of content creators could include everyone from veteran users with sophisticated graphic design skills to new users who simply post recipes to culinary Web sites. That said, it is still overwhelmingly an activity that appeals to more experienced Internet users. In October 2002, 28% of users with 6 or more years of experience online had created content for the Web, while just 17% of those who had 4-5 years' experience online had done so.

Overall, men have outpaced women for this activity, possibly reflecting the greater number of men who have broadband access at home. In October, that meant that 24% of online men and 15% of online women had produced Web content.

The various racial groups report similar amounts of experience with creating content for the Internet. In October 2002, 19% of online whites, 19% of online blacks, and 16% of online English-speaking Hispanics said they had created something for the Web.[58]

As is the case with other activities that favor high-speed Internet connections, such as music downloading and playing online games, creating content is widespread among younger Internet users, who tend to have access to faster connections. Seniors, who are the least likely of all the demographic groups to have broadband access, understandably lag far behind in experience with content creation.

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[58] The unweighted n for online African-Americans in the October 2002 survey was 80. The unweighted n for online English-speaking Hispanics was 71.

Young Adults and Broadband Users Lead in Content Creation

Based on Internet Users

Sep '02
- Other
- All Users

(Bar chart values:)
- All Users (red): 18
- 65+: 3
- 50 - 64: 11
- 30 - 49: 19
- 18 - 29: 27
- Broadband Users: 31
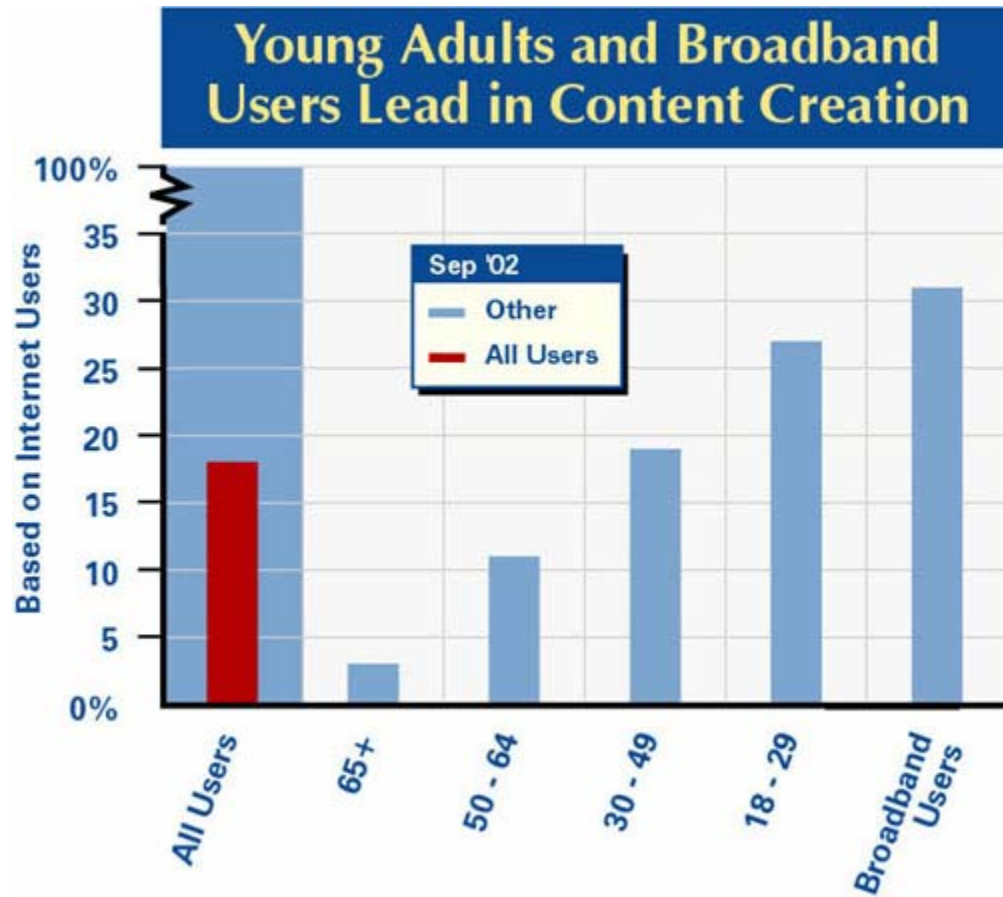
Other demographics

Internet users with higher education levels are generally more likely to contribute content compared to those with less education. Variations according to income have been less consistent, but by October 2002, users with household incomes of $50,000 or more stood out as more likely content creators compared to those living with smaller incomes.

