The Virtual Art of Loafing on the Job: An Empirical Study of Cyberloafing

Vivien K.G. Lim\textsuperscript{1)}, Thompson S.H. Teo\textsuperscript{2)}

\textsuperscript{1)} Dept of Management and Organisation, National University of Singapore (bizlimv@nus.edu.sg)
\textsuperscript{2)} Dept of Decision Sciences, National University of Singapore (bizteosh@nus.edu.sg)

Abstract

Over the last decade, perhaps the one technology that has had a dramatic effect on people’s lives is the internet. Businesses, in particular, have been quick to identify and harness the potential offered by the internet as a platform for conducting business in non-traditional ways, and as a tool for enhancing employee performance. The internet has revolutionized how businesses are conducted, and in this management era where timely information takes precedence as a form of competitive advantage in the business world, it comes as no surprise that more businesses will provide, or at least, consider providing desktop Internet access to their employees.

Recently, however, anecdotal evidence suggests that the internet is a double-edged sword which companies should deploy freely to employees with caution due to the possibility of the Internet being abused by employees. For example, an online survey reported that about 84% of employees sent non-work related email, while another 90% surfed the Internet for recreational Web sites using time when they should have been working (Vault.com, 2000). Employees misusing the Internet while at work warrant managers’ attention because they may incur considerable costs. For instance, a study by SurfWatch found that when employees accessed the Internet on company time with company’s computers for non-work reasons, as much as US$1 billion in costs may be incurred (The Orlando Sentinel, 1999).

Besides these direct costs, intangible costs in the form of productivity losses can result from employees’ misuse of the Internet. For example, majority of the 150 executives polled in a study reported that their employees’ productivity levels are being impaired because these employees use the Internet for non-work related purposes (Roman, 1996). Further, another study reported that as much as 30% to 40% of employee productivity is lost due to employees surfing the Internet for non-work purposes (Verdon, 2000).

This study examined the extent to which Internet abuse – termed ‘cyberloafing’ – occurs at the workplace in Singapore. Data were collected, using an electronic questionnaire, from 188 working adults. Results suggest that employees do cyberloaf while at work by surfing non-work related Web sites and checking personal email. Majority of respondents either worked in organizations where there were no policies regulating workplace Internet usage or were unaware of the existence of such policies. Implications of our results for organizations are discussed.

1. Introduction

As businesses, together with the rest of the world, embark on their journey through the 21st century, it remains without a doubt that technological advances will continue to change the landscape of various domains of life as we know them. Over the last decade, perhaps the one technology that has had a dramatic effect on people’s lives is the internet. Businesses, in particular, have been quick to identify and harness the potential offered by the internet as a platform for conducting business in non-traditional ways, and as a tool for enhancing employee performance. The internet has played an important role in helping businesses to reduce costs, shorten product cycle times, and market products and services more effectively (Anandarajan et al., 2000).

Recently, however, anecdotal evidence suggests that the internet is a double-edged sword which companies should deploy freely to employees with caution. Anandarajan (2002) argued that, in addition to being an efficient business tool, the internet also provides employees access to the world’s biggest playground. While most internet users feel that activities such as looking up the football scores on the net, or e-mailing a friend, take only a couple of seconds, and should not pose a problem in the bigger scheme of things; often the few seconds add up to hours, spelling a problem for the company.

A survey of 1,000 workers in the US revealed that 64% of those surveyed surf the internet for personal interest during working hours (The Straits Times, 2000). Additionally, an online survey reported that about 84% of employees sent non-job related email, while another 90% surfed the internet for recreational Web sites using time when they should have been working (Vault.com, 1999).

Reports in the mass media lend further support to this worrying and costly trend of employees misusing the internet while on the job. For example, a study by SurfWatch found that when employees accessed the internet on company time with company’s computers for personal reasons, as much as US$1 billion in costs may be incurred (The Orlando Sentinel, 1999. Menzel (1998) noted that activities such as surfing the web for entertainment, downloading or viewing
obscene materials, transmitting electronic messages using pen names or pseudonyms are commonly encountered by managers of public organizations in USA and considered undesirable and unproductive.

