

Function of internet

Introduction

The Pew Internet Project has looked at how people use the internet in four major ways: to communicate, to gather information, to transact personal and professional business, and to entertain themselves.

1. Communications

Men and women communicate online differently.

In principle, internet users have high regard for the internet as a tool of communication; 85% of both men and women say they consider the internet to be a good way to interact or communicate with others in their everyday lives.¹⁴ But similarities end there. Men and women differ in their modes of online communication, in what they communicate about, and in how much they value their online communications.

Women are more voracious online communicators.

Over the last 5 years, we have polled users about different forms of online communications, both through our regular tracking polls and through one-time modules on communications within topics as varied as health care, civic and community life, and email in the workplace.

How men and women use the internet to communicate			
	% of online men	% of online women	Date of PIP survey
Email	88	94*	Sep 05
Instant message	46	48	Sep 05
Greetings/invites	41	44	Dec 03
Text messaging	33	37	Sep 05
Chats or discuss.	24	20	Sep 05
Placing internet phone calls	9*	5	Jun 03

(*) indicates statistically significant differences.

Women have always been slightly more likely than men to use email and to send cards, greetings and invitations and are pulling ahead of men in instant messaging and text messaging on cell phones. Men are more likely to have communicated online in chats or discussion groups and by making voice calls by voice over internet protocol, or VOIP.

Email is for everyone.

Email has always been the most popular application on the internet. Over 90% of internet users send and receive email. Since we began tracking email use in 2000, the number of men and women who do email has been about equal, with women sometimes taking a slight lead. Further, on an average day, just about the same number of men and women will access their email. As for volume on a typical day, men and women also say they receive about the same number of emails in both their work and personal accounts. But what goes into those emails and how the application is valued differs for men and women.

Women do more with personal email.

In March 2001, we asked users about email habits with their most frequent email correspondents. Women proved to email about a wider variety of topics with both friends and family. They were more likely to correspond with the favored family member about getting together; to pass along some interesting non personal or personal news; to discuss worries as well as information about jobs or other activities; and to forward jokes or humorous stories.

From time to time we have asked about emailing with family for other reasons. In November 2002, significantly more women than men said they emailed with family about health or medical issues. In March 2003, significantly more women than men said they emailed with family about the likelihood of upcoming war in Iraq. Immediately after the events of September 11, 2001, more women than men said they emailed with family about news of terror attacks and their aftermath.

What men and women write about in their emails with friends and family			
	% of online men	% of online women	Date of PIP survey
Total who email with family	79	88*	Oct 01
Personal news	80	86*	Mar 01
Non-personal news	76	87*	Mar 01
Jokes or funny stories	77	84*	Mar 01
News on job or activities	72	74	Mar 01
Advice seeking	50	61*	Mar 01
Getting together	34	39	Mar 01
Sept. 11 news	27	33	Oct 01
Worries	30	57*	Mar 01
Health information or news	20	27*	Nov 02
The Iraq war	11	18*	Mar 03
Total who email with friends	85	88	Oct 01
Non-personal news	88	84	Mar 01
Jokes or funny stories	86	83	Mar 01
News about user's job or activities	72	81*	Mar 01
Personal news	71	80*	Mar 01
Advice seeking	53	58	Mar 01
Getting together	48	52	Mar 01
Sept. 11 news	33	39	Oct 01
Worries	38	55*	Mar 01
Health information or news	16	26*	Nov 02
The Iraq war	17	23	Mar 03

(*) indicates statistically significant difference

With the favorite friend, the picture was much the same: Women emailed more than men about getting together, to discuss worries, to pass along personal news and information about jobs or other activities. In two cases, men were more likely to email about topics with a favored friend: to pass along some interesting non personal news, and to forward jokes or humorous stories.

From time to time, we also asked users about emailing on various topics with friends. In November 2002, significantly more women than men said they emailed with friends about health or medical issues. In March 2003, more women than men said they emailed with friends about the possibility of upcoming war in Iraq. Immediately after the events of September 11, 2001, more women than men said they emailed with friends about the terror attacks.

Women find emailing with friends and family both more useful and more valuable than men do.

Where email is useful

In November 2001, significantly more women than men said emailing with family is very useful to them. Slightly more women than men said this is true for friends, as well.

Of the most important reasons they choose to email with family, both men and women say convenience, 30% for men and 27% for women, and speed, 29% for men and 30% for women. More women, 19%, than men, 12%, appreciate that email is inexpensive. And 12% of both men and women find it useful for attaching pictures or documents to the emails.

