



Workplace Trends: Impact of Technology

Report
November 2006



Table of Contents

Introduction	3
Summary and Implications	4
Productivity	5
Time Spent Working	6
Flexible Working	7
Working from Home.....	8
Work-Related Stress	10
Required Technologies.....	12 14
Connectivity and Communications	13
Downsides of Technology	16

Introduction

According to the U.S. Census Bureau (2003 data):

- 64% of the adult population (18 years plus) are in employment;
- 56% of employed people use a computer at work (36% of the total adult population);

Of those who use a computer at work, almost all are, what you might call, 'Knowledge Workers', i.e., individuals who use word processing, database, spreadsheet, internet or email applications.

In terms of sectors, Knowledge Workers are much more likely to be based in information businesses, financial services, professional services, education, health and public administration than the total employed population. They are also more likely to be female, married and educated.

Objectives

Lexmark commissioned Ipsos Public Affairs to establish the impact of technology among 'Knowledge Workers'.

Key areas and trends for investigation included:

- Time spent working
- Flexibility in terms of when and where employees work
- Productivity
- Use of different technologies and further requirements
- Connectivity
- Potential negative impacts including stress levels

Special attention is given to employees who work from home for at least 1 hour per week. This group accounts for 55% of the total sample.

Methodology

Ipsos interviewed 711 'Knowledge Workers' by telephone between October 10 and 24, 2006 across the United States. All respondents were 18 years and over. The interviews took, on average, 17 minutes to complete.

Reported results are based on all respondents unless indicated. Sums of percentages do not always add up to exactly 100% because of rounding.

Margin of error around values (with 95% confidence level):

- Total respondents (711): +3.7%
- People who work from home (393): +4.9%
- Require BlackBerry/PDA (133) +8.5%

Summary and Implications

The adoption of technology in the workplace has resulted in extremely positive outcomes for both the employer and the employee. Employers have benefited from leaps in productivity while employees now enjoy greater flexibility over where and when they work and find the experience more rewarding. Although Knowledge Workers report greater work-related stress than five years ago, this trend is more related to the increase in hours they are working than the use of technology. In general, views on technology in the workplace are more likely to focus on the benefits rather than on the drawbacks.

The development and use of mobile communication technologies have served to erode the boundary between work time and non-work time. Employees regularly take and make work-related communications when they aren't working. This breaking down of the distinction between work and non-work time doesn't appear to be two-way as relatively few employees say they are undertaking more personal business in work time.

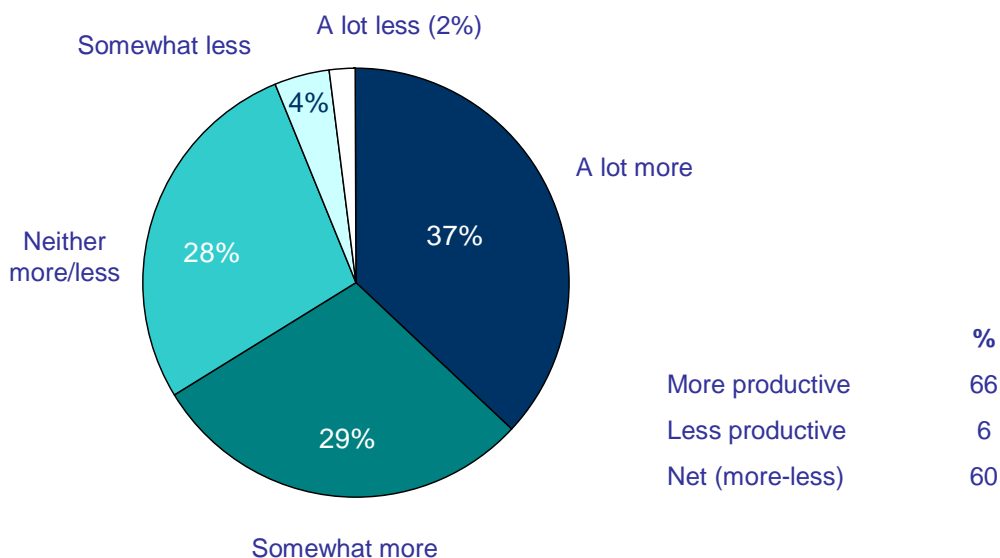
The printer is crowned as the most essential technical resource for the computer user. While most have access to a printer at home, Knowledge Workers don't when on the move and there is definite support for off-campus establishments and companies (such as cafes and airports) to offer the ability to print documents wirelessly in addition to wireless internet on their premises. Indeed, Knowledge Workers would like to print wirelessly wherever they work including in the office. Despite its status as an essential item, there are calls for the printer to be used more efficiently to avoid wasting paper.

