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## **Internet Misuse at Work in Jordan: Challenges and Implications**

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### **Abstract**

The Internet has undoubtedly transformed our lives—both at the personal and professional levels. What happens when the Internet is used simultaneously for personal purposes but during work or professional time? This paper seeks to argue that such interaction is one of the challenges that organizations are facing today. We intend to discuss the phenomenon of Internet misuse at work with specific reference to Jordan. As one of the only two countries in the Middle East that has fully liberalized the telecommunications sector, the growing Internet penetration in the country is not without risks. Internet misuse is one likely consequence of the liberalization policy. In this paper, we seek to explain what Internet misuse is, how it is problematic to organizations and how it can be addressed. Though the problem of Internet misuse is not unique to Jordan, we argue that effective measures to tackle the issue are likely to be appropriate to some extent for other countries facing a similar problem.

**Keywords:** Internet misuse, cyberdeviance, Jordan, Middle East

As early as 2003, Jordan has actively opened its telecommunications sector by easing government restrictions and limitations to network providers. Understanding that information and communication technology can help enhance the quality of life of its people, in 2006 the Kingdom made a bold move to liberalize fully the telecommunications sector, making it one of the two countries in the Middle East to do so (Bahrain is the other country). As a result, Internet penetration has increased tremendously. While Internet has benefitted the business community in Jordan in terms of enhanced productivity through wide access of information and business solution strategies (Wansink, 2014), we seek to highlight an important challenge to business organizations i.e. Internet misuse, which can also be referred to as cyberdeviance. We argue that if this issue is not addressed, it will have adverse implications to the productivity and effectiveness of organizations. We offer some practical recommendations on how this issue can be addressed.

Toward this end, we organize this paper as follows. First, we provide a brief background on Jordan—its people and economy. Next, we provide an overview of Internet use and penetration in Jordan. Finally, we offer some practical recommendations to address the issue. Some concluding remarks are presented at the end.

### **Jordan in Brief**

Jordan is an Arab country in the Middle East. It is surrounded by Syria to the North, Iraq to the Northeast, Saudi Arabia to the Southeast and Israel and West Bank to the West. The capital of the Hashemite Kingdom of Jordan is Amman. According to the World Population Review (2015), currently Jordan population stands at 7.73 million, which makes it the 100th most populous nation. Islam is the official religion of the country and approximately 97.2% of the people who live in Jordan are Muslims (CIA World Fact Book, 2015). While Arabic is the national language, English is widely spoken and used in commerce, government, medicine, universities, and education. Both languages are mandatory as medium of instruction in both private and public schools and universities.

Jordan is a market oriented economy with a GDP of USD35.77 billion in 2014 (CIA World Fact Book, 2015). Unlike many Arab countries in the Middle East that are rich in oil and gas resources, Jordan does not possess such resources. Instead, its economy is much diverse in nature though much of it is service oriented. Overall, the service sector contributes 64.7% of the total GDP in 2014 (CIA World Fact Book, 2015). According to Bank Audi (2015), the government services contribute 19.5% to the country's GDP, followed by finance, real estate, and business services (18.1%), manufacturing (16.6%), transport and communications (12.2%), trade, restaurants, and hotels (10.2%), construction (4.5%), mining and quarrying (2.3%), agriculture (2.7%), and others (14.0%). Despite the diversity of its economic activities, Jordan is not able to sustain itself without relying heavily on foreign aid. According to the Ministry of Planning and International Cooperation, the overall amount of foreign assistance, grants and soft loans committed to Jordan by international donors reached \$1.74 billion

(JD1.2 billion) by the end of November 2014 (Obeidat, 2014). Some of the international donors were the US through USAID, who is the biggest donor, the European Union, the World Bank, and the Saudi Development Fund. In the early 2015, the US announced plans to increase its annual aid to Jordan to \$1 billion from \$660 million in 2015 until 2017 to help address Jordan's short-term, extraordinary needs, including those related to regional instability and rising energy costs ("U.S. plans to boost aid," 2015).

Since 1999, when King Abdullah took the throne, the economic policies have focused on economic stabilization, market liberalization, and reducing the size of government. Consequently, the reforms has resulted in dramatically growing trade, foreign direct investment as well as increased rates of growth (Jordan Enterprise Development Corporation [JEDCO], 2009). In particular, an eightfold GDP increase between 1990 and 2014 and growth averaged 7% a year from 2000 to 2008 was reported by the central bank (Awadallah, 2015). Despite these economic reforms, Jordan faces many daunting challenges, both domestically and internationally in all sides, economically, politically, and socially. The regional instability, high dependency on grants and remittances from Gulf economies, unstable energy supplies, and high unemployment continue to pressure its economy (Awadallah, 2015).

