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Networked Workers

Most workers use the internet or email at their jobs, but they say these technologies are a mixed blessing for them

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Summary of Findings

Most working Americans use the internet or email at work.

Just over half of American adults (53%) say that they are currently employed with full or part-time work. Among those who are employed, 62% could be considered "Networked Workers" who use the internet or email at their workplace.

Networked Workers are not only connected while at work, but they are also more likely than average Americans to have access to a wide array of technological assets outside of the workplace. They are more likely to own cell phones, desktop and laptop computers, and personal digital assistants (PDAs). Among Networked Workers:

- 93% own a cell phone, compared with 78% of all American adults.
- 85% own a desktop computer, compared with 65% of all adults.
- 61% own a laptop computer, compared with 39% of all adults.
- 27% own a Blackberry, Palm or other personal digital assistant, compared with 13% of all adults.

Nearly half of all working Americans do at least some work from home.

In our latest survey, 45% of employed respondents in our sample reported at least some amount of at-home work. The segment that routinely works from home is smaller: Some 18% of job-holding Americans work at home every day or almost every day. However, 37% of employed Americans say they are working from home at least as often as a few times per month.

Networked Workers who use the internet or email at their job report higher rates of working at home. Overall, 56% of Networked Workers report some at-home work and 20% say they do so every day or almost every day.

With workplace internet use, Americans tend to be always on or always off.

Workplace internet users tend to either use the internet every day or not at all. A large majority of the population can be found at either end of the spectrum – using the internet

This Pew Internet & American Life Project report is based on the findings of a daily tracking survey on Americans' use of the internet. All numerical data was gathered through telephone interviews conducted by Princeton Survey Research Associates between March 27 and April 14, 2008, among a nationally representative sample of 2,134 adults living in continental United States telephone households, including 1,000 self-identified full-time and part-time adult workers. For results based on the total sample, one can say with 95% confidence that the error attributable to sampling and other random effects is +/- 3%. For results based on workers (n=1,000), the margin of sampling error is +/- 4%.

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at work every day (60%) or never (28%). By contrast, few (5%) use the internet just once every few days at work and only 6% use it occasionally, but even less often than that.

Americans are also significantly more likely to use the internet "constantly" at work than at home. At work, 27% of employed online Americans use the internet constantly. In comparison, just 14% of online Americans say they constantly use the internet at home.

Internet Use at Home and Work

How often do you use the internet or email from home or work?

(among employed internet users)

	Constantly	Several times a day	About once a day	Every few days	Less often	Never
Home	14	26	22	20	11	6
Work	27	22	11	5	6	28

Source: Pew Internet & American Life Project Survey. March-April 2008. N=865 total employed internet users. Margin of error is ±4%.

Internet use at work varies by company type and profession.

Among company types, government workers – federal, state or local – are the most likely to use the internet at work; almost three-fourths (72%) of government workers use the internet at least several times a day at work. Those who work in schools and educational institutions are also frequent internet users at work, followed closely by those who work in non-profits.

Internet usage on the job also tends to vary by a person's chosen field of work. Nearly three out of four professionals and managers or executives use the internet at work, either constantly or several times a day. About half of clerical, office and sales workers also use the internet at work at least several times a day. Service workers and those in the skilled trades are far less likely to report internet use at work.

Nearly all workers use new information and communication tools in some way.

Beyond those who are actively using the internet or email at their workplace, there is an even larger group of workers who are armed with the technological tools that can keep them connected to their jobs outside of normal working hours. Among those who are employed, 96% are in some way making use of new communications technologies—either by going online, using email or owning a cell phone. We refer to these respondents as "Wired and Ready Workers," as they represent the broader group of working

Americans who are using information and communications technologies inside and outside the workplace. Among the working population:

- 86% of employed Americans use the internet or email at least occasionally.
- 89% own a cell phone.
- 81% have a personal or work email account.

Overall, 73% of all workers use all three basic tools of the information age: they use the internet, have an email account, and have a cell phone.

Information and communications technologies present tradeoffs for today's workers.

While working Americans largely hold positive views about the role of information and communications technology (ICT) in their lives, many say there are tradeoffs in being networked. On the one hand, they cite the benefits of increased connectivity and flexibility that the internet and all of their various gadgets afford them at work. However, many workers say these tools have added stress and new demands to their lives.

Wired and Ready Workers: The 96% of employed adults who are in some way making use of new communications technologies—either by going online, using email or owning a cell phone.

On the upside, a large majority of Wired and Ready Workers note big improvements in their work lives due to the influence of technologies such as the internet, email, cell phones and instant messaging.

- 80% say these technologies have improved their ability to do their job.
- 73% say these technologies have improved their ability to share ideas with co-workers.
- 58% say these tools have allowed them more flexibility in the hours they work.

At the same time, half of Wired and Ready Workers note various negative impacts of communications technology on their work life:

- 46% say ICTs increase demands that they work more hours.
- 49% say ICTs increase the level of stress in their job.
- 49% say ICTs make it harder for them to disconnect from their work when they are at home and on the weekends.

Those who are most tethered to work are more likely to say that their gadgets and connectivity have increased demands that they work more hours.

When asked how much, if at all, technologies such as the internet, email, cell phones, and instant messaging have increased demands that they work more hours, 46% of all Wired and Ready Workers say they feel those demands have intensified, with 16% saying they have increased "a lot." Among those who work in professional and managerial positions, 59% say these demands have increased, as do 56% of those who work more than 40 hours per week.

- Of those who work more than 50 hours per week, 62% say that these demands have increased, with 38% saying the expectation that they work more hours has increased "a lot."
- Those who own Blackberries and PDAs are also a widely affected group; 63% feel as though gadgets and connectivity increase demands that they work more hours, and 30% feel as though these demands have increased "a lot."

Professionals and executives own more gadgets.

Professionals, managers and executives are more likely than other workers to own gadgets, especially higher-end gadgets such as laptops and personal digital assistants (PDAs) such as Palm Pilots or Blackberries. Fully 30% of people in these professions own (PDAs) and nearly two out of three own laptops, significantly more than employed Americans in any other field of work.

Americans juggle work and email accounts, checking both throughout the day in many cases.

More than half of working adults (53%) have both personal and work email accounts. And while 22% say they only maintain personal addresses, just 5% say that their email use is limited to a work account.

- 54% of employees with personal email accounts say they at least occasionally check their personal inboxes while at work and most do so on a daily basis.
- Personal email spills over to the cell phone and Blackberry, too: Among employed respondents who actively use their cell phone or Blackberry for email, 44% say that most or all of the messages they send and receive are personal, while 32% say that most or all of the messages are work-related. Another 25% say their email use is equally split between personal and work-related messages.
- 37% of those with work email accounts check them constantly, up from 22% in 2002.

In recent years, workers have become more likely to check their email outside of normal working hours.

Since 2002, working Americans have become more likely to check their work-related email on weekends, on vacation and before and after they go to work for the day.[1]

- 50% of employed email users say they check their work-related email on the weekends. Fully 22% say that they check their work email accounts "often" during weekend hours, compared with 16% who reported the same in 2002.
- 46% of employed email users say they check email when they have to take a sick day; 25% say they do so "often."
- 34% of employed email users say they will at least occasionally check their email while on vacation; 11% say they do so "often."
- The more money an employee earns, the more closely he or she monitors work email accounts.

Among Blackberry and PDA owners, all of these numbers are much higher. Checking work-related email outside of normal working hours is the norm for many of these gadget users, even during weekends and vacation time.

One in five employed email users and half of Blackberry and PDA owners say they are required to read and respond to work-related emails when they are not at work.

The off-hours checking of work-related email is not an act generated solely by the volition of the employee. Some 22% of employed email users say they are expected to read and respond to work-related emails, even when they are not at work. Blackberry and PDA owners are more than twice as likely to report that their employer expects that they will stay tuned in to email outside of the office. Fully 48% say they are required to read and respond to email when they are away from work.

Yet, few workers feel as though email alone has increased the total amount of time they spend working.

Most employed email users do not believe that using email has increased the amount of time they spend working overall. Just 17% attribute some increase to email, while 6% feel as though email has actually cut down the amount of time they spend working. About the same modest number report some increase in the amount of time spent

[1] April 2002 results based on a sample of 1,003 "work emailers." See Deborah Fallows "Email at Work: Few feel overwhelmed and most are pleased with the way email helps them do their jobs," Pew Internet & American Life Project, December 8, 2002. Available at: http://www.pewinternet.org/PPF/r/79/report_display.asp. April 2008 results based on a sample of 807 "employed email users." The 2008 sample includes those who may use personal accounts for work-related email.

working specifically at home (16%), while 5% note a decrease. A smaller segment (10%) note an increase in the amount of time spent working at the office, while nearly the same number (7%) say email has cut down the time they spend at the office.

Other online activities capture workers' attention at the office.

Shopping is among the most popular online leisure activities at work, with 22% of employed internet users reporting at least some at-work purchasing. At the other end of the spectrum, activities such as online gaming and blogging typically happen at home (see table on the following page for details).

Blogging is equally prevalent among employed internet users as it has been among the general population; 12% of employed Americans who use the internet and the same number of all online Americans have created or worked on a blog. Just 2% of employed internet users say they blog at work.

Working men and women are equally as likely to blog, but young adults far outpace older workers in their engagement with blogging. Employed internet users ages 18-29 are more than twice as likely to blog when compared with 30-49 year olds (20% vs. 9%). However, young adults are no more likely to report at-work tending to their blog; just 2% say they blog from work.

Blog reading is also most prevalent among younger generations of employed internet users. One in three internet-using employees (33%) say they have read someone else's blog or online journal, and 11% report at least some at-work reading. However, among young working adults, 46% are blog readers, compared with 33% of 30-49 year olds and 25% of employed internet users ages 50-64. At-work blog reading is equally prevalent among all of these groups.

Online Activities at Work and Home

Do you ever use the internet to…? Do you generally do this at work, at home, or both at work and at home?

Activity	Have ever done this	At work only	At home only	Both work & home	Some other place	Have not done this
Buy a product online, such as books, music, toys or clothing	76%	3%	53%	19%	1%	24%
Watch video on a video-sharing site like YouTube or Google Video	53	3	37	12	1	47
Send "instant messages" to someone who's online at the same time	41	6	22	12	--	59
Use an online social or professional networking site like MySpace, Facebook or LinkedIn	35	3	25	7	--	65
Read someone else's online journal or blog	33	3	22	8	1	66
Play online games	28	--	24	3	--	72
Contribute writing, files or other content to your employer's website	23	10	3	8	1	77
Create or work on your own online journal or blog	12	--	9	2	1	88

Source: Pew Internet & American Life Project Survey. March-April 2008. N =855 employed internet users who use the internet from home or from work. Margin of error is ±3%.

