

Lost in Cyberspace: The Web @ Work

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ABSTRACT

Most U.S. businesses provide Internet access for their employees. The current study surveyed representatives from 224 organizations on issues related to Internet abuse. Nearly 70% of companies surveyed had more than half of their employees online. Almost all companies had Internet access policies (IAP) in place (82.6%), outlining appropriate and inappropriate use of the Internet in the workplace. Despite IAPs, U.S. businesses are facing a severe problem. More than 60% of companies had disciplined—and more than 30% had terminated—employees for inappropriate use of the Internet. Accessing pornography, online chatting, gaming, investing, or shopping at work were the leading causes for disciplinary action or termination. Many companies were not concerned about the severity of the problem (49.6%) and/or had done very little to enforce their IAPs (59.4% use self or managerial oversight, and only 37.5% use filtering software).

INTRODUCTION

THE Internet is at the cutting edge of an expanded usefulness on the job. Most employers see the potential uses of the Internet, and have begun to make the Net available to workstations and computers on the job. And after all, why not? The Net is being hailed as the greatest technological advance since the telephone or television, exceeding both in the speed of growth and the acceptance of their use. You cannot go a day without hearing about the newest Internet technology or application. No business wants to be left behind on this technological rocket, in part because they see its potential and in part because of potential efficiency gains.

Sometimes new technology can create new problems, especially in the workplace, where, by some measures, unmonitored Internet access in the workplace may be too tempting for an employee to refrain from abusing, despite employer monitoring and supervision.

Recent research in Internet psychology and workplace behavior has identified the Internet as a psychologically potent communications/media technology. The existence of psychological and behavioral impacts from Internet use and abuse seem unequivocal.¹ Most practicing mental health clinicians, HR directors, and EAP counselors have ample anecdotal experiences of the negative effects of the Internet on marriages, relationships, and work life behavior.²⁻⁵ Such studies suggest that the Internet may have psychological properties that are capable of altering mood and behavior, often with little or no awareness. The daily behaviors of many people seem to be affected by this powerful technology, and a large part of daily Internet use occurs during work hours.

As the lines between home and work continue to blend and blur, greater amounts of time are spent at work. As employers strive to retain employees and offer more comprehensive perks, the Internet continues to be one of the most utilized company resources. This use may

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move toward abuse simply because faster Internet access speeds, ease of access, better graphics, and lack of monitoring/accountability make over-use almost a given. Still it seems likely that for some users this use may take on compulsive levels of abuse. This is consistent with numerous studies that seem to show approximately 6–10% of Internet users becoming compulsive in their Net use.³⁻⁵ Recent studies and surveys have continued to highlight this growing trend, particularly in the sexual content areas of pornography, cybersex, and chat rooms.

A study commissioned by Elron Software (Burlington, MA), which provides Internet access and e-mail content filtering software, found a significant increase in the number of companies with Web and e-mail usage policies. Despite these policies, employees' personal use of corporate network resources is rising.⁶

Elron's second annual corporate Internet usage study was conducted by NFO Interactive, a market research firm that interviewed 576 employees who have Web and e-mail access at work. For the companies represented in the study, 68% have Web usage policies, up from 48.9% a year ago. Less than 60% have corporate e-mail policies, an increase from 46.5% a year ago. According to the study, employees are getting more personal e-mails with attachments, with 73.5% of respondents saying they receive these types of e-mails compared to 63.6% last year.⁷ In addition, nearly one out of five respondents received at least one potentially offensive e-mail per month from a co-worker. In the area of inappropriate surfing, one in three corporate workers said they spend 25 min or more each day using the Internet for personal reasons. Much of that time is spent shopping, with the most popular destination sites being for vacations and vehicles. Employees report worse behavior among their colleagues. Nearly one in 10 respondents say they have seen co-workers accessing adult sites, while nearly one-third say they have seen co-workers job hunting on the Internet.