One of the sectors that benefits from the economic liberalization policy is the telecommunications sector. Jordan has been making great strides especially with respect to providing Internet access and services to its people (Jordan Economy, n.d.), as shown later. Being one of the first countries in the Arab world to introduce information technology (IT) to the industry and economy, Jordan has initiated many reforms in the ICT by deregulating the industry and lowering Internet usage costs especially in the government sector through e-education and e-government (Ministry of Information & Communication Technology [MoICT], 2013). The progressive reforms in the telecommunications sector in Jordan were initiated by the current King Abdullah II, who believes strongly that the ICT is able to enhance the quality of lives of his people (Maghaireh, 2009). Now, Jordan is one of the only two states in the region that liberalizes fully the telecom sector (Gelvanovska, Rogy, & Rossotto, 2014). By not limiting the number of licensed operators, the Kingdom has seen increased competition among the existing providers, resulting in higher broadband penetration and low prices (Ghazal, 2014a).

## Internet Penetration in Jordan

According to the Internet World Stats (2015), as of December 2014, there were 5.7 million Internet users in Jordan (or 86.1% of the total population). Table 1 shows the Internet growth and population statistics in Jordan from 2000 until 2015.

**Table 1.** Internet usage statistics (2000–2015)

Year	Users	Population	% Pop.
2000	127,300	5,282,558	2.4 %
2002	457,000	5,282,558	8.7 %
2005	600,000	5,282,558	11.4 %
2007	796,900	5,375,307	14.8 %
2008	1,126,700	6,198,677	18.2 %
2009	1,595,200	6,269,285	25.4 %
2010	1,741,900	6,407,085	27.2 %
2012	2,481,940	6,508,887	38.1 %
2015	5,700,000	6,623,279	86.1 %

*Source: The Internet World Stats (2015)*

Table 1 shows that there has been steady Internet usage growth in relation to the growth of the population in Jordan. For instance, the population grew by only 5.6% from 2012 to 2015, but the Internet users increased significantly by 55.7%. By the end of June 2015, the number of Internet users in Jordan reached 6.2 million with Internet penetration stood at 76% (Telecommunications Regulatory Commission [TRC], 2015).

According to Ghazal (2015), the number of Internet users in the Kingdom is expected to grow significantly with the launch of Fourth Generation (4G) services. While Zain and Orange have launched their 4G services early 2015, Ummiah, which is the country's third telecom operator, has been given a license to provide the service recently and is expected to offer the service before end of 2015 (Ghazal, 2015). Mobile broadband is the most popular mode of subscription, with more than 1.6 million subscriptions at the end of June 2015 (TRC, 2015). According to the TRC, there were 376,400 land-line subscribers in Jordan by the end of March 2015 — a 5% penetration rate (Ghazal, 2015). Table 2 shows the telecommunications indicators in Jordan from the second quarter of 2014 until the second quarter of 2015.

The Internet penetration in the Kingdom is further heightened with the development of smart mobile phones. According to the 2013 Spring Pew Global Attitudes Survey, nine out of 10 people own mobile phones in Jordan (Ghazal, 2014b). In comparison to other Arab states in the region, the Survey ranked Jordan among the countries with high smartphone ownership, as 38% of mobile holders have smartphones, as opposed to 23% in Egypt, 12% in Tunisia, and 17% in Turkey. The TRC (2015) further reported a significant increase in the number of active mobile users from 11 million at the end March 2015 to 12 million at the end of June 2015, with an increase in penetration from 147% to 152%, respectively.

**Table 2.** Telecommunications Indicators (Q2/2014–Q2/2015)

Items		Q2/2014	Q3/2014	Q4/2014	Q1/2015	Q2/2015
Fixed phone	Residential	243,220	242,501	242,976	244,477	244,318
	Business	133,988	134,768	132,507	131,996	131,283
	Total	377,208	377,269	375,483	375,483	375,601
	subscriptions Penetration rate	5.1%	5.1%	5.0%	5.0%	4.6%
Active mobile phone	Post-paid	791,366	832,664	864,299	893,150	888,500
	Pre-paid	9,900,231	110,170,727	10,255,982	10,670,516	11,379,843
	Total	10,691,597	11,003,391	11,120,281	11,563,666	12,268,343
	subscriptions Penetration rate	146%	147%	147%	147%	152%
Internet users	Total internet users (millions)	5.4	5.6	5.7	5.9	6.2
	Penetration rate	73.0%	74.0%	75.0%	76.0%	76.0%
Internet subscriptions	Dial-up	364	362	361	359	359
	ADSL	207,713	211,732	213,398	218,459	223,435
	Wi-Max	125,909	125,481	128,626	121,754	114,133
	Leased line	1,629	1,525	1,620	1,575	9,270
	FTTX	6,069	6,000	6,200	6,400	
	Mobile broadband	1,209,603	1,300,908	1,430,184	1,587,549	1,682,064
	Total	1,551,287	1,646,008	1,780,389	1,936,096	2,029,261
	subscriptions Penetration rate	21%	22%	24%	25%	25%

