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Is serious internet deviance a problem in Indonesian workplace?*

Yanki Hartijasti**
Universitas Indonesia

Abstract

The internet users in Indonesia have not fully utilized the technologies, as they simply used it for socializing, browsing, and updating in the virtual world. Hence, the aim of this study is to analyze the level of seriousness employees use internet for personal purposes. Data gathered from 338 respondents from different job levels, age and organization were analyzed using descriptive analysis. The findings of this study indicate more than half of the respondents have spent their working time doing activities on minor and serious internet deviance for at least four to five hours per day. They belong to the age group of 21 - 25 years old staff level, and work in multinational and private local companies as well as public sector. The impact of this finding is that if the condition is not managed well, it will jeopardize the employees' productivity and the entire organizational performance.

Keywords: serious internet deviance, time duration of internet use, employee productivity, Indonesian workplace

1. Introduction

The internet has become a fundamental part of many people's day-to-day working lives (Griffiths, 2010). Nowadays, it is common for office workers to spend workplace time on various non-work activities, such as paying personal bills, booking holidays, shopping online, communicating with friends and family, e-mailing friends, playing games, downloading music, etc. These activities are called internet deviance (De Lara, 2006) or a counterproductive behavior because it is the employees' intentional use of internet access during work hours for personal purposes (Henle and Kedharnath, 2012) which are inflicting major costs to organizations in terms of resource wasting, productivity losses, legal liabilities, and security risks (Chou, Sinha and Zhao, 2008).

Although not as damaging as other forms of computer abuse such as the theft or destruction of proprietary data and software, internet deviance during work is commonly considered problematic (Garrett and Danziger, 2008). The time that employees spend doing internet deviance in the workplace can add up to a substantial amount of wasted, unproductive time (Young and Case, 2004). Previous studies have estimated a range from 30 minutes per day (Greenfield and Davis, 2002) to 2.5 hours per day (Mills, Hu, Beldona and Clay, 2001).

Despite having benefits of experiencing an increased organizational learning through sharing knowledge and experiences (Martin, Reddington and Kneafsey, 2009) and smoothing the sharing of information between colleagues (Turner, Stavri, Revere and Altamore, 2008), prior studies discover that internet use during working

hour have some detriments, such as, lower productivity, embarrassing an organization, and misbehavior (Wen and Lin, 1998; Block, 2001; Lim, 2002; Mirchandani and Motwani, 2003; Eastin, Glyn and Griffiths, 2007; Johnson and Rawlins, 2008). Some examples are majority of the employees posted their thoughts and messages in the social networking sites such as Twitter and Facebook, i.e., calling passengers with bad words, criticizing the employer's safety standards (BBC News, 2008), insulting customers, discussing pupils (BBC News, 2009), branding work as boring (Swann, 2009), and uploading photos of patients having operations (BBC News, 2010).

Taking into consideration those previous studies, in Indonesia it is necessary to identify the implication of internet deviance on the organization productivity because the survey in 2014 (Puskakom-APJII, 2015) illustrated that internet was utilized as a means of social interaction or communication (72 percent), source of daily information (65 percent), and following the latest trends (51 percent). The four top activities while accessing the internet are social networking (87 percent), searching information (69 percent), chatting or messaging (60 percent), and searching the latest news (60 percent). This situation is due to the increase of internet penetration rate in Indonesia from 24 percent in 2012 to 35 percent in 2014. Most of the internet users are mostly employees (65 percent) and they access internet using a mobile phone (85 percent) because a majority of employees in Indonesia have more than one device.

The 2016 internet penetration is now 40 percent of the Indonesian population, or 100 million internet users (Indonesia Investments, 2016). It means the number of internet users among employees in Indonesia has also increased. With the growing number of internet users in the next coming years, the problem of misuse of internet in the workplace is expected to continue to trend upward. Therefore, the aim of this study is to analyze the level of seriousness employees use internet for personal purposes in Indonesian workplace in order to know how much the impact of losing employees' productivity towards organizational performance. To achieve this aim, this study gathers data from employees who have internet access in the workplace and belong to different job levels, age group, and organizations.