Working patterns and attitudes differ across types of employer and employee. Employees from smaller and/or private sector companies have much more flexibility over where and when they work than those from larger employers and the public sector. Employees from smaller and/or private sector companies are also much more positive about their working patterns, technology and the benefits that these practices and resources bring to them and their employer.

Productivity

Knowledge Workers are much more productive than they were five years ago with nearly two-thirds (66%) saying they are at least somewhat more productive and over a third (37%) saying they are a lot more productive. Very few (6%) say they are less productive now.

Working Trends - Productivity



Q4d Compared to 5 years ago how much more or less productive are you in your work?

Increased productivity is very pronounced among those who say they are working more from home than they were five years ago. Indeed, three-quarters (75%) of those who work from home for at least one hour per week agree that they are more productive as a result.

More than four in five of all Knowledge Workers (83%) believe that having access to technology makes them more productive. Higher productivity is more evident among 'the constantly connected', i.e. Knowledge Workers who regularly take and make communications by telephone or internet in non-traditional work situations and times, such as on vacation or on a date.

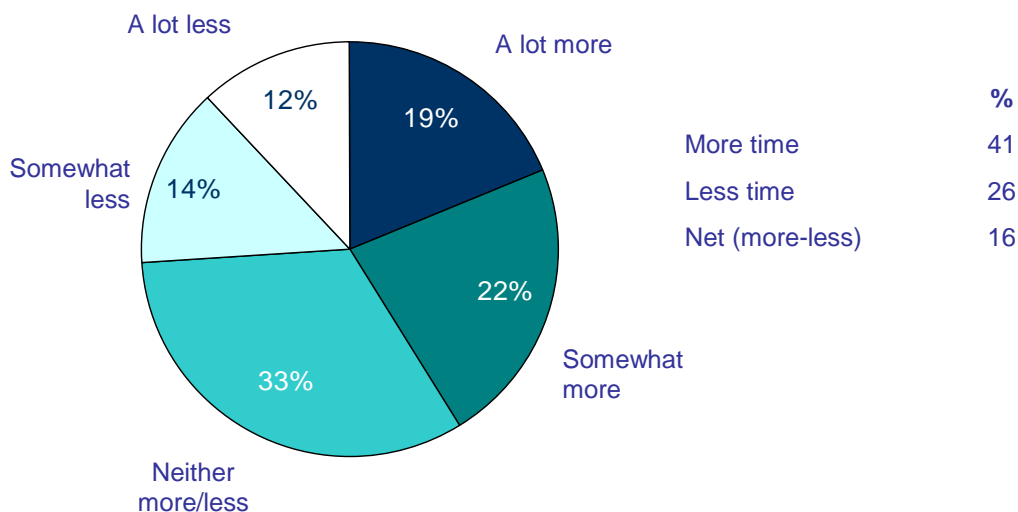
Other groups reporting a higher-than-average increase in productivity include those working more hours, those working more flexibly and those with a different employer from where they were five years ago.

Time Spent Working

Knowledge Workers are contracted (if employees) or plan to work (if self-employed) 39 hours per week on average. Although the majority of Knowledge Workers (61%) is committed to the standard 40-hour week, there is a great deal of fluctuation around the norm with a range of one to 140 hours. Men, upper-income earners, the self-employed, private sector employees, those who have been with their employer for more than five years, those with employee responsibilities and those taking/making lots of work-related communications outside of work tend to be committed to a longer working week.