Source: Telecommunications Regulatory Commission [TRC] (2015)

The 2013 Spring Pew Global Attitudes Survey further reported that, of the total Internet users in Jordan, 84% use social networking sites, compared to 88% in Egypt, 85% in Tunisia, 72% in Lebanon and 79% in Turkey, making the Kingdom ranked third in engagement in social networking sites among Arab states (Ghazal, 2014b). As reported by Ghazal (2014b), the Survey also found that mobile users engage in various activities with their phones. Sending text messages using phones is the most popular activity among Jordanian users (71%), followed by taking photos and videos (48%), accessing social networking sites such as Facebook and Twitter (28%), getting political news (13%), obtaining health news (9%), and making or receiving payments (5%). The Survey also concluded that using the Internet has become a daily habit for an overwhelming majority of users in the region, around which 84% of Internet users in Jordan use the service every day. When the Internet users use the social networking sites, staying in touch with friends and family was cited as the number one reason,

followed by sharing views about music and movies (69%), about religion (64%), and politics (63%) (Ghazal, 2014b). Online video is also rising in popularity in the Kingdom (Wansink, 2015).

In Jordan, the Survey reported that 67% of the Internet users are between the age of 18 and 29, while the 57% of the same age group is social networking users. Among those aged 18-29 years old, 95% hold cell phones in Jordan, compared to 92% in Egypt and 90% in Lebanon. Ghazal (2014b) reported that the smartphone ownership grows due to the declining price of smartphones and the strong competition between network providers.

In another survey conducted by Northwestern University in Qatar among more than 10,000 in 2013 people from Lebanon, Tunisia, Egypt, Saudi Arabia, Bahrain, Qatar, Jordan and United Arab Emirates, it was found that 91% of Internet users in Jordan watch news videos compared to 88% of Internet users in Lebanon and 87 per cent in the UAE. The survey also found that in Jordan, 94% use social media sites, mainly Facebook, 39% use Internet daily for instant messaging, 19% use it daily to check their e-mails, 14% use it every day to make or receive phone calls, and 20% use it daily to post photos. As far as Internet usage is concerned, the survey observed that Jordanian men spend about 15.2 hours per week using the Internet, while women spend about 4.4 hours per week (Media Use in the Middle East, 2013).

## **Internet Use and Challenges At Work**

While the Internet has undoubtedly benefitted many sectors in the country, its use is without challenges. New technologies such as the Internet have drastically transformed the place of work as we could perform our work more conveniently and effectively, but they also ironically give rise to a number of wrongful behaviours at work (Tapia, 2006). Indeed, researchers sense a growing threat of Internet misuse and abuse at the workplace that can endanger and harm the well-being of the organization (Rogers, Smoak, & Liu, 2006; Tapia, 2006). According to Joinson (2005), the Internet provides new opportunities for deviance like the creation and development of virus ware, cyber terrorism, computer hacking, online harassment and self-harm behaviours. Joinson further remarked that owing to the convenience and ease of use of the Internet and the easy access to various kinds of information, it has led to the facilitation of crimes i.e. fraud, identity theft, and money laundering. He noted succinctly that “people have always lied, cheated, and stolen, but the Internet enables some of them to do it more easily, quickly, and cheaply” (p. 5).

Internet misuse is a topic that has garnered much interest. As the world becomes more connected, thanks to the advent of the Internet, Internet misuse will likely remain as one of the contentious issues to many people. At the workplace, Internet misuse is a growing phenomenon. Internet misuse occurs when employees use the Internet not for work related purposes, but for personal purposes during working hours using the facilities provided by the organization (Blanchard & Henle, 2008; Lim, 2002). Non-work related or personal purposes include activities such as shopping online, sending private emails, watching online videos, downloading illegal materials, gambling, chatting, blogging, etc. Because these activities tend to limit employees’ work effort (Hoffman, 2009), Internet abuse/misuse is a form of workplace deviance, defined as any voluntary behaviour that violates significant organizational norms, goals, policies or rules and threatens the well-being of the organization, its members, or both (Robinson & Bennett, 1995). According to Robinson and Bennett, while there are many types of workplace deviance, Internet misuse can be regarded as a form of production deviance (Lim, 2002, 2005; Weatherbee, 2010) because when employees engage in such activities, they use the company’s property and time (Lim, 2002, 2005). To Martin et al. (2010), wasting time at the Internet at the expense of the organization’s time is time banditry. While Martin and her colleagues focused on the time spent as a criterion to define deviant behaviour in cyberspace, Lim (2002) considered it as the misuse of company property.