Both men and women say the most important reason they choose to email with friends is also for convenience, 39% each for men and women. That is followed by speed, 31% for men, compared with 30% for women, and that it's less expensive, 14% for women and 8% for men, and that they can attach pictures or documents, 11% for men and 9% for women.

Where email is valuable

We asked about some of the softer measures of the value of email. In March 2001, more women, 43%, than men, 33%, said that communicating by email has improved relationships with their family members. More women than men said email has brought them closer to their family, and that they have learned more about their family by using email.

Where men and women who email with friends and family find it useful and valuable			
With family	% of online men	% of online women	Date of PP survey
Useful	46	52*	Nov 01
Improve relationship with	33	43*	Mar 01
Brought close to	33	42*	Mar 01
Convenient	30	27	Nov 01
Fast	29	30	Nov 01
Learn more about	19	32*	Mar 01
Inexpensive	12	19*	Nov 01
Send attachments	12	12	Nov 01
With friends			
Useful	51	55	Nov 01
Improve relationship with	39	49*	Mar 01
Convenient	39	39	Nov 01
Brought closer to	36	49*	Mar 01
Fast	31	30	Nov 01
Learn more about	30	37	Mar 01
Send attachments	11	9	Nov 01
Inexpensive	8	14	Nov 01

(*) indicates statistically significant difference.

With respect to their friends, some 49% of women say this improved relationships with friends compared with 39% of men. More women than men say email has brought them closer to their friends and that they have learned more about friends by using email.

In November 2001, significantly more women, 52%, than men 45% , said they would miss using email a lot if they could no longer use it.

Women find emailing at work more effective and valuable than men do.

In May 2002, we asked users a battery of questions to compare email with phone or face-to-face contact for handling various tasks at work. More women than men named email as the most effective way to handle every work situation we queried: to make appointments; to edit or review documents; to ask questions about work issues; and to deal with problems with supervisors. Women were also consistently more likely than men to see email as a positive force in the workplace. More women than men said email improves teamwork in the workplace; expands their circle of colleagues at work; makes them more available to co-workers; helps them stay current with events at work; provides moments of relief from work; saves them time; and liberates them from being tied to the office.

Women were less likely than men to cite email's negative effects. Women were less likely to say email makes it too easy for outsiders to reach them and makes them too accessible to others inside the company. Men and women were equally likely to consider email at work to be a source of stress, gossip, misunderstanding, and to say they can't get away from it. Overall, more women, 20%, than men, 15%, give email in the workplace the highest praise, saying they "can't live without it."

How men and women value their email in the workplace		
	% of online men	% of online women
Work emailers	55*	49
Email most effective to ...		
Edit documents	64	69
Make appointments	61	65
Ask questions	32	39*
Raise problem with boss	5	6
Deal with sensitive issues	4	4
Email's positive impact ...		
Helps me stay current with events	50	55
Expand my contacts at work	48	52
Saves time	40	46
Helps me be available to co-workers	37	40
Improves teamwork	26	31*
Provides moments of relief	12	17*
Liberates me from office	8	12
Email's negative impact ...		
Makes me too accessible inside work	21	17
Too accessible to outsiders	20*	13
Adds new stress	7	6
Is distracting	6	6
Can't get away from work	6	5
Encourages gossip	6	4
Causes misunderstandings	5	5

Source: Pew Internet & American Life Project April-May 2002. Margin of error is $\pm 3\%$. (*) indicates statistically significant difference.

Men use the internet more than women to communicate and discuss issues with special interest groups.

In February 2001, we found that 84% of internet users belonged to some kind of online group or organization and that many of them had joined those groups after they had gotten internet access. In that survey there were some differences between men and women and the kinds of groups to which they belonged. More men said they went to the internet to communicate with or get information from a variety of special interest groups: trade and professional groups; hobby or interest groups; fan groups for a sport or sports team; groups for a sport team they participate in; lifestyle groups; groups for those who share personal beliefs; and political groups. For a number of other groups, men and women responded equally: entertainment fan groups; local or community groups; religious, cultural or ethnic groups; and labor unions. More women said they went to support groups for medical or personal situations.

