

## THE USE OF SOCIAL MEDIA, E-MAIL AND INSTANT MESSAGING AS THE PREDICTORS OF AN EMPLOYEE'S WORK PERFORMANCE

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### Abstract

*Computer mediated communication tools such as e-mail, instant messaging and social media has become common tools used to deliver messages to get prompt responses. It is an opportunity for organizations to use and fully utilise the functions of e-mail, instant messaging and social network to improve work performance. This study was conducted at one of the public service departments in Malaysia with 132 number of questionnaires distributed. The data was analysed using multiple regression. Findings showed that there is significant relationship between the use of instant messaging and social network with performance, whereas the results for the use of e-mail showed otherwise. This paper provides a better knowledge and information on how to increase the work performance of employees through the use of instant messaging and social network. The findings may also contribute to the existing literature.*

Keywords: *work performance, instant messaging, social media, e-mail*

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### 1. Introduction

Employers and employees must communicate in order for them to accomplish their tasks and achieve the objectives of their organizations. According to (Rogers, 1986), communication can be defined as a process that involves participants to creating and sharing information among themselves in order to achieve a mutual understanding. A good communication channel may enhance or increase work performance of employees in an organization (Mohr & Sohi, 1996). In the workplace, the work performance of employees can be improved if the employees have a chance to learn and apply whatever they have learned from their colleagues through an effective communication medium (Mohr & Sohi, 1996), and with the role of technology, communication has enhanced the speed of message delivery as well as increasing the work performance. According to Gandal and Sharma (2009), they predicted that organizations should take this opportunity by using current technologies to shape social networking at workplaces to increase work performance. The purpose of workplace communication is to increase business performance of the organization (Lee, 2005). Communication is considered successful if employees are able to align what their employers delivered to them with the organization's objectives. Computer mediated communication tools are one of the biggest opportunities that organizations use to connect directly with their employees. This medium of communication can be used to distribute information such as instant messaging, e-mail and social media.

A study was conducted in Hong Kong showed the use of social media for non-academic purposes significantly negatively predicted academic performance (Lau, 2017). Also, social media can be instrumental in enhancing teacher's performance (Khattak, Batool, Saleem, & Takrim, 2016). As in Malaysia, news from Star Online 2016, Malaysians are spending more than three hours on their smartphones each day. It shows that 40% of users' time is spent on social media and chatting, 36% on entertainment and 15% on other utility apps, show an increasing trend of the use of social media, instant messaging and e-mail at workplaces. With this regards, researchers cannot disregard the effect of these tools with an employee's work performance at one of the public service in Malaysia. Besides that, most of the research conducted only study one or two tools of communication use contributed to employee's performance. This study attempt to identify three types of tools frequently use as medium of communication namely the use of e-mail, social media and instant messaging at the workplace. Therefore, the objective of this study is to identify the relationship between computer mediated communication namely the use of social media, instant messaging and e-mail with employee work performance in the context of public service in Malaysia.

## **2. Literature Review**

### Computer-Mediated Communication

A variety of computer-mediated communication technologies have been established and designed to increase the performance of employees at the workplace through improvements in communication. Communication was mediated or channelled through the medium of technology such as computer and mobile phone. Various computer-mediated communication technologies have been proposed and designed to enhance performance through improvement in communication (Ou, Sia, & Hui, 2013). This could strengthen social networks in an organization and subsequently increase the performance of the organization according to Gandal & Sharma (2009). With the utilization of these tools, quality communication processes, interactivity and relationship networks among employees can be established and strengthened, subsequently leading to enhanced individual work performance.

#### 2.1 The Use of Social Media and Work Performance

An effective communication is vital to make sure that every information and knowledge could be transferred to the employee. Social media can be defined as "applications, services and systems that allow users to create, remix and share content", (Junco, 2014). Nowadays, users are relying more on social media for their entertainment, web searches, news and many more (Giannakos, Chorianopoulos, Giotopoulos, & Vlamos, 2013). An example of this is when, social network is being used in the workplace for employees to communicate with their colleagues and their customers on something work related (DiMicco, Geyer, Millen, Dugan, & Brownholtz, 2009). Besides that, an effective social networking platform will provide various communication channels in both, social and work environments, as this allows informal social interaction across space, time and organization boundaries. The development of networking enables employees to lessen their reliance on face to face communication as they can now rely on virtual communication created by social media, especially when employees work in different places. This will ultimately create online communities of people who share information on similar interests. Popular social networking sites include Facebook, Twitter and LinkedIn. These sites provide several ways for users to communicate with each other through chat rooms, direct messaging, private messaging and others (Bell, 2008).