Various terminologies have been used to describe online activities exhibited at work using the Internet for non-work related purposes. They include the following:

- a. Cyberdeviance – An employee’s voluntary act regarding the use of the companies’ Internet access while on the clock, to surf non-work related websites to satisfy personal needs (Lim, 2002).
- b. Cyberloafing – Employees’ non-work related use of company provided email and the Internet while working (Henle & Blanchard, 2008).
- c. Cyberslacking - The usage of e-mail and Internet opportunity unrelated to job in office hours for the aims that is supplied to workers (Phillips & Reddie, 2007).
- d. Cyberslouching – Unproductive Internet surfing (Urbaczewski & Jessup, 2002).
- e. Personal web use (PWU) – Online web behaviour of an employee during work hours, utilizing any of the organization’s resources to carry out activities that are not included in his current customary job/work requirements (Mahatanankoon, Anandarajan, & Igbaria, 2004).

However, regardless of how one defines Internet misuse and what terminology is used, there seems to be consensus in the above definitions that when an employee engages in online activities that bring harm to the organization and its members, more so when the activities are committed using the company’s property (whether or not during or outside working hours), such activities are deemed to be against the organizational norms and

not to be sanctioned. In this paper, we intentionally use the term Internet misuse to emphasize the negativity and deviancy of the act. Furthermore, we believe that Internet misuse represents a broader term than the terminologies highlighted above. That is, misuse reflects inappropriate use (using something in a wrong way or for a wrong purpose) that has social, ethical, and legal connotations. When employees shop online during work hours, such behaviour is said to be against the work ethics and organizational norms/expectations. While such activity *per se* is not illegal, hacking at work is unethical, socially unacceptable, and illegal.

Grounded in deviance research, the degree of Internet misuse can range from minor to serious (Blanchard & Henle, 2008). Minor forms of Internet misuse consist of activities that are “common” such as sending and receiving personal email or visiting mainstream news. In this way, “minor cyberloafing is similar to *commonly tolerated* [emphasis ours] although not entirely appropriate behaviours at work: taking personal phone calls, reading the Wall Street Journal at one’s desk, and chatting by the water cooler” (Blanchard & Henle, 2008, p. 1070). In other words, minor forms of cyberdeviance are rather innocuous, especially if limited in duration. On the other hand, serious forms of cyberdeviance are those that are abusive and potentially illegal such as online gambling, downloading music, and viewing adult oriented sites. They provided empirical support for the validation of the typology in their study among 221 MBA students at a Southeastern university in the USA. Other scholars have contended that using the Internet for non-work related purposes at work may not necessarily be a deviant act (Anandarajan, 2002; Vitak, Crouse, & LaRose, 2011). Warren (2003) proposed that whether or not cyberdeviance is deemed to be constructive or destructive depends on the consequences of the act. If the outcomes of Internet misuse are constructive, then such act is not deviant and vice versa. Hence, based on Warren’s definition, if the Internet allows employees to get relief from boredom, fatigue or stress because it can enhance their creativity (Eastin, Gkynn, & Griffiths, 2007; Reinecke, 2009) or can lead them to learn new things that may be of value to the organization (Anandarajan, 2002), then misusing the Internet is considered to be constructive.

While we concur that Internet use has some benefits, we maintain that the Internet itself can be luring and it is this feature that is likely to be harmful. When Internet use has become a daily habit (Ghazal, 2014b), it becomes difficult to remove, as there is possibility that the Internet users will be addicted. According to Jiang and Leung (2012), it was Young who pioneered the study on Internet addiction and took the problem seriously. Although there is no consensus as to the definition of Internet addiction (Jiang & Leung, 2012), it has been generally acknowledged as a serious social problem that needs to be tackled especially when Internet addiction begins to be detected among school children (Cassidy, 2014). Based on their review, individuals who are addicted have numerous symptoms which include tolerance, withdrawal, preoccupation, numerous unsuccessful attempts to cut down use of the Internet, and feeling restless without Internet. Internet addiction, according to Jiang and Leung (2012), is a health risk that is now posing a problem to many urban Chinese Internet users. They quoted various anecdotes as a result of Internet addiction: a boy who murdered his uncle to steal money to play online games; a teenager committed suicide after meeting his online lover in real life, only to find she was a middle-aged housewife; and a man killed another game player for theft of his virtual items. They argued that unless the users are willing to change their maladaptive Internet habits, they are likely to continue to succumb to the addiction. Since addiction clinics in China are still scarce and expensive, they noted that such mental illness is likely to continue plaguing China.

Lazzaro (2015) reported a study on phone use at work by YouGov, a market research firm, in the US. The survey involved 1,200 adults and found that professionals are overwhelmingly splitting their time between work duties and their screens. The study observed that social media to keep in touch with friends is the biggest distraction at work. By field, consultants ranked as the top distracted profession with 76% admitting to using their phones for contacting their friends five times per day at the least. Those who work in the IT industry came in second with a guilty 59%, followed by teachers and those who work in finance with rates of 23 and 27%, respectively. While for many, such behaviour may reflect bad performance, but in certain fields, such as medicine, such distraction can be dangerous especially for doctors playing right before going in operation theatres. The study indicated that 43% of those in the medical field admitted they are busy playing mobile phone games while at work.

