

Task Performance: The Use of E-mail in the Workplace

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ABSTRACT

This paper is written to determine the relationship between the use of e-mail and task performance of employees. In order to do so, a research has been done for a total of 80 employees from a selected organization. In general, the development of e-mail has brought changes to the whole world as it is the most widely used mode of communication by common users and in any organization daily. Undoubtedly, the use of e-mail has helped to increase the efficiency of employees and improve their productivity of task performance. Among the advantages of e-mail is easily accessible and thus making it possible for individuals to communicate effortlessly from different locations all over the world. Besides, individuals who are more inclined toward adapting new technologies may perceive it as easy to use and useful. Perceived ease of use and perceived usefulness are contemplated important factors in determining the acceptance and the use of information technologies. Ease of use is because of the functionalities offered solves multiple users' problems to complete their tasks. The result of this research eventually revealed that there was a relationship between the perceived usefulness of e-mail, ease of use of e-mail and task performance of employees. It can be concluded that using e-mail benefited employees, as it will enable them to perform their tasks efficiently due to ease of use and usefulness of e-mail. However, employees need to manage their e-mails to prevent loss of information and overload of information.

KEYWORDS: E-mail, Perceived Usefulness, Perceived Ease of Use, Task Performance.

INTRODUCTION

Undeniably, communication is an essential tool in the process of developing technology. The application of technology in the human communication mode such as telephone, e-mail and other social media is increasing at a rapid rate. For instance, the development of new communication tools such as electronic mail has brought the drastic change to most organizations in the world. Most organizations have switched to e-mail as their main communication mode instead of telephone and faxes. The definition of Information and Communication Technology (ICT) had been made extensively to include many other types of communication technologies, and e-mail application is one of the examples. Furthermore, the assimilation of telecommunication, middleware, computers and the data system that support, store and transmit the communications between systems has been commonly known as ICT [14].

As highlighted by [19], e-mail has been used widely among most of the population of the world. E-mail has become the key platform for creating and disseminating knowledge. According to [4], e-mail has become known to be the foundation of communication component of networked organizations, virtual teams and electronic communities. E-mail is a process by which people talk to one another that relate virtual communities and conduct business. E-mail communication is different from telephone communication. It is asynchronous and does not require senders and receivers to be available at the same time during the occurrence of the communication. Although textual in nature, e-mail has also become an informal way of communication besides the use of letters and memos [24].

Undoubtedly, the use of e-mail helps employees to keep in touch with each other easily from distant places and time, and able to improve productivity among greatly employees. Furthermore, most of the people in an organization are more likely to give better performance when they use e-mail to interact although there are some of them who are not familiar with the use of e-mail. Not only e-mail is used to communicate within an organization, but it also being used over long distance. Nonetheless, a business transaction can be fastened by e-mail and this helps to conclude a transaction without delay [15].

LITERATURE REVIEW

According to [9], Davis' Technology Acceptance Model (TAM) research (1986; 1989) is an influential contribution to the enduring line of Information Technology implementation and diffusion research. TAM revealed that both perceived ease of use and perceived usefulness correlate with system use, a relationship that shows whether users accept or reject an Information Technology. Their causal model hypothesizes that actual

system use is affected by behavioral intentions of users affected by attitudes towards use. In addition, perceived usefulness and perceived ease of use in Technology Acceptance Model directly affect attitudes toward use, based on the belief of the system.

The theory of media richness[5] is considered as the communication media, which is able to reproduce the information sent over it or in other words the level of richness in communication. Researchers rate media richness based on four criteria. The first criteria is the opportunity for instant feedback. Second criteria is the ability to deliver multiple cues. Third criteria is the adapting of messages to people and situations and last criteria is the language diversity permitted when communicating with the media.

Media richness theory stated that task's performance will improve if task information needs are matched to media richness. Media capable of sending "rich" information as the example of face-to-face meetings are better suited to unclear tasks, where there are multiple interpretations of information and less rich media such as computer-mediated communication are best suited to tasks with a lack of information. However, in [23] stated that empirical tests of media richness theory for new media such as computer mediated communication have not been convincing.

Computer mediated communication can change communication process and the outcomes in an organization, as pointed by [13]. Hence, the study of media richness theory also revealed that the effect of computer mediated communication on resolution quality includes message clarity, social perceptions and capability to value others mediated the effects of cue multiplicity and feedback immediacy on decision quality. Another research made by [18] found that there are significant relationships between perceived usefulness and ease of use and media richness that contribute to the actual usage of Second Life (3-D multi user virtual environment). The positive effects of media richness on perceived ease of use and usefulness indicated that the more the medium is rich, the more useful users perceive it and finally they will use the technology.