Networked Workers: Summary of Findings at a Glance
Most working Americans use the internet or email at work.
Nearly half of all working Americans do at least some work from home.
With workplace internet use, Americans tend to be always on or always off.
Internet use at work varies by company type and profession.
Nearly all workers use new information and communication tools in some way.
Information and communications technologies present tradeoffs for today's workers.
Those who are most tethered to work are more likely to say that their gadgets and connectivity have increased demands that they work more hours.
Professionals and executives own more gadgets.
Americans juggle work and email accounts, checking both throughout the day in many cases.
In recent years, workers have become more likely to check their email outside of normal working hours.
One in five employed email users and half of Blackberry and PDA owners say they are required to read and respond to work-related emails when they are not at work.
Yet, few workers feel as though email alone has increased the total amount of time they spend working.
Other online activities capture workers' attention at the office.
Source: Madden, Mary and Sydney Jones. *Networked Workers.* Washington, DC: Pew Internet & American Life Project, September 24, 2008.

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About the Pew Internet & American Life Project: The Pew Research Center's Internet & American Life Project is a non-partisan, non-profit "fact tank" that produces reports exploring the impact of the internet on families, communities, work and home, daily life, education, health care, and civic and political life. The Project aims to be an authoritative source on the evolution of the internet through collection of data and analysis of real-world developments as they affect the virtual world.

The Project takes no positions on policy issues related to the internet. It does not endorse technologies, industry sectors, companies, non-profit organizations, or individuals. Support for the project is provided by The Pew Charitable Trusts. The Project's website: http://www.pewinternet.org

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Part 1.

Snapshots of the Wired Workforce

In 2002, the Project's "Email at Work" report declared that few working Americans who had incorporated email into their work lives felt overwhelmed by it. In fact, most felt their email load was manageable and most were pleased with the way email helped them to do their job. In 2008, while email is still the well-functioning artery of workplace communications in many professions, there is much more to consider when examining work-related use of communications technology. Over the past six years, as internet and email use have grown, so too have the array of devices, applications and complications that arise from their use.

Questions about work-life balance, what counts as overtime work, and the extent to which personal online activity can spill into normal working hours have become more pervasive as the internet is integrated into many workplaces. Even those working in the new media industry are struggling to establish norms for workplace issues that arise with the always-on connectivity that the internet affords. Writers for the television network ABC recently protested a new policy that stated they would not be compensated for any time spent checking email after normal working hours on their company Blackberries.[2] However, "normal working hours" no longer exist in many professions, and there are often not clear lines suggesting fair compromises when technology use is so pervasive in and outside of the office. While ABC was trying to avoid paying time-and-a-half overtime for every idle minute that a writer might spend checking for messages, the writers, who can often end up spending hours on work-related exchanges via email at home, were equally concerned that they would not be properly compensated for their work.

Whether in or outside of the office, those who use the internet for work may also see their employers' monitoring of their online activities grow more restrictive. Firms' ability to block various kinds of sites is becoming more granular and their reach extends beyond the walls of the office. Many workplaces routinely monitor employees' in-office use of the internet for various abuses, and advances in security and filtering technology are

[2] See Brian Stelter, "ABC and Writers Skirmish Over After-Hours E-Mail," The New York Times, June 23, 2008. Available at: http://www.nytimes.com/2008/06/23/business/media/23abc.html?ex=1371873600&en=e5984ac4d76d1e3c&ei=5124&partner=permalink&exprod=permalink

increasingly giving employers even more options for policing use of the company's network that may happen from afar.[3]

This report, based on findings from the Networked Workers Survey, represents the Project's first dedicated inquiry into the technological assets of today's workers and their attitudes towards ICT use as part of their job. The Networked Workers Survey was fielded among a nationally representative sample of 2,134 adults in the U.S., including 1,000 self-identified full-time and part-time workers. The survey was conducted by Princeton Survey Research Associates International from March 27 to April 14, 2008, and the margin of sampling error for the complete set of weighted data is ±3%. The margin of error for results based on workers is ±4%.

This survey provides a snapshot of technology use by American workers.

In this survey, we find that employed Americans make up 53% of our survey population.[4] We find in our poll that of those employed, 16% are self-employed and 84% work for someone else. Close to one in three (30% of employed Americans) work for large corporations, and 28% work for small businesses. The remaining 39% of employed Americans work for medium-sized companies, for the government, in educational institutions, or in the non-profit sector.

When it comes to particular professions, about one in five employed Americans are professionals, such as lawyers, doctors, teachers, and accountants. Another fifth of Americans works as secretaries, receptionists, sales clerks and in similar office positions. The third most common jobs are those in the service industry, such as waiters, hairstylists, fire or policemen, and janitors, accounting for 17% of employed Americans. Other respondents are divided between business executives and owners, skilled trades such as electricians and plumbers, and semi-skilled trades such as truck and bus drivers. Another 10% of Americans, including consultants, farmers and musicians, do not fit into any these categories (falling into an "other" category referred to throughout the report).

[3] See findings from the AMA/ePolicy Institute "2007 Electronic Monitoring and Surveillance Survey" which found that 66% of the companies surveys monitor employee internet connections and 65% use software to block connections to inappropriate websites. Available at: http://press.amanet.org/press-releases/177/2007-electronic-monitoring-surveillance-survey/ See also, Brad Stone, "Web Filtering Moves to the Cloud," The New York Times, August 4, 2008. Available at: http://bits.blogs.nytimes.com/2008/08/04/web-filtering-moves-to-the-cloud/index.html?ref=technology

[4] This percentage includes both full- and part-time employees. Of the non-working, 24% are retired, 18% are not employed for pay, 3% are disabled, 1% are students, and 1% refused to answer.

Most working Americans use the internet or email at their workplace.

Among those who are employed, 62% could be considered "Networked Workers" who use the internet or email at their workplace.[5] Networked Workers are not only connected while at work, but they are also more likely than average Americans to have access to a wide array of technological assets outside of the workplace. They are more likely to own cell phones, desktop and laptop computers, and personal digital assistants (PDAs).

Among Networked Workers:

- 93% own a cell phone, compared with 78% of all American adults.
- 85% own a desktop computer, compared with 65% of all adults.
- 61% own a laptop computer, compared with 39% of all adults.
- 27% own a Blackberry, Palm or other personal digital assistant, compared with 13% of all adults.

Networked Workers: The 62% of employed adults who use the internet or email at work.

Nearly half of all working Americans do at least some work from home.

While measures of at-home work and telecommuting by government agencies and private research firms have varied extensively, our latest data suggest that the ranks of at-home workers may have grown considerably in recent years.[6] When asked how often, if ever, they work from home, 45% of employed respondents in our sample reported at least some amount of at-home work. The segment who routinely work from home is more modest (18% do so every day or almost every day), but 37% of employed Americans say they are working from home at least as often as a few times per month.

Work at home: 18% of employed adults work from home every day or almost every day.

By comparison, a 2006 study conducted by the Harvard School of Public Health found that just 27% of employed respondents were working from home, with 18% doing so at least as often as a few days per month.[7]

[5] See Manuel Castells, *The Rise of the Network Society* (1996, page 260) for one early reference to "networked workers" who are "on-line, but without deciding when, how, why or with whom." These workers are differentiated from "networkers," who set up connections and "navigate the routes of the network enterprise," and the "switched-off workers," who are "defined by non-interactive one-way instructions." Our use of the term in this report refers solely to those respondents in our survey who are currently employed and use the internet or email at work.

[6] See Joanne H. Pratt, "Counting the New Mobile Workforce," U.S. Department of Transportation, April 1997: http://www.bts.gov/programs/statistical_policy_and_research/wrkforce.pdf

[7] See Harvard School of Public Heath Project on the Public and Biological Security, Pandemic Influenza Survey Results: www.hsph.harvard.edu/panflu/panflu_release_topline.doc

Networked Workers who use the internet or email at their job report higher rates of working at home. Overall, 56% report some at-home work and 20% say they do so every day or almost every day.

Those in the highest-earning occupations are more likely to work from home.

Whether working at home in lieu of going into the office, or simply working extra hours at home, those in the top earning categories are far more likely than lesser-paid employees to do at least some work from home. More than two-thirds (69%) of employed adults earning $75,000 per year or more say they work from home at least some of the time, one in four do so every day or almost every day. By comparison, just 30% of those in jobs earning less than $30,000 per year work from home, and 12% do so every day or almost every day.

Nearly all workers use new information and communication tools in some way.

Beyond those who are actively using the internet or email at their workplace, there is an even larger group of workers who are armed with technological tools that can keep them connected to their jobs outside of normal working hours. Among those who are employed, 96% are in some way making use of new communications technologies—either by going online, using email or owning a cell phone. We refer to these respondents as "Wired and Ready Workers," as they represent the broader group of working Americans who are using information and communications technologies inside and outside the workplace.

Wired and Ready Workers: The 96% of employed adults who are in some way making use of new communications technologies—either by going online, using email or owning a cell phone.

This group includes employed respondents who are either internet users (86%), have a cell phone (89%) or an email account (81%). Additionally, some 73% of workers use all three basic tools of the information age: they use the internet, have an email account, and have a cell phone.

Most working adults are satisfied with their jobs.

Overall, employed Americans are satisfied with their jobs—a trend that has been largely consistent over the past twenty years. Nine out of ten Americans are at least mostly satisfied, with 57% mostly satisfied and 33% completely satisfied with their jobs. Only 10% are either mostly or completely dissatisfied. These results are consistent with the

2008 Pew Social & Demographic Trends survey, which reports that 31% are completely satisfied and 56% are mostly satisfied with their jobs.[8]

Past polls by Gallup indicate that Americans' general feelings of satisfaction toward their jobs have remained relatively unchanged over the past couple decades.[9] A 1989 Gallup poll reported that 89% of working Americans were either completely or somewhat satisfied with their jobs and only 11% were dissatisfied. Ten years later, in 1999, another Gallup poll showed that 86% of employees were completely or somewhat satisfied with their jobs; 14% were dissatisfied. Now, 90% of employed Americans are satisfied with their jobs, according to a 2008 Pew Internet survey.

Those who earn the most also report the highest levels of job satisfaction.

Looking at demographics, job satisfaction levels are at their highest among those in the top earning groups. Fully 98% of employed Americans making over $75,000 a year are satisfied with their jobs, significantly more than any other income group. Fully 38% of those in the highest earning bracket say they are completely satisfied with their jobs, and 61% say they are mostly satisfied. That compares with just 31% of those earning less than $30,000 per year who are completely satisfied, and 57% who are mostly satisfied.

Self-employment and certain job types are associated with higher levels of satisfaction.

Self-employed respondents are significantly more likely than those who work for someone else to be completely satisfied with their jobs; 42% of self-employed Americans are completely satisfied with their jobs compared with 31% of non-self-employed who are equally satisfied.