An employee's social network plays a vital role in the workplace in order to maintain professional networking between employers and employees (Nardi, Whittaker, & Schwarz, 2002). Through social network, an employer manages to distribute information and knowledge their employees need in order to perform their work. By doing so, work performance can be increased, as social media can provide a significant amount of information and communication tools, as well as come out with multiple communication mediums for information exchange and knowledge transferring. Employees in an organization use social media to distribute information and share knowledge with other groups or departments.

Social media is fast becoming an essential part of everyday life to communicate and share information with other people. According to Fischer and Reuber, (2011), social media does not require any fee to use and is easily use. Its ability to provide quick responses and its low cost method in connecting with customers are other reasons why social media is heavily used today. However, to make sure the organization uses social media in a proper way, they must have goals and objectives to indicate how it will be used and what it will be used for. One of the benefits of social media is to maintain a relationship with external professional networks, strengthen bonds between colleagues, collecting information and encourage knowledge sharing and resource (Cao, Vogel, Guo, Liu, & Gu, 2012). Social media does not only strengthen ties, but it also builds relationship with new people. Therefore, hypothesis 1: there is a positive relationship between the use of social media and an employee's work performance.

## 2.2 The Use of Instant Messaging and Work Performance

Instant messaging can be defined as the exchange of messages between two or more people in real time. According to (Castelluccio, 1999), it is said that instant messaging is known as a communication tool that allows users to set up a list of users who will be able to receive messages that pop up on their screens when someone writes and hits the send button. Instant messaging is not only in the form of text messages, but it also can be in the form of a voice note. One of the more prominent computer mediated communications is instant messaging which is able to boost an instant reaction through a near synchronous form of communication, similar to face to face communication (Ou et al., 2013). (Cameron & Webster, 2005) described instant messaging as a communication technology that allows employees to communicate in real time and shows those who are online and currently available to receive messages. Instant messaging also allows users to create a group through their contact list and permit users to exchange information with other users on the contact list who are logged on to the service such as WhatsApp. In a social context, scholars have emphasized instant messaging as being easy to use (Lou, Chau, & Li, 2005). In a workplace context, (Cho, Trier, & Kim, 2005) have given evidence through a case study that building a social network by using instant messaging increases mutual understanding between two individuals, thus encouraging collaboration exchange. Employees may request for help and switch knowledge and information with one another through instant messaging (Ou et al., 2013).

Many researchers have discovered that instant messaging is one of the computer mediated communications that is different from other spoken and written communication modes. Instant messaging is viewed as similar to other mediums such as e-mail and chat. However, there are significant differences that differentiate instant messaging from others. For example, most instant messaging users can only send and receive messages using the same instant messaging system. Besides that, instant messaging enables users to send and receive messages much faster than traditional ways. (David, 2001) states that

computer mediated communication is different from spoken and written communication and it is known as one to one communication. Instant messaging is also similar to a phone call due to the fact that one communicates with one or more people at one time. There are also some characteristics of instant messaging that differentiate it with others. O'rouke & Jettka, (2010) stated that in instant messaging they can use emoticons to show expressions. Lee, (2005) explained that correction of spellings is an important characteristic of instant messaging. For example, "boi" for "boy" and "dunno" for "do not know" are examples of corrections of spelling. These characteristics can be seen in instant messaging.

Instant messaging may be in varied forms such as WhatsApp and Telegram where messages are sent immediately. Therefore, communication in an organization can be enhanced through the use of instant messaging, which may lead to an increase in work performance. Hence, instant messenger is a communication tool has become increasingly common in the workplace. Instant messaging is a type of technology that allows employees to know who is online, to send and receive messages (Cameron & Webster, 2005). Huang & Yen, (2003) states that instant messaging gives a significant impact on work performance and improves work relationship between employees at different departments. They also state that instant messaging is found to be useful for work purposes. Instant messaging could also help employees to increase their work performances. By having information and sharing knowledge in quick time, this will enable employees to move forward and ahead of other employees from other organizations. Therefore, Hypothesis 2: there is positive relationship between the use of instant messaging and employee work performance.