2. Literature review

In today's workplace, information technology (IT) devices connected to the internet, such as computers, tablets, and smartphones, are commonly used in the organizations (Jiang and Tsohou, 2014). This condition has given employees the opportunity to use these devices for non-work-related activities (or internet deviance) which poses a threat to companies, such as a decrease in productivity, network clogging, and an increase in the incidents of security breaches at an organization (Pee et al., 2008; Clayburgh and Nazareth, 2009; Weatherbee, 2010). Moreover, it can also expose organizations to legal liabilities lawsuits (Johnson and Rawlins, 2008; Mirchandani and Motwani, 2003) and disrupt operations (Johnson and Rawlins, 2008). In addition, problems in information systems and data security can arise, such as network bandwidth overload, system performance degradation, spyware infection and virus malware introduction through illegal software downloading and surfing insecure sites, all of which can make the company vulnerable (Levoie and Pychyl, 2001; Sipior and Ward, 2002).

Examples of internet deviance activities are web browsing and personal e-mail use, or a more destructive form of computer abuse, such as stealing or destroying company data, harassing coworkers via e-mail, and distributing viruses over a corporate network (Beugre', 2006; Mahatanankoon, 2006). Other examples cited by Ugrin, Pearson and Odom (2008) are chatting, instant messaging, online shopping, investment trading, gaming, reading or watching online media, and viewing pornography. Blanchard and Henle (2008) categorize those internet deviance activities into two, namely (1) minor internet deviance (e.g., sending and receiving

personal email at work) and (2) serious internet deviance (e.g., online gambling, surfing adult oriented websites).

Previous studies examine the causes of internet deviance during work. Employees are more likely to do internet deviance when they perceive injustice at work (Lim, 2002; Blanchard and Henle, 2008; Henle and Blanchard, 2008; Krishnan and Lim, 2010) or to look for stress relievers when there are pressures of employees' jobs (Ugrin, Pearson and Odom, 2007). Other authors claim that internet deviance is caused by dissatisfaction and job stress (Beugre', 2006; O.-K.D. Lee, Lim and Wong, 2005; Mahatanankoon, 2006; Mastrangelo, Everton and Jolton, 2006; Phillips, 2006). Blau, Yang and Ward-Cook (2006) also find that employees who feel powerless in their work environment are more likely to engage in interactive forms of internet deviance, including playing games.

To put it in a nutshell, when employees perceived more role ambiguity or role conflict, they are more likely to respond with internet deviance (Henle and Blanchard, 2008). Conversely, they are less probable to do internet deviance in response to role overload. However, employees are more likely to do internet deviance in response to these stressors when they perceive that organizational sanctions for internet deviance are unlikely.

Regarding the amount of time spent doing internet deviance activities, according to a survey by the International Data Corporation (Snapshot Spy, 2008), up to 40 percent of internet access in the workplace is spent on non-work related browsing, and 60 percent of all online purchases are made during working hours. The same survey also reported that 90 percent of employees felt the internet can be addictive, and 41 percent admitted to personal internet surfing at work for more than three hours per week. Other studies found using the internet for non-job related purposes in a day for at least 30 minutes (Hathi, 2008), 48 minutes (Coker, 2011), one hour 20 minutes (D'Abate and Eddy, 2007), and one hour 42 minutes (Salary.com, 2007). Nevertheless, Atkinson (2006) claims that employees are considered to have a low duration of internet deviance when they spend a maximum of one hour a day, while a high duration when they spend more than one hour a day.

In Jordan, the amount of time spent on doing internet deviance is between 30 minutes and 3 hours a day for social purposes such as connecting with friends (Ghazal, 2011 as stated in Alshuaibi, Shamsudin and Alshuaibi, 2015). Moreover, prior studies on internet deviance in Jordan found that there is only 17 percent of Jordanians who use the internet for work-related purposes, while 73 percent use it for personal purposes, such as social networking in Facebook (Al-Frwaty, 2008 as stated in Alshuaibi, Shamsudin and Alshuaibi, 2015). Aside from social networking, as stated in Alshuaibi, Shamsudin, and Alshuaibi (2015), they also browse online shopping, play games, write personal blogs (Mashhour, Al-Saad and Saleh, 2011), browse entertainment-related websites, download non-work related information, look for employment, and browse non-job related websites, as well as check, send, and receive non-work related e-mail (Al-Shuaubi, 2013).