Respondents also find some occupations more satisfying than others. Ninety-four percent of managers and business owners are satisfied (mostly or completely) with their jobs, notably more than the 86% of service workers and 80% of skilled-trade workers who are satisfied with their jobs. Also, 93% of professionals and 90% of clerical workers are satisfied with their jobs – significantly more than the percentage of skilled-trade workers who are satisfied at work.

Job satisfaction may also be related to teamwork. Employed adults who have worked with five or more work groups over the past month (43%) are more likely than those who have worked with just one other group (26%) to be completely satisfied with their jobs. Those who have not worked with other teams are significantly more likely to be

[8] Survey by Pew Demographic & Social Trends and Princeton Survey Research Associates International, January 24 – February 19, 2008. Results available at: http://pewsocialtrends.org/assets/pdf/MC-Middle-class-report.pdf.

[9] All Gallup data taken from The Gallup Organization: "Work and Workplace." Most recent survey fielded August 13-16, 2007. http://www.gallup.com/poll/1720/Work-Work-Place.aspx.

dissatisfied with their jobs (12%) than employees who have recently worked with five or more work groups (6%). Job satisfaction does not vary significantly according to company type, internet use at work, number of hours worked, supervisor status or work at home options.

Supervisors are heavier at-work internet users.

Fully 87% of employed Americans report to at least one person at work, and the majority of workers are overseen by only one or two supervisors. Almost half (46%) of employed respondents report to only one person, while about a quarter (23%) of respondents report to two people at work. Eighteen percent of employed Americans report to three or more people. Eleven percent of employed respondents do not report to anyone at all.

Some 42% of workers in our sample supervise other employees at work daily. About 84% of those who supervise other employees also report to at least one supervisor themselves. Furthermore, of employed Americans who oversee others at work, more than one-third (36%) say that the employees they supervise also supervise other employees. These supervisors who are in charge of multiple levels of staffers are significantly more likely to use the internet constantly or several times a day at work than those who supervise at only one level. Nearly 74% of multi-level supervisors use the internet at least several times a day at work while only about 54% of single-level supervisors use the internet as often at work.

Most workers report little tenure at their current place of employment.

One hallmark of this era is that there is considerable churn in the job market and even inside companies. Most working Americans have been at their current place of employment for a relatively short period of time. Fully 58% of job-holding Americans have been working for their current employer for fewer than seven years and 30% have been working for that employer for two years or fewer; compared with 42% of employed respondents who have been with their current employer for eight or more years and 20% who have been with their employer for 16 years or more.

Many working Americans also have little tenure in their current positions at their place of employment. Fully 39% of employed Americans started their current position within the past two years. This number is significantly more, than the number who have been in their current position for 3-7 years (29%). Just 18% have been with their current position for 8-15 years and only 13% have been in the same position for 16 years or more.

The Department of Labor offers similar statistics with regard to employee tenure:[10]

[10] U.S. Department of Labor, Bureau of Labor Statistics, Monthly Labor Review: The Editor's Desk, "Employee Tenure, 2006." These and other relevant data are available from the BLS "Current Population Survey," http://www.bls.gov/opub/ted/2006/sept/wk2/art01.htm.

- Almost one out of four employed adults (24%) has been with their current employer for less than one year.
- A similar number (26%) have been with the same employer for 10 years or more.
- A little more than half (54%) have been with their current company for fewer than five years.
- Another fifth (21%) have been with the same company for 5-9 years.

Additionally, in 2006, employed Americans ages 25 and older averaged 4.9 years with their current employer, according to the Labor Department.[11]

Two in five American employees works overtime.

Significant numbers of Americans are working longer hours than the traditional 40-hour work week. Some 39% of workers say they put in more than 40 hours a week, compared with 31% who say they usually work 40 hours a week and 28% who say they work part time.[12] Almost one-fourth (24%) of employed Americans – the majority of Americans who work overtime – work between 40 and 50 hours a week. Some 15% of working Americans work more than 50 hours a week; similarly, only 15% work fewer than 25 hours a week.

The number of hours Americans are working each week has remained relatively steady over the past 20 years. According to Gallup polls in 1989 and 1999, respectively, 13% and 12% of employed adults were working over 60 hours a week (compared with 11% in the current Pew Internet Project survey). Likewise, in the same Gallup polls, 46% and 41% were working 35-44 hours a week (compared with 41% in the Pew survey).[13] According to the Gallup data, however, even as the number of hours Americans are working remains the same, employees are increasingly "completely satisfied" with the flexibility of their hours. In 2007, 68% of employed adults were completely satisfied with the flexibility of their hours, while in 1989 only 46% were completely satisfied.

Certain demographic groups – men, middle-aged employees and those earning more money – work longer hours.

Women are significantly more likely than men to work part time, and men are significantly more likely than women to work overtime. About 21% of women work fewer than 25 hours a week and 19% work between 26 and 39 hours a week, while only 10% and 9% of men work those respective hours. On the other hand, 29% of men work

[11] U.S. Department of Labor, Bureau of Labor Statistics, "Table 4. Median years of tenure with current employer for employed wage and salary workers 25 years and over by educational attainment, sex, and age, January 2006," available at: http://www.bls.gov/news.release/tenure.t04.htm.

[12] "Overtime" is defined as working more than 40 hours per week, while "part-time" is defined as working fewer than 40 hours per week.

[13] See Gallup footnote above.

41-50 hours and 21% work over 50 hours a week; 19% of women work 41-50 hours a week and only 8% work more than 50 hours a week.

Age is also related to the number of hours a person works. Employed 18-29 year-olds (23%) are significantly more likely to work 25 hours or less per week when compared with 30-49 year-olds (11%) and 50-64 year-olds (13%). Employed Americans in the middle age groups are significantly more likely, on the other hand, to work 41-50 hours a week. As noted in the table below, those earning higher incomes also tend to work longer hours.

Who works longer hours?

Certain work environments are linked to working longer hours

	Less than 40 hours	40 hours	41-50 hours	Over 50 hours
All Adults	28%	31%	24%	15%
Worker income				
Less than $30,000	50	30	11	7
$30,000-$49,999	20	43	25	11
$50,000-$74,999	16	27	**36**	**21**
$75,000 or more	14	22	**34**	**30**
Supervision				
Supervise other workers	17	30	**29**	**22**
Do not supervise anyone	36	32	20	11
Work at home				
Work at home frequently	27	18	27	**27**
Work at home sometimes	20	31	**30**	**19**
Never work at home	31	38	21	8
Team work in past month				
No team work	36	30	20	12
Worked with one team	33	40	19	7
Worked with 2-4 teams	20	32	**30**	18
Worked with 5 or more teams	14	22	**33**	**31**

Source: Pew Internet & American Life Project Survey. March-April 2008. N= 2,134 for total sample. Margin of error is ±3%. N=1,000 for those who are employed. Margin of error is ±4%. Among employed adults who were asked about their income, 9% or 320 respondents said they did not know or refused to answer the question.

* Percentages may not add up to 100 due to rounding.

Some occupations and certain work environments tend toward longer working hours.

Managers and professionals are much more likely to work over 40 hours per week than employees in other job categories. Twenty-three percent of professionals work over 50 hours a week, significantly more than the proportion of clerical workers (10%), service workers (6%) or skilled workers (14%) who put in work weeks that long. The cohort of managers and business owners who work over 50 hours a week (24%) is also significantly more than clerical and service workers who work the same hours. Additionally, 36% of managers and business owners work 41-50 hours a week, significantly more than professionals (24%), clerks (21%) and service workers (14%) who work those hours.

The number of hours an employee works also varies by certain aspects of respondents' work environment--such as supervision responsibilities, the ability to work at home and whether or not that employee works in teams. For instance, of employed Americans who supervise others, 29% work 41-50 hours a week and 22% work over 50 hours a week—considerably more than those who do not supervise anyone (20% and 11% respectively). Respondents who work at home frequently (27%) or sometimes (19%) are also significantly more likely to work over 50 hours a week than those who never work at home (8%).

Part 2.

Internet and Email Use for Work

Whether at home or work, more internet users are going online more often.

Widespread adoption of the internet has made it a go-to resource for nearly all Americans, whether they are at work, in school, or at play. There are still notable differences in internet use among age groups and other segments of the population, but those who are employed are more alike than different—despite the diversity of the working population.

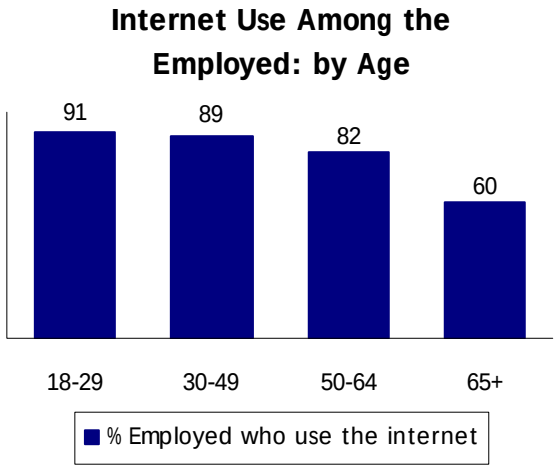
First, a look at the general situation with internet adoption: According to the current survey, 73% of the population uses the internet at least occasionally, up from 63% in the spring of 2004. Furthermore, on an average day, 72% of internet users go online, an increase from just 53% in spring 2004 and 69% last spring. Among all internet users, 93% use the internet from home and 52% use the internet from work.[14]

While the differences are slightly less substantial than those seen among the American population as a whole, age, education, and income are also significantly related to internet use by employed Americans. Unlike what we see with the general population, race is not significantly related to internet use among employed Americans.

The differences between employed internet users and total internet users is most marked when it comes to age and education. Employed Americans ages 65 and older are considerably more likely to be online when compared with the national average for that age group. Fully 60% of employed seniors are online, while just 38% of the general population of seniors uses the internet.[15] The relative youthfulness of employed Americans ages 65 and older may account for some of this difference when viewed alongside the general population. Similarly, employed Americans with lower levels of education are much more likely to be online than the national average of those with the same education. While just 40% of all Americans with less than a high school education use the internet, 62% of employed Americans with the same education are online.[16] In addition, 63% of all high school graduates are online, while fully three-fourths (75%) of employed high school graduates are online.