While Internet misuse can range from minor to serious, as noted earlier, we further argue that the line between minor and serious is most of the time blurred. Even if the minor act is tolerated, there is no guarantee that the minor misuse of the Internet such as using personal emails at work will not spiral into something harmful. Indeed, this is the case for Internet addiction where individuals tend to lose self-control over how they use the Internet over time. According to Aboujaoude et al. (2006), when the Internet “may have become a consuming problem that exhibits features of impulse control disorders,” (p. 750), the Internet use becomes problematic. Also, when collective action is involved, Internet misuse can be problematic to the organization. Imagine if a number of employees are connected to the Internet while at work for personal purposes. In this situation, work will not get done and as a result the overall productivity will be affected, more so if the employees’ job affects the core business of the organization, or more so when the Internet misuse involves activities that are illegal. Indeed, a survey on 304 companies of all sizes by the American Management

Association (AMA) and The ePolicy Institute found that more than a quarter of employers have fired workers for misusing e-mail and one third have fired workers for misusing the Internet on the job (Gohring, 2008). The vast majority of bosses who fired workers for Internet misuse -- 84 percent -- said the employee was accessing porn or other inappropriate content. While looking at inappropriate content is an obvious no-no on company time, simply surfing the Web led to a surprising number of firings. As many as 34 percent of managers in the study said they let go of workers for excessive personal use of the Internet. If the Internet misuse is a ground for dismissal, then it shows how harmful can the misuse be. In sum, it is for the above reasons that we chose Internet misuse and maintain that Internet misuse is likely to be harmful to the individual user and to the organization and its members.

### **Internet Misuse in Jordan**

Misusing the Internet for inappropriate purposes is not a problem faced by the West such as the USA or the East such as China; it is now acknowledged as a growing problem across the world. While statistics and data on Internet addiction are not available in Jordan, perhaps because there is lack of awareness on the topic, we suspect that the Internet is also likely to pose some serious risks there. Ghazal (2012a) reported how some Internet freedom activists slammed the Ministry of Information and Communications Technology's (MoICT) call to block porn sites. Those who agree with the ministry's decision cited that such move will make the Internet safer from children. While visiting pornographic websites may not be likely to be carried out at work because it may not be socially acceptable, but it is still likely to happen if the work station is rather isolated from the public eyes.

While misuse of the Internet can take place everywhere, we are more interested in the phenomenon as it occurs at the workplace. To date, Internet misuse at the workplace in Jordan is not widely researched. Perhaps, it is because the problem has not yet reached a proportion where the organization or the government should be alarmed yet. However, indications that the Internet is being misused at the workplace start to emerge. Through the various surveys on the Internet use or social media use, probabilities that individuals' habit of using the Internet can spill over at the workplace are quite high especially when social networking sites are concerned. Ghazal (2011) reported findings of a survey conducted by Bayt.com and YouGov covering 8,981 respondents from Algeria, Bahrain, Egypt, Jordan, Kuwait, Lebanon, Morocco, Oman, Pakistan, Qatar, KSA, Syria, Tunisia and the UAE. The survey was found that 34% of 698 Jordan-based respondents claimed to connect with friends via e-mail every day, while 36% said they connect with friends through social networking sites. The survey further revealed that the majority of Jordanians spend between 30 minutes to 3 hours a day on Facebook, with another 12 per cent claiming to be signed into their account most times of the day. Twitter, on the other hand, has 38 per cent of users who log in for less than 30 minutes a day, and 24 per cent who log in for between 30 minutes and three hours. In 2012, it was reported that there were 2.3 million Facebook users in the Kingdom (Ghazal, 2012b), which represented 36.5% of the total population that stood at 6.32 million. As Jordanian people were found to use the social networking sites more for social purposes such as for connecting with friends, it is likely that such activity will be spilled over to the workplace, as sites such as Facebook, get to be accessed more frequently and longer (Ghazal, 2011). A study published by the University of Hong Kong, which compiled data from 89,000 online users from 31 countries in seven different regions, found that 6% of the world's population is addicted to the Internet, and the Middle East is the region that has the highest rate of addiction ("Middle East is most addicted," 2014). The researchers found a link between high pollution levels, dissatisfaction with living standards, and increased frequency of Internet addiction. If this study paints the true picture of the situation in the Middle East, then the Internet seems to be used an escapism tool. Indeed, a study on Internet addiction among high school students in Jordan suggests that the Internet is being misused, and if such addiction is not curbed it is likely to trickle into the workplace in the future (Atoum & Al-Hattab, 2015).