Part 6.

Conclusions

Major changes in technologies of access, the maturation of Internet users, and the development of new applications and content are three likely factors that have contributed to the growth of online pursuits.

Since the Pew Internet & American Life Project began its research in 2000, the applications available on the Internet have changed dramatically, the composition of the Internet population has changed, the ways to access the Internet have expanded, and users themselves have grown increasingly familiar with the things they can do online. As a result, the percentage of Internet users who do almost any given activity we ask about — from email to downloading music to seeking religious information online — has increased in the years since the Project has existed. In some cases, such as online banking, an activity evolved from being a relatively novel feature used by a modest segment of mostly veteran users to a widely used and valuable time-saving resource that many Americans now consider to be an indispensable feature of the Internet. In other cases, such as downloading music, an activity seemed to be at its peak in 2000, but continued to grow over time — even as there were legal attempts to thwart it.

Technology has changed

Technologies that facilitate ease of access appear to have played a considerable role in expanding the roster of activities people pursue online. Namely among them, the proliferation of high-speed access has changed the way people incorporate the Internet into their everyday lives; broadband transforms the Internet from being an occasional go-to reference and communication tool to an "always-on" information appliance.[59] While the majority of the online population still dials in to log on, the 31% of home Internet users who said they had high-speed connections in August 2003 is five times what it was in June 2000 (6%).

The impact of broadband Internet access is consistent across nearly every activity we examined for this report; those with high-speed connections at home do more online more often than dial-up users. Dramatic differences in broadband access are evident, for example, among those who download or listen to music online, create content, conduct job research, or buy products online. Looking forward, the push towards the adoption of wireless technologies promises further transformations in the integration of high-speed

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[59] Horrigan, John and Lee Rainie. "The Broadband Difference." (Pew Internet Project: June 2002.) Available at: http://www.pewinternet.org/reports/toc.asp?Report=63.

Internet into the daily lives of Americans. In November of this year, for example, the Federal Communications Commission designated a new portion of the airwaves to accommodate wireless Internet data transmissions in hopes that it might help provide high-speed access in rural and other underserved areas.[60]

Users have gained experience that changes their online behavior

As the technologies of Internet access have matured, so have its users. The findings in this report build upon previous research from The Pew Internet Project, which has shown that as Internet users gain experience online, they have increased confidence in the technology and use it to perform more significant tasks.[61] The growing cohort of veteran users within the overall Internet population translates into more people who have explored a wide range of applications, particularly those activities requiring high levels of trust or technical skill. While most new users start with email and then move on to develop their information-searching skills, it is typically the more experienced users who attempt sophisticated activities such as completing an online transaction or creating content for the Internet.

The amount of content online has grown

A third factor influencing the growth of various Internet activities has been the increase in available content and applications. In recent years, for example, large institutions have orchestrated monumental efforts to bring educational and government materials online, commercial organizations large and small have brought their services online, and individuals have also independently accounted for much of the content posted on the Internet. And this vast amount of content and growing number applications continue to evolve; new features like blogging and online bill paying have appeared while old applications like email and search engines have been refined. In short, there is simply more to do online now than there was in 2000 and there are more ways to pursue everything online.

Different demographic groups use the Internet in different ways.

Despite all of this growth, not all groups are participating in these activities at the same level. While many live in a rich online world, those who are least likely to use the Internet are also often the least likely to access a wide range of tools and resources after they come online. These differences are especially apparent when looking at information-gathering activities and financial and transaction activities.

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[60] Stern, Christopher. "Wireless Networks Gain Spectrum." (The Washington Post: November 14, 2003, Page E01.)

[61] Horrigan, John. "Getting Serious Online: As Americans gain experience, they use the Web more at work, write emails with more significant content, and pursue more serious activities." (Pew Internet Project: March 2002.) Available at: http://www.pewinternet.org/reports/toc.asp?Report=55.

African-Americans, older Americans, and those with lower levels of education and household income who use the Internet are not engaging in many online activities at the same rate as the average Internet user. Considering their relative newness to the medium, these trends may shift as these users gain more experience online.