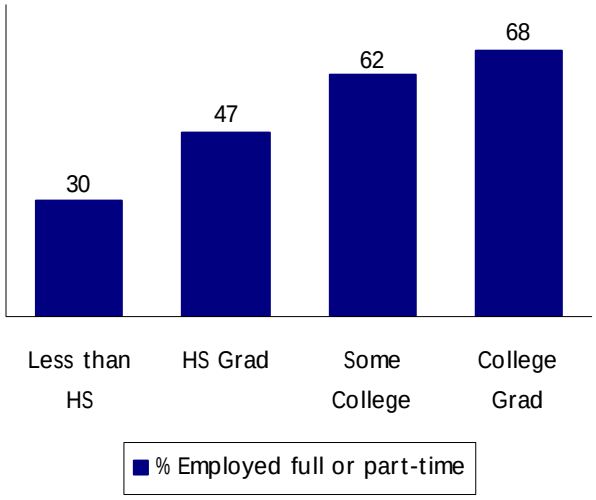
[14] This question employed new wording and should not be trended with our earlier measures of at-work and at-home internet use.
[15] However, it should be noted that this group of respondents is small (n=64 for employed seniors ages 65 and older).
[16] This group of respondents is also small (n=52 for employed respondents with a high school education or less).

Source: Pew Internet & American Life Project Survey. March-April 2008.
N= 2,134 total sample, margin of error is ±3%.



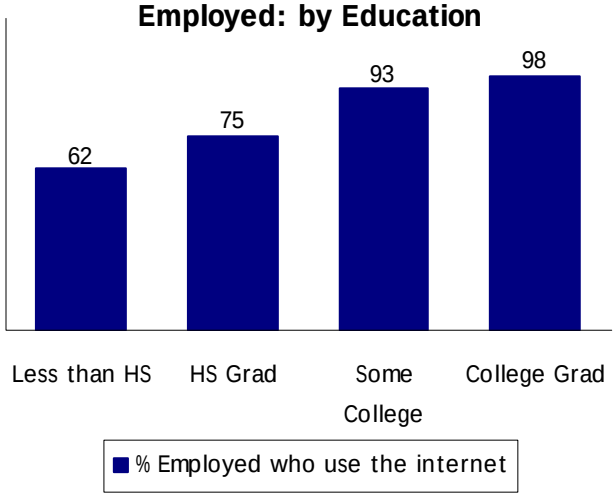
Source: Pew Internet & American Life Project Survey. March-April 2008.
N=1,000 total employed, margin of error is ±4%. For employed seniors ages 65 and older, N=64.

Employment by Education



Source: Pew Internet & American Life Project Survey. March-April 2008.
N= 2,134 total sample, margin of error is ±3%.

Internet Use Among the Employed: by Education



Source: Pew Internet & American Life Project Survey. March-April 2008.
N=1,000 total employed, margin of error is ±4%. For employed respondents with less than HS, N=52.

With workplace internet use, Americans tend to be always on or always off.

These data suggest that in the workplace internet users tend to either use the internet every day or not at all. Large numbers of workers can be found at either end of the spectrum – using the internet at work every day (60%) or never (28%). By contrast, few (5%) use the internet just once every few days at work and only 6% use it occasionally, but even less often than that.

Internet Use at Home and Work

How often do you use the internet or email from home or work?

(among employed internet users)

	Constantly	Several times a day	About once a day	Every few days	Less often	Never
Home	14	26	22	20	11	6
Work	27	22	11	5	6	28

Source: Pew Internet & American Life Project Survey. March-April 2008. N=865 total employed internet users. Margin of error is ±4%.

Americans are also significantly more likely to use the internet "constantly" at work than at home. At work, 18% of the total population and 27% of employed Americans use the internet constantly. In comparison, only 13% of all Americans and 14% of employed Americans are constantly online at home. Instead, at home, internet users are more likely to go online several times a day, once a day or every few days.

The frequency of internet use at work varies by company type and profession.

Considering the diversity of the American workforce, it is notable that the jobs in which Americans are employed can be some indicator as to whether or how much they use the internet at work. Among different company types, sizes and between different fields of work, there are statistically significant and distinct differences concerning internet use at work.

Portrait of Working Americans and their Workplace Internet Use	Employed internet users who use the internet or email *constantly* or *several times a day* at work	Employed internet users who *never* use the internet at work
Size or type of company		
Large corporation	50%	32%
Medium-size company	43	36
Small business	42	31
Federal, state, or local government (n=81)	72*	14*
School or educational institution (n=84)	60*	18*
Non-profit (n=61)	56*	21*
Profession		
Professional (lawyer, doctor, teacher, accountant)	74%	11%
Clerical, office, sales	57	18
Manager, executive, business owner (n=93)	73*	10*
Service work (waiter, hairstylist, policeman, janitor, nurses' aide)	17	52
Skilled trades (electrician, plumber, carpenter)	18	51
Semi-skilled (assembly line worker, truck driver, bus driver) (n=53)	17*	72*
Other (n=80)	65*	17*

Source: Pew Internet & American Life Project Survey. March-April 2008. N=1,000 total employed. Margin of error is ±4%. N=865 employed internet users. Margin of error is ±4%.

* The unweighted *n* for these sub-samples is less than 100.

An employee's pattern of internet use is correlated with her work environment.

What people do on a typical day at work – whether they work long hours, work from home, supervise others, or work on teams – may play into the amount of time they spend on the internet at work.

For example, people who work overtime (more than the usual 40 hours a week) are much more likely to use the internet constantly while at work. Fully 43% of those who work over 50 hours a week and 41% of those who work between 41 and 50 hours a week use the internet constantly at work, significantly more than employed internet users who work 40 hours or less each week.

Similarly, over two-thirds of those who frequently or sometimes work from home are likely to be online constantly or log on several times a day, significantly more than those who never work at home.

Work Environments Associated with Internet Use

Work environment		Use internet constantly or several times a day at work	About once a day or less often at work	Never at work
Hours worked	Over 50 hours a week	63%	19%	18%
	41-50 hours	67	12	21
	40 hours	47	27	26
	Less than 40 hours	31	25	44
Work from home	Frequently	67	16	15
	Sometimes	69	20	11
	Never	34	25	41
Supervise others	Yes	61	20	19
	No	40	24	36
Work with teams in past month	5 or more teams	71	16	15
	2-4 teams	61	21	19
	None	35	25	40

Source: Pew Internet & American Life Project Survey. March-April 2008. N =865 employed internet users. Margin of error is ±4%.

Employed Americans who have more interaction with their coworkers tend to use the internet more frequently at work. Fully 61% of supervisors use the internet at work constantly or several times a day. Those who have worked with a range of different teams in the past month also use the internet very often at work; 71% of those who have worked with five or more groups and 61% of those who have worked with two to four groups use the internet either constantly or several times a day at work.

Employed Americans in the top earning brackets are the most wired workers.

Looking more closely at demographics, employed internet users ages 30-49, those with at least some college education, and those making $75,000 or more in annual income are among the most likely to use the internet at work. Those least likely to use the internet at work include 18-29-year-olds, those with less than a college education, and those making under $30,000 income. However, there are no significant differences in internet use at work according to one's race or gender.

One in three employed internet users ages 30-49 uses the internet constantly while at work. In addition, 72% of these workers use the internet from both home and work. In both cases they are using the internet significantly more than any other age group.

The "Always On" Population at Work

The percentage of employed internet users who use the internet at work "constantly"

All employed internet users	27%
Gender	
Male	28
Female	27
Race/Ethnicity	
White, non-Hispanic	25
Non-white	27*
Age	
18-29	19
30-49	33
50+	23
Education	
High school graduate or less	11
Some college	27
College graduate	41
Worker Income	
Less than $30,000	11
$30,000-$49,999	26
$50,000-$74,999	35
$75,000+	46

Source: Pew Internet & American Life Project Survey. March-April 2008. N=865 total employed internet users, margin of error is ±4%. Among employed adults who were asked about their income, 9% or 320 respondents said they did not know or refused to answer the question.

** Non-white respondents include Black non-Hispanics and English-speaking Hispanics. N=123 for non-white employed internet users.*

Education is also strongly associated with internet use at work. College graduates are significantly more likely than those with just some college, and especially more likely than high school or less than high school graduates, to use the internet at work. Fully 41% of employed college graduates use the internet constantly at work, significantly more than those with less education. In addition, employed American internet users with some college education are significantly more likely to use the internet constantly at work (27%) than those with no college education (11%).

Income is also a factor in internet use at work. Employed Americans with higher incomes are significantly more likely to be using the internet at work. In particular, nine out of ten Americans making over $75,000 a year use the internet at work, while only about half (55%) of those making less than $30,000 a year do so.

Americans making less than $30,000 a year are significantly more likely to work in the service industry and significantly less likely to be professionals, managers or executives, or government employees than the general working population. Because they are much less likely to be managers or professionals (the two groups most likely to use the internet at work) and more likely to be service workers (one of the groups that is least likely to use the internet at work), it seems that profession might be a reason why so few people who make less than $30,000 a year use the internet at work.

They are also much more likely to work only part-time, which might also play into their lower likelihood of using the internet at work. The finding that they are actually about equally likely as the total employed population to work in most sizes or types of companies (with the exception being the government) suggests that the size/type of a company has less of a role to play in internet use at work, at least among those making less than $30,000 a year.

Gadget ownership continues to increase, with higher levels in certain areas of the workforce.

Gadget ownership, and particularly cell phone ownership, continues to rise dramatically among all Americans. Well over three-fourths (78%) of all Americans now own cell phones, up from 65% in 2004 and 73% in 2006. Among those who are working, fully 89% own a cell phone, up from 82% in 2006.

Personal digital assistants (PDAs), such as Blackberries, are also becoming more common among working Americans. Overall, 13% of Americans and 19% of those who are working own a PDA or Blackberry (up from 14% of workers in 2006). Most PDA owners (69%) say their PDAs double as cell phones. This trend is also rapidly increasing; in 2006 only 26% used their PDAs as cell phones.

Laptops are gaining ground in American households and workplaces. Laptop ownership has increased to 39% from 30% in 2006, while at the same time ownership of desktop computers has decreased slightly, from 68% in 2006 to 65% in the current survey. Half of those who are currently working own a laptop, up from 38% in 2006.

Employed Americans own more gadgets for working on the go.

In all gadget counts, employed Americans own more devices. Employed Americans own more gadgets than the non-working population, with the starkest differences emerging among those who own a laptop, Blackberry or PDA. There is a type of hierarchy to

gadgets; while even the majority (65%) of non-working Americans own cell phones, fewer Americans own desktops, only one in four own laptops, and about one in twenty own a Blackberry or PDA.

Gadgets Overview

Gadget type	2006 Total	2006 Employed	2006 Non-working	2008 Total	2008 Employed	2008 Non-working
Cell phone	73%	82%	58%	78%	89%	65%
Desktop	68	77	52	65	77	52
Laptop	30	38	18	39	50	27
PDA, Blackberry	11	14	4	13	19	6

Source: Pew Internet & American Life Project Surveys. For 2006 data: February-April 2006. N= 4,001 total sample. Margin of error is ±2%. N= 2,367 total employed. Margin of error is ±2%. For 2008 data: March-April 2008. N= 2,134 total sample. Margin of error is ±3%. N=1,000 total employed. Margin of error is ±4%.