### 2.3 The Use of E-mail and Work Performance

In a virtual environment, e-mail communication seems just as important. Salmon & Joiner, (2005) stated that the further away employees are from each other, the less they will communicate, and the more frequent their use of e-mail communication will be. This is because e-mail is user friendly, easy to use and quick to send and receive messages. Observation has shown that e-mail has become an important part of the communication medium in every organization with employees having the ability to access to their e-mail by using any device at any time they are available (Jackson, Dawson, & Wilson, 2003). E-mail is the most preferred medium by most organizations to use at the workplace as it allows a near-synchronous transfer of information and messages by employer to employee. Hence, by simplifying the communication style, this will increase the interaction and communication process. E-mail also gives employees more time to organize their thoughts before sending them to someone else. Through this perspective, e-mail is considered as the most suitable computer mediated communication tool used in an organization to discuss tasks (Markus, 1994). Besides that, e-mail can be sent to all employees in an organization and can easily reach the whole organization network.

E-mail plays as an important role in creating and keeping the business relationship alive, both within the organization as well as outside the organization (Bafoutsou & Mentzas, 2001). E-mail has replaced the traditional way of communicating such as letters, faxes and calls where it has become a tool of communication that exchanges messages and information quickly in all business environments (Tassabehji & Vakola, 2005). Besides that, email covers huge geographic areas with a minimum increase in physical working space (Gupta, Karimi, & Somers, 2000), which makes e-mail a way of communication that saves cost and spreads the information faster compared to other communication

mediums. It is also easily used by everyone without taking into consideration the differences in occupational, ethnic or gender characteristics (Romm & Pliskin, 1999)

According to Rice (1994), e-mail promotes diversity of communication and better understanding regarding certain parts of the organization. E-mail allows workers to socialize with colleagues who have little face to face communication. Markus, Bikson, El-Shinnawy, & Soe (1992) examines the basic use of e-mail where users can send their thoughts to individuals by typing and sending the messages, and the receiver is able to read the messages on screen. Organization cost is also saved by distributing messages using e-mail. E-mail is a cost effective medium of communication compared to other mediums (Agnew & Hill, 2009). Therefore, Hypothesis 3: there is relationship between the use of e-mail and employee work performance.

### 3. Methodology

This study was conducted at one of the public sectors in Malaysia with the total number of employees is 200. Simple random sampling was use as a method to choose the respondents within a sampling frame. It is a cross-sectional study where the data was collected one time in a natural setting. Returned and useable questionnaires amounted to 132.

### 4. Results

#### 4.1 Profile of Respondents

Males represented 24.2 percent and females represented 75.8 percent among the 132 employees who participated in this study. 48 respondents were aged below 29 years old, 67 respondents were aged between 30-39 years old, 12 respondents were aged between 40 to 49 and only five respondents' aged 50. The majority of the respondents were Bachelor Degree holders at 40.2 percent, whereas ten respondents reached their education level until Master at 7.6 percent. Those at secondary level of education amounted 27.3 percent, whereas Diploma holders represented with 25.0 percent of the total amount of respondents. The majority of the respondents have worked for more than 5 years, where 14.4 percent of the respondents served their organization for 2 to 5 years and 7.6 percent of the respondents served their organization for 1 to 2 years.

#### 4.2 Reliability Analysis

The reliability analysis was conducted to determine the internal consistency of measurement items. Based on table 4.2, the data is deemed reliable where all of the factors are more than 0.70. Both e-mail and social media factors have good internal consistency at 0.849 and 0.902 respectively. Meanwhile, the instant messaging factor is deemed acceptable at 0.762. Work performance shows good internal consistency at 0.931. Therefore, all the 40 items were reliable and valid to measure the influence of instant messaging, e-mail and social media at a workplace on work performance.