Besides these direct costs, intangible costs in the form of productivity losses can result from employees’ misuse of the internet. For example, majority of the 150 executives polled in a study reported that their employees’ productivity levels are being impaired because these employees use the internet for non-job related purposes (Roman, 1996). Further, another study reported that as much as 30% to 40% of employee productivity can be lost due to employees surfing the internet for personal purposes (Verton, 2000). Taken together therefore, these figures provide evidence regarding the prevalence, or at the very least, the potential of employees misusing the internet access provided at the workplace.

Although a recent study found that about 15.2% of the 244 companies surveyed were not concerned at all, and 50% somewhat or more concerned about employees surfing the internet for personal reasons (Verton, 2000), this is a noteworthy and rather worrisome trend as it affects losses in productivity and ultimately, affects companies’ bottomline.

1.1 Objective of Study

Given the potentially detrimental organizational effects of cyberloafing, it is imperative for organizations to determine the extent to which cyberloafing is occurring at the workplace and the factors which facilitate individuals’ propensity to cyberloaf. This is especially the case given that the Internet is poised to play a significant role as organizations embrace information technology in an effort to remain competitive. Consequently, having a better understanding of the factors which increases employees’ tendency to become cyberloafers will enable organizations to come up with appropriate policies and guidelines regarding what constitutes acceptable workplace Internet usage. Companies will then be able to foster and maintain an ethical environment in which the Internet is used responsibly in the organizational setting.

Given that the government in Singapore is working towards the country being a fully wired nation by the end of this century (Teo, Lim & Lai, 1997), Internet access is widespread in Singapore, not only at home but also increasingly, at the workplace. Thus, with Singaporeans being generally IT and Internet-savvy, it would be interesting to base our study here. The objective of this study was thus to examine whether working adults in Singapore with access to the Internet at their workplace engage in cyberloafing and the deciding factors for their doing so.

2. Method

2.1 Sample and Procedures

Data were obtained through the use of an electronic questionnaire which was posted on the Internet. The questionnaire was designed such that respondents would be prompted when they try to electronically submit an incomplete survey. This helps to reduce the number of unusable responses. Respondents comprised working adults with access to the Internet while at work. Prior to the design of the questionnaire, interviews were held with several working adults to ensure that the cyberloafing items were easily understood by them. Issues, concerns and suggestions raised by the interviewees were noted.

The revised instrument was then pre-tested with two undergraduate Internet users. While no major problem was detected, several minor modifications were made based on their feedback regarding the clarity of some items as well as the overall presentation of the survey. The second round of pre-test was conducted using three working adults. No major adverse comments were raised by these working adults. Thus, the electronic survey instrument was deemed ready for actual respondents.

The survey site was publicized in various newsgroups, and via personal emails. To encourage participation in the survey, a token phonecard worth S$3 was offered as an incentive to the first 100 participants. A total of 188 surveys were received. Since these received surveys were fully completed by respondents, all 188 surveys were used in our data analyses.

Of these 188 respondents, about 47% were men. The average age of respondents was 30 years (S.D. = 7). Majority of respondents were Chinese (96%), while the remaining 4% comprised Malays, Indians, Eurasians and other ethnic minorities. About 85% of respondents had at least a diploma or a bachelor’s degree. Respondents reported that on average, they use the Internet while at work for about 2.4 hours each day (S.D. = 2), and have been using the Internet for about 2.6 years (S.D. = 2).

About a month after the survey was first posted, focus group interviews were conducted with 20 respondents who had agreed to be interviewed. The purpose of these interviews was to elicit comments which could further our understanding of cyberloafing at the workplace. Each interview lasted an average of one hour.

3. Results

In this section, we present the results obtained from our survey. First, we examine how often respondents reportedly engage in cyberloafing while at work. This is followed by the reasons as to why respondents cyberloaf when they should be working. Finally, responses to items pertaining to organizational regulation of Internet usage at the workplace are presented.
3.1 Reported Frequency of Cyberloafing

Generally, results suggest that respondents do use the Internet access at their workplace for non-work interest during office hours. Figure 1a summarizes the frequency with which respondents cyberloafed by browsing Web sites when they should have been working.