Sixty-three percent of large and mid-sized companies monitor Internet use, and 46.5% store and review e-mails, according to an annual study by the American Management Association.⁸ Writing e-mails and roaming the Web feel private. Many workers would rather

research a health issue online than call a doctor or will flirt with a co-worker via e-mail but not in front of the boss. This sense of anonymity is actually an illusion, as much of what occurs online is traceable and recordable through corporate network systems. "You need to work on the assumption that your employer is reading over your electronic shoulder," says Nancy Flynn, author of *The ePolicy Handbook* and executive director of the ePolicy Institute. "If you work in an office, you should assume you are being monitored."⁹

There are many possible reasons for the Internet's powerful effect on human behavior. It seems that the Internet may combine certain key psychological elements that may stimulate an almost psychoactive response. This response is present, to some degree, in all users, but some may become overwhelmed by it. The Internet has certain elements in common with gambling, and it is that irresistible and uncertain potential for reward, (e.g., finding information, winning at gambling, sexual gratification, shopping) that produces a strong attraction to online use.¹¹

Internet use in the workplace is indeed a complex issue. There is little doubt that, as the spearhead of the digital industrial revolution, the Internet has become indispensable in conducting day-to-day business of all types. More and more employers are utilizing the Net as a place to conduct business, as well as a tool to conduct business with. When it comes to distraction at work, the Net is so compelling that many employers are finding that putting Internet access on the desk of an employee is like putting a television on each worker's desk. The current study explores descriptive properties of organizational Internet abuse to investigate the current standards and practices with respect to Internet usage in the workplace.

MATERIALS AND METHODS

Procedures

Part I. This collaborative study was undertaken in 2000 by Websense, Inc., an Internet access management software company, and The Center for Internet Studies and administered by the Saratoga Institute (SI), to conduct a sur-

vey on employee misuse of the Internet at work. The Saratoga Institute is a human resources consulting company. Human resource directors at more than 1,500 companies were contacted by telephone, all of which were existing SI clients, ranging from mid-sized to 150,000 employees. Of the companies contacted, SI received 224 (15%) completed surveys for analysis.

Part II. The second study involved direct interviews of 300 randomly selected employees regarding their Internet use patterns at work. Surveys were again completed via telephone by trained interviewers.

RESULTS

Part I

From the human resource manager's survey, the following trends emerged. Most U.S. businesses provide Internet access for their employees. Nearly 70% of companies surveyed had more than half of their employees online. Almost all companies have Internet access policies (IAP) in place (82.6%), outlining appropriate and inappropriate use of the Internet in the workplace. Despite IAPs, U.S. businesses are facing a severe problem. More than 60% of companies have disciplined—and more than 30% have terminated—employees for inappropriate use of the Internet. Accessing pornography, online chatting, gaming, investing, or shopping at work are the leading causes for disciplinary action or termination. Many companies are not concerned about the severity of the problem (49.6%) and/or have done very little to enforce their IAPs (59.4% use self or managerial oversight; 37.5% use filtering software).

1. What percentage of employees at your company has access to the Internet?

	<i>n</i>	%
Over 90%	79	35.3
75-90%	26	11.6
50-75%	51	22.8
25-50%	38	17.0
10-25%	18	8.0
Under 10%	11	4.9
Blank	1	0.4

2. Yes or no, does your organization currently have a written policy for employees outlining appropriate and inappropriate uses of the Internet?

	<i>n</i>	%
Yes	185	82.6
No	39	17.4
Blank	0	0.0

3. On a scale of 1 to 5—with 1 being "not concerned at all" and 5 being "extremely concerned"—how concerned is your company about employees surfing the Internet inappropriately?

	<i>n</i>	%
Not concerned		
1	34	15.2
2	77	34.4
3	67	29.9
4	34	15.2
Extremely concerned		
5	10	4.5
Blank	2	0.9

4. Yes or no, to your knowledge, have employees in your organization been reprimanded or disciplined for inappropriate use of the Internet?

	<i>n</i>	%
Yes	144	64.3
No	78	34.8
Blank	2	0.9

5. How many have been disciplined?

	<i>n</i>	%
<5	60	26.8
5-10	31	13.8
>10	18	8.0
Blank	115	51.3

6. Responding yes or no to each, which of the following inappropriate uses resulted in reprimands or discipline over the past year?

	<i>n</i>	%
Shop/auction		
Yes	15	6.7
No	115	51.3

	<i>n</i>	%		<i>n</i>	%
Blank	94	42.0	Investing		
Investing			Yes	1	0.4
Yes	16	7.1	No	54	24.1
No	114	50.9	Blank	166	74.1
Blank	94	42.0	Chat/personals		
Chat/personals			Yes	4	1.8
Yes	28	12.5	No	54	24.1
No	102	45.5	Blank	166	74.1
Blank	94	42.0	Pornography		
Pornography			Yes	47	21.0
Yes	92	41.1	No	11	4.9
No	38	17.0	Blank	166	74.1
Blank	94	42.0	Games		
Games			Yes	5	2.2
Yes	26	11.6	No	53	23.7
No	104	46.4	Blank	166	74.1
Blank	94	42.0	Gambling		
Gambling			Yes	4	1.8
Yes	6	2.7	No	54	24.1
No	124	55.4	Blank	166	74.1
Blank	94	42.0	Sports		
Sports			Yes	3	1.3
Yes	18	8.0	No	55	24.6
No	112	50.0	Blank	166	74.1
Blank	94	42.0	Hate groups		
Hate groups			Yes	0	0.0
Yes	2	0.9	No	58	25.9
No	128	57.1	Blank	166	74.1
Blank	94	42.0			

7. Yes or no, to your knowledge, have employees in your organization been terminated for inappropriate use of the Internet?