Table 4.2: Result of Reliability Analysis

Variable	No. of Items	Cronbach's Alpha
Instant Messaging	10	0.762
E-mail	10	0.849

Social Media	10	0.902
Work Performance	10	0.931

#### 4.3 Correlation Coefficient Analysis

All three independent variables are shown to be significant to work performance. Table 4.3 shows the summary of the correlation coefficient results for all the independent variables. Based on the strength of correlation, there is a weak association of the use of instant messaging with work performance where the r-value is 0.288 ( $p < 0.05$ ). The association of the use of e-mail and work performance is almost negligible with the r-value of 0.210 ( $p < 0.05$ ), and social media shows a weak association with work performance where the r-value is 0.313 ( $p < 0.05$ ).

Table 4.3: Results of Correlation Analysis

		Instant Messaging	E-mail	Social Media	Work Performance
<b>Instant Messaging</b>	Pearson Correlation	1			
	Sig. (2-tailed)				
<b>E-mail</b>	Pearson Correlation	.268**	1		
	Sig. (2-tailed)	.002			
<b>Social Media</b>	Pearson Correlation	.347**	.300**	1	
	Sig. (2-tailed)	.000	.000		
<b>Work Performance</b>	Pearson Correlation	.288**	.210**	.313**	1
	Sig. (2-tailed)	.001	.016	.000	

\* Correlation is significant at the 0.05 level (1-tailed).

\*\* Correlation is significant at the 0.01 level (1-tailed).

#### 4.4 Multiple Regression Analysis

According to (Sekaran & Bougie, 2016) the regression analysis is used when the situation of independent variable is hypothesized to determine the effect with dependent variable. The value of r-square for the whole model is 0.143, which means that the independent variables namely instant messaging, e-mail and social media explained only 14.3% of the dependent variable and the remaining 85.7% is explained by other factors.

4.4.1 Table of Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.378	0.143	0.123	0.471

4.4.2 Table of Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.436	.396		6.155	.000
	IM	.197	.094	.186	2.101	.038

EMAIL	.096	.089	.094	1.077	.284
SM	.175	.071	.221	2.461	.015

a. Dependent Variable: WP

Based on the coefficient table, instant messaging and social media showed a significant relationship to work performance. Thus, these findings support Hypothesis 1 and Hypothesis 2. However, use of e-mail has shown to have an insignificant effect to work performance. Hence, hypothesis 3 is rejected.

## 5. Conclusion and Recommendation

This paper discussed specific computer mediated communications that influence an employee's work performance at one of the public sectors in Malaysia. The three tools of computer mediated communication are the use of E-mail, social media and instant messaging. Based on multiple regression, the use of instant messaging and social media are significant and influences work performance. However, the use of E-mail was found to be insignificant to employee's work performance. All three tools of computer mediated communication, contributed only 14.3 percent of work performance. The remaining 85.7 percent were explained by other variables as there are many types of other computer mediated communication tools such as knowledge forums and portals that can deliver the most relevant information for employees to use in order to perform their jobs and increase their work performance (Benbya, Passiante, & Belbaly, 2004).

Communication is an essential ingredient in managing change and no amount of communication is too much. More is in fact better (Sperber & Hirschfeld, 1999). The use of technology has made communication faster and more efficient, especially with the introduction of mobile applications. These include WhatsApp, social media networks and instant messaging to foster communication among community members, help create online professional learning communities (Cox & McLeod, 2014) and enhance performance (Khattak et al., 2016). Social media usage refers to the multiplicity of activities an individual may participate online (Smith & Gallicano, 2015) which results in social media multitasking. For the past two decades, e-mail has become more and more popular at the workplace (Ou et al., 2013). E-mail has seen as single platform to provide and distribute task related information. Its richness of data as media tools requires its participants to be active users in order to utilize and create valuable meaning (DeSanctis & Poole, 1994). However, if the user is an inactive user, as message accumulate in inbox, it is increasing difficult for employee to manage the increasing amount of information and task given through e-mail (Mano & Mesch, 2012). Therefore, the use of e-mail influence by the personality of user whether he or she is an active user or otherwise. However, recently, most of the e-mail systems in organizations has integrated the function of instant messaging that allows a near-synchronous transfer of information to get prompt responses of its users (Ou et al., 2013).

The implication of this research is to provide empirical evidence for use of social media and instant messaging to see whether its use can increase an employee's work performance through active interactive activities. Theoretically, this study extends the research of the association of work performance and the use of e-mail, social media and instant messaging.

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