![Fig 1a: Frequency of browsing activities](image)

Majority of respondents admitted to engaging in some form of cyberloafing. For example, almost 23% of respondents reported that they used the Internet to browse non-work related Web sites while at work a few times a day (Item 1). Another 26% reported that they browsed non-work related Web sites a few times a week. Results are thus fairly consistent with the findings obtained in Vault.com’s (2000) study which was conducted in the US, where 32% of those surveyed reported that they surfed the Internet for non-work related purposes at work a few times a day, and about 21% did so a few times a week.

Respondents who used the Internet at work to browse non-work related Web sites typically visited general news Web sites or downloaded non-work related information. For instance, almost 27% of respondents reported visiting general news sites, such as the Straits Times Interactive, a few times each month (Item 2). Pertaining to the downloading of non-work related information, another 35% of respondents reported that they engaged in this type of activity a few times a month (Item 3).

Other popular destinations when respondents surfed the Web during office hours include entertainment related Web sites, which approximately 35% of respondents reported browsing a few times monthly (Item 4); investment related Web sites, which were visited by about 26% of respondents a few times a month (Item 5); and sports related Web sites, which garnered visits a few times per month by approximately 25% of respondents surveyed (Item 6).

Interestingly, while almost 28% of respondents admitted to cyberloafing in the form of online shopping of personal goods a few times monthly (Item 7), none of the respondents did so constantly. Instead, about 54% of respondents reported that they never used the Internet access while at work to shop online. Results are generally consistent with those of previous research conducted locally (e.g., Teo et al., 1997) and in the West (e.g., Bhatnager, Misra & Rao, 2000), which found that online shopping had not taken off in general. Typically, people shop online for goods which are unique, not available locally, and preferably when some form of sampling is possible (e.g., books for which synopses are usually provided), or when people are familiar with the product and opt for the convenience offered by making purchases online (e.g., groceries and stationery). Actual visits to the shopping malls appear to be still favored over shopping on the Internet plausibly because inherent in online shopping are the risks associated with it. For instance, there may be concerns about the security of transmitting credit card details over the Internet. Further, people may remain reluctant about making purchases without being able to touch or feel the products of interest (Bhatnager et al., 2000). Thus, for these reasons, online shopping does not appear to be a popular form of cyberloafing.
Majority of respondents in our study (86%) also reported that they never visited adult-oriented Web sites as a form of cyberloafing (Item 8). One plausible explanation for this low incidence of visits to these sexually-explicit sites could be due to the presence of a proxy server which restricts access to such sites. Additionally, there is the possibility that organizations may actually have the abilities to track the Web sites which have been visited by employees. This may result in a general reluctance on the employees’ part to visit adult-oriented sites, partly because of a fear of an ensuing disciplinary action as a consequence of visiting such questionable sites.

Another reason could be that in our relatively conservative Asian culture, sex is generally a taboo topic best discussed behind closed doors – if discussed at all. Individuals may thus find it awkward and embarrassing to visit such Web sites while at work due to the possibility of losing face in front of their co-workers should they get caught. Generally, some stigma appears to be attached to a display of flagrant interest in sexually explicit materials, regardless of whether the materials are in print form (e.g., magazines, books) or in the form of Web sites, videos and so on. Thus, individuals would rather not indulge in this form of cyberloafing for fear of being stigmatized upon being caught. Nevertheless, some respondents surveyed still reported that they do visit these adult-oriented Web sites. For example, about nine percent of respondents reported that they browsed these adult sites a few times each month; another three percent stated that they do so a few times a week; and almost two percent reported doing so a few times daily.

Figure 1b provides a summary of the frequencies with which respondents cyberloafed by checking non-work related email.