This study uses previous studies' findings on internet deviance in the U.S., therefore comparing the internet activities between American and Indonesian users will be necessary. The most popular social network sites in the U.S. are Facebook (42 percent) and YouTube (24.9 percent) (Statista, 2016b). Twitter is only 5.2 percent and Instagram is 1.6 percent. In Indonesia, the top social media has a much higher percentage, such as Facebook (87.5 percent), Instagram (69.2 percent), and Twitter (41.3 percent) (Loras, 2016).

But regarding mobile activities, Americans spend a higher percentage than Indonesians users (Kemp, 2016). For example, (1) using mobile messengers (Americans: 34 percent; Indonesians: 27 percent), (2) watching videos on mobile (Americans: 31 percent; Indonesians: 22 percent), (3) playing games on mobile (Americans: 28 percent; Indonesians: 19 percent), and (4) using mobile banking (Americans: 31 percent; Indonesians: 20 percent).

Additionally, there is a slight difference in the motivation to use the social media. In the U.S., Facebook and YouTube are used to seek for news and information (Statista, 2016b). But news is not the primary reason

they use Twitter, because it is a place to (1) learn about what people in general are talking about, not just the lives of people they know, (2) find things that entertain them, such as funny lists, articles, or videos, (3) share their own content, and (4) get more information on something they heard either on social media or in the news (American Press Institute, 2015). In Indonesia, Facebook is used for social communication, while Instagram is used to explore online shopping account, explore funny or joke account, and post traveling photos (Jakarta Globe, 2016).

3. Research method

To answer the objective of this study, descriptive analysis was utilized to analyze the level of seriousness employees use internet for personal purposes in Indonesian workplace. Internet deviance is measured by twenty internet deviance activities adapted from Coker (2011).

Some important items in the questionnaires are: reading online news websites, checking online sport results, writing personal emails or blogs, visiting job hunting or employment-related sites, playing online games, booking personal trip tickets, organizing personal financial affairs, downloading movies/songs, and viewing adult websites. Those activities are then classified into minor and serious deviance activities of Blanchard and Henle (2008). Previous studies suggested activities under minor internet deviance include sending and receiving personal e-mail and browsing financial websites and mainstream news, as well as shopping online at the workplace (Blanchard and Henle, 2008). Moreover, it includes surfing for non-work related information (Wen and Lin, 1998), conducting domestic chores (Block, 2001), looking at football scores (Lim, 2002), and making personal arrangements (D'Abate and Eddy, 2007).

Whereas activities under serious internet deviance consist of visiting adult oriented websites, maintaining personally-owned websites and personal ads, interacting with others online through blogs and chat rooms, downloading MP3 music files, and gambling online (Blanchard and Henle, 2008). Furthermore, it also comprises trading stock shares (Griffiths, 2003), illegal downloading (Chou, Sinha and Zhao, 2008), paying personal bills, moonlighting for extra income (Adler, Schminke, Noel and Kuenzi, 2008), viewing porno-graphy (Chou, Sinha and Zhao, 2008; Young and Case, 2004), online gaming, and cybersex (Chou, Sinha and Zhao, 2008), and spending time during work on Internet-based journals or blogs (Brody and Wheelin, 2005).

The duration of each internet activity in minutes is divided by 60 minutes to get the amount of internet deviance time in an hour. Then, the duration of accessing the internet for non-work related purpose is classified into two categories: low and high duration. Referring to Atkinson (2006), employees are considered to have low duration when they spend a maximum of one hour a day or 5 hours a work week, while high duration when they spend more than one hour a day.

This study used convenience sampling with purposive criteria as its sampling method. Criteria of the respondents are an employee in an organization who has internet access in the workplace. Data collection is done through an online questionnaire which is distributed to respondents who work in a different organization and job level.