Knowledge Workers are putting in more hours than they were five years ago with those reporting a longer working week significantly outweighing those reporting a shorter working week (41% vs. 26%). Knowledge Workers currently put in, on average, an extra five hours per week (or an extra hour every working day) on top of what they are committed to. The amount of overtime worked varies considerably with one in ten (8%) working an extra 20 hours per week.

Working Trends – Time Worked



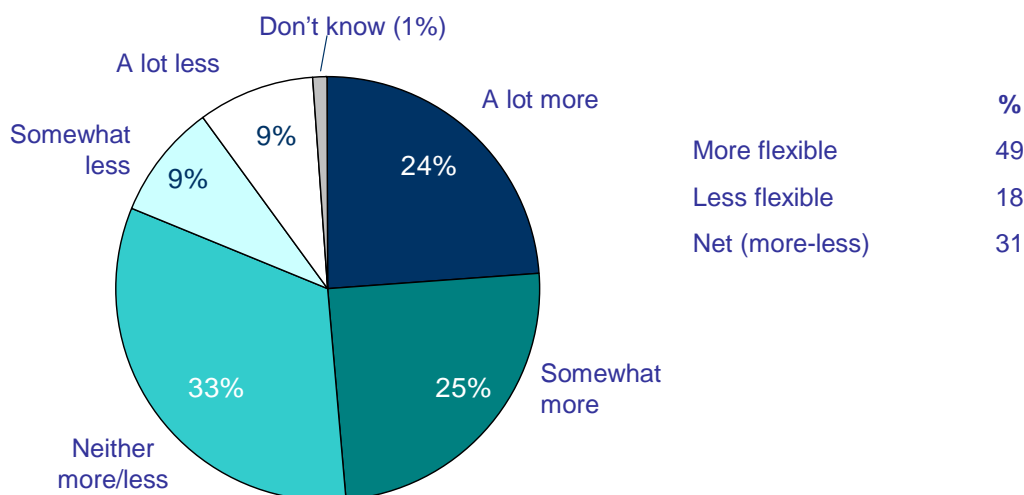
Q4a. Compared to 5 years ago how much more or less time (including overtime) do you work?

Although men and private-sector employees are committed to a longer working week than women and public-sector employees, women and public-sector employees work more overtime. Working overtime is also more prevalent among those who are middle aged, are married, earn higher salaries, live in the Northeast and the West, have a college degree, have employee responsibilities, work for larger employers, work from home, experience more work-related stress and make/take work-related communications outside of normal working time.

Flexible Working

Knowledge Workers are working much more flexibly (i.e., they work the hours that suit them, their employer or their clients). More than twice as many say they are working more than less flexibly (49% vs. 18%) than they were five years ago.

Working Trends – Flexible Working



Q4c. Compared to 5 years ago how much more or less flexible are you in the hours that you work i.e. hours that suit you, your employer or your clients?

Having access to technology and working from home are major factors in the ability to work more flexibly. Greater flexible working patterns are also more pronounced among those who work in the private sector, are better educated, have child responsibilities, have higher incomes, live in the Northeast and the South, are self-employed and work for smaller employers.

Those who are working more flexibly than they were five years ago report a lower increase in stress over the same period than other Knowledge Workers.