The kinds of online groups and other communities of interest that wired men and women belong to		
	% of online men who belong to this kind of group	% of online women who belong to this kind of group
Trade or professional	58*	42
Hobby	57*	44
Sports fan	38*	19
Pop culture fan	31	30
Lifestyle	31*	24
Community organization	29	29
Political	27*	17
Groups that shared their personal beliefs	26*	21
Groups that offered support on medical issues or personal problems	25	30*
Sports team participant	25*	15
Religious	22	19
Cultural or ethnic group	16	14
Labor union	7	5

Source: Pew Internet & American Life Project. February 2001 survey. Margin of error is $\pm 3\%$. (*) indicates a statistically significant difference.

When asked about the special interest group they contact most often, nearly equal numbers of men, 63%, and women, 57%, say they use email. Also, significantly more men, 65%, than women, 53%, said they read or post messages on a special group's listserv or bulletin board.

Using email with special interest groups is important to both men and women for getting hard news and information. Significantly more men than women think that discussing issues is an important reason to email with these special interest groups. More women than men say that maintaining or building personal relationships among group members is important to them.

Why online men and women value their email contact with their favorite groups		
Reasons	% of online men	% of online women
Membership news and info	75	77
Discuss issues	72*	65
Group activity participation	71	71
Nurture member relationships	46	52

Source: Pew Internet & American Life Project February 2001 Survey Margin of error is ± 3 points.

2. Transactions

Men do more a few more online transactions than women, including some with less predictable or controlled outcomes.

In their day-to-day lives, 75% of internet users believe that the internet offers them a good way to conduct their everyday business like banking or buying tickets, although men, at 78%, say this in significantly higher numbers than women, at 71%.¹⁵

Over the last five years, the Pew Internet Project has been tracking users' participation in more than a dozen kinds of online transactions. Men and women are about equally likely to go online to do many of these: to buy products, as well as everyday items like groceries, food, and household items and prescriptions; to make travel arrangements or to purchase tickets; to do their banking; and to donate to charities.

The transactions men and women do online			
Online transaction	% of online men	% of online women	Date of PIP survey
Buy a product	68	66	Jun 05
Do travel reservations	60	63	Nov 04
Pay bills	42*	35	Jan 05
Bank online	41	41	Feb 05
Buy tickets for events	40	42	Dec 03
Develop/display photo	31	35*	Sep 05
Do auction	30*	18	Feb 05
Buy everyday items	26	26	Dec 03
Trade stocks, bonds	20*	6	Nov 04
Donate to charity	18	19	Sep 05
Pay for digital content	14*	7	Jun 04
Buy groceries	12	14	May 03
Order from spam	6	5	Feb 05
Play lottery or gamble	4	4	May 03
Buy Rx drugs online	3	4	Jun 04

(*) indicates statistically significant difference.

Men are significantly more likely to pay bills online and to pay for online content. They are also more likely to do more of the online transactions with less predictable outcomes: bidding in auctions and trading stocks, bonds or mutual funds. A very small and equal number of both men and women also order from unsolicited email and gamble online.

Men and women share an increasing enthusiasm for doing transactions on the internet.

The ability to do different kinds of transactions online has been one of the biggest attractions of the internet over the last few years. Participation rates among some of the transactional activities the Pew Internet Project has tracked regularly have eclipsed those for other online functions, including communications, getting information, and enjoying entertainment.

Participation in online banking grew from 17% in 2000 to 41% in 2005; in doing travel arrangements online grew from about a third in 2000 to nearly two-thirds in 2004; in buying products like books, music, toys, and clothing from 48% in 2000 to 67% in 2004; in online auctions from 15% overall in 2000 to 24% in 2005, including men's rate from 19% to 30%, and women's from 11% to 18%.

Some online transaction activities have not taken off as dramatically. In March 2000, 16% of men and 9% of women bought or sold stocks. By November 2004, men's participation rose to 20%, while women's fell to 6%.

Men and women like online transactions for mostly the same reasons, with convenience and speed leading.

The Pew Internet Project has polled internet users about the reasons they value three online transactions, banking, shopping, and buying prescriptions.

Why men and women who do online transactions value them		
Banking	% of online men	% of online women
Convenience	79	79
Save time	72	71
Own control	50	54
Privacy	41	41
Information	36	36
Services	27	22
Save money	25	35*
Shopping		
Save time	74	73
Convenience	72	75
Unusual gift	47	54
Save money	35	28
Prescriptions		
Save money	69	60
Save time	69	51
Convenience	68	52
Privacy	22	19

Source: Pew Internet & American Life Project September 2002 for banking; December 2002 for Shopping; June 2004 for Rx. * indicates a statistically significant difference

Men and women share most reasons they value online banking. About three-quarters of both men and women said they appreciated both the convenience and time savings. Many also said they appreciate the privacy of online banking and the accessibility to so much information and so many services online. Men and women differed significantly in only one element: More women than men said they valued online banking for the savings in cost.