A total of 338 respondents were gathered. There were 179 males (53 percent) and 159 females (47 percent). The majority of the age groups were 21 to 25 years (38.2 percent), 26 to 30 years (25.1 percent), and 31 to 35 years (15.4 percent). They had an undergraduate degree (50.6 percent) and master degree (38.2 percent). Their job level was mostly staff (60.9 percent) in the back office (65.4 percent). They worked in the private local companies (41.4 percent) as compared to multinational companies (32.2 percent) and public sector (26.6 percent).

4. Result

This study finds that almost half of the respondents (45.3 percent or 153 users) are doing a combination of minor and serious internet deviance in a low duration (see Table 1). Their activities in minor internet deviance include reading online news, searching for information about their hobbies, writing personal emails, and shopping online for an average of 29 minutes a day. They do serious internet deviance activities for an average of 15 minutes a day reading or checking social network websites (including Twitter and Facebook), watching video online from YouTube, chatting in social media groups, or downloading movies/songs.

Table 1. Duration of internet deviance

Duration of serious deviance	Duration of minor deviance				Total	
	Low duration		High duration			
	n	(%)	n	(%)		
Low duration	153	(45.3%)	52	(15.4%)		
High duration	45	(13.3%)	88	(26.0%)		
Total	198	(58.6%)	140	(41.4%)	338	(100%)

Notes: Low duration = maximum of 1 hour a day; High duration = more than 1 hour a day

There are 26 percent of respondents who use a combination of minor and serious internet deviance in a high duration. They spend 4 hours 48 minutes a day doing activities in minor internet deviance and 5 hours 31 minutes a day in serious internet deviance. Furthermore, 15.4 percent are a combination of a high duration minor internet deviance and a low duration serious internet deviance. They spend 2 hours a day for minor internet deviance and 20 minutes a day for serious internet deviance. The last is 13.3 percent users from a combination of a low duration minor internet deviance and a high duration serious internet deviance. They spend 41 minutes a day doing minor internet deviance and 2 hours 40 minutes a day doing serious internet deviance.

Further analysis was done to find out the respondents' age group, job level and ownership of the organization. It is revealed that respondents with the age of 21-25 years old with the job level of staff are the internet deviance users who do minor and serious internet deviance in a high duration for at least three hours a day. Currently, they work in multinational and private local companies as well as public sector.

5. Discussion

This study revealed that almost half of the respondents spend their working hour doing minor and serious internet deviance for a low duration around 15 to 30 minutes a day. However, more than half of them waste the working time doing activities on minor and serious internet deviance for a high duration at least 4 to 5 hours a day. The activities they mostly do are (1) social interaction (i.e., reading or checking social network websites including Facebook and Twitter, checking personal emails, chatting in social media groups), (2) following the latest trends (i.e., searching for information about hobbies, browsing for products/services, browsing shopping catalogues), (3) entertainment (i.e., watching YouTube, downloading movies or songs, playing online games), and (4) daily information search (i.e., reading online news).

The result of this study supports the research done by Griffiths (2010) in the U.S. which found that 40 percent of employees were doing internet deviance at work. However, this study has a much higher time spent doing internet deviance (at least 4 hours a day). A range of internet deviance from previous studies is from 1.3 hours (D'Abate and Eddy, 2007) to 1.7 hours (Salary.com, 2007) and 2.5 hours per workday (Mills, Hu, Beldona and Clay, 2001), majority doing web surfing.

Regarding the internet deviance activities, this study has similar results with the study in the U.S. which revealed that the most common use of the internet at work was for communication purposes, followed by information searches (Wyatt and Phillips, 2005). Whereas the study of Garrett and Danziger (2008) also found that fully 80 percent of the computer-using workers engage in communication purposes such as personal e-mails and text messaging. This study is also aligned with a survey in Indonesia in which the internet was utilized as a means of social interaction or communication (72 percent), a source of daily information (65 percent), and following the latest trends (51 percent) (Puskakom-APJII, 2015).

However, the internet deviance activities have a slight difference among internet users in the U.S. and Indonesia. For example, Americans use a variety of social networks (especially Facebook) to look for news and information such as seeing what their friends are talking about and what's happening in their friends' lives, much more than a way to connect about personal matters (American Press Institute, 2015).