Working from Home

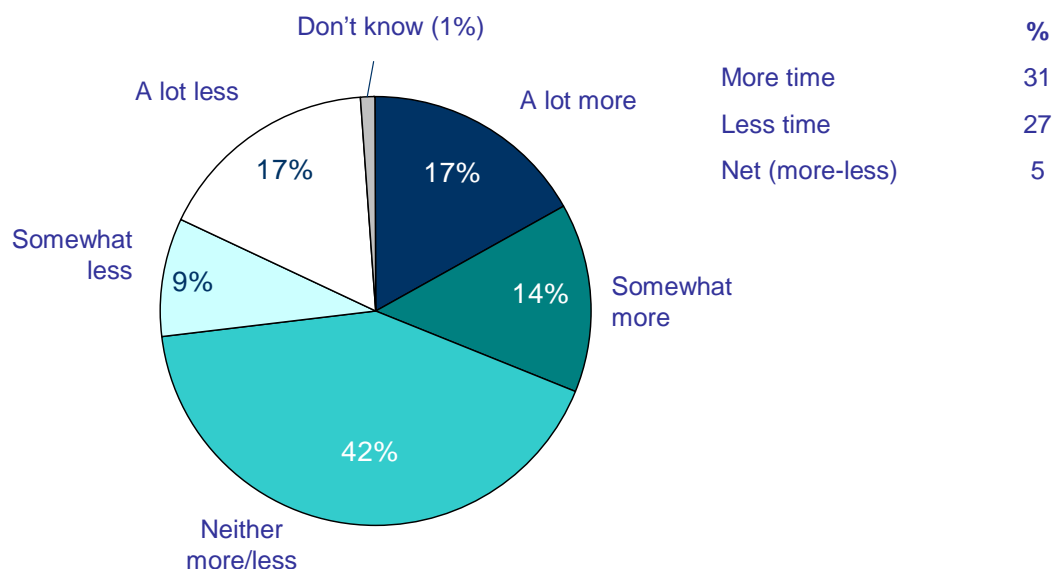
Knowledge Workers spend, on average, 8 hours or a fifth of their total working time (18%) working from home:

- More than half (55%) spend at least one hour a week working from home
- One third (34%) spend more than five hours a week working from home
- One in ten (11%) spend more than half of their working week working from home

A high proportion of the self-employed spend most of their time working from home—probably because their business is based there. On average, the self-employed spend more than three times as many hours working from home as do the employed (23 hours vs. 8 hours). Knowledge workers who spending a higher proportion of time working at home include private-sector employees, the middle-aged, high-income earners, those who are married, those working for smaller employers, those without employee responsibilities and those undertaking work-related communications outside normal work time.

Trends in working from home among Knowledge Workers has remained fairly constant over the last five years: three in ten say they are working from home more, but a similar proportion say they are working from home less (31% vs. 27%).

Working Trends – Working from Home



Q4b. Compared to 5 years ago how much more or less time do you spend working from home?

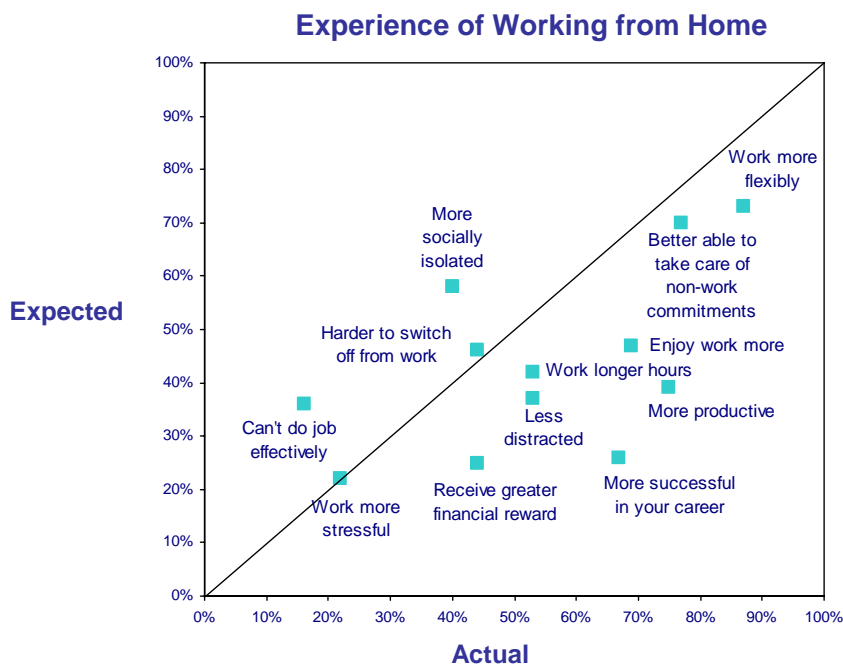
Those that work from home are very positive about doing so. Knowledge Workers that work from home state that the biggest benefit is the ability to work more flexibly (mentioned by 87%).