For online shopping, both men and women cite convenience and time savings as major reasons to like shopping online. Further, more men than women value cost savings, and more women than men appreciate the chance to find unusual gifts.

And finally in June 2004, both men and women cited convenience and savings of time and money as very important reasons to have bought prescription drugs online, although the overall number of internet users who have bought drugs online remains very low, about 4%.

3. Getting information

All internet users have a high regard for the internet as a source of information, but men look for a broader range of information online than women do.

Nearly all internet users, 91%, agree that the internet is a good source of information for everyday interests like news, weather reports, and sports scores.¹⁶ About 80% of both men and women also expect to find information online about more specialized topics of government issues and health or medical issues. The same number also say they expect to find information on particular products they want to purchase, although this includes more men, 82%, than women, 77%. About a third of internet users say they expect to find reliable information online

about individuals.¹⁷

Beginning in 2000, we asked users about the kinds of information they look for online. Men and women are equally likely to get travel information and to look up phone numbers and addresses. They also look for information about the government, about colleges, jobs, and places to live.

Men look for information online on more topics than women do			
Topics of information	% of online men	% of online women	Date of PIP survey
Maps/driving	82	87*	Feb 04
Research product/service	82*	75	Mar 05
Check weather	82*	74	Nov 04
Info on hobby	80	75	Nov 04
News	75*	69	Feb 05
Travel info	74	71	Jun 04
Gov website	67	65	Aug 03
Research for school/training	59	55	Jan 05
How-to/Do-it-yourself	60*	50	Mar 05
Sports scores	59*	27	Feb 04
Health/med	58	74*	Dec 02
Political campaign news	60	56	Nov 04
Financial info	56*	33	Nov 04
Work/Research for job	54*	48	Feb 05
Phone, address	53	55	Feb 04
About a job	46	42	Jan 05
Place to live	33	34	Jun 04
Religion	25	34*	Nov 04
Genealogy	24	24	May 03
College or Univ to attend	44	47	Jan 05

(*) indicates statistically significant difference.

Significantly more men than women go online to get news and financial information, to check the weather and look up sports scores. Men also do research about products and services as well as research for their jobs. They look up more how-to information.

More women look for health and medical information, for maps and driving instructions and for information on religion.

In emergencies, more men use the internet to focus on information and more women to focus on people.

The Pew Internet Project looked in depth at a few extraordinary instances where users might go to the internet for information. In the fall of 2001, we asked users about the kinds of websites they had visited after the events of September 11. Significantly more men had visited

a larger variety of different kinds of websites that would be sources of information, including news media sites, business sites, government or military sites, international sites, political sites, discussion groups, and portals. Men and women were equally as likely to visit personal websites, sites for charities, religious groups, and interest or advocacy groups.

Men and women visited different kinds of websites after September 11 terror attacks		
Kinds of websites	% of online men	% of online women
News media	71*	62
Business	62*	51
Government or military	36*	22
Personal sites	35	34
International	26*	17
Charities	18	16
Special interest	15	14
Religious	13	16
Political	13*	9
Discussion groups	12*	8
Portals	12*	4

Source: Pew Internet & American Life Project Oct19 – Nov18, 2001 Survey. Margin of error is $\pm 2.7\%$. (*) indicates statistically significant difference.

In the same survey, we asked users how the internet helped through the events of September 11. More men, 30%, than women, 25%, said the internet helped them a lot to learn more about what was going on, while more women, 56%, than men, 50%, said it helped them connect with people they needed to reach. These differences are statistically significant.

Men and women share similar search habits to get information.

In September 2005, about 90% of both men and women were using search engines to find information. Women's history with search engine use is more volatile than men's. In June 2003, 88% of women used search engines; it dipped to 79% in June 2004, and rose back to 91% in September 2005. Men's use has held steady at about 90%.

The rise in search engine use on an average day, from about 35% for men and 25% for women in June 2003 and June 2004, soared for both in September 2005, to 43% for men and 39% for women. This coincides with the recent popular excitement about major search engines, including the vastly expanding volume searchable content, the IPOs, and the widely reported competition among them.

Search engines are just one way to find information online. As alternatives, searchers return to familiar websites or follow recommended links. The Pew Internet Project looked more closely at searchers' strategies for three specific kinds of informational searches: for health and medical issues, government issues, and religious issues.

