FACTORS INFLUENCING COMPUTER ETHICS AT THE WORKPLACE: A STUDY OF PROFESSIONALS IN SOUTH-EAST ASIA

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ABSTRACT

The present research is aimed at understanding employees' perception towards computer use ethic at the workplace. In view of this, the research investigates the extent to which personal characteristics such as gender, religious belief and an employee's position in the organizational hierarchy can influence his/her attitude towards computer use ethic. The data used for this qualitative research was drawn from in-depth and intensive semi-structured interviews of six prominent professionals; four from the private sector and two from the public sector. Out of the six professionals, there were three males and three females. The study made some interesting revelations; that computer use ethic is one of the greatest concerns for employers which needs to be tactfully addressed through values based orientation rather than compliance or legal based orientation; and as compared to gender and organizational position, religious belief has the greatest impact in guiding and influencing employees towards ethical computer use at the workplace.

Keywords: computer ethics, business ethics, religious belief, cyber slacking, values based orientation.

INTRODUCTION

Of recent, information technology is witnessing rapid developments within short periods of time. Since its invention in the 12th century, the computer has brought into organizations the most significant changes in terms of productivity and communication. Of late, the computer is seen as having significant effects on every aspects of our lives. From the business point of view, the benefits of technology are reducing business cost, increasing the productivity of employees, and improving the communication processes faster than ever.

However, Karim, Zamzuri and Mohamed (2009) captured in their study that the use of computers is also subjected to abuse in ways that no ordinary human being can imagine. There are many forms of computer abuse, such as cyber slacking or surfing internet for personal purposes, fraudulence, hacking, plagiarism and falsification (Mohamed, 2012). The level of computer abuse are rising in organizations because computers become pervasive and inevitable to users in knowledge-based societies (Peterson, 2002; Conger & Loch, 1995). The study conducted by Greengard (2002) found that the level of cyber slacking is 56%. It was also found that 59% of employees use internet for non-work related purposes (Griffiths, 2003). Other

researchers, such as Greenfield & Davis (2002), Mills, Hu, Beldona and Clay (2001) also mentioned that 2.5 hours per day to 3 hours per week are the average times spent on cyber slacking by employees. There is another survey carried out at Peninsula Ireland by Mohamed, Abdul Karim and Hussein (2012). The research mentioned that 90 minutes per day is the average time Irish employees spend on the social media whilst at work. According to the authors, if put into years, it would be 43 working days (Mohamed et al., 2012). The impact to organizations is very costly, and this costly impact has been echoed by O'Donnel (2008) that a typical company of 1,000 employees could lose up to £2.5m a year through non-business use of the internet.

These and other numerous findings about the unethical issue of computers at the workplace can be considered a critical issue because it could be categorized into abuse and crime if it can cause harm to others. West (1995) opined that regulations cannot change the attitudes towards unethical computer use, however, attention may be focused on the importance of formal ethic training in organization. Even though some employees attended ethic training and human resource have developed ethic guidelines, as well some universities offer ethics courses for both undergraduate and postgraduate levels, it is noteworthy that the number of ethical issues about computer use at the workplace is not decreasing. Most of the time employees are exposed to ethical dilemmas regarding the appropriate use of company's assets at workplace. So, they are still engaged in unethical use of the computer. The study found that students in information technology are more aware of computer use ethics than education students, but they tend to ignore this knowledge and prefer to engage more in unethical activities and illegal internet practices (Aliyu et al. 2010)

Peoples' perception and attitude towards computer use ethics significantly affect the way information technology (IT) is used (Aliyu et al., 2010). According to Ajzen and Fishbein (1980), attitudes and perception of one behavior can influence the person to act unethically. As well, organizational researchers captured that positive behaviors and negative behaviors towards ethical decision making could be influenced by personal characteristic (Mohamed, 2012; Bommer et al., 1987; Ford & Richardson, 1994; Paradice, 1990; Loch & Conger, 1996; and Pierce & Henry, 2000). For instance, Bommer et al. (1987) mentioned about demographic, organizational position, personal goals, and motivation, while Karim et al. (2009) mentioned personality. This seems to suggest that employees who have positive perception about computer use ethics will have high tendency to comply with organizational values, rules and regulations as compared to those employees who have negative or little perception about computer use ethics.