Professionals and executives own more gadgets.

In a trend similar to internet use at work, professionals, managers and executives are most likely to own gadgets, especially higher-end gadgets such as laptops and PDAs. Fully 30% of people in these professions own PDAs, more than twice as many as the national average of 13%. Furthermore, two out of three professionals, managers and executives own laptops, significantly more than employed Americans in any other field of work.

The semi-skilled workers can be found on the other side of the gadget ownership spectrum. They are significantly less likely than professionals, clerical workers and managers to own any of the gadgets (13% do not own any type of computer or gadget, including cell phones). Additionally, only 7% of semi-skilled workers own PDAs, compared with 19% of employed Americans who own PDAs. Only 76% of Americans working in semi-skilled trades own cell phones, while 89% of all employed Americans own cell phones.

However, while gadget ownership varies by profession, it does not differ by the size or type of company a person works for. Those employed in medium (51%) and small businesses (51%), governments (53%), schools (52%) and non-profits (50%) are all about equally likely to own laptops. Similarly, there are no statistically significant differences among those who own PDAs or desktop computers.

Gadget Ownership and Profession				
Profession	**Cell phone**	**Desktop**	**Laptop**	**Blackberry or other PDA**
Professional (lawyer, doctor, teacher, accountant)	94%	89%	68%	30%
Clerical, office, sales	90	87	46	21
Manager, executive, business owner	93	78	62	30
Service work (waiter, hairstylist, policeman, janitor, nurses' aide)	88	69	36	10
Skilled trades (electrician, plumber, carpenter)	86	72	47	10
Semi-skilled (assembly line worker, truck driver, bus driver)	76	56	29	7
Other	88	71	50	22

Source: Pew Internet & American Life Project Survey. March-April 2008, N =1,000 employed Americans. Margin of error is ±4%.

Those who work longer hours, work from home or supervise others own more gadgets.

Americans working longer hours are significantly more likely to own laptops and PDAs. Thirty-two percent of employed Americans working over 50 hours a week own PDAs, compared with 20% of Americans working between 41 and 50 hours a week. Part-time workers are significantly less likely than those who work overtime to own laptops and PDAs.

These data also suggest that those who frequently or sometimes work from home are more likely to own laptops and PDAs than those who never work from home. Those who work from home some of the time (but not frequently) are also significantly more likely to own cell phones and desktop computers than those who never work at home.

Workers who supervise others and who work with more teams are more likely to own gadgets when compared with those who do not. This trend is particularly significant in comparing laptop and PDA ownership among supervisors, team-workers, and those who work independently. Three in ten people who have recently worked with five or more teams own PDAs and 68% of the same group own laptops. Similarly, one in four supervisors owns a PDA and 57% own laptops.

Gadget Ownership and Work Environment				
Work environment		**Desktop**	**Laptop**	**Blackberry or other PDA**
Work longer hours	Over 50 hours a week	79%	67%	32%
	41-50 hours	79	57	20
	40 hours	75	45	15
	Less than 40 hours	76	40	17
Work from home	Frequently	78	61	27
	Sometimes	83	64	29
	Never	74	40	13
Supervise others	Yes	82	57	25
	No	73	45	15
Work with teams	5 or more teams	79	68	30
	2-4 teams	82	59	25
	None	71	35	17

Source: Pew Internet & American Life Project Survey. March-April 2008, N =1,000 employed Americans. Margin of error is ±4%.

Americans juggle work and email accounts as the lines between personal and professional communication continue to blur.

Eight in ten working adults maintain either a personal or work-related email account. More than half of working adults (53%) have *both* personal and work accounts. One in five (22%) say they only maintain personal email accounts and just 5% of working adults say that their email use is limited to a work account.

Employed Americans generally maintain one personal email account and one work account—a trend that has been consistent over time.[17] Nearly half of working Americans (45%) say they have just one personal email account, while 18% say they maintain two and 13% keep tabs on three or more personal accounts. Likewise, 45% of working Americans have just one email account for work, while 9% maintain two and 5% manage three or more work accounts.

Young working adults are the most likely to maintain multiple personal addresses; 20% report having three or more personal accounts, compared with just 13% of those ages 30-49. However, younger workers are no more likely to maintain multiple work accounts. In fact, more working 30-49 year olds report having work email accounts overall; 65% say they have accounts for work, while just 49% of working young adults report the same.

[17] See Deborah Fallows, "Spam: How it is Hurting Email and Degrading Life on the Internet," Pew Internet & American Life Project, October 22, 2003. Available at: http://www.pewinternet.org/PPF/r/102/report_display.asp

Personal and Work Email Accounts Among the Employed

Now thinking about email, both personal email and email that may be related to work and other activities…How many accounts do you use now, if any?

Type of account and group	At least one	Only one	Two	Three or more	None	Don't Know
Personal						
All employed adults	76%	45%	18%	13%	24%	*
Employed internet users	87	51	21	15	13	*
Employed adults working over 40 hrs/wk	80	51	15	14	20	*
Work						
All employed adults	59	45	9	5	40	1
Employed internet users	66	51	10	5	33	1
Employed adults working over 40 hrs/wk	72	53	13	6	27	*

Source: Pew Internet & American Life Project Survey. March-April 2008, N =1,000 employed respondents. Margin of error is ±4%.

Most employees who have personal email accounts check them while on the job.

Overall, 54% of employees with personal email accounts say they at least occasionally check their personal inboxes while at work. Most do so on a daily basis; 39% of all personal emailers say they check their personal accounts at least once a day at work, while 15% report checking in less often than that. Just 7% admit to refreshing their personal inboxes at work constantly, and 4% say they check in several times an hour.

Some of the same groups who report the most frequent checking of work-related email are also the most likely to report frequent tending to their personal accounts while at work: higher-income workers and those tethered to a desk. Fully 66% of those in jobs earning $75,000 per year or more say they check their personal accounts at work, compared with just 45% of those in jobs earning less than $30,000 annually. Likewise, those in professional, managerial and clerical positions are more tuned into their personal

email at work when compared with those working in the service industry, skilled and semi-skilled jobs.

Personal email spills over to the cell phone and Blackberry, too.

While most email activity is still channeled through the desktop or laptop computer, the growing presence of Blackberries and other communications devices has made email increasingly mobile.

As mentioned previously, 89% of workers have a cell phone and 19% have a Blackberry, Palm or other personal digital assistant. Of those employed respondents who own a cell phone or Blackberry or PDA, 25% use that device for email. Most report using these gadgets for at least some personal email use.

Looking more closely at employed respondents who actively use their cell phone or Blackberry for email, 44% say that most or all of the messages they send and receive are personal, while 32% say that most or all of the messages are work-related. Another 25% say their email use is equally split; about half of the messages they send and receive are personal, while the other half are work-related.

Messages Sent or Received by Mobile Email Users

Respondents who use mobile device to send or receive email

All are personal	28%
Most are personal	16
About half and half personal/work	25
Most are for work	21
All are for work	11

Source: Pew Internet & American Life Project Survey. March-April 2008, N=192 employed respondents who use their cell phone or Blackberry to send or receive email messages. Margin of error is ±8%.

Text messaging is mostly personal.

Among workers who own a cell phone or Blackberry or PDA, 59% use that device for text messaging. As is the case with email, text messages sent throughout the day are more likely to be personal than work-related. Nearly half of these employed gadget users

(47%) say that all or most of their text messaging is personal, while a meager 2% say that all or most is work-related. Another 9% say that their text messaging is evenly split between work-related and personal exchanges.

Young adults who are gadget owners are far more likely to report text messaging overall (81%), but are no more likely to report work-related messaging. However, fully 66% of those ages 30-49 use text messaging and 15% say that at least half of their exchanges throughout the day are work-related.

Of course, due to the mobile nature of cell phones and PDAs, work-related and personal text messaging can happen anywhere. However, even when looking at text messaging that happens specifically at work, most of the use reported is personal in nature. Among employed text messaging users, 28% say they exchange text messages with friends and family at least once a day while at work, while just 17% exchange messages with colleagues.

Those who use email at work are now more closely glued to their inboxes.

When they are at work, 37% of those with work email accounts check them constantly, up from 22% in 2002. Men and women tend to their work email with equal frequency. Workers ages 30 to 49 years old are the power emailers when it comes to managing work email. For instance, 40% of 30-49 year olds with work email accounts check those accounts constantly while at work, compared with 30% of those ages 50-64.

Higher paying jobs require more attention to email.

The more money an employee earns, the more closely he or she monitors work email accounts. While 27% of those earning less than $30,000 per year say they keep constant tabs on their work email, 46% of those earning $75,000 or more report that level of monitoring. Fully 78% of work emailers in the top earning bracket say they check their email accounts at least as often as several times per day.

Those who work for large corporations are far more likely than those who work for small businesses to be glued to their inboxes. Half of work emailers who are currently employed at large corporations check their email constantly, compared with just 32% of those who work for small businesses.

Mirroring the findings with overall internet use at work, those in different job types report varying patterns of email use; those in managerial, professional and clerical positions are more closely tuned into their email than those in the service industry, and skilled or semi-skilled jobs. Indeed, there is a considerable amount of overlap in the patterns seen here with wages and job types; as mentioned previously, many of those who earn less than

$30,000 work in the service industry, skilled and semi-skilled jobs—professions that are not associated with high levels of internet or email use.

In recent years, workers have become more likely to check their email outside of normal working hours.

Since 2002, working Americans have become more likely to check their work-related email on weekends, on vacation and before and after they go to work for the day.[18]

Overall, half of employed email users say they check their work-related email on the weekends. Fully 22% say that they check their work email accounts "often" during the weekend, compared with just 16% who reported doing this in 2002.

Those earning higher incomes are more closely tethered to their email on the weekends when compared with those in lower paying jobs. One in three (34%) employed email users in jobs earning $75,000 or more say they check their work email often on the weekends, while just 17% of those earning under $50,000 do so.

Even more frequent is the practice of checking email when employees are sick and cannot go to work. One in four employed email users (25%) say they check email "often" even when they have taken a sick day, compared with 17% who say they often check their inboxes before they go to work for the day, and 19% who frequently check their email after leaving work for the day.

Vacations no longer offer respite for many job-holders from work communications, either. Overall, 34% of employed email users say they will at least occasionally check their email on vacations; 11% say they do so often, 14% say they sometimes check in and 9% rarely log in to their email while taking a vacation day.

In addition, there is also a contingent of workers who manage their work email while they are on the go, such as commuting or shopping. Just 18% of employed email users report some level of on-the-go emailing for work, and just 7% say they check in frequently while on the go.

Blackberry and PDA owners are closely tuned in to their work email during off hours.