	<i>n</i>	%
Yes	68	30.4
No	76	33.9
Blank	80	35.7

8. How many have been terminated?

	<i>n</i>	%
<5	43	19.2
5-10	4	1.8
>10	6	2.7
Blank	171	76.3

9. Responding yes or no to each, which of the following inappropriate uses resulted in termination over the past year?

	<i>n</i>	%
Shop/auction		
Yes	4	1.8
No	54	24.1
Blank	166	74.1

10. To what extent does your organization make an effort to monitor employee use of the Internet? Choose from "no effort" to "considerable effort."

	<i>n</i>	%
No effort	42	18.8
Some effort	139	62.1
Considerable	38	17.0
Blank	5	2.2

11. If you responded with "some" or "considerable" effort in question 10, what methods are used to monitor employee use of the Internet?

	<i>n</i>	%
Filtering software		
Yes	84	37.5
No	77	34.4
Blank	63	28.1
Self-oversight		
Yes	50	22.3
No	102	45.5
Blank	72	32.1
Managerial oversight		
Yes	83	37.1
No	69	30.8
Blank	72	32.1

12. Yes or no, has your company been involved in any litigation over inappropriate use of the Internet by employees in the past year?

	n	%
Yes	6	2.7
No	216	96.4
Blank	2	0.9

Part II

This second study examined Internet use patterns among 300 randomly selected individuals who had Internet access at work. It is not surprising that almost half (47%) admitted to surfing non-work-related for an average of 3.24 h per week. Forty-three percent of employees surf ≥ 2 h per week, with 19% surfing ≥ 4 h per week on non-work-related sites. These findings seem to parallel what we have found in other related surveys and studies, where the Internet is being used for personal activity by large numbers of employees a trend that appears to be growing. Managerial oversight by physically watching employees seems negative to employees, as they experience this as more intrusive than monitoring software. Employees seem to favor education for themselves and their managers on Internet abuse problems (54%) and possible reprimand (informal = 47%; formal/written = 48%). It was also found that only 38% of employees understand the drain on a company's Internet resources from excessive Net use.

DISCUSSION

How business is dealing with Internet use and abuse depends largely on whether the employer considers non-work-related Net use to constitute an abuse of company policy or resources. And many, if not most, employers (83%) report having written policies on Internet use in the workplace, even if they do not monitor, filter, or block access. What seems even more relevant is that nearly half of the surveyed employees believe that surfing the Net *decreases* their productivity. Similar figures were found in our subsequent follow-up stud-

ies as well. The second part of this study found that surprisingly low numbers (<50%) of managers are concerned about the level of employee use/abuse in spite of the number of wasted work hours spent online.

There is little doubt as to the acceptance and usefulness of the Internet in the workplace. Approximately 29% of the time spent on the Net at work¹⁰ is spent in non-work-related sites, and this figure seems to be slightly higher (33%) for more compulsive users. There is also little doubt of the potential problems and pitfalls that this new technology can create at work. Productivity, legal liability, and bandwidth drain are but a few of the many challenges that we face in effectively using essential digital technology such as the Internet in today's corporate and business environment.

Technology has undoubtedly improved the quality and productivity of our lives at work. The Internet has further opened up new avenues for increased productivity, greater flexibility, and new applications for the work we do. We now have the ability to instantly and efficiently access a virtually unlimited fountain of information in the corporate environment. Not only do most businesses have instant access to any information they may want or need, but they can also use the Internet to integrate all their office locations, or make more information more readily available locally. This has opened up many new horizons for most businesses and, in doing so, is creating a global integration of the world's information economy. The Internet is not only a way of *conducting* business, but a way of *creating* new business as well.