In Indonesia, social media is not only used solely for social communication (especially in Facebook) but also used as part of boosting business via Instagram (Jakarta Globe, 2016). That is why many Indonesian internet users are exploring online shopping account via Instagram, asides from exploring funny or joke account and posting traveling photos. Facebook is used for social communication is similar to the finding of Hartijasti (2013) who states that the motivation to use Facebook is to keep in touch with their friends. Moreover, traffic congestion has become a contributing factor in the high level of internet deviance in Indonesia because many users are fond of updating and retweeting traffic conditions which are done before and after the working hour (Jakarta Globe, 2016) as well as on the way to client's office.

Based on the "We Are Social" survey (Kemp, 2016), as of January 2016 average daily internet use among Americans and Indonesian users via a personal computer (PC) or tablet, which is used more often in the office, is 4 hours 15 minutes and 4 hours 42 minutes respectively. However, via a mobile phone, American users have spent only 1 hour 55 minutes, while Indonesian users are for 3 hours 33 minutes. Additionally, an average daily use of social media via any device is 1 hour 45 minutes in the U.S., while in Indonesia is 2 hours 51 minutes. During working days, internet access for personal purposes should be used before and after office hours or during lunch break. It seems that both American and Indonesian users spend their time utilizing the internet for personal purposes not only during their free time, but Indonesians have spent a longer time.

Despite the slight differences between the internet activities among American and Indonesian users, there is a commonality between the two countries. Since the world is now connected through the internet, most of the people with a better internet access, especially the young generations, are influenced by overseas trends channeled to them via media. During presidential or governor elections, social media is often utilized (Jakarta Globe, 2016) by both American and Indonesian users. Throughout the campaign period, many internet users are directly or indirectly supporting their favorite candidate by writing personal comments or sharing a promoting content in their status. Many of them are doing it not only during the free time but also in between their working hours.

The finding of this study in which half of the respondents have spent their working hours ineffectively for non-work-related purposes is very much related to the 2012 survey on Indonesian internet users. The survey illustrates that the internet users in Indonesia have not fully utilized the technologies, as they simply used the internet for socializing, browsing, and updating in the virtual world (APJII, 2013).

As stated by Purbo (APJII, 2013), there is a switch of communication form from voice to data communication, particularly among the young users because since the year 2014 most of the Indonesian users can no longer get rid of using the internet for communication activities. Therefore, there is a slight shift of Indonesian internet activities from 2012 to 2015. In 2012, the most popular internet activity was finding the latest news (Statista, 2016a) and in 2015 it was a social interaction (Puskakom-APJII, 2015). The condition in Indonesia is in contrast to the situation in the U.S. Over the past decade in the U.S. a majority of young generations use social media to interact with others and seek out information (Greenwood, Perrin and Duggan, 2016), but in 2016 they use it to look for news and information (American Press Institute, 2015).

While many scholars claim that internet deviance is a counterproductive work behavior, Coker (2011) argues that internet deviance can have a positive effect on worker productivity, provided the time of using the internet does not exceed 57 minutes a day. Coker's argument is supported by Oravec (2002) and Lim and Chen (2009) who state that a constructive and decent amount of internet use will help employees deal with problems they encounter at work and enhance their productivity in the workplace. Some other benefits of internet use in the workplace are: (1) having improved collaboration and communication among team members (Nedelko, 2008; Turner et al., 2008), (2) getting up-to-date and pertinent information (Turner et al., 2008), and (3) having the possibilities for flexible working practices to new employees (Applebee et al., 2000; Bentley and Yoong, 2000; Breure and van Meel, 2003).

Accessing the internet for a short period is similar to a replacement for having a short break (Chen and Lim, 2011) because it could be a stress reliever for employees when there are job pressures (Ugrin, Pearson and Odom, 2007). Even the most loyal, hard-working employee can be tempted to occasionally communicate with family and friends, check local news or weather reports, do a little online shopping, play games, or watch videos (Edward, 2013) during office hours.