Perceived ease of use can be described as "the degree to which a person believes that using a particular system is free of effort" [6]. Earlier research has proven that users are more likely to use a new technology if they perceive that it is easy of use [17]. Previous studies by [11] highlighted that the characteristics of the technologies portrayed crucial part between the user and the user's experience using the technology. His study proved that the variable of Computer Self-Efficacy (CSE) was used in previous studies by using the application such as Windows 95, Lotus 123, on-line help desk system, and Lotus Pine (email) [1, 20, 21, 22]. In [1] used the applications on Windows 95 and Lotus 123 indicated that general CSE was significant with the perceived ease of use. Besides, the application such as on-line help desk system showed a significant relationship with perceived ease of use [20]. In addition, gender differences were another factor that influenced the perceived ease of use of the users to use e-mail [9]. However, in [6] also indicated that perceived usefulness as "the degree to which a person believes that using a particular system would enhance his or her job performance". This is the origin of the use of perceived usefulness in determining the ICT adaptation that is affected by use-related beliefs, [10].

Later, the study by [16] conducted on students' perception counselling the use of online learning tools suggested a theoretical framework to distinguish three dimensions of perceiving usefulness which are the personal-related outcome expectation, performance-related outcome expectation and intrinsic motivation. The association of these three dimensions contributes to the perceived ease of use. The result proved that perceived ease of use influenced dimension of perceived usefulness positively, and therefore improves students' performance in the course.

Additionally, perceived usefulness was defined as the extent to which an individual have confidence in using the system that improves their performance [16]. Perceived ease of use and perceived usefulness construct has been considered important in determining the users' acceptance and use of Information Technology. Based on [2] study, they assumed that much of e-mail complexity depends on the nature of the task management activities it is used to support.

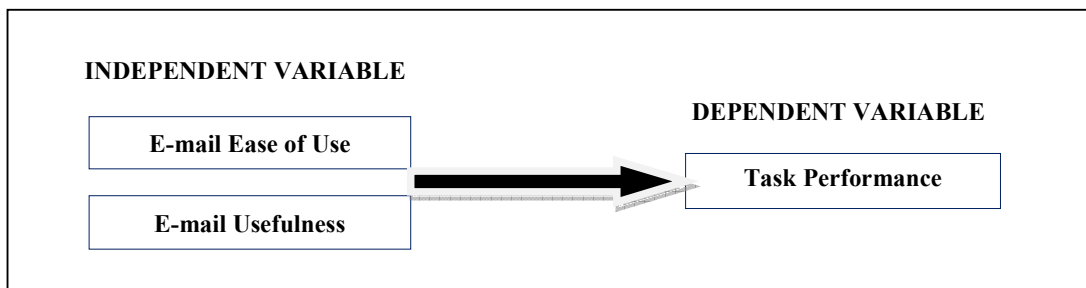


Figure 1: Theoretical framework

The following theoretical framework has been adopted from previous research and literature. The theoretical framework illustrates the overall relationship between the independent variables and dependent

variables of the study. The independent variables are perceived e-mail usefulness and perceived e-mail ease of use and the dependent variable is task performance.

The objective of this paper is to study the ease of use and usefulness of e-mail among employees in the organization. Electronic mail was perceived by users as the medium to use for messages with informational value. Media features of usability, functionality and ease of use were found to be the most influence on media choice [8]. In [12] found that e-mail users tend to be either rude or not and they were also having a difference in grammatical errors of e-mail messages. According to [3], the effect of new communication technologies such as e-mail in the organization can be classified into 3 levels. One of them is the effects on an individual level, which reflect the degree of individual employee and his task that can be made more or maybe less efficient. In addition, the costs of e-mail may unreasonably load onto the recipients who might usually have to give their attention between e-mail and other tasks as argued by [15].

This paper seeks to address the following objectives:

1. To identify the relationship between perceived e-mail ease of use and task performance.
2. To identify the relationship between perceived e-mail usefulness and task performance

METHODOLOGY

The aim of this paper is to determine the relationship of e-mail ease of use, usefulness and task performance. Therefore, to achieve the objective of the research, a quantitative correlation research design was used to examine the relationship between the two types of variables.

The main instrument of this paper is a set of questionnaire. The items in the questionnaire are formulated to meet this research objective, although they were based from previous studies. This paper has been divided into 4 parts. It started with demographic questions of respondents, second part determined the dependent variable, third part and fourth part determined the independent variables. Questionnaire in the second part, third part and fourth part were instructed in Likert-scale format by using strongly disagree to strongly agree.

The samples of 80 responses were used in this study obtained as part of the survey. The survey had been conducted in the field of oil and gas industry in Kemaman, Terengganu, Malaysia. The entire of the questionnaires are distributed and collected directly from all the employees. The analysis of the questionnaires was done by using the Statistical Package in the Social Science (SPSS) version 20.0 program for Windows for descriptive statistical analysis.