These facts don't include the potential for legal issues relating to employees who feel harassed from being exposed to inappropriate, provocative, or sexual email or those who download pornography onto the company server. There appears to be at least some cause for concern for employers and employees alike. Could these situations constitute a situation where an employer isn't providing a reasonable and professional work environment? We also have the potential threat of an employee suing his or her employer under the ADA statutes for termination relating to an Internet abuse situation, claiming they suffer

from a compulsive Internet use disorder.¹² These facts are not lost on entrepreneurs who have created software that allows you to toggle back and forth between what you are surfing for and a "fake desktop screen." This method would allow an employee to look busy when in fact they are in fact not working! Although most businesses probably expect some degree of personal use of the Internet while at work (just as they do for the telephone and copier), they are probably not prepared for the 2-3 h or so a day that heavy Internet users are spending online while at work. The financial ramifications of this cyberslacking may be seen in the form of reduced productivity and decreased efficiency, but there may be other costs as well.

With all this growth and promise, what could be the problem? There is ample evidence that many employees are abusing the Internet while on the job. For compulsive Internet users who have access at work, this research suggests that upwards of 3 h a day may be spent online at work. The problem is not new, but it seems to be growing as more companies add broadband Internet access to their networks and as Internet access becomes indispensable in the workplace. The problem may not as yet be so serious that the business community feels they need to deal with it, although a large percentage of the current study's surveyed companies have Internet use policies on the books. After all, Internet use and abuse are somewhat secretive and illusive. In addition, there is a strong positive valence that surrounds computer technology and the Internet; with all its uses and applications, it is viewed as businesses' best friend. There appears to be enough evidence as to the compulsive nature of the Internet and especially specific types of Internet content (e.g. stock trading, on-line casino gambling, pornography, chat rooms/personals, travel, sports, shopping, and e-mail). The synergistic addictive combination of the Internet and such stimulating content holds as true at work as it does in the home.

It will likely require a paradigm shift to begin to see the Internet as potential problem to be addressed proactively, alongside other work-related issues such as substance abuse, sexual harassment, and violence in the work-

place. Although no one really knows what employees are doing online (although some employers are beginning to monitor Web access), there is little doubt that employees are using the Internet for personal purposes while on the job. The extent of the abuse and how to address the challenges that this great technology poses still remain to be seen. Whether employers view the use or abuse as a problem or a perk may depend on how much actual productivity is thwarted by this digital distraction, and whether some degree of use/abuse is to be tolerated or ignored, as are personal phone calls and copies.

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REFERENCES

1. Davis, R.A. (2001). A cognitive-behavioral model of pathological Internet use. *Computers in Human Behavior*, 17:187-195.
2. Cooper, A., Putnam, D.E., Planchon, L.A., et al. (1999). Online sexual compulsivity: Getting tangled in the net. *Sexual Addiction & Compulsivity: The Journal of Treatment and Prevention* 6:79-104.
3. Cooper, A., Scherer, C.R., Boies, S.C., et al. (1999). Sexuality on the Internet: from sexual exploration to pathological expression. *Professional Psychology* 30:154-164.
4. Greenfield, D.N. (1999). *Virtual addiction: help for net-heads, cyberfreaks, and those who love them*. Oakland, CA: New Harbinger Publications.
5. Young, K.S. (1996). Internet addiction: the emergence of a new clinical disorder. Presented at the 104th Annual Convention of the American Psychological Association, Toronto, Canada.
6. Elron Software, Inc. (2001). The year 2001 corporate web and email usage study [On-line]. Available: www.elronsw.com/pdf/ENFORPRT2000-final.pdf.
7. Elron Software, Inc. (2001). The year 2001 corporate web and email usage study [On-line]. Available: www.elronsw.com/pdf/NFORReport.pdf.
8. American Management Association. (2001). Workplace monitoring & surveillance: policies and practices [On-line]. Available: www.amanet.org/research/pdfs/emsfu_short.pdf.
9. Flynn, N. (2000). *The e-policy handbook: designing and implementing effective e-mail, internet, and software policies*. New York: Amacom.
10. Greenfield, D.N. (1999). Psychological characteristics of compulsive Internet use: a preliminary analysis. *CyberPsychology and Behavior* 2:403-412.

11. Cooper, A., Boies, S., Maheu, M., et al. (2000). Sexuality and the Internet: the next sexual revolution. In: Muscarella, F., & Szuchman, L., eds. *Psychological perspectives on human sexuality: a research-based approach*. New York: Wiley, pp. 519-545.
12. Davis, R.A. (2001). Cyberslacking: internet abuse in the workplace [On-line]. Available: www.internetaddiction.ca/cyberslacking.htm.

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