The benefit of using internet for personal purposes during working hours is true if employees only use internet for personal purposes for a maximum of one hour a day. Nevertheless, this study finds respondents spending at least 4 to 5 hours in a day doing both minor and serious internet deviance activities. Based on the previous studies, this condition can be caused by unchallenged job characteristics (Vitak, Crouse and LaRose, 2011) or organizations' inability to come up with decent work tasks to fill the whole day (Ivarsson and Larsson, 2011-2012). As Henle and Blanchard (2008) said, when employees do not have enough work to do, they turn to do internet deviance as a means of passing time.

Furthermore, this counterproductive work behavior is so pervasive because a survey by Greenfield and Davis (2002) found that nearly 87 percent of organizations in the U.S. have internet policies, but only about half of the organizations actively enforce their policies. It means the internet usage policies are ineffective which lead to a failure to measure and discipline employees' doing internet deviance (Wyatt and Phillips, 2005). A lack of managements' control on such activities (Chen, Chen and Yang, 2008) has worsened the low enforcement of internet policies. Implementing internet policies will not be effective in changing individuals' internet behavior (Lee, Lee and Yoo, 2004) without giving sanctions (Blanchard and Henle, 2008). They can still shift their internet deviance activities to their smartphones or tablets which are unmonitored.

A further reason for such pervasive counterproductive internet behavior is that the use of the internet has become an integral part of many individuals' standard operating procedures, during work as well as during other aspects of life (Dourish, 2004). If the employees' use of computers and the internet has become an unremarkable aspect of the daily routine during work and non-work activities, there is a tendency to use these technologies at any point where they might be perceived to be useful, including a blurring of their specific work and non-work uses, even during work (Garrett and Danziger, 2008).

In this study, it is revealed that staffs with age between 21 and 25 years old have the highest rank in internet deviance users in all the organizations (multinational and private local companies as well as public sector). They are technology savvy generations who have blended task completion and personal purposes while using the internet at work because the internet has become part of their daily life (Hartijasti and Fathonah, 2015). This is related to the survey finding that since the year 2012, 51 percent of Indonesian internet users belong to the age group of 15 to 24 years old (Statista, 2016a). This is the reason why the finding in this study is in contrast with the survey of Ugrin, Pearson and Odom (2007) towards individuals from the United States, Asia, and India. Their study discovers that young executives are more likely to do internet deviance compared to the other types of workers because their high degree of autonomy appears to affect their tendency to do internet deviance.

To sum up, internet deviance can be beneficial to the employee and organization if only done for a maximum of one hour a day. More than one hour a day, especially 4 to 5 hours a day like the finding of this study, should get a special attention by the top management.

6. Conclusion

The findings of this study indicate most of the respondents have not spent their working hour efficiently doing job-related purposes by doing a minor as well as serious internet deviance for at least four to five hours a day. This circumstance is related to the current situation in which smartphones and tablets have triggered the way people access the internet, and it has become people's indispensable communication need to support their daily activities because employees have blended their task completion and personal purposes while using the internet.

Whilst the internet has definitely benefitted employees and the organization, an internet deviance can occur everywhere, not only in Indonesia but also in the U.S. as well as in other countries around the world. Employers should be aware of this situation because today's employees are connected to the internet at all times by devices in their pocket or purse, and that has changed the way we live and work (Kim, Triana, Chung and Oh, 2015). Therefore, excessive internet use for at least four to five hours a day doing non-related work purposes can endanger and harm the organization and should be considered as a severe issue.

The impact of this finding is that if the condition is not managed well, it will jeopardize the employees' productivity and the entire organizational performance. Before employees become addicted to doing serious internet deviance, the organization should take internet issue as an important matter.

Many studies have mentioned that it is not effective to only implement internet policies and giving sanctions accordingly in the workplace. Therefore, employers need to monitor not only for high-stress levels but also for low levels of workload if they wish to reduce internet deviance. It is highly recommended that organizations should transform into a smart working culture. Consequently, top management should redesign challenging job targets with clear goals and attractive incentives, so employees will respond productively and lessen their internet deviance activities in the workplace.

Internet deviance in this study is only analyzed in general. Future research should consider determining the level of internet deviance in public sectors in which they should provide services to the community.

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