The present research attempts to understand peoples' perception towards computer use ethics at the workplace. Several studies have been conducted in the areas of computer ethics, such as Leonard and Cronan (2005) who carried out a study among students in an institute of higher learning in the United States, Aliyu et. al (2010) who conducted the study in Malaysia among students, and Mohamed and Abdul Karim (2012) who conducted the study among academic staff and students. From the perspective of organizations, there are tangible and intangible losses to the company with regard to computer use by employees. Piracy, illegal downloads, possible virus infection in the system are just some of tangible losses to an organization where computer use ethics is taken lightly. In terms of intangible losses, companies lose many productive man-hours due to the attitudes of some employees engaging in non-related work activities during company hours.

The present study is carried out among working prominent professionals in Malaysia in order to delineate their perception of the computer use ethic at the workplace. This study maybe one of the pioneering research works in this field of research especially in Malaysia. In view of that, the study employs a qualitative research approach in order to exhume deep rooted knowledge with regard to employees' perception of computer use ethics in the Malaysian business organizational setting. The research is guided by the following research questions; (1) what are the factors that influence employees' computer use ethics? (2) To what extent does gender, religious belief and level in organizational hierarchy influence the attitudes towards computer use ethics?

The study is organized into six sections. Section one captures the introduction, section two highlights the review of literature, section three discusses the methodology employed in this study, section four captures the analysis and discussion of findings, section five highlights the implications and directions for future research and section six captures the conclusion and recommendations.

LITERATURE REVIEW

Perspective towards computer ethics

The definition of ethics has been explained by Langford (1995) that ethics encourage individuals to think through their attitudes and beliefs and thus be able to decide in advance whether their opinions are appropriate or not, and once this is decided, individuals should then be prepared to accept full responsibility for their actions. It is considered as complex things because it is not solid and quite difficult to be monitored and measured.

Baase (2003) explained that computer ethics in information technology (IT) has been considered as one of the major issues being faced by IT professionals. It is considered the same with other category of professional ethics like medical, legal ethic, accounting ethic. The definition of computer ethics has been explained by Peterson (2002) that it is a dynamic and complicated field of study including facts, concepts, policies and values regarding rapidly increasing computer technologies. According to Floridi (2002), computer ethics stemmed from practical concerns arising in connection with the impact of information and communication technologies on contemporary society.

Attitudes towards computer ethics

Some organizational scholars such as Moor (1985) divided computer ethics into four: (i) Identification of computer-generated policy vacuums, (ii) clarification of conceptual muddles, (iii) formulation of policies for the use of computer technology, and (iv) ethical justification of such policies. According to Bommer et al. (1987), factors that influence ethical or unethical decision making are government or legal, work, professional, personal, decision maker's social and individual characteristics. Ford and Richardson (1994) also agreed that individual characteristics are the most preferred factors that could influence ethical behavior.

Education about computer ethics is important to increase the level of people's awareness. We would start from academic environment, for example students. If academicians explain about computer ethical issues, students will understand and be cautious of any unethical issue in their professions. There is a similar study from Aliyu et al. (2010) who discussed the importance of ethical training for students' awareness.

Gender

There are some arguments regarding the relationship between gender and attitudes toward computer ethics. According to Wong (1985), the ratio between male and female perpetrators is 4:1. The reason is because male culprits seem to be bolder than their female counterparts. In addition, Baneerje, Jones, and Cronan (1996) stated that gender can influence the behavior towards computer ethics. Other researchers as well found that gender is significantly associated with ethics (Kim, 2003; Leonard, 2004; Leonard, 2005; McCarthy, Halawi, & Aronson, 2005; Dorantes, Hewitt, & Goles, 2006; Haines, & Leonard, 2007; and Akbulut, Uysal, Odabasi, & Kuzu, 2008).

There is a difference between how men and women act towards computer use (Loch & Conger, 1996). This statement is supported by the study of Kreie and Cronan (1998) that Men and women are different in the way they perceive ethical and unethical attitudes.   In the sales profession, according to Dawson (1997), ethical differences between men and women were confined to relational context.

However, there are some arguments from other studies. For instance Pearson (1997) conducted a research of 500 information systems personnel and found that gender is not significantly related with ethical behavior. This is similar to the finding by Chow and Choi (2003) that gender and attitudes toward ethical issues does not have relationship, whilst other study by Moores and Chang (2006) also found that gender does not have relationship with software piracy.