In addition, those that work from home are more likely to say they are working more flexibly than they were five years ago than do other Knowledge Workers. In turn, the ability to work more flexibly allows Knowledge Workers who work from home to be better able to take care of non-work related commitments (even though those who work from home are no more likely to be responsible for a pet or family member than those who don't work from home).

The perks of working from home aren't entirely personal as employers supporting the practice benefit from a more productive workforce. The majority of those that work from home (75%) feel that they work more productively at home.

The drawbacks to working from home are much less pronounced than the benefits. The main gripes among Knowledge Workers that work from home are working longer hours (mentioned by 53%), finding it difficult to switch off from work (44%) and feeling more socially isolated (40%).

When it comes to views on working from home, there are two camps: those who work from home and those who don't. Those who don't work from home are more skeptical of the potential benefits and more likely to identify drawbacks. The biggest gaps in opinion are on productivity, career success, isolation and job effectiveness. Unlike home workers, those who don't work from home are less likely to think they would be more productive (39% vs. 75%) or more successful in their careers (26% vs. 67%) if they were to do so. They are also much more likely to feel that they would suffer from feelings of social isolation (58% vs. 40%) and would not be able to do their jobs effectively (36% vs. 16%).



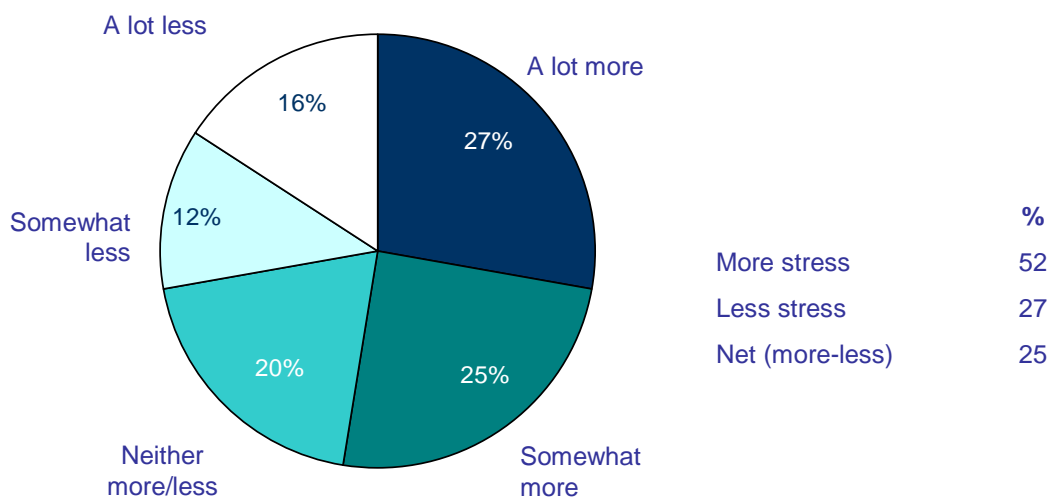
Q5 Here are some statements about the possible experience of working from home (for at least a few hours per week). On balance, please tell me if each statement applies or doesn't apply/would apply or wouldn't apply to your own experience of working from home?

Base: Actual i.e. work from home (393); Expected i.e. don't work from home (318)

Work-Related Stress

Just over half (52%) of Knowledge Workers report that they are experiencing greater levels of work-related stress compared to five years ago. Those experiencing more stress outweigh those experiencing less stress by nearly two to one (52% vs. 27%). Higher stress is more evident among public-sector, female, married, younger and full-time employees, plus those working for larger employers, those who have been with their employer for more than five years, those with employee responsibilities, the more educated, those who don't work from home and those who communicate about work outside of work on a regular basis.

Working Trends – Stress



Q4e. Compared to 5 years ago how much more or less work-related stress do you experience?

Stress is strongly linked to time spent working. Net increases in the experience of stress (the percentage saying they are experiencing more stress minus the percentage saying they are experiencing less stress) more than doubles among those who also work more hours (61 vs. 25 for all). The net increase in stress is much lower among those who say they are working more flexibly (15 vs. 25 for all).