Indeed, Al-Frwaty (2008) reported that business owners in Jordan are becoming more concerned with the growing Internet misuse among employees during work hours. Although there are no local statistics on the incident, the Department of Statistics of Jordan figures indicate that 73% of Jordanians use the Internet for personal purposes as opposed to 17% who use it for work-related purposes. Most of these personal purposes were related to social networking conducted on various sites, with Facebook being the most popular among Jordanians. A human resource director in one of the companies in Jordan, Khaleda Mefleh, estimated that the time spent on the Internet for personal purposes exceeds 40% of the daily work time. She blamed the lack of awareness on the importance of maintaining working time and use of the Internet to facilitate the work as the key reasons why Internet misuse takes place at work.

Systematic studies that investigated Internet misuse at work also began to emerge, albeit very slowly. One of the earliest studies was conducted by Mashhour, Al-Saad, and Saleh (2011). They examined a sample Internet log file from a private company in Jordan to identify Internet abuse at the workplace. They found that employees misused the Internet to browse online shopping, games, and personal blogs, to name a few. These misuses, the authors claimed, had the potential to cause lost in time and productivity. Another recent study on cyberdeviance (i.e. Internet misuse) conducted in the Jordanian context was by Al-Shuaibi (2013). He surveyed

273 administrative employees in four universities in Amman, Jordan, who were randomly selected using a cluster technique. Using established measure of cyberdeviance, Al-Shuaibi found seven deviant activities carried out by the sample. They were browsing entertainment-related websites, downloading non-work related information, looking for employment, sending non-work related e-mail, receiving non-work related email, browsing non-job related websites, and checking non-work related email. As shown in Table 3, on the scale of 1-5, the mean value of cyberdeviance was 3.15, which suggests that the sampled administrative employees engaged in cyberdeviant activities a few times a week. Breaking down each activity in percentages, Al-Shuaibi further observed that 22.7% of the participants wasted their time on the Internet on a constant basis receiving non-work related email, which was closely followed by 17.9% of them checking non-work related email. While the percentage of participants who wasted their time on the Internet on cyberdeviant activities on a constant basis was less than 30%, it nonetheless shows that organizations should be wary that these activities are taking place and could harm the well-being of the organization in the long run.

**Table 3.** Percentages of participants engaging in cyberdeviance at work (n = 273)

Frequency	CD3	CD4	CD7	CD5	CDc2	CDc3	CDc1
Constantly	16.5	12.1	13.2	14.7	9.5	22.7	17.9
Once a day	22.0	17.8	19.8	19.4	26.7	21.2	20.1
A few times a week	15.0	23.1	12.8	23.4	22.7	16.9	26.0
A few times a month	17.2	20.9	16.1	20.1	24.9	23.4	24.9
Never	29.3	26.4	38.1	22.3	16.1	15.8	11.0

*Note.*

*CD3 = Browsing entertainment-related website; CD4 = Downloading non-work related information; CD7 = Looking for employment; CD5 = Browsing non-job related websites; CDc2= Sending non-work related email; CDc3 = Receiving non-work related email; CDc1 = Checking non-work related email.*

If the finding reported by Mashhour, Al-Saad, and Saleh (2011) and Al-Shuaibi (2013) are reflective of what is happening in a wide range of organizations in Jordan, then management needs to consider ways to manage such phenomenon especially when the Jordanian government intends to achieve its national agenda of becoming the hub of telecommunication and education sectors in the Middle East (Al-Jaghoub & Westrup, 2008). These two service sectors in the economy have been earmarked as being the engine of economic growth in Jordan particularly when the service sector in general is the biggest employer of almost 67% of the population in 2013 (Global Finance, 2015).

## Implications

Regardless of whether Internet misuse is minor or serious, the consistent theme among scholars and practitioners is how to regulate and control its use. But, the call to regulate the Internet is not without its opponents. In Jordan, attempts to block any websites have been met with strong resistance from groups claiming that accessing any website on the Internet is their right (Ghazal, 2012a). Furthermore, organizations may not want to control the Internet at work so much so that it stifles creativity, innovative energy, and productivity of employees. While the Internet itself should not be blamed for the loss of productivity, its problematic use that needs to be regulated. How can this be done?

Firstly, Internet acceptable use policies (AUPs) should be in place. The policies should be clearly define what acceptable Internet usage is, what potential sanctions will be meted out if the policies are not observed, and how the Internet usage is monitored (Ugrin & Pearson, 2008). While organizations have begun to have these policies at work, their effectiveness lies upon proper enforcement. In this regard, the organizations can take heed of how occupational safety and health policies are effectively enforced at work. For instance, the Occupational Safety and Health (OSH) Act 1994 in Malaysia requires that all employers put up their OSH policies to show their commitment to promote safety and health at work. While we do not suggest that such policy should be made into law, the same mechanism may work. If organizations display their AUPs, then employees will be aware what is clearly expected of them. Such display may, in fact, be the first step towards promoting the good use of the Internet at work. With regards to monitoring, various methods have been used to address Internet misuse at work. In a survey reported by Gohring (2008), 65% of the companies surveyed in the USA use software to to block inappropriate websites, while 18% block URLs to prevent workers from visiting external blogs. Some (45%) even track content, keystrokes and time spent at the keyboard, 43% store and review computer files, 12% monitor blogs to track content about the company, and 10% monitor social-networking sites. While monitoring the Internet use at work may make sense to ensure that it is used for work-related purposes, we caution that such move can be counterproductive. Studies have shown that excessive control and monitoring at work suggests a lack of trust, which leads to negative work performance (Demerouti et al., 2001).