However, when looking at trends within the major demographic categories covered in this report, the following highlights emerge:

Gender

While female Internet users have grown to participate at equal levels for many activities when compared to men (such as visiting a government Web site or seeking product information), the portion of male Internet users doing most online activities still outnumbers women. Some of the most considerable differences fall along traditional gender lines; men are much more likely to seek financial information or seek sports information online, and women are more likely to gather health and religious information. However, for other activities like online gaming and government information seeking, where there once was a rift, gender differences have become less apparent.

Race

Differences in activity levels when looking across racial groups abound; there are few instances where online whites, blacks, and English-speaking Hispanics report equal participation levels. For communication activities, online African-Americans and English-speaking Hispanics have both trailed behind noticeably with their use of email. However, their use of instant messaging and participation in chat rooms or online discussions often exceeds that of online whites. For many of the information utility activities covered in this report, either African-American Internet users or English-speaking Hispanic users (or both) generally report lower activity when compared to white users. This is the case with those who do research for their job or look for health and medical information online, for example. When looking at financial and transaction activities, there are also some sizable discrepancies; African-Americans and English-speaking Hispanics who use the Internet are not participating in online auctions or making online purchases at the same rate as white users. However, when it comes to hobby and entertainment activities, such as downloading music, playing online games or looking for sports information, online whites generally report lower numbers in comparison.

Age

While young adults who use the Internet (ages 18-29) have consistently paved the way with specialized online communication tools like IM and chat, and continue to lead in most hobby and entertainment activities such as downloading music and going online for fun, those aged over 50 have exhibited considerable increases in information utility and

financial and transaction-related activities since 2000. For instance, wired 50- to 64-year-olds and wired seniors who seek political information have grown by almost 10 percentage points. And wired seniors who search for health information online or do online banking have both jumped up a whole 20 percentage points. The 30-49 age group is also strong in these categories; these users have become the most likely to look for government information online, do research for their job, or buy a product online, for example.

Income

Differences in Internet activity incidence levels when comparing across income groups have been most consistent among financial and transaction activities and hobby and entertainment pursuits. Those with lower household incomes are generally less likely to do any one of the financial or transaction-related activities we have asked about compared to those with higher incomes. These gaps have been substantial for those who have sought financial information online, bought or made travel reservations, or exchanged stocks online, for example. In contrast, Internet users with lower household incomes tend to be more likely than those with higher incomes to say they have tried any one of the hobby or entertainment-related activities covered in the report.

Education level

The pattern of variation according to education level is even more stable. With the exception of a handful of activities that tend to appeal to younger users (playing online games, going online for fun, instant messaging, etc.), Internet users who have higher educational attainment are more likely to have tried the majority of the activities we ask about. Education's effect has been especially strong for financial and transaction-based activities such as buying a product online and information utility pursuits like doing research for one's job online. This is very likely the case because educational attainment is so closely tied to people's income levels.

The Internet is the killer app.

The Internet has been irrevocably woven into everyday life for many Americans. While there was once a time when the Internet was interesting because it was dazzling, it is now a normalized part of daily life for about two-thirds of the U.S. population. For some, it has become an integral and required part of work or school. For others, it is a primary means to stay in touch with family and friends. All the trends set out here seem destined to continue, if not evolve, as the technology gets better, the applications become simpler, the appliances that use the Internet become omnipresent, and the technology fades into the background of people's lives – as powerful, ubiquitous, commonplace, and "invisible" as electricity.

Methodology

This Pew Internet & American Life Project report is based on the findings of daily tracking surveys on Americans' use of the Internet.

The primary numerical data used for this report was gathered through telephone interviews conducted by Princeton Survey Research Associates between March 2000 and December 2002 among multiple samples of adults, aged 18 and older. Please see the chart below for detailed information on sample size and margins of error for each survey period. Additional data is cited from an August 2003 survey also gathered through telephone interviews conducted by Princeton Survey Research Associates. For results based on the total sample from August 2003 (n=2,925), one can say with 95% confidence that the error attributable to sampling and other random effects is plus or minus two percentage points. For results based on Internet users (n=1,899), the margin of sampling error is also plus or minus two percentage points. In addition to sampling error, question wording and practical difficulties in conducting telephone surveys may introduce some error or bias into the findings of opinion polls.

