

# Perceptions and use of e-mail among Universiti Utara Malaysia Staff: A Pilot Study

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**Abstract.** The use of e-mail has become common either for work purposes or personal usage. Despite its usefulness, complain about the overwhelming messages received which cause the users to have problem in managing those messages. Similar situation occurred among Universiti Utara Malaysia (UUM) staff. Thus, a pilot study was conducted to investigate its staff's perception and use of e-mail in order to improve the e-mail service provided to them. This paper discusses the findings from the pilot study, which involves 41 UUM staff. Self-administered questionnaires were used to gather the data, while descriptive statistical analysis was used for data analysis. The findings of the study reveal that UUM staff appreciate the e-mail service. However they faced problems like limited storage size and overwhelming e-mails. They think that UUM e-mail is being abused by the repeating advertisements and news sent to them. The output of this study can be used as a guideline by the UUM management in revising its e-mail policy to serve better quality of e-mail service.

## INTRODUCTION

E-mail provides flexibility and improves the quality of communication. It is very useful and frequently used for communication in the workplace and its usage has varied from time to time. Among the uses of e-mail are document sharing, distributing and tracking tasks, storing information, delivering reminders, as well as scheduling and billing management [1,2]. Due to that, e-mail is not only usable for the workplace, but also for personal use. According to a study conducted in the marketing field, there are 2.6 billion e-mail users worldwide in year 2015 and this number is expected to rise to 2.9 billion by end of 2019. Furthermore, the estimated number of e-mails sent and received per day is 205 billion [3]. Chui, Manyika, Bughin, Dobbs, Roxburgh and Westergren [4] stated that 28% of a worker's workweek is spent for reading and responding to e-mails.

Although e-mail is useful, there are various problems faced by e-mail users. They complained about the overwhelming number of e-mails received which causes users to not be able to manage e-mail received effectively [5,6]. Because of this, they face problem of organizing archival material [7,8]. Furthermore, this causes them to forget several tasks that must be completed since the e-mails are mixed between important and unimportant ones [2]. Besides, the e-mail spam messages are being received and a notable growth can be seen [9].

Universiti Utara Malaysia (UUM), which comprises of 3415 staff, is also facing the same problems. The staff complained that they always receive too many e-mails and this causes them to overlook the important e-mails. Furthermore, some of the e-mails are not relevant and took up the space allocated for each individual. The overwhelming messages received cause them to have problem in managing those messages. More importantly, the staff feel bored reading the same e-mail that is sent over and over again. The staff are allocated with a particular e-mail inbox size according to their positions, for example, the academicians with special posts are allocated with 4.0 GB, while the academicians without special posts are allocated with 3.0 GB. On the other hand, the administrative staff are allocated with 1.5 GB. Nevertheless, they need to delete the e-mails every day, otherwise the inbox will be full very fast which leads to e-mails cannot be received and sent again. This affects the tasks that need to be completed. The situation is worsening, causing the UUM management to take prevention action. Therefore, a case study was conducted to investigate the staffs' perception and usage of UUM e-mail in order to improve the e-mail service provided to them. This paper reports the outcome of the pilot test on the case study.

The research approach is described in Section 2 and the results of the pilot test are presented in Section 3. Section 4 presents the conclusion and future work.

## **THE RESEARCH APPROACH**

A quantitative approach has been adopted in this study and data for the pilot test were collected using a survey. This approach was chosen because it is a useful approach and seeks to measure the opinion of someone [10]. There were three main activities involved, which started with instrument design, followed by data collection and data analysis. They are elaborated further next.

### **Instrument Design**

To carry out the survey, the self-administered instrument was developed since it has several advantages such as cost effective, easy to analyze the data and have higher level of confidentiality. Furthermore, respondents would have more time to think [11]. The content of the instrument was built through the reference of previous related works such as Alkahtani et al. [5], Luo [12] and Kumar and Kumar [13]. There are twenty one (21) questions, organized into three sections; 1) Section A: Demographic, 2) Section B: Use of UUM e-mail and 3) Section C: Perception on e-mail services. Section A focuses on the respondents' background, specifically their positions. Meanwhile Section B focuses on frequency of e-mail usage, knowledge on the e-mail inbox and attachments size limitation, reasons for using UUM e-mail in future, the use of UUM e-mail in communicating with students and the possibility of being monitored through e-mail. Section C on the other hand, concentrates on the respondents' perception on the e-mail service. Also, it includes question on suggestions for the e-mail service improvement.

### **Data Collection**

Data were collected through interviews with respondents. They were selected randomly among the UUM staff, which consists of academicians and non-academicians. Overall, 41 respondents involved, which is considered sufficient for a pilot study [11]. The respondents were provided with printed instrument. The questions were found to be clear and understandable, thus the respondents managed to answer the questions easily.

### **Data Analysis**

The data obtained were analyzed using descriptive analysis. The Statistical Package for Social Science software was used in this analysis activity.

## **FINDING AND DISCUSSION**

The findings are elaborated according to demographic, the e-mail usage and ended with the perceptions on e-mail service.

## DEMOGRAPHIC

The selected respondents consists of academicians (61%) and non-academicians (39%). Among the academicians, 40% hold administrative posts and majority of the academicians are permanent staff. All non-academicians are permanent staff. Table 1 depicts the demographic profile of the respondents.

**TABLE 1.** Respondents' Profile

	Positions	Frequencies	Percentages
Academicians	University Lecturers	22	53.7
	Visiting Lecturers	1	2.4
	Tutors	2	4.9
Non-academicians	Administrative Assistant	7	17.1
	Security Guards	6	14.8
	Deputy Administrative Officer	1	2.4
	Administrative Officer	1	2.4
	Operations Assistant	1	2.4
	<b>Total</b>	<b>41</b>	<b>100</b>

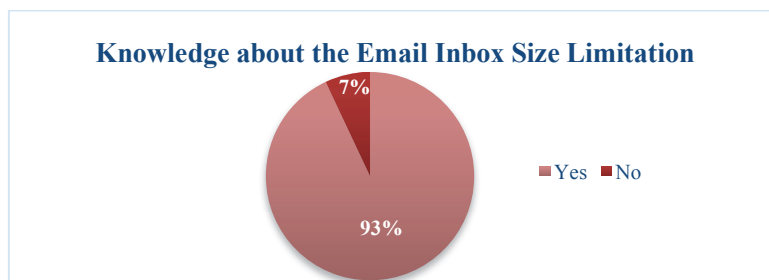
## E-mail usage

The respondents were asked on the frequency of e-mail usage. Table 2 illustrates the e-mail usage pattern of the staff. Majority of the staff use e-mail every day (90.2%). Out of that, 61% are