A well drafted and properly enforced Internet AUPs is important as it protects the organization from potential liability in the future, as evidenced from a number of cases related to termination due to misusing the Internet at work (Buckley, 2010). Facing a growing phenomenon of Internet misuse at work, some business companies in Jordan have begun installing software tools that can block certain websites purported to distract their employees at work, which they claimed have radically solved the problem (Al-Frwaty, 2008). However, with the creation of smart phones, the problem of Internet misuse is not likely to go away any time soon. Even if the organization does not allow its employees to have access to the Internet externally, they are likely to be able to have access to the Internet via their mobile phones. This situation is even more challenging for the organization. Karaiskos et al. (2010) reported a case of a 24-year old woman who used social networks excessively which severely disrupted her daily life. As her result of her obsession/addiction, she was dismissed from her job. While it is beyond the scope of this paper to discuss misuse of smart mobile phones at work, organizations should also think of how to tackle this issue well.

In addition to the implementation and enforcement of Internet AUPs, organizations may also want to consider looking at the whole culture of work. A conducive work culture and environment, characterized by respect, trust, teamwork, recognition for hard work, development focused, etc. that make people enthusiastic and eager to work, is less likely to suffer from the issue of Internet misuse by employees. Social exchange theory essentially proposes that individuals are likely to reciprocate good gestures made by others (Gouldner, 1960). When employees share the same vision with the company, they are more likely to understand and accept which behaviours are destructive toward the goal. In maintaining such culture, organizations therefore have to consider a number of practices. Effective human resource management practices can be implemented toward that end (Al-Shuaibi, 2013). In his study, Al-Shuaibi revealed that human resource management practices, such as, performance appraisal, compensation practice, career advancement, and employment security predicted significantly cyberdeviance among university administrators in Jordan. Take the case of performance appraisal. In Jordan, employees tend to perceive performance appraisal as an important tool for employee promotion, career advancement, salary raise etc. (Al-Zawahreh & Khasawneh, 2013). Thus, fair assessment of their job performance is important as it reflects honor, and self-respect, which are some of the values deemed dominant and importance in the society (Sidani & Thornberry, 2009). Unfair assessment means the employees are not seen as trustworthy and this defies their self-respect and honor as individuals. Indeed, in the Arab culture, justice is of paramount importance, as enshrined in the Islamic religion (Sidani & Thornberry, 2009). According to social exchange theory, an organization that fails to carry out objective and fair assessment of job performance is perceived by employees as being a failure to fulfill its expected obligation in an exchange relationship. As argued by to Gouldner (1960), this may lead to the employees to reciprocate negatively. In this context, employees who misuse the Internet do so because they wish to communicate the perceived injustices that occur at work. In sum, a human resource system that fosters commitment, engagement, involvement, creativity, and motivation should be in place to enhance good work performance.

The promotion and development of a good working culture necessitates good and effective leadership. Good leaders set the proper direction of the organization. They inspire the others through their vision and aspiration. Al-Shuaibi (2013) found that supportive leadership matters in discouraging Internet misuse at work in Jordanian universities. According to Abdalla and Al-Homoud (2001), leaders in the Arab world are viewed as protectors, caregivers, and fathers. At work, such leaders are expected to provide support and guidance to employees toward the accomplishment of their job performance. Leaders perceived not to have the correct qualities are likely to be met with negative behavioral response. In the words of Sidani and Thornberry (2009, p. 46), "In a culture where honor is linked to status, employees may feel that management interest in them is part of honoring them. When they feel less respect from their superiors, they will shut themselves out..." Internet misuse can be a form of "shutting out" because the Internet allows the employees to be isolated from the organizational reality. In sum, while these recommendations may not be comprehensive and exhaustive, they may have the potential to reduce the likelihood of Internet misuse at work.

## Conclusion

The Internet is a remarkable technology ever invented in the contemporary human civilization. But, it is important to emphasize also that any issues and problems emanating from this technology should *not* be blamed on the technology itself. It is not the technology that is at fault; it is *how* it is being used that is at stake here. Whether it is used constructively or destructively depends much on the individual and the environment. The role of managers in this context is to ensure that the Internet is not misused to harm the organization and its stakeholders by implementing reasonable yet legal policies at work. While the implementation of AUPs is important to reduce organizational liability, it is *not* the only way out. We stress that AUPs alone is not enough to address the issue of Internet misuse; promoting a work culture and environment that is more conducive and celebrates respect, trust, and openness is likely to help.