Level in Organization

There are researchers who found that working experience is related to ethical behavior. For instance, the works of Dawson (1997) found that the higher the years of work experience, the greater the tendency of ethical issue arising. In making ethical decision, working professionals more often use moral reasoning than students (Cappel & Windsor, 1998). Mohamed et al. (2012) carried out a research on 550 respondents and the result showed that staff are more unethical than students.

According to the authors, the staff of the university are most likely more mature, undergoing more motivational and spiritual trainings, and the work of which has more enforcement for noble values and virtues. The students, on the other hand, are relatively young and new to the working environment, which the scenario portrays. Many of the students have never been exposed to any induction or motivational courses to understand the concept of ethical and unethical behavior in the work environment involving the use of computers. Therefore, the staff have the ability to identify quickly and more accurately when certain behaviors are considered unethical in the work environment" (Mohamed et al., 2012).

Religious belief

Research conducted by Cappel and Windsor (1998) found that an employee with a strong religious belief is significantly different toward computer ethics for some cases. Other researchers believe in the importance of religious belief towards ethical behavior such as Clark and Dawson (1996) and Dorantes et al. (2006). Dorantes et al. (2006) for instance conducted a research from US setting and found that religious belief influences ethical behavior. Another researcher also found that Korean IT professionals who have strong religious beliefs are more ethical than their coworkers who do not (Kim, 2003). However, there are other researches as well who do not seem to find relationships between religious beliefs and attitude such as the work of Chow and Choi (2003) who conducted a research for IT managers in Hong Kong and found no relationship between individual religious values and attitudes toward ethical issues.

METHODOLOGY

Design
The present study employs a qualitative research approach. The research attempts to exhume deep rooted meanings with regard to the perceptions of respondent's perspective about computer ethic and the impact of independent variables which include are gender, religious belief, and level in organization towards ethical behavior.

Instrument – Interview
In-depth intensive semi-structured interviews were carried out with respondents. Interviews were arranged separately with each respondent. They determined the time and places. Semi-structured interview questions were developed by the researcher using open-ended questions. The interview questions consist of 2 main issues with a total of six detailed questions.

The first section focused on understanding the perception of respondents about unethical computer use. The second section focused on investigating as to what extent gender, level in organizational hierarchy and religious belief influence attitudes towards computer ethics.

Sampling
The researcher interviewed six prominent professionals working in Malaysia. The samples consist of three males and three females from various backgrounds with working experiences of not less than 5 years. Four of the respondents were from the private sector whilst two were from the public sector. Data was collected then analyzed to obtain meaningful results that could provide relevant answers to the study's research questions.

FINDINGS AND DISCUSSION

Perspective towards computer use ethic at workplace

In the opinion of the majority of the respondents, computer ethics is important in modern organizations. Most of respondents mentioned in one way or another that computer ethics at the workplace mean employees should not engage the organization's computers in any use other than what is required in the work. They also should not damage the resources in any manner. And for that matter, an organization should have set rules and regulations pertaining to the use of the computer in order to serve as a guide and a reminder to employees.For instance, a respondent mentioned;

If we don't have any guidelines, the number of computer abuse will increase dramatically because people tend to think that they are free to do anything they want at office.

This contention by the respondent seem to suggest that employers are fully aware of the ethical computer use in their companies, as well as the loss in terms of profitability because of unethical computer use by some employees.

However, two respondents stated that computer ethic is mostly not clearly communicated well to employees in the company's rules and regulations. Sometimes employees do not know what is ethical and what is not ethical. It is difficult to measure what to do and what not to do. There is a very thin line to decide what is ethical and what is not. For example, a respondent stated that:

Yes, I do think that it is important to be ethical in everything you do, but what is right and what is wrong is not so clear stated in the company policy. It also depends to the individual's perception.

This opinion seems to supports the research conducted by Langford (1995) who stated that ethics is solid and complex. People may have different opinions about what is good and what is wrong. People think that the behavior is ethical, but others may see it as unethical.

In the case of ethical issue of computer use at work, most of the respondents seem to be familiar with cyber slacking than other unethical computer use activities. There are different opinions among the respondents. Few of the respondents understand that they should not be surfing the internet for personal purposes and access social media during working hours. One of respondents shared his experience:

We cannot open any documents nor do anything which is not related to our work or surfing internet for our own personal things like facebook, youtube, online shopping website and other social media during working hours.

Similarly, another respondents said:

If let's say they use the laptops were given by company to do other things than work, but not during working hours, its fine.