**Fig 1b: Frequency of non-work related emailing activities**

<table>
<thead>
<tr>
<th>Activities</th>
<th>Never (%)</th>
<th>1-5 times/day (%)</th>
<th>6-10 times/day (%)</th>
<th>11-15 times/day (%)</th>
<th>&gt;15 times/day (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Receive non-work related emails</td>
<td>15.4</td>
<td>53.7</td>
<td>20.2</td>
<td>9.6</td>
<td>1.1</td>
</tr>
<tr>
<td>2. Check personal emails</td>
<td>22.9</td>
<td>52.1</td>
<td>16</td>
<td>6.9</td>
<td>2.1</td>
</tr>
<tr>
<td>3. Send non-work related emails</td>
<td>24</td>
<td>50.5</td>
<td>16.5</td>
<td>6.9</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Majority of respondents (54%) received non-work related email (Item 1) up to 5 times a day – a figure which is considerably higher than the 32% who reported receiving non-work related emails up to 5 times per day in the study conducted by Vault.com (2000). Fifty-two percent of respondents checked their non-work emails 1 to 5 times daily (Item 2), while another 51% reported that they used hours which should be spent on work to send non-work related emails 1 to 5 times daily (Item 3), which is comparable to the 47% US respondents who reported engaging in a similar act at their workplaces (Vault.com, 2000).

In summary, results suggest that cyberloafing does take place in the workplace. Furthermore, findings are comparable to those of existing studies conducted locally, which investigated how the Internet is used at home (e.g., Teo et al., 1997), in that people were also more likely to engage in browsing and messaging activities when using the Internet at work. This is noteworthy as it suggests that it is plausible that as the work day gets longer, the boundaries between home and work activities are becoming increasingly indistinguishable such that people may simply take whatever time is available to them to carry out certain activities, instead of drawing a clear demarcation between work and non-work activities. Upon comparing our findings with those of studies conducted to examine cyberloafing in the US (e.g., Vault.com, 2000), our study suggests that in general, cyberloafing is as prevalent in Singapore as in the US.
3.2 Factors Influencing Individuals' Propensity to Engage in Cyberloafing

A summary of reasons affecting respondents’ propensity to engage in cyberloafing is presented in Table 1. In general, findings suggest that respondents feel justified in using their companies’ Internet access for non-work purposes in certain situations. These may be situations in which respondents perceive themselves to have been treated unfairly by their companies, or in situations where extra effort had been expended on their part to do their job.

Table 1: Factors influencing individuals’ propensity to engage in cyberloafing

<table>
<thead>
<tr>
<th>In my opinion, it is alright for me to use the Internet for non-work related reasons:</th>
<th>Disagree (%)</th>
<th>Neutral (%)</th>
<th>Agree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If I have to put in extra effort to find enough information to get the job done.</td>
<td>18.6</td>
<td>21.3</td>
<td>60.1</td>
</tr>
<tr>
<td>2. If I have to do overtime work without compensation.</td>
<td>26.6</td>
<td>22.3</td>
<td>51.1</td>
</tr>
<tr>
<td>3. If I were asked to do excessive amounts of work.</td>
<td>30.9</td>
<td>26.1</td>
<td>43.0</td>
</tr>
<tr>
<td>4. If I am exposed to conflicting demands that other people make of me.</td>
<td>27.7</td>
<td>35.1</td>
<td>37.2</td>
</tr>
<tr>
<td>5. If I have to put in extra work because I do not receive enough help and equipment.</td>
<td>28.2</td>
<td>35.1</td>
<td>36.7</td>
</tr>
<tr>
<td>6. If my responsibilities are clearly defined and I have no extra job obligations.</td>
<td>52.1</td>
<td>21.3</td>
<td>26.6</td>
</tr>
</tbody>
</table>

N = 188

Majority of respondents (60%) agreed that it is alright for them to use the Internet for non-work related reasons if they have to put in extra effort to find enough information to get the job done (Item 1). Fifty-one percent of respondents also agreed that they need not experience feelings of guilt when they cyberloaf if they have to do overtime work without compensation (Item 2). It is plausible that individuals rationalize that since they had to put in extra effort to perform their jobs, they are ‘entitled’ to spend some time visiting non-work related Web sites as a form of ‘informal’ compensation, which may be a form of relaxation at the same time.

Forty-three percent of respondents also agreed that it is acceptable to use the Internet for non-work interest if they were asked to do excessive amounts of work (Item 3). Additionally, about 37% of respondents agreed that they need not experience guilt over cyberloafing in each of the following situations: if they are exposed to conflicting demands that other people make of them (Item 4); and if they have to put in extra work because they do not receive enough help and equipment (Item 5).