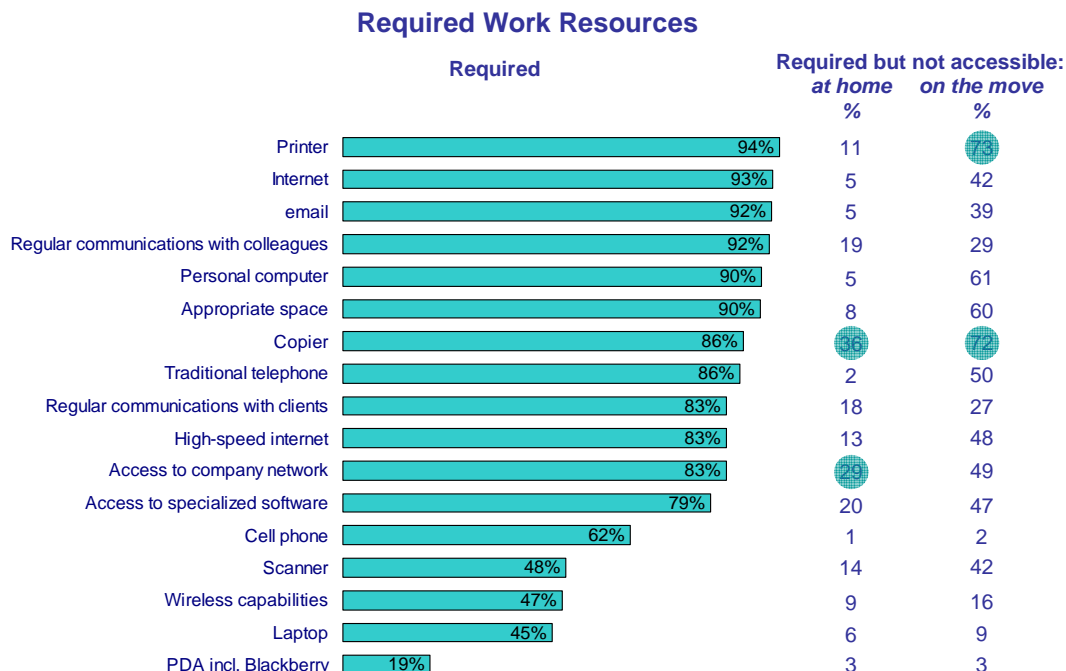
Working Trends – Stress (Sub-Group Differences)

	All	Work more hours	Use 5+ computer applications	Work more flexibly	Work less flexibly
Base:	(711)	(293)	(322)	(346)	(125)
	%	%	%	%	%
More stress	52	74	55	49	58
Less stress	27	13	24	35	28
Net (more-less)	25	61	31	15	30

Q4e. Compared to 5 years ago how much more or less work-related stress do you experience?

Required Technologies

Topping the list of requirements and resources that Knowledge Workers need is the printer - 94% say they need a printer in order to be able to do their jobs effectively. Access to a printer is perceived to be slightly more important than having access to a personal computer (but on par with having access to a personal computer or a laptop). The internet and e-mail are also identified as critical.



Q7 I'm going to read out a list of requirements and resources that people may or may not require to do their job effectively. Please tell me which, if any, you need to do your job?

Compared to the more traditional, bulkier items, wireless technologies and mobile devices are more of a 'nice-to-have' than essential elements to the Knowledge Workers' tool kit. Even so, nearly half (45%) say their laptop and one in five (19%) say that their PDA or BlackBerry are important items.

When working at home, the copier is the most missed piece of office equipment with two in five (36%) of those saying it is essential (86%) not having access to one at home. Just under a third of all Knowledge Workers (29%) are also handicapped by the inability to access their company network from home.

When on the move (i.e., away from the office or home), the printer is the most-missed item with under three-quarters (73%) of those saying it is essential (94%) not having access. The inability to print when on the move leads to nearly three-quarters of all Knowledge Workers (71%) to be supportive of wireless printing technologies in a location other than the work or home office. Nearly two-thirds (62%), for example, would find it useful to print in a hotel using Wi-Fi and a third (34%) would find the technology helpful in a vehicle or café or restaurant.