However, four of respondents echoed that surfing the internet for personal purposes after they finish their work during normal work hours is not considered unethical as long as they are not abusing company's resources. According to a respondent, cyber slacking may be permissible. The respondent supported cyber slacking with a condition, stating that;

I cannot really say if people are using computers at office the way they should be or not. I do not control my employees very strictly, as long as they finish the works that have been assigned to them.

Similarly, other respondent said:

Can you really separate work and personal life, especially on the PC? Both lives are so intertwined.

These messages by the respondents seem to show that the level of cyber slacking increase is not because of the lack of awareness, but it is because of the difficulty for employees to separate work from personal leisure activities. Another respondent also stated:

Habits of cannot live without internet. Well, it is wrong actually, but we and internet like best friends.

One of the respondents shared about his cyber slacking experience at the office. He said that he always open facebook, twitter, youtube, blog, online shopping websites, and other social media. The reason is to release stress and gather enthusiasm by combining work with leisure.

The perspective of other unethical computer use, such as programmer writing programs irresponsibly, unauthorized software downloads, obtaining exclusive company data for personal use, and hacking competitors' database for own company use, etc has been highlighted by three of the respondents.

From the opinion of the respondents who work in customer service departments, the company strictly put regulations in place with regard to computer use. The company does not allow employees to bring thumb drives or USBs, hand phones, earphones, books, pens, or anything inside the office. All of the employees should put their belongings in some allocated lockers. The purpose is to avoid employees to access and copy confidential documents for personal purposes because employees will have millions of information about client's credit card information for payment transactions or any information related to online businesses. Therefore, strict regulation is important for this company. A respondent has the following to say:

In my opinion, unethical computer use is beyond our control. Most of the companies make computer use policy and give internet security and computer ethic training to the employees, but these kind of unethical things still exist.

This phenomenon stated by the respondent is usually a very rare case to many of the respondents.

Factors that influence employee attitudes toward computer ethics

Almost all the respondents seem to agree that gender plays a role in influencing employees' attitudes towards computer ethics. Five of the respondents believe that strong religious belief will influence their attitudes towards computer ethics and three of respondents believe that one's level in the organizational hierarchy tends to affect the person's attitude towards computer ethics. A respondent has the following to say:

When people are in high positions, they are less scrutinized, less questioned by the top executives, and therefore more opportunity to misuse computers. It is maybe because they are already trusted by the top executives, especially if they can bring a good profit for the company.

Other respondent opined that:

I think the most important thing is your belief system. Because when no one is looking, you know God is watching, and you would do the right thing. Because you know whatever you do in this world will be accounted in Akhirat.

It is worth noting that an employee with low religiosity may not necessarily be an unethical person, likewise, a religious employee may not necessarily be an ethical person. Nowadays, due to different societal norms and cultural backgrounds and other national characteristics, what is right and wrong is sometimes quite vague. Henceforth, an employee in this modern competitive volatile and complex business environment may need to develop an internal compass, thus, the ability to be mechanistic in thought, such that one has in mind at all times that God is watching even if no one sees or even if there is no CCTV surveillance in place.

Four of the respondents agreed that good religious belief is the dominant factor that plays a greater role towards influencing employees' attitudes with regard to computer ethics, while 2 respondents believe that one's level in organization is the dominant factor.

In addition, some respondents also mentioned that ethical or unethical behaviors are deeply rooted in employees' individual characteristics and commitment to the company. As well, differential association may play greater roles in shaping employees' attitudes and behaviors. It may be noted that when a person works for so long in an organization and mingles with the same people over a period of time, unethical behavior may be seen as ethical. An example of such an attitude is cyber slacking.

Another respondent made an interesting remark with regard to workplace misbehavior. He mentioned that when an organization employs very strict regulations and ignores employees' satisfaction, some employees may reciprocate against the organization through computer abuse in order to compromise their lack of satisfaction.

In terms of mitigating some of the negative attitudes of employees towards computer abuse, some of the respondents suggest that the company should set clear and reasonable guidelines about computer ethics or security information policy. So that employees may have clear and unambiguous understanding about what to do and what not to do with regard to computer use. Employee may also be given the platform to voice out their concerns and expectations from the organization, in order to enhance mutual and peaceful coexistence at the workplace. Respondents also suggest providing periodic ethics training or ethics program to all employees.