Sample Sizes and Margins of Error for Tracking Surveys (2000-2002)				
Survey Date	Total Number	Internet User Number	Margin of Error (Total)	Margin of Error (Internet Users)
March 2000	3,533	1690	±2.5 %	±3%
April 2000	2503	1345	±2.5%	±3%
May-June 2000	4606	2277	±2%	±2.5%
July-August 2000	2109	1101	±2.5%	±3%
September-December 2000	13342	7532	±1%	±1.5%
February 2001	2096	1198	±2%	±3%
August-September 2001	2247	1351	±2%	±2%
September 12-19 2001	2039	1138	±2%	±3%
October-November 2001	2513	1437	±2%	±2.7%
November-December 2001	2575	1501	±2.5%	±3%
January 2002	2391	1415	±2%	±3%
March-May 2002	3553	2259	±2%	±2%
June-July 2002	2501	1527	±2%	±3%
September 2002	2092	1318	±2%	±3%
October 2002	1677	1027	±2%	±3%
November 2002	2745	1707	±2%	±2%
December 2002	2038	1220	±2%	±3%

Additional data from 2003, also gathered through telephone interviews conducted by Princeton Survey Research Associates, is cited throughout the report. These surveys were conducted between March and August 2003. For results based on the total sample from March 12-19, 2003 (n=883), one can say with 95% confidence that the error attributable to sampling and other random effects is plus or minus four percentage points. For results based on Internet users (n=510), the margin of sampling error is plus or minus five percentage points. For results based on the total merged sample from March 12-19 and April 29-May 20, 2003 (n=2515), one can say with 95% confidence that the error attributable to sampling and other random effects is plus or minus three percentage points. For results based on Internet users (n=1,555), the margin of sampling error is also plus or minus three percentage points. For results based on the total sample from June 10-24, 2003 (n=2,200), one can say with 95% confidence that the error attributable to sampling and other random effects is plus or minus two percentage points. For results based on Internet users (n=1,380), the margin of sampling error is plus or minus three percentage points. For results based on the total sample from August 2003 (n=2,925), one can say with 95% confidence that the error attributable to sampling and other random effects is plus or minus two percentage points. For results based on Internet users (n=1,899), the margin of sampling error is also plus or minus two percentage points. In addition to sampling error, question wording and practical difficulties in conducting telephone surveys may introduce some error or bias into the findings of opinion polls.

The sample for each survey is a random digit sample of telephone numbers selected from telephone exchanges in the continental United States. The random digit aspect of the sample is used to avoid "listing" bias and provides representation of both listed and unlisted numbers (including not-yet-listed numbers). The design of the sample achieves this representation by random generation of the last two digits of telephone numbers selected on the basis of their area code, telephone exchange, and bank number.

New sample was released daily and was kept in the field for at least 5 days. This ensures that complete call procedures were followed for the entire sample. Additionally, the sample was released in replicates to make sure that the telephone numbers called are distributed appropriately across regions of the country. At least 10 attempts were made to complete an interview at every household in the sample. The calls were staggered over times of day and days of the week to maximize the chances of making contact with a potential respondent. Interview refusals were re-contacted at least once in order to try again to complete an interview. All interviews completed on any given day were considered to be the final sample for that day.

Non-response in telephone interviews produces some known biases in survey-derived estimates because participation tends to vary for different subgroups of the population, and these subgroups are likely to vary also on questions of substantive interest. In order to compensate for these known biases, the sample data are weighted in analysis. The demographic weighting parameters are derived from a special analysis of the most recently available Census Bureau's Current Population Survey. This analysis produces population parameters for the demographic characteristics of adults age 18 or older,

living in households that contain a telephone. These parameters are then compared with the sample characteristics to construct sample weights. The weights are derived using an iterative technique that simultaneously balances the distribution of all weighting parameters.

Throughout the report, survey results are used to estimate the approximate number of American adults, in millions, who were engaging in Internet activities during a particular period. These figures are derived from the Census Bureau's estimates of the number of adults living in telephone households in the continental United States. The Census Bureau updates these estimates at the end of each year. The schedule of estimates that were used in this report to calculate the number of people doing any given activity online was as follows: 188 million American adults was used as the baseline for estimates from our March 2000-December 2000 surveys, 191 million for February 2001-December 2001 surveys, 193 million for January 2002-December 2002 surveys, and 200 million for March 2003 to the present. In some cases, the approximated number of people doing an activity may differ from previously published estimates due to the timing of the Census Bureau's releases.

Each sample is weighted to be representative of the whole population. It is frequently the case, though, that the samples are not large enough to involve large numbers of people in certain subpopulations. Therefore, any reference to a subgroup with a sample size of less than 100 was footnoted accordingly in this report.