Among Blackberry and PDA owners, of course, all of these numbers are much higher. Checking work-related email outside of normal working hours is the norm for many of

[18] April 2002 results based on a sample of 1,003 "work emailers." See Deborah Fallows "Email at Work: Few feel overwhelmed and most are pleased with the way email helps them do their jobs," Pew Internet & American Life Project, December 8, 2002. Available at: http://www.pewinternet.org/PPF/r/79/report_display.asp. April 2008 results based on a sample of 807 "employed email users." The 2008 sample includes those who may use personal accounts for work-related email.

these gadget users, even during weekends and vacation time. Indeed, many workers either choose to own these gadgets or are required to have them so they can to stay connected while they are away from the office.

Overall, 70% of Blackberry and PDA owners say they will at least occasionally check work-related email on the weekends, and 40% say they do so "often." While on vacation, 55% will stay tuned in to work communications, and 25% say they check in often.

When they are sick, Blackberry and PDA users rarely let that keep them from staying on top of their work email. Seven in ten say they will log on to get their work-related email when they are taking a sick day, and nearly half (46%) do so often.

Most of these tethered gadget owners start the work day early by taking care of email before going to the office. More than half of Blackberry and PDA owners (55%) will check in before they go to work for the day and 36% do so often.

However, evening seems to be the time when email most often spills over into personal time. Fully 70% say they will at least occasionally check their work-related email after they leave work for the day, with 37% doing so often.

Commercials of gadget users bumping into obstacles while glued to their screens have even started to appear. Indeed, 43% of Blackberry and PDA owners say they check their work-related email on the go, such as commuting or shopping. Close to one in four do make a regular habit of it; 23% say they "often" get work email on the go.

Work-related Email Outside of Normal Working Hours

Blackberry and PDA owners far more likely to check for work-related messages in off hours

Time outside of work		Often	Sometimes	Rarely
On weekends	Current - Employed Email Users	22	18	10
	Current - Blackberry/PDA owners	40	23	7
	April 2002 - Work Emailers	16	15	12
On vacations	Current - Employed Email Users	11	14	9
	Current - Blackberry/PDA owners	25	20	10
	April 2002 - Work Emailers	5	10	7
Before you go to work for the day	Current - Employed Email Users	17	9	7
	Current - Blackberry/PDA owners	36	11	8
	April 2002 - Work Emailers	8	7	5
After you leave work for the day	Current - Employed Email Users	19	16	9
	Current - Blackberry/PDA owners	37	22	11
	April 2002 - Work Emailers	11	15	9
When you are sick and cannot go to work	Current - Employed Email Users	25	15	6
	Current - Blackberry/PDA owners	46	18	6
On the go, such as when you are commuting or shopping	Current - Employed Email Users	7	6	5
	Current - Blackberry/PDA owners	23	13	7

Source: Pew Internet & American Life Project Survey. March-April 2008, N =807 for employed email users. Margin of error is ±4%. N=233 for Blackberry/PDA owners. Margin of error is ±7%. April 2002 data based on work emailers, N=1,003. Margin of error is ±3%.

One in five employed email users and half of Blackberry and PDA owners say they are required to read and respond to work-related emails when they are not at the workplace.

Off-hours email checking does not merely happen out of an employee's own volition; 22% of employed email users say they are expected to read and respond to work-related emails, even when they are not at work. Blackberry and PDA owners are more than twice as likely to report that their employer expects that they will stay tuned in to email outside of the office. Fully 48% say they are required to read and respond to email when they are away from work.

By comparison, employees are still more likely to say they are required to be available by phone; 52% of employed email users are expected to be available to discuss work on the phone when they are not at work. And 70% of Blackberry and PDA owners report the same.

However, in practice, off-hours calls related to work are much less common than checking in via email. For instance, just 12% of employed email users say they "often" make or receive work-related calls on the weekend, while 22% say they often check work-related email on the weekends (as noted above). Similarly, just 5% of employed email users make and receive work-related phone calls often while on vacation, compared with the 11% who say they often tend to their inboxes during their time away.

Those who are home sick are also far more likely to check in online than they are to pick up the phone; just 14% of employed email users say they "often" make and receive work-related phone calls when they are sick and unable to go to work, while 25% check their email often when they are sick. Making work-related calls while on the go, such as commuting or shopping, is the only practice that is more frequent than after-hours email checking; 12% of employed email users say they often make and receive work-related calls while they are on the go, while just 7% say they check work-related email on the go.

Yet, few workers feel as though the volume of email alone has increased the total amount of time they spend working.

In a trend similar to what we noted in 2002, few employed email users feel as though using email has increased the amount of time they spend working overall; just 17% attribute some increase to email, while 6% feel as though email has actually cut down the amount of time they spend working. About the same modest number report some increase in the amount of time spent working specifically at home (16%), while 5% note a decrease. A smaller segment (10%) note an increase in the amount of time spent working at the office, while nearly the same number (7%) say email has cut down the time they spend at the office. In a new question, we also asked how email might have changed the amount of time spent working at places other than the office and at home—including work done while commuting or traveling. Just 13% reported an increase, while

3% said email has decreased the amount of time they spend working somewhere other than the office or home.

Those who have higher education and income levels are more likely than the average employed email user to say that using email has increased the amount of time they spend working. One in four employed email users with a college degree and the same number of those earning $75,000 per year or more feel that email use has added to the amount of time they spend working (compared with 7% of high school grads and 14% of those earning $30,000-$49,999). Similarly, among workers who hold managerial and professional positions, 22% say that email has increased the amount of time they spend working.

Again, Blackberry and PDA owners stand out as being more likely to feel the crunch that work email adds to their lives. Fully 28% say using email has increased the total amount of time they spend working overall. Likewise, these gadget users are more than twice as likely as the average employed email user to say that email use has increased the amount of time they spend working at places other than the office; 30% of Blackberry and PDA owners report an increase in this regard (compared with just 13% of all employed email users who report the same).

Part 3.

Online Activities at Work and Home

Beyond email, this survey examined a variety of common internet activities that people engage in at home and work—including those with no obvious work-related purpose. While recent studies have shown that email can be a distraction from getting other work done, employers continue to express concern over workplace use of the internet for other activities such as gaming, social networking and online shopping.[19] A 2007 survey conducted by the American Management Association found that 65% of companies use software to block employees' connections to websites they deem inappropriate for work. Among those employers who block content, 61% said they were concerned about employees visiting gaming sites, 50% were concerned about social networking sites and 27% wanted to block employees from visiting shopping and auction sites.[20]

Nearly one in five employed internet users use instant messaging at work.

Overall, 41% of employed internet users send instant messages. Just 6% reserve IM exclusively for the office, while 22% report that use IM at home only. Another 12% say they use instant messaging software at both home and work. Looking at the data another way, 18% report at least some at-work use of instant messaging.

The frequency of instant messaging at work varies by the type of communication employees engage in; 20% of employed IM users say they send messages at least once a day to family and friends while they are at work, while 31% say they send messages to colleagues at least once a day at work. Just 3% of employed IM users admit to sending messages "constantly" to friends and family while at work, and 8% say they are exchanging messages with colleagues non-stop.

Men and women are equally as likely to use IM in all settings, but other demographic groups vary significantly in their IM use. Young working adults who are online (18-29) are far more likely to use IM when compared with older users; 56% send instant messages while just 37% of employed internet users ages 30-49 do so. However, those differences are primarily tied to at-home use; the youngest employed internet users are no more likely than 30-49 year-olds to report IM use at work.

[19] A 2007 joint study by researchers from Microsoft and the University of Illinois found that it takes, on average, 15 minutes for an employee who is interrupted by an email or instant message to return to serious mental tasks like writing reports or computer code. See: http://www.nytimes.com/2007/03/25/business/25multi.html?pagewanted=print

[20] See findings from the AMA/ePolicy Institute "2007 Electronic Monitoring and Surveillance Survey" which found that 66% of the companies surveys monitor employee internet connections and 65% use software to block connections to inappropriate websites. Available at: http://press.amanet.org/press-releases/177/2007-electronic-monitoring-surveillance-survey/

Looking specifically at IM use in the workplace, those who work in jobs earning $75,000 or more per year are the most likely to send instant messages. Overall, 33% of employed internet users in this earning bracket send instant messages at work, compared with just 18% of all employed internet users. Fully 21% of employed internet users in the highest income group use IM at home and work, while 12% reserve their instant messaging for the office only.

Looking across job types, most employed internet users have some experience with instant messaging, regardless of their profession. However, when it comes to at-work use, those in professional, managerial and clerical roles are much bigger users of IM than are those in service, skilled and semi-skilled jobs.

Those who work longer hours generally make greater use of instant messaging in the workplace. One in four employed internet users who clock in over 40 hours say they send instant messages at work, while 11% of those who work less than 40 hours per week do so.

Shopping is among the most popular leisure online activities at work.

Three in four employed internet users have made a purchase online—either at home, work or someplace else. With 22% of employed internet users buying online at work, online shopping is one of the most popular leisure online activities in the workplace. Just 3% say they have made online purchases at work only, while 53% say they have bought items while online at home only. Another 19% report making online purchases at both home and work, and 1% say they have bought something online from some other location.

While shopping activity at home varies by gender, at-work shopping is equally prevalent among men and women. Wired working women are more likely than men to say they shop online at home only (57% vs. 49%), but comparable numbers of both sexes say they do at least some of their online shopping at work (22% vs. 23%).

While high numbers of working young adults shop at home (67%), they are less likely than their older counterparts to say they shop at work. About one in four employed internet users ages 30-64 do at least some shopping at work, compared with one in eight workers ages 18-29.

The higher an employed internet user's income and education level, the more likely he or she is to shop online. At-work shopping is also most common among these groups; 35% of those with college degrees make online purchases at their workplace, and fully 41% of those who earn $75,000 per year or more do so.

Few report playing online games at work.

Overall, 28% of employed internet users say they play games online, but just 3% report at-work playing. Most online game activity happens at home; one in four employed internet users say their game playing is limited to home only.

Employed internet users ages 18-29 are far more likely than their older counterparts to play games online—at home and at work. Fully 43% play games online from any location, and 7% of young employed internet users say they play at work at least some of the time.

Online game playing does not vary by gender, but employed internet users who fall into lower earning categories generally report more game playing—a trend that is likely influenced by the youthfulness of these respondents.

Younger employees are the most likely to create and read blogs.

Blogging is equally prevalent among employed internet users as it has been among the general population; 12% of employed Americans who use the internet and the same number of all online Americans have created or worked on a blog. Just 2% of employed internet users say they blog at work.

Working men and women are equally as likely to blog, but young adults far outpace older workers in their engagement with blogging. Employed internet users ages 18-29 are more than twice as likely to blog when compared with 30-49 year olds (20% vs. 9%). However, young adults are no more likely to report at-work tending to their blog; just 2% say they blog from work.