Connectivity and Communications

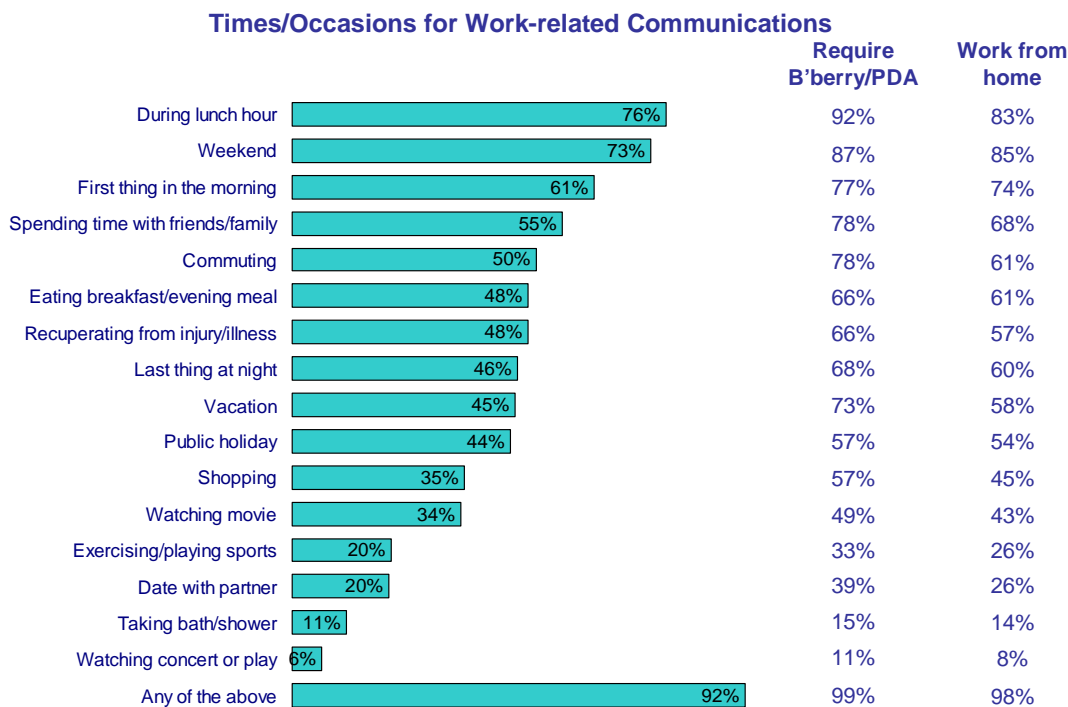
The biggest personal impact of technology in the workplace is identified as connectivity: almost all Knowledge Workers (85%) say that having constant access to technology means that they are always contactable about work. Because of technology, those with employee responsibilities are more likely to be in constant contact with the workplace than those with none (87% to 83%).



Q8 Here are some statements about the possible experience of having access to technology for work. On balance, please tell me if each statement applies or doesn't apply to your own experience of having access to technology for work?

Base: All (711); Require PDA/Blackberry (133); Work from home (393)

Almost all Knowledge Workers (92%) read, send, make or take work-related communications in non-work situations. Three-quarters (76%), for example, continued to communicate with colleagues or clients during their lunch hours with a similar proportion (73%) not being able to switch off their communications devices on weekends. Just under half (45%) are still tuned into the office while on vacation. Knowledge Workers are even thinking about work in social situations: more than half (55%) have communicated about work while spending time with their friends and family and a fifth (20%) have interrupted a date for work purposes. One in twenty (6%) have been known to ignore pleas to switch off their mobile devices before the beginning of a concert or play.



Q6 Thinking back over the last year, which of these times and occasions, if any, have you read, sent, made or taken work-related communications?