Conversely, in work situations where job responsibilities are clearly defined and where there are no extra job obligations (Item 6), approximately 52% of respondents disagreed that they should not feel guilty for abusing their companies’ Internet access. Stated alternatively, individuals would feel that cyberloafing is unacceptable and thus, experience lower propensity to cyberloaf when job responsibilities are clearly defined and they have no extra job obligations.

Previous studies have found that employees generally become disgruntled when they perceive that the effort they expend to do their jobs is greater than the reward that they receive from their employers. Indeed, past research efforts have found that individuals will be motivated to respond in some manner to restore this perceived inequity (e.g., Aquino, Lewis & Bradfield, 1999). While it is plausible that employees previously would resort to other forms of loafing on the job in an effort to address this perceived imbalance, with the advent of technology, employees now have an easier way in which to redress their perceived grievances – the Internet. Given that cyberloafing is not easily detected and that it provides instant gratification – literally, gratification with just a few clicks of the mouse – it is hardly surprising that employees are more willing to engage in this act when they perceive that companies overwork and underpay them. Indeed, comments obtained from respondents in our focus group interviews lend support to this line of reasoning:

“It is alright for me to use the Internet for non-work reasons at work. After all, I do work overtime without receiving extra pay from my employer.”
“I don’t see anything wrong with using the company’s Internet access for non-work purposes as long as I do not do it too often, and complete my work as required by my boss.”

Thus, results of our study suggest that when employees are able to rationalize that they have earned this right to use their companies’ Internet access for non-work purposes, it is highly likely that they would not be averse to the act of cyberloafing.

3.3 Organizational Regulation of Workplace Internet Usage

Table 2 provides a summary of respondents’ responses to questions regarding existing and possible organizational regulation of workplace Internet usage.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Don’t Know (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you know anyone (professionally or personally) who has been disciplined because of non-work related use of the Internet at the workplace?</td>
<td>14.4</td>
<td>85.6</td>
<td>—</td>
</tr>
<tr>
<td>2. Do you think it is possible to regulate Internet usage in the workplace?</td>
<td>56.9</td>
<td>43.1</td>
<td>—</td>
</tr>
<tr>
<td>3. Does your organization have policies regarding the use of the Internet?</td>
<td>47.3</td>
<td>40.4</td>
<td>12.3</td>
</tr>
<tr>
<td>4. Is this policy acceptable to you?</td>
<td>60.1</td>
<td>17.6</td>
<td>22.3</td>
</tr>
</tbody>
</table>

Additionally, respondents appeared to be divided when queried about the possibility of regulating Internet usage at the workplace (Item 2). For example, while almost 57% of respondents felt that it is possible to do so, 43% of respondents indicated otherwise. One plausible explanation for this could be that, as noted by Meckbach (1998), respondents may feel that they are being treated like children when companies monitor their movements on the Internet, and thus may view Internet regulation with resentment.

About 47% of respondents reported that the organization that they work for has policies regarding the use of the Internet (Item 3), while about 40% reported that such policies do not exist at their workplace. Compared to findings of studies conducted in the West (e.g., HR Executive, 2000), where 87% of companies surveyed indicated that they had formalized Internet usage policies, this figure is relatively low.

Further, approximately 12% of respondents indicated that they did not know about the existence of any policies governing Internet usage at the workplace. This is a noteworthy finding as it highlights the plausibility that such policies, though in existence, may not have been adequately and effectively communicated to employees. This not only defeats the purpose of having the policies in the first place, but would also make it difficult for the organizations to enforce the policies should there be a breach of conduct in future. Thus, our finding draws attention to the need of not only having clearly written guidelines governing Internet usage in the organizational context, but also the need to ensure that these guidelines are communicated to all employees.

Results also suggest that among respondents whose organizations had drawn up policies to regulate Internet usage, 60% of respondents indicated that they found their organizational Internet policy acceptable, while another 18% did not (Item 4).
4. Implications and Concluding Remarks

In summary, while results of our study suggest that cyberloafing is generally as prevalent in Singapore as in the US, companies in Singapore are still lagging behind their American counterparts where the regulation of Internet usage at work is concerned. Given that our findings suggest that individuals are not averse to the possibility of engaging in some form of cyberloafing when they perceive that their companies are working them too hard or making work too difficult for them while not providing adequate compensation, it is imperative that organizations start paying attention to the issue of potential Internet abuse at the workplace now.