Appendix

Pew Internet Project Reports, 2000-2003

Online Activities & Pursuits

1. Spam: How it is hurting email and degrading life on the Internet (Author: Deborah Fallows. Release date: October 22, 2003) Available at: http://www.pewinternet.org/reports/toc.asp?Report=102

2. Music Downloading, File-sharing and Copyright (Authors: Mary Madden and Amanda Lenhart. Release date: July 31, 2003) Available at: http://www.pewinternet.org/reports/toc.asp?Report=96

3. Let the Games Begin: Gaming technology among college students (Author: Steve Jones. Release date: July 6, 2003) Available at: http://www.pewinternet.org/reports/toc.asp?Report=93

4. Hunting for a Home Online (Authors: Angie Boyce and Lee Rainie. Release date: August 5, 2003) Available at: http://www.pewinternet.org/reports/toc.asp?Report=84

5. Online Banking (Author: Susannah Fox. Release date: November 2002) Available at: http://www.pewinternet.org/reports/toc.asp?Report=77

6. Women Surpass Men as E-Shoppers During the Holidays (Author: Lee Rainie. Release date: January 1, 2002) Available at: http://www.pewinternet.org/reports/toc.asp?Report=54

7. The Music Downloading Deluge (Authors: Mike Graziano and Lee Rainie. Release date: April 24, 2001) Available at: http://www.pewinternet.org/reports/toc.asp?Report=33

8. Downloading Free Music: Internet music lovers don't think it's stealing (Authors: Amanda Lenhart and Susannah Fox. Release date: September 28, 2000) Available at: http://www.pewinternet.org/reports/toc.asp?Report=23

9. 13 Million Americans "Freeload" Music on the Internet (Authors: Lee Rainie, Susannah Fox, and Amanda Lenhart. Release date: June 8, 2000) Available at: http://www.pewinternet.org/reports/toc.asp?Report=16

Demographics

1. Internet Use by Region in the U.S. (Author: Tom Spooner. Release date: August 27, 2003) Available at: http://www.pewinternet.org/reports/toc.asp?Report=98

2. The Ever-Shifting Internet Population (Author: Amanda Lenhart. Release date: April 16, 2003) Available at: http://www.pewinternet.org/reports/toc.asp?Report=88

3. Asian-Americans and the Internet (Author: Tom Spooner. Release date: December 12, 2001) Available at: http://www.pewinternet.org/reports/toc.asp?Report=52

4. Wired Seniors (Author: Susannah Fox. Release date: September 9, 2001) Available at: http://www.pewinternet.org/reports/toc.asp?Report=40

5. Hispanics and the Internet (Authors: Tom Spooner and Lee Rainie. Release date: July 25, 2001) Available at: http://www.pewinternet.org/reports/toc.asp?Report=38

6. Teenage Life Online (Authors: Amanda Lenhart, Lee Rainie, and Oliver Lewis. Release date: June 20, 2001) Available at: http://www.pewinternet.org/reports/toc.asp?Report=36

7. African Americans and the Internet (Authors: Tom Spooner and Lee Rainie. Release date: October 22, 2000) Available at: http://www.pewinternet.org/reports/toc.asp?Report=25

8. New Internet Users (Author: John B. Horrigan. Release date: September 25, 2000) Available at: http://www.pewinternet.org/reports/toc.asp?Report=22

9. Who's Not Online (Author: Amanda Lenhart. Release date: September 21, 2000) Available at: http://www.pewinternet.org/reports/toc.asp?Report=21

Internet Evolution

1. Counting on the Internet: Most expect to find key information online (Authors: John B. Horrigan and Lee Rainie. Release date: December 29, 2002) Available at: http://www.pewinternet.org/reports/toc.asp?Report=80

2. Use of the Internet at Major Life Moments (Authors: Nathan Kommers and Lee Rainie. Release date: May 8, 2002) Available at: http://www.pewinternet.org/reports/toc.asp?Report=58

3. Getting Serious Online: As Americans gain experience, they use the Web more at work, write emails with more significant content, and pursue more serious activities (Authors: John B. Horrigan and Lee Rainie. Release date: March 3, 2002) Available at: http://www.pewinternet.org/reports/toc.asp?Report=55