Base: All (711); Require PDA/Blackberry (133); Work from home (393)

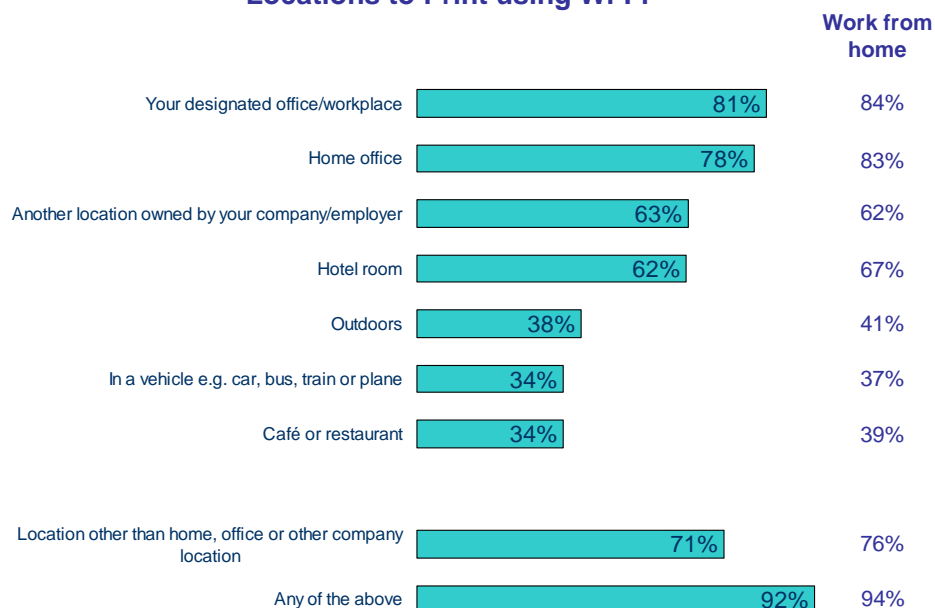
The most connected outside of work are men, the under-45 year olds, those with a higher income, the better-educated, non-whites, the self-employed, those with managerial responsibilities and those who work from home.

The boundaries for when it is appropriate to communicate about work are most blurred for BlackBerry and PDA users with nine in ten (91%) saying they are always contactable about work. Knowledge Workers with these devices are twice as likely to make a work-related communication during a date with a partner as other Knowledge Workers (39% to 20%). They are also much more likely to make work-related communications while on vacation (73% to 45%). The BlackBerry (or 'CrackBerry') user does seem to follow the pattern of an addict with many using (or getting their fix from) their device first thing in the morning (77%) or last thing at night (68%).

The ability to communicate electronically is resulting in fewer face-to-face conversations for 50% of Knowledge Workers with a quarter (27%) say that technology is making them feel more socially isolated.

Wireless technologies are well received. Almost all Knowledge Workers (92%) would like to be able to print, for example, without connecting their computer to a printer by a cable. The biggest demand is for wireless printing in the workplace or home office. Demand for wireless technologies in these locations increases among those who work from home who are probably frustrated by having to repeatedly disconnect and reconnect their laptops as they change their work location.

Locations to Print using Wi-Fi



Q9 Here is a list of locations where you might want to work. From which of these, if any, would you like to be able to print using Wi-Fi i.e. print without connecting your computer to a printer by a cable? Please say yes or no after each location.

Base: All (711); Work from home (393)

Downsides of Technology

While the personal experience of using technology for work tends to be a very positive one, Knowledge Workers do have a number of concerns about its implications for their employer.

The biggest negative implication of technology on organizations is perceived to be the increase in the amount of information and communications that workers have to deal with (mentioned by 66%). Few Knowledge Workers (18%), however, say they find it difficult to determine which work-related communications to pay attention to.

Issues Arising from the Use of Technology



Q10 Here is a list of possible issues arising from the use of technology at work. Which of the following, if any, do you see as issues in your company/organization?

Other concerns, mentioned by half or more, include the constant need to keep up-to-date with the latest technologies, system failures and the overuse of the printer and associated paper wasting.

Just under a third of Knowledge Workers (32%) say that having access to technology has resulted in them conducting more personal business in their work time and just under half (47%) suspect the use of technology for conducting personal business at work is an issue for employers. Increases in conducting personal business at work are more evident among younger employees, men, the self-employed, those making/taking work-related communications outside normal work time, Northeasterners, the better-educated, those who have been with their employer for less than five years and those working from home.