Companies which provide Internet access to their employees must first understand that there is the possibility that some employees will cyberloaf some of the time each day. From there, organizations should then decide the extent to which cyberloaing will be tolerated. For example, some companies may decide that cyberloafing is acceptable as long as employees finish their work effectively and efficiently. Other companies may decide to adopt a stern stance towards cyberloafing and limit access to the Internet altogether or allow employees access but use programs like Watchdog 2.0 which serve to monitor employees’ application usage (Meckbach, 1998). Whether companies decide to adopt Hewlett Packard’s approach – which plays it safe, or DSF Internet Services’ approach – which places no restrictions on employees’ Internet access (e.g., Kaur, 2000), there is clearly a need for distinct and explicit guidelines to be established.

However, findings of our study suggest that a substantial proportion of companies still lack a policy which governs Internet usage. Thus, as our society enters the information age and the Internet becomes a relatively indispensable business tool at the workplace, it is timely for companies which still do not have Internet usage policies to design an appropriate one for their employees. In developing these guidelines, managers should consider the importance for organizations to clearly define and communicate to all employees what they would consider to be unacceptable Internet usage behaviors.

Another reason why workplace policies regarding Internet usage are advocated is that the existence of clearly stated policies would help to establish ethical norms which are objective and unambiguous. In this way, employees would find it more difficult to rely on their own subjective interpretation of ambiguous or non-existent norms where Internet usage is concerned and thus, more difficult to negotiate the line between what is wrong and what is acceptable. That is, employees would be more hesitant in trying to justify and legitimize cyberloafing to themselves as well as to other organizational members when well-established guidelines are in place.

Possible areas which these policies should cover include what constitutes cyberloafing; what means, if any, will be used to track and monitor employees’ movements in cyberspace; and what disciplinary actions would be enforced should employees be caught abusing the Internet while at work. In monitoring employees’ usage of the Internet while at work, organizations will also have to deal with the issue of individual privacy rights. Should organizations decide to track their employees’ movements in cyberspace and monitor the emails that are being sent and received via the company server, this must be explicitly stated in the policy. This is to avoid the situation in which employees become disgruntled because they view that their privacy has been invaded when the organization engages in such forms of monitoring, or simply view monitoring negatively as it reflects a lack of trust in them. Comments elicited from respondents who were interviewed lend support to this being an issue of concern:

“If there is a need to regulate, the company is better off not providing Internet access to its employees.”

“I guess the company could track the sites visited by the employees… but I think it (tracking) shows that the company doesn’t respect their employees’ privacy!”

Results of our study also highlight the need to ensure that such policies are communicated to all employees. Basically, the existence of a policy is not beneficial to the company unless employees know of its existence and adhere to the guidelines outlined within the policy. Organizations should also enforce the policy as and when Internet abuse is detected to ensure that the policy would be taken seriously by employees and thus, serve its purpose of curbing cyberloafing.

In conclusion, the Internet is fast becoming an indispensable tool which can be used to improve employees’ efficiency and productivity, and thus enhance organizations’ competitive advantage in a world where time is of the essence. However, organizations, in their eagerness to embrace the Internet as a business tool, must also be aware of the possibility that employees may be presented with the temptation of a new way in which to loaf on the job – cyberloafing. Cyberloafing is a management issue that will need to be dealt with as technology increasingly plays a greater role in our work lives. Results of our study have shed light on the prevalence of cyberloafing at the workplace. More importantly, our study has highlighted the need for explicit guidelines to be drawn regarding Internet usage. This is because without such clear and unambiguous norms about the use of the Internet at the workplace, it becomes all too easy for employees to rationalize and legitimize the deviant act of cyberloafing. Thus, as the Internet rises in stature as an indispensable work tool, employers should try to ensure that the work culture is such that employees would utilize this powerful information tool left at their disposal wisely and responsibly.
References


[14] The Orlando Sentinel. 1999, 19 May. A costly pleasure: Net surfing is riding high at work and employees are waxing up their keyboards and checking out their personal interests at company expenses.