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## **Organizational Climate Survey: A Study at Silterra Malaysia Sdn. Bhd.**

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### **Abstract**

Silterra is a global player in the semiconductor wafer fabrication industry. Being cognizant of the importance of work life balance to be at par with global competitors, the company offers a work environment that is conducive for its employees to be productive. To this end, Silterra manages to instill a work culture that values employee contributions and teamwork. It also has a line-up of managers who are respected and knows what needs to be done in line with the company's core values, vision and mission. Therefore, the purpose of this survey is to investigate the employees' satisfaction level at Silterra. Ten variables pertinent to the company's operations were chosen. They were Corporate Culture, Employee Relation, Career Development, Teamwork, Job Satisfaction, Communication, Leadership, Management, Vision and Mission and Core Values. SPSS version 18 was used to analyze the data. Result of the survey indicates that Silterra management team needs to take necessary correctives actions to create a more conducive work environment such as by devising better policies and benefits. However, there are some areas that need improvement and revisits such as communication, leadership, career development, employee benefits, employee relation and continuous improvement program. For future growth, Silterra needs to remain true, transparent and steadfast to its core values and to reflect these core values in all its activities and operations.

**Keywords:** Climate survey, semiconductor industry, employee satisfaction, work-life balance, organizational culture

## **Economic Growth, the Middle Class and Income Distribution in Malaysia**

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### **Abstract**

In the last four decades Malaysia has been generally quite successful not only in sustaining rapid economic growth and transforming the structure of the economy, but also in reducing poverty. These observations raise the question: Does this rapid economic growth and transformation translate into the emergence of a large size of the middle class? Examining the size of the middle class seems plausible since Malaysia aspires to transform her economy towards a high income, inclusive, and sustainable growth by the year 2020. It has been argued in the development literature that a sizeable and stable middle class in the society is imperative to foster economic growth and democracy. The creation and expansion of the middle class will stimulate the demand for better quality consumer goods, induce investment, and hence increase and sustain economic growth. Furthermore, the middle-class is also regarded important as the foundation for the emergence and development of a strong democratic civil society, which will induce the demand not only for better public services, but also for a more effective, accountable and transparent government. In addition, a large and expanding middle class also will help to improve income inequality as well as lessen polarisation between the poor and the rich, reduce social tension and conflict, and hence foster socio-political stability. In this regard, the objective of this paper is essentially to measure the size of the middle class in Malaysia. The data used in the analysis is from the Household Expenditure Survey (HES), Department of Statistics, Malaysia, for the periods 1998/1999, 2004/2005 and 2009/2010. We measure the middle class using +/-25% of the median income as suggested in the literature. Our findings show that the middle class in Malaysia is relatively small, i.e. about 30% of the households and the size is almost constant throughout the periods under study. The findings suggest that, despite the rapid growth of the Malaysian economy and the remarkable performance in reducing poverty, Malaysia has not been quite successful in translating the rapid growth towards creating and enlarging the size of the middle class. As the middle class seems to be the backbone of the market economy and of democracy, perhaps, the relatively small size of the middle class could become an impediment not only in improving income distribution, but also an obstacle for the sustainability of future development in Malaysia.

**Keywords:** Economic growth, middle class, income distribution, Malaysia

## **Public Private Research Network: A Demand Driven Business Innovation, Moving Beyond the Conventional Approach**

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### **Abstract**

Public-Private Research Network (PPRN) is a new initiative and strategy by the Malaysian Government to increase productivity and strengthen the economic development through innovation and commercialization programmes. The Ministry of Education (MoE) has been tasked to complement the effort. The end in mind is to improve productivity of small and medium enterprises (SME) in Malaysia. The initiative has taken a vast turn in churning production outputs at a greater height. Product and process innovations are given a high priority as they contribute towards value enhancement in the supply chain of the SMEs. The conventional way of performing research by focusing on supply driven innovation is no longer valid. Academics/researchers should move towards demand driven innovation, solving actual problems of the industry. By mitigating SMEs' technological challenges, researchers can also further enhance their knowledge and skills. The effort contributes to a win-win situation. The seriousness of the initiative can be seen via the country's 2015 and 2016 budget announcements where the Government of Malaysia has allocated a special amount of RM50 million per year for the programme. The initiative comes at the right time and on track to realize the country's inspiration of becoming a high-income nation by 2020.

**Keywords:** PPRN, SME, productivity, demand driven innovation

## **Developing Business Leaders – The PRME Initiative**

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### **Abstract**

The challenges business schools face in transforming business graduates into responsible business leaders is the focus of this study. The challenges the business leaders encounter in the face of disruptive forces and the need to adhere to values that will protect societies from irresponsible business behavior takes center stage in the analysis. The PRME Global Initiative to develop responsible business graduates capable of dealing with the transformations taking place around them with a focus on sustainable social economic and business wellbeing is discussed in this paper.

**Keywords:** Business leaders; responsible business behaviour; PRME initiative; sustainable society