FINDINGS AND DISCUSSION

The purpose of this paper was to examine on perceived ease of use, perceived usefulness and task performance. Results suggest that ease of use and usefulness is important to determine task performance of employees. This finding highlights the demographic of respondents as shown in Table 1. This finding highlights a descriptive analysis of demographic data that most of the respondents were male with the percentage of 53.8% while 46.3% were female. The category of age were 42.5% with the age between 25 to 34 years old, 27.5% with the age between 18 to 24 years old, 15% with the age between 35 to 44 years old, 10% with the age between 45 to 54 years old and 5% were above 55 years old. Further analysis showed that most of the employees were Bachelor 45%, followed by diploma 36.3%, STPM and Master's Degree 8.8%, and SPM 1.3%. This study indicates that most of the employees were categorized with working experience of 1 to 5 years with 46.3%, 21.3% in less than a year, 20.1% in 6 to 9 years old and 12.5% above 10 years old. Most of the employees were from Non-Executive category 61.3% compares to the Executive which were 38.8%.

Table 1: Respondents' demographic profile

No	Profile	Description	Responses	Percentage
1	Gender	Male	43	53.8
		Female	37	46.3
2	Age	18 - 24	22	27.5
		25 - 34	34	42.5
		35 - 44	12	15.0
		45 - 54	8	10.0
		55 and above	4	5.0
3	Highest education qualification	SPM	1	1.3
		STPM	7	8.8
		Diploma	29	36.3
		Bachelor	36	45.0
4	Years of experience	Master's degree	7	8.8
		Less than 1 year	17	21.3
		1-5 years	37	46.3
		6-9 years	16	20.1
		10 years and above	10	12.5
5	Position	Executive	31	38.8
		Non-executive	49	61.3

DISCUSSION

Correlation Analysis Result

It can be seen from the data in Table 1 the strength of the relationship between variables. Perceived usefulness, perceived ease of use and task performance variable were analyzed using Spearman's correlation coefficient. Based on the result, there was a moderate relationship between task performance and perceived e-mail ease of use ($r = 0.429$, $p < 0.05$), which is a substantial relationship. The relationship between perceived e-mail usefulness and task performance is $r = 0.646$, $p < 0.05$ which based on Pearson Correlation Value Table, it means that the relationship was strong relationship. Lastly, the relationship between perceived e-mail ease of use and perceived e-mail usefulness is 0.412 $p < 0.05$ which means the relationship is moderate relationship.

Table 2: Correlation analysis result

		Task Performance	Perceived Ease of Use	Perceived Usefulness
Task Performance	Pearson Correlation	1		
	Sig. (2-tailed)	-		
	N	80		
Perceived Ease of Use	Pearson Correlation	0.429**	1	
	Sig. (2-tailed)	0.000	-	
	N	80	80	
Perceived Usefulness	Pearson Correlation	0.646**	0.412**	1
	Sig. (2-tailed)	0.000	0.000	-
	N	80	80	80

** Correlation is significant at the 0.01 level (2-tailed).

Regression Analysis Result

Table 3: Regression analysis (multiple regression)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.670 ^a	0.449	0.435	0.22515

a. Predictors: (Constant), perceived e-mail ease of use and perceived e-mail usefulness

Further analysis was done through the result of regression analysis shown in Table 3. The multiple correlation coefficients (R) using all the predictors simultaneously is 0.670 and Adjusted R-Square is 0.449. It means that 45% of the variance of the Task Performance can be predicted from the Perceived E-mail Ease of Use and Perceived E-mail Usefulness. In conclusion, there is a significant relationship between both independent variables which are Perceived Usefulness, Perceived Ease of Use and with the dependent variable, Task Performance.

CONCLUSION AND RECOMMENDATIONS

This paper attempts to show that there were relationships between email usefulness, ease of use and task performance among employees. This study has shown that email ease of use and usefulness are two valuable indicators that can measure task performance. The findings supported the three variables generated from this study.

The results proved the concepts are strongly related to each other whereby in an organization, ease of use and usefulness are important variables that contribute to a success of the organization. Hence, most of the organizations use e-mail as their tool of communication that contribute to efficiency of task in the organization. The results from this research can be generalized to other organizations across the country, as e-mail is the main tool in the organization. In this research, it is found that independent variables which are perceived e-mail ease of use and perceived e-mail usefulness have a positive relationship in task performance. Therefore, policy makers should consider creating awareness among employees on using an e-mail in working environments. More importantly, the organization used an email as tools to communicate between them as most of the employees work outstations with dispersed location. Furthermore, employees in organization use email as their medium of communication to submit documents, updated progress of certain projects and other activities related to work.

According to [2], if it is barely to be difficult to use a system, an information system user is unlikely to use a system. Furthermore, perceived usefulness is a crucial element of intention to use the system by the user. The important body of research has gathered realistic support to prove that perceived usefulness is important in predicting and determining user's technology behavior based on the technology acceptance model [7].

Through this research, the future academic undertakings may use the existing study for further exploration research towards an additional understanding on particular data of research. The study of this research has been reported in a small scale and further research on the instrument or other factor might be identified.

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