Blog reading is also most prevalent among younger generations of employed internet users. One in three internet-using employees (33%) say they have read someone else's blog or online journal, and 11% report at least some at-work reading. However, among young working adults, 46% are blog readers, compared with 33% of 30-49 year olds and 25% of employed internet users ages 50-64. At-work blog reading is equally prevalent among all of these groups.

Online Activities at Work and Home

Do you ever use the internet to…? Do you generally do this at work, at home, or both at work and at home?

Activity	Have ever done this	At work only	At home only	Both work & home	Some other place	Have not done this
Buy a product online, such as books, music, toys or clothing	76%	3%	53%	19%	1%	24%
Watch video on a video-sharing site like YouTube or Google Video	53	3	37	12	1	47
Send "instant messages" to someone who's online at the same time	41	6	22	12	--	59
Use an online social or professional networking site like MySpace, Facebook or LinkedIn	35	3	25	7	--	65
Read someone else's online journal or blog	33	3	22	8	1	66
Play online games	28	--	24	3	--	72
Contribute writing, files or other content to your employer's website	23	10	3	8	1	77
Create or work on your own online journal or blog	12	--	9	2	1	88

Source: Pew Internet & American Life Project Survey. March-April 2008. N =855 employed internet users who use the internet from home or from work. Margin of error is ±3%.

One in ten employed internet users use social networking sites at work.

Social networking continues to grow in popularity among the general online population such that 29% of online adults now report using a social or professional networking site such as MySpace, Facebook or LinkedIn. Employed internet users are even more likely than the average internet user to use these sites; 35% report social networking site use from at least one location.

As is the case with other online activities, most employees say their social networking use happens at home. One in four say their use is restricted to home only, while one in ten employed internet users report at least some at-work use.

Social networking use among young adults continues to dwarf that of older users. Three in four employed internet users ages 18-29 use social networking sites, while just 30% of

those ages 30-49 use the sites. Differences in at-work use are not as stark; 14% of employed internet users ages 18-29 use social networking sites from work, while 10% of those ages 30-49 report some at-work use.

On a typical day at work, employed social networking users are equally as likely to use sites such as MySpace or Facebook to communicate with colleagues as they are to communicate with family or friends. Just 5% of employees who use social networking use their profiles to exchange messages with colleagues at least once a day while at work, and 9% say they use their profiles to communicate with family and friends daily while at work.

Men are more likely to watch videos online from both home and work.

More than half of all employed internet users (53%) say they have watched video on a video-sharing site such as YouTube or Google Video. At-work watching is less common than viewing at home; 15% report at least some online video viewing at these sites from the office, while 49% report some kind of viewing at home. Looking more closely, just 3% say they exclusively watch at work and 37% say they limit their viewing to home only. Another 12% say they watch from both locations.

As is the case with the general population, there exists a gender gap in the working world when it comes to online video watching. A larger share of wired working men count themselves among this segment of the online video viewing audience when compared with wired working women (57% vs. 48%). And while equal numbers of men and women say they watch from home only, more men than women report both home and at-work viewing. Overall, 18% of wired working men report watching at work at least some of the time—2% watch only at work, while 16% say they view videos from both locations. Just 11% of wired working women say they visit online video sharing sites from the office—4% say their viewing happens exclusively at the office, while 7% watch from both home and work.

Similarly, in keeping with trends among the broader internet population, younger workers are far more engaged with online video when compared with older generations. The vast majority, 71% of wired working young adults (18-29), have watched video on a video sharing site such as YouTube or Google Video. In comparison, just 54% of employed internet users ages 30-49 and 36% of those ages 50-64 have watched video on these sites. However, as is the case with social networking site usage, most young adults use video sharing sites at home; young adults are no more likely than older users to say they watch content on video sharing sites at work.

Those in the highest earning and education brackets are the most likely to contribute content to their employer's website.

Overall, nearly one in four (23%) of employed internet users have contributed writing, files or other content to their employer's website. Fully 18% report posting content at work—10% say they do so at exclusively at work, while 8% do so from home and work. Another 3% say they contribute content from home only.

Men and women are equally as likely to post writing, files or other content to their employer's website, and all but the oldest employed internet users (ages 65 and older) report similar experience with contributing some kind of content to the Web for their workplace.

Yet, when it comes to education and earning categories, those in the highest brackets are far more likely to post content to the Web. While 32% of wired working college graduates have contributed writing, files or other content to their employer's website, just 23% of those with some college education have done so. Similarly, 34% of those in jobs earning $75,000 or more contribute content while just 25% of those earning $50,000 to $74,999 do so.

Part 4.

Attitudes and Impacts of Technology

Today's workers clearly recognize the benefits of increased connectivity and flexibility that the internet and all of their various gadgets afford them on the job. The overwhelming majority of Wired and Ready Workers say that the internet, email, cell phones and instant messaging have improved their ability to do their job (80%), improved their ability to share ideas with co-workers (73%) and allowed them more flexibility in the hours they work (58%). In addition, 80% of Wired and Ready Workers report that these tech tools have expanded the number of people they communicate with.

Wired and Ready Workers: The 96% of employed adults who are in some way making use of new communications technologies—either by going online, using email or owning a cell phone.

Mobile gadget users who own a Blackberry or PDA are even more likely to note some of these positive effects: that the internet, email, cell phones and instant messaging have improved their ability to do their job (93% overall and 55% "a lot") and improved their ability to share ideas with co-workers (86% overall and 51% "a lot"). Nearly all Blackberry and PDA owners (95%) feel that new communications technologies have expanded the number of people they communicate with and 70% feel as though these technologies have expanded their network "a lot."

However, America's busiest workers—particularly those in professional and managerial roles—also acknowledge the tradeoffs that come with increased connectivity. Many of these workers feel as though access to all of these technologies increases demands that they work more hours, increases the level of stress in their job, and makes it harder for them to disconnect from their work when they're at home or on the weekends.

Many say technology helps them at work, but also has prompted more demands and expectations that they should work more hours.

When asked how much, if at all, technologies such as the internet, email, cell phones, and instant messaging have increased demands that they work more hours, 46% of all Wired and Ready Workers say they feel those demands have intensified, with 16% saying they have increased "a lot." Looking specifically at those who work in professional and managerial positions, 59% say these demands have increased, as do 56% of those who work more than 40 hours per week. Of those who work more than 50 hours per week, fully 62% say that these demands have increased, with 38% saying the expectation that they work more hours has increased "a lot." Those who own Blackberries and PDAs are also an acutely affected group; 63% feel as though gadgets and connectivity increase

demands that they work more hours, and 30% feel as though these demands have increased "a lot."

Looking at age-related differences, younger workers under the age of 50 are generally more likely than older users to feel that new communications technologies have increased expectations that they will work more hours. For instance, 21% of Wired and Ready Workers ages 18-29 say that the internet, email, cell phones and instant messaging have increased these demands "a lot," while just 11% of those 50-64 note the same.

Many of the nation's busiest workers attribute increases in stress levels to the information and communication technologies in their lives.

In 2002, the Pew Internet Project asked work emailers how much, if at all, using email at work had added new sources of stress to their job. At the time, 6% said work email had added "a lot" of new stress, while 38% attributed at least a small increase in their stress level at work to email.

We asked a similar, yet broader, question this year and half of all Wired and Ready Workers (49%) say that technologies such as the internet, email, cell phones and instant messaging have had the effect of increasing the level of stress in their job. At one extreme, 15% say these technologies have increased the amount of stress for them "a lot," while 17% report "some" increase and another 17% say their stress level has increased only "a little" due to their connectivity.

However, among those who work over 50 hours per week, 56% say that information and communication technologies have increased their stress level, with fully 27% saying it has increased "a lot." Similarly, 58% of those in professional and managerial positions note an increase, but just 18% say that stress in their job has increased "a lot."

Unlike the findings related to demands for working more hours, younger workers were no more likely than older users to report increased levels of stress due to the use of communications technologies. Similarly, those who work overtime (41-50 hours per week) and those who own a Blackberry or PDA are no more likely than the average user to report heightened stress.

Blackberry and PDA users appreciate the flexibility their connectivity affords, but are among the most likely to find it harder to forget about work at home and on the weekends.

Most Wired and Ready Workers (58%) say that new communications technologies have afforded them more flexibility in the hours they work; 24% feel as though technologies such as the internet, email, cell phones and instant messaging have allowed them "a lot" more flexibility, while 21% say it has afforded them "some" added leeway. Just 13% report that they have "only a little" more flexibility than they did before.

However, Blackberry and PDA users are far more likely than the average Wired and Ready Worker to point to the flexibility factor when talking about the impact of communications technologies. Fully 71% note an increase in flexibility, with 37% saying it has increased "a lot."

Yet, for many employees, one of the tradeoffs for having more leeway in one's schedule has been the blurring of work hours and off-work personal time. Noting this compromise, half of Wired and Ready Workers (49%) say that the internet, email, cell phones and instant messaging make it harder for them to forget about their work at home and on the weekends.

Again, Blackberry and PDA users stand out in this regard. More than two-thirds of these gadget owners (69%) feel that new communications technologies have made it harder for them to disconnect from work at home and on the weekends and one-third (34%) feel as though it has become "a lot" harder to do so.

Those who work lots of extra hours report similar impressions; 66% of Wired and Ready Workers clocking in 50 or more hours per week note that new communications technologies have made it harder for them to forget about work, while 37% say it has become "a lot" harder to disconnect from their job at home and on the weekends.

Looking at age, those ages 30-49 are the most likely to say they have problems disconnecting fully from work; 20% of Wired and Ready Workers in this group say new communications technologies have made it "a lot" harder to forget about work at home and on the weekends, while just 12% of those ages 50-64 report the same.

Some find that new communications technologies make it harder to focus at work.

The constant ping of email appearing in our inboxes, voicemails arriving on our cell phones and instant messaging windows beckoning for our attention have presented new challenges for today's workers. Yet, just 38% of Wired and Ready Workers say that technologies such as the internet, email, cell phones and instant messaging have made it harder for them to focus at work. Few report big impacts in this regard; just 7% say these technologies have made it "a lot" harder to focus, while 14% report "some" impact and 17% say they have made it "only a little" bit harder to focus.

Those who own a Blackberry or PDA are somewhat more likely to report problems focusing at work; half say they have a harder time, while 13% say that new communications technologies have made it "a lot" harder to focus at work. Younger workers under the age of 50 are generally more likely than older users to attribute problems focusing at work to the impact of new communications technologies. However, even among young adults, this is a minority view; just 39% feel as though all of their connectivity and gadgets have made it harder to focus, while 13% say these technologies have made it "a lot" harder to focus at work.

Workplace Impact of Gadgets and Connectivity

How much, if at all, have technologies such as the internet, email, cell phones, instant messaging…

		Wired and Ready Workers	Blackberry/PDA owners	Work over 50 hours
		N=960	N=233	N=152
Improved your ability to do your job	TOTAL "yes"	80	**93**	83
	A lot	42	**55**	47
	Some	25	25	25
	Only a little	13	13	11
Expanded the number of people you communicate with	TOTAL "yes"	80	**95**	86
	A lot	46	**70**	**56**
	Some	20	16	18
	Only a little	14	9	12
Improved your ability to share your ideas with co-workers	TOTAL "yes"	73	**86**	**81**
	A lot	35	**51**	**49**
	Some	24	23	24
	Only a little	14	12	8
Allowed you more flexibility in the hours you work	TOTAL "yes"	58	**71**	64
	A lot	24	**37**	35
	Some	21	23	21
	Only a little	13	11	8
Made it harder for you to forget about work at home and on the weekends	TOTAL "yes"	49	**69**	**66**
	A lot	17	**34**	**37**
	Some	16	19	18
	Only a little	16	16	11
Increased stress in your job	TOTAL "yes"	49	55	56
	A lot	15	23	27
	Some	17	16	20
	Only a little	17	16	9
Increased demands that you work more hours	TOTAL "yes"	46	**63**	**62**
	A lot	16	**30**	**38**
	Some	17	**24**	14
	Only a little	13	9	10
Made it harder for you to focus at work	TOTAL "yes"	38	**50**	47
	A lot	7	**13**	**14**
	Some	14	15	14
	Only a little	17	22	19

Source: Pew Internet & American Life Project Survey. March-April 2008, N=960 for all Wired and Ready Workers (employed respondents who are internet users, have a cell phone or email account). Margin of error is ±3%. N=233 for Blackberry/PDA owners. Margin of error is ±7%. N=152 for networked workers who work more than 50 hours per week. Margin of error is ±9%. Significant differences, relative to all networked workers, are noted in bold.

In-person communication is still preferred for many workplace interactions.

While email is the medium of choice for logistics, planning and document review-related work, employed email users still express clear preferences for in-person communication when it comes to coping with questions about work, dealing with sensitive issues or bringing up problems to a supervisor. Modest segments of these workers prefer to use the phone for arranging meetings or appointments, or asking questions about work; however, instant messaging and text messaging were not seen by respondents as effective ways to deal with any of the scenarios posed to them.

Communications Technology Preferences in Different Workplace Situations

Which is the most effective way to…

Workplace Situation	In Person	By Email	By Phone	By IM	By Text Message
Arrange meetings or appointments	21	60	17	*	1
Edit or review documents	30	62	3	1	*
Ask questions about work issues	65	21	11	1	1
Deal with sensitive issues	88	4	7	*	*
Bring up a problem to your supervisor	79	10	7	1	*

Source: Pew Internet & American Life Project Survey. March-April 2008. N=655 employed respondents who use email at work. Margin of error is ±4%.

Those who express a preference for arranging meetings and appointments or for editing and reviewing documents by email are far more likely than the average worker to express strong views that tech tools have improved their ability to do their job; 58% who favor email feel as though technologies such as the internet, email, cell phones and instant messaging have improved their ability to do their job "a lot," compared with 42% of all Wired and Ready Workers.

Methodology

This Pew Internet & American Life Project report is based on the findings of a The Networked Workers Survey. The Networked Workers Survey, sponsored by the Pew Internet and American Life Project, obtained telephone interviews with a nationally representative sample of 2,134 adults living in continental United States telephone households, including 1,000 self-identified full-time and part-time adult workers. The survey was conducted by Princeton Survey Research International. The interviews were conducted in English by Princeton Data Source, LLC from March 27 to April 14, 2008. Statistical results are weighted to correct known demographic discrepancies. The margin of sampling error for the complete set of weighted data is ±2.5%. The margin of error for results based on workers is ±3.5%.

Details on the design, execution and analysis of the survey are discussed below.

DESIGN AND DATA COLLECTION PROCEDURES

Sample Design

The sample was designed to represent all continental U.S. telephone households. The telephone sample was provided by Survey Sampling International, LLC (SSI) according to PSRAI specifications. The sample was drawn using standard *list-assisted random digit dialing* (RDD) methodology. *Active blocks* of telephone numbers (area code + exchange + two-digit block number) that contained three or more residential directory listings were selected with probabilities in proportion to their share of listed telephone households; after selection two more digits were added randomly to complete the number. This method guarantees coverage of every assigned phone number regardless of whether that number is directory listed, purposely unlisted, or too new to be listed. After selection, the numbers were compared against business directories and matching numbers purged.

Questionnaire Development and Testing

The questionnaire was developed by PSRAI in collaboration with staff of the Pew Internet and American Life Project. In order to improve the quality of the data, the questionnaire was pretested with a small number of respondents using RDD telephone number sample. The pretest interviews were monitored by PSRAI staff and conducted using experienced interviewers who could best judge the quality of the answers given and the degree to which respondents understood the questions. Some final changes were made to the questionnaire based on the monitored pretest interviews.

Contact Procedures

Interviews were conducted from March 27 to April 14, 2008. As many as 10 attempts were made to contact every sampled telephone number. Sample was released for interviewing in replicates, which are representative subsamples of the larger sample. Using replicates to control the release of sample ensures that complete call procedures are followed for the entire sample.

Calls were staggered over times of day and days of the week to maximize the chance of making contact with potential respondents. Each household received at least one daytime call in an attempt to find someone at home. In each contacted household, interviewers asked to speak with the youngest adult male currently at home. If no male was available, interviewers asked to speak with the youngest female at home. This systematic respondent selection technique has been shown to produce samples that closely mirror the population in terms of age and gender.

Towards the beginning of the interview, respondents were asked their employment status. Those who identified themselves as employed full-time or part-time continued with the full interview. The remaining non-employed respondents were asked an abbreviated questionnaire that included a short series of demographic questions necessary for weighting the data.

WEIGHTING AND ANALYSIS

Weighting is generally used in survey analysis to compensate for patterns of nonresponse that might bias results. The weight variable balances the interviewed sample of all adults to match national parameters for sex, age, education, race, Hispanic origin, region (U.S. Census definitions), and population density. These parameters came from a

special analysis of the Census Bureau's 2006 Annual Social and Economic Supplement (ASEC) that included all households in the continental United States that had a telephone.

Weighting was accomplished using Sample Balancing, a special iterative sample weighting program that simultaneously balances the distributions of all variables using a statistical technique called the *Deming Algorithm*. Weights were trimmed to prevent individual interviews from having too much influence on the final results. The use of these weights in statistical analysis ensures that the demographic characteristics of the sample closely approximate the demographic characteristics of the national population. Table 1 compares weighted and unweighted sample distributions to population parameters.

Table 1: Total Sample Demographics

	Parameter	Unweighted	Weighted
Gender			
Male	48.2	46.1	48.2
Female	51.8	53.9	51.8
Age			
18-24	12.4	5.8	11.3
25-34	17.6	9.3	17.0
35-44	19.7	14.4	19.7
45-54	19.7	20.4	20.2
55-64	14.3	19.5	14.8
65+	16.3	30.6	17.1
Education			
Less than HS Grad.	14.5	9.8	14.1
HS Grad.	35.7	32.9	35.1
Some College	23.6	24.2	23.3
College Grad.	26.2	33.1	27.5
Region			
Northeast	18.6	18.1	18.6
Midwest	23.3	28.1	23.9
South	36.2	35.4	36.5
West	21.9	18.4	21.0
Race/Ethnicity			
White/not Hispanic	70.8	80.3	72.6
Black/not Hispanic	10.9	9.1	10.8
Hispanic	12.4	5.8	10.7
Other/not Hispanic	5.9	4.9	5.9

Population Density			
1 - Lowest	20.1	24.4	20.7
2	20.0	24.4	20.7
3	20.1	23.1	20.6
4	20.2	15.7	19.8
5 - Highest	19.6	12.4	18.2

Effects of Sample Design on Statistical Inference

Post-data collection statistical adjustments require analysis procedures that reflect departures from simple random sampling. PSRAI calculates the effects of these design features so that an appropriate adjustment can be incorporated into tests of statistical significance when using these data. The so-called "design effect" or *deff* represents the loss in statistical efficiency that results from systematic non-response. The total sample design effect for this survey is 1.37. The design effect for results based on workers is 1.26.

PSRAI calculates the composite design effect for a sample of size n, with each case having a weight, w_i as:

$$deff = \frac{n\sum_{i=1}^{n} w_i^2}{\left(\sum_{i=1}^{n} w_i\right)^2}$$

In a wide range of situations, the adjusted *standard error* of a statistic should be calculated by multiplying the usual formula by the square root of the design effect ($\sqrt{deff}$). Thus, the formula for computing the 95% confidence interval around a percentage is:

$$\hat{p} \pm \left(\sqrt{deff} \times 1.96 \sqrt{\frac{\hat{p}(1-\hat{p})}{n}} \right)$$

where $\hat{p}$ is the sample estimate and n is the unweighted number of sample cases in the group being considered.

The survey's *margin of error* is the largest 95% confidence interval for any estimated proportion based on the total sample— the one around 50%. For example, the margin of error for the entire sample of workers is ±3.5%. This means that in 95 out every 100 samples drawn using the same methodology, estimated proportions based on

the entire sample of workers will be no more than three and one half percentage points away from their true values in the population.

Table 2 shows margin of sampling error and design effects for key subgroups. It is important to remember that sampling fluctuations are only one possible source of error in a survey estimate. Other sources, such as respondent selection bias, questionnaire wording and reporting inaccuracy, may contribute additional error of greater or lesser magnitude.

Table 2: Margins of Sampling Error for Key Groups

	Sample Size	Design Effect	Margin of Error
Total Sample	2,134	1.37	+- 2.5 percentage points
Workers	1,000	1.26	+- 3.5 percentage points
Internet Users	1,482	1.34	+- 2.9 percentage points
Employed Internet Users	865	1.26	+- 3.7 percentage points

RESPONSE RATE

Table 3 reports the disposition of all sampled telephone numbers ever dialed from the original telephone number sample. The response rate estimates the fraction of all eligible respondents in the sample that were ultimately interviewed. At PSRAI it is calculated by taking the product of three component rates:[21]

- Contact rate – the proportion of working numbers where a request for interview was made – of 82percent[22]
- Cooperation rate – the proportion of contacted numbers where a consent for interview was at least initially obtained, versus those refused – of 33 percent
- Completion rate – the proportion of initially cooperating and eligible interviews that were completed – of 89 percent

Thus the response rate for this survey was 24 percent.

[21] PSRAI's disposition codes and reporting are consistent with the American Association for Public Opinion Research standards.

[22] PSRAI assumes that 75 percent of cases that result in a constant disposition of "No answer" or "Busy" are actually not working numbers.