One of the respondents who has been working for the past 30 years shared his experience:

In my company, we will organize ethics training or program, and among the topics discussed is effective computer use policy. The purposes are to detect criminal conduct and prevent any computer abuse. We are also to promote our organizational culture to make the employee understand about our expectation and what we will give in return for their satisfaction. We also require the employee to report any offensive or abuse behavior to the regulatory or legal department without unreasonable delay.

Yet, another method respondents mentioned is to block inappropriate websites that perhaps, steals company man-hours such as Facebook, Twitter, YouTube, other social media, and personal email, except company email account. According to respondents, doing this will increase the effectiveness and efficiency of employees at workplace.

In terms of using strict and rigid policies to curtail computer abuse, some respondents seem to disagree with that, stating that strict regulation does not bring any good to the organization.

One respondent said;

Being ethical is not something you can enforce.

This contention by the employee seem to suggest, that of recent employees in general are favouring values orientation to compliance or legal orientation, in shaping employee behaviour at the workplace. With values orientation, an organization concentrates its efforts in shaping organizational culture and nurturing good organizational citizens through training and through showering empathy to employees to get them to have deep understanding of their activities and how it costs themselves and their organization. This values orientation is favoured to the archaic compliance or legal orientation of using strict policies to get employees to be ethical, through means such as coercion or punishment.

IMPLICATIONS AND DIRECTION FOR FUTURE RESEARCH

This study has expanded the perspective of ethics in the real working world. Different opinions were presented. While some acts have clear-cut answers, others do not. Millions of people use computers daily and a big portion for that use is targeted to work purposes only. While companies may lose productive hours because of unethical use by some employees, several preventive steps can be taken by companies, such as monitoring, setting different passwords and others.
However, first and foremost, companies may need to lay down the rules and expectations. Some companies find some acts "unethical" to be accepted in the company culture, while others have very strict rules. In addition to that, religious belief has been identified to be a dominant factor. Therefore, companies can conduct in-house training, not just work-related, but also matters concerning the religion and accountability to instill ethical work behaviors, thus, in a way moving towards values orientation.
In the near future, it is suggested to carry out a research with equal proportions of people from different religions, such as Islam and Christianity or other religions. Since religious belief was found to be a dominant factor in this study, it is worth to explore it in a wider scale, and find

out if specific religion yields same responses. Cross-cultural studies can also be conducted, whether empirical or qualitative. Qualitative study allows basic knowledge to be grasp and empirical study to test the model adopted.

CONCLUSION AND RECOMMENDATIONS

Generally, the present study has made attempts to find answers to its research questions. In particular, with regard to people's perception toward computer ethics, most of the respondents agreed that it is important to be quite circumspect in using company computers at the workplace as there is such a very thin line between what kind of use is ethical and what kind is unethical, such as cyber slacking, irresponsible program-writing, illegal downloads, and hacking into company's or competitor's database or system. Though most of these cases may not happen in one organizations at the same time or at the same rate, yet, being wary of them is quite crucial. As such, big companies usually implement preventive measures by implementing strict rules and regulations to be followed by employees.

At the same time, few of the respondents stated that being ethical or unethical is also something that is not straightforward. They mentioned that if the act does not affect the company resources, it is considered ethical. Examples that were given include saving personal data on company computers and using company's laptop at home to perform personal matters. However, the main concern for employers is that when employees are given tasks, they are expected to complete it as and when needed. If they fail to complete it because of the personal stuffs that they do during work hours on the computer it is considered unethical. In this sense, employers do not find strict regulations needed, as a response had indicated that controls or regulations itself by the use of coercion and punishment can rather cause unethical behavior. But at the same time, some work activities may need to access different internet sites. With the sites being blocked, it could impede a successful completion of some tasks.

In an attempt to provide answer to the second research question, regarding the extent to which gender, one's level in the organizational hierarchy, and religious belief influence attitudes toward computer ethics, most of the respondents agreed that one's level in the organizational hierarchy and religious belief play greater roles in influencing computer ethics. However, gender is not a major determinant as culprits can come in any form. Other factors that determine ethical computer use are awareness, personal characteristics, loyalty to the company and position in the company.

There were few suggestions by respondents in addressing some of the issues. It include employee-briefing, ethics training, blocking of inappropriate websites, monitoring of computer activities and others. A group of respondents on the other hand believe that general guidelines are sufficient to be provided to employees.

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