Men and women use similar strategies in launching their searches. Most users who are looking for information about health or government issues will start with search engines or portals. For instance, when asked about their most recent searches for health information, 85% of men and 78% of women said they went first to search engines or to general portals that included search engines.¹⁸ Similarly, when asked about the last time they searched for government information or services, 48% of men and 51% of women started at engines or portals.¹⁹ Then, as a secondary strategy, 29% of men and 28% of women went to sites they had already used. In looking for religious information, both men, 44%, and women, 49%, were most likely to start their searches at familiar religious websites.²⁰ Both turned to search engines or general portals as a second resort; 37% of men and 35% of women.

Women handle less information online but feel the information glut more.

Although men gather and consume more information online, women seem more overwhelmed by the volume of information around them. In October 2002, we asked users about their sense of information overload in the context of growing volumes of easily-attainable information from TV, newspapers, online information services, magazines, etc. Although most users, including 65% of women and 70% of men, said they like having lots of information, significantly more women, 24%, than men, 19%, felt overloaded by it.

4. Entertainment

Men participate in more kinds of online entertainment than women.

Just over two thirds of users think the internet is a good place to pursue entertainment or personal enjoyment, including significantly more men, 72%, than women, 66%.²¹

Over the years, the Pew Internet Project has asked internet users about a grab bag of activities they do online for fun, recreation, and entertainment. Men and women participate equally in about half the activities we polled, but men are more likely than women to participate in the rest of the activities.

In the light entertainment category, about two-thirds of men and women surf the web for fun. With hobbies, slightly more men than women go online looking for information about their hobbies and many more actually pursuing their special interests online. Men also participate more seriously than women in sports fantasy leagues. A small but equal number of men and women said they have gone online to play the lottery or gamble.

Men do more entertainment online than women			
Entertainment activities	% of online men	% of online women	Date
Miscellaneous			
Hobby info	80	75	Nov 04
Surf the web	70	63	Nov 04
Pursue hobbies	33*	22	Dec 03
Read for pleasure	20*	11	Dec 03
Adult website	21*	5	Jun 05
Take class	15*	11	Jan 05
Sports fantasy league	15*	3	Mar 05
Playing Games			
Play games	36	37	Jun 05
Download games	22	19	Jun 05
Play lottery or gamble	4	4	May 03
Watching and listening			
Video/audio clips	56	57	Nov 04
Listen to music at websites	38*	29	Jun 04
Listen to live or recorded broadcasts	38*	20	Jun 04
Download music	30*	20	Jun 05
Share files	25	28	Jun 05
Download video	22*	13	Jun 05
Remix files	21*	15	Jan 05

(*) indicates statistically significant difference.

We have occasionally asked users about visiting adult websites. The overall participation rates have remained constant, from about 13% – 15%. Traditionally, three to five times as many men as women have responded positively to this question.

Men have recently closed the gap with women in playing online games. Women have traditionally led men in this data point; as late as November 2004, significantly more women, 44%, than men, 34%, said they had played games online. In that same survey, about equal numbers of men and women also said they downloaded such games to play online.²²

Among more serious endeavors, significantly more men than women said they read for pleasure online and have taken a class online for personal enjoyment or enrichment.

Men do more online watching and listening

We have asked about online audio and video activities in a variety of ways. Overall, men are more enthusiastic than women about using the internet as kind an entertainment center for watching and listening.

Just over half of both online men and women have watched video clips or listened to audio clips online, a number that has risen slowly but steadily over the last 5 years, with women closing an earlier gap.

About a third of internet users, including significantly more men than women, have listened to music online at websites of places like a radio station, music store, recording artist or music service. Similar numbers have listened to live or recorded broadcasts of shows like newscasts, sporting events, or a radio show.

We also asked about downloaded entertainment. About a quarter of users have downloaded music files for later, anytime use, including significantly more men than women. This number had been growing to nearly a third of internet users at the end of 2002 and the first half of 2003, when suits against illegal file sharing brought by the Recording Industry Association of America encouraged many internet users to stop downloading music. In June 2003, the total number was 30%. By November 2003, the participation rate fell to 14%. The number has risen since then to the current 25% in May 2005. Men have always led women in downloading.

Significantly more men than women have downloaded other kinds of files as well, including video files, games, and picture files.

An equal number of men and women, about a quarter of all internet users, have shared various kinds of files as well.

In a first-time question in January 2005, we also asked users if they ever take online material, like songs, text, or images to remix. Significantly more men than women have done this.