4. The Dot-com Meltdown and the Web (Authors: Lee Rainie, Tom Spooner, Bente Kalsnes, and Sharon Nof. Release date: November 14, 2001) Available at: http://www.pewinternet.org/reports/toc.asp?Report=48

5. Time Online: Why some people use the Internet more than before and some use it less (Authors: Susannah Fox and Lee Rainie. Release date: July 16, 2001) Available at: http://www.pewinternet.org/reports/toc.asp?Report=37

6. More Online, Doing More: 16 million newcomers gain Internet access in the last half of 2000 (Authors: Lee Rainie and Dan Packel. Release date: February 18, 2001) Available at: http://www.pewinternet.org/reports/toc.asp?Report=30

Technology & Media Use

1. Consumption of Information Goods and Services in the United States (Author: John B. Horrigan. Release date: November 23, 2003) Available at: http://www.pewinternet.org/reports/toc.asp?Report=103

2. Broadband Adoption at Home (Author: John B. Horrigan. Release date: May 18, 2003) Available at: http://www.pewinternet.org/reports/toc.asp?Report=90

3. Search Engines (Author: Susannah Fox. Release date: July 3, 2002) Available at: http://www.pewinternet.org/reports/toc.asp?Report=64

4. The Broadband Difference (Authors: John B. Horrigan and Lee Rainie. Release date: June 23, 2002) Available at: http://www.pewinternet.org/reports/toc.asp?Report=63

Health

1. Internet Health Resources (Authors: Susannah Fox and Deborah Fallows. Release date: July 16, 2003) Available at: http://www.pewinternet.org/reports/toc.asp?Report=95

2. Vital Decisions: How Internet users decide what information to trust when they or their loved ones are sick (Authors: Susannah Fox and Lee Rainie. Release date: May 22, 2002) Available at: http://www.pewinternet.org/reports/toc.asp?Report=59

3. Exposed Online: Why the new federal health privacy regulation doesn't offer much protection to Internet users (Authors: Angela Choy, Zoe Hudson, Joy Pritts, and Janlori Goldman. Release date: November 19, 2001) Available at: http://www.pewinternet.org/reports/toc.asp?Report=49

4. The Online Health Care Revolution (Authors: Susannah Fox and Lee Rainie. Release date: November 26, 2000) Available at: http://www.pewinternet.org/reports/toc.asp?Report=26

Family, Friends & Communities

1. Holidays Online (Authors: Lee Rainie and John B. Horrigan. Release date: January 7, 2003) Available at: http://www.pewinternet.org/reports/toc.asp?Report=83

2. Parents Online (Authors: Katherine Allen and Lee Rainie. Release date: November 17, 2002) Available at: http://www.pewinternet.org/reports/toc.asp?Report=75

3. Cyberfaith: How Americans pursue religion online (Author: Elena Larsen. Release date: December 23, 2001) Available at: http://www.pewinternet.org/reports/toc.asp?Report=53

4. Online Communities: Networks that nurture long-distance relationships and local ties (Author: John B. Horrigan. Release date: October 31, 2001) Available at: http://www.pewinternet.org/reports/toc.asp?Report=47

5. Holidays Online: Emails and e-greetings outpace e-commerce (Author: John B. Horrigan. Release date: December 31, 2000) Available at: http://www.pewinternet.org/reports/toc.asp?Report=29

6. Wired Churches, Wired Temples (Author: Elena Larsen. Release date: December 20, 2000) Available at: http://www.pewinternet.org/reports/toc.asp?Report=28

7. Tracking Online Life: How women use the Internet to cultivate relationships with family and friends (Authors: Lee Rainie, Susannah Fox, John B. Horrigan, Amanda Lenhart and Tom Spooner. Release date: May 10, 2000) Available at: http://www.pewinternet.org/reports/toc.asp?Report=11

Major News Events

1. The Internet and the Iraq War (Authors: Lee Rainie, Susannah Fox, and Deborah Fallows. Release date: April 1, 2003) Available at: http://www.pewinternet.org/reports/toc.asp?Report=87

2. One Year Later: September 11 and the Internet (Authors: Lee Rainie, Susannah Fox, and Mary Madden. Release date: September 5, 2002) Available at: http://www.pewinternet.org/reports/toc.asp?Report=69

3. The Commons of the Tragedy: How the Internet was used by millions after the terror attacks to grieve, console, share news, and debate the country's response (Authors: Lee Rainie and Bente Kalsnes. Release date: October 10, 2001) Available at: http://www.pewinternet.org/reports/toc.asp?Report=46

4. How Americans Used the Internet After the Terror Attack (Author: Lee Rainie. Release date: September 15, 2001) Available at: http://www.pewinternet.org/reports/toc.asp?Report=45

5. Risky Business: Americans see greed, cluelessness behind dot-coms' comeuppance (Author: John B. Horrigan. Release date: March 16, 2001) Available at: http://www.pewinternet.org/reports/toc.asp?Report=31

6. Olympics Online: The old media beat the new media (Author: Tom Spooner. Release date: October 4, 2000) Available at: http://www.pewinternet.org/reports/toc.asp?Report=24

7. The Love Bug: Few take an online sick day due to virus (Authors: John B. Horrigan and Susannah Fox. Release date: May 19, 2000) Available at: http://www.pewinternet.org/reports/toc.asp?Report=13

Public Policy

1. The Internet and Emergency Preparedness (Author: Lee Rainie. Release date: August 31, 2003) Available at: http://www.pewinternet.org/reports/toc.asp?Report=100

2. Cities Online: Urban development and the Internet (Author: John B. Horrigan. Release date: November 20, 2001) Available at: http://www.pewinternet.org/reports/toc.asp?Report=50

3. Fear of Online Crime: Americans support FBI interception of criminal suspects' email and new laws to protect online privacy (Authors: Susannah Fox and Oliver Lewis. Release date: April 2, 2001) Available at: http://www.pewinternet.org/reports/toc.asp?Report=32

4. Trust and Privacy Online (Author: Susannah Fox. Release date: August 20, 2000) Available at: http://www.pewinternet.org/reports/toc.asp?Report=19

E-gov & E-politics

1. Untuned Keyboards: Online campaigners, citizens and portals in the 2002 elections (Authors: Michael Cornfield, Lee Rainie, and John B. Horrigan. Release date: March 20, 2003) Available at: http://www.pewinternet.org/reports/toc.asp?Report=85

2. Modest Increase in Internet Use for Campaign 2002 (Authors: Andrew Kohut and Lee Rainie. Release date: January 5, 2003) Available at: http://www.pewinternet.org/reports/toc.asp?Report=82

3. Digital Town Hall: How local officials use the Internet (Authors: Elena Larsen and Lee Rainie. Release date: October 2, 2002) Available at: http://www.pewinternet.org/reports/toc.asp?Report=74

4. The Rise of the E-Citizen (Authors: Elena Larsen and Lee Rainie. Release date: April 3, 2002) Available at: http://www.pewinternet.org/reports/toc.asp?Report=57

5. Dot-Gov Goes Retail (Author: Judi Hasson and Graeme Browning. Release date: May 27, 2001) Available at: http://www.pewinternet.org/reports/toc.asp?Report=35

6. Internet Election News Audience Seeks Convenience, Familiar Names (Authors: Andrew Kohut and Lee Rainie. Release date: December 3, 2000) Available at: http://www.pewinternet.org/reports/toc.asp?Report=27

Education

1. College Students and the Web (Authors: Lee Rainie, Max Kalehoff, and Dan Hess. Release date: September 15, 2002) Available at: http://www.pewinternet.org/reports/toc.asp?Report=73

2. The Internet Goes to College: How students are living in the future with today's technology (Author: Steve Jones. Release date: September 15, 2002) Available at: http://www.pewinternet.org/reports/toc.asp?Report=71

3. The Digital Disconnect: The widening gap between Internet-savvy students and their schools (Authors: Douglas Levin and Sousan Arafeh. Release date: August 14, 2002) Available at: http://www.pewinternet.org/reports/toc.asp?Report=67

4. The Internet and Education (Authors: Amanda Lenhart, Maya Simon, and Mike Graziano. Release date: September 1, 2001) Available at: http://www.pewinternet.org/reports/toc.asp?Report=39

Work

1. Email at Work (Author: Deborah Fallows. Release date: December 8, 2002) Available at: http://www.pewinternet.org/reports/toc.asp?Report=79

2. Online Job Hunting (Authors: Angie Boyce and Lee Rainie. Release date: July 17, 2002) Available at: http://www.pewinternet.org/reports/toc.asp?Report=65

3. Wired Workers (Author: Lee Rainie. Release date: September 3, 2000) Available at: http://www.pewinternet.org/reports/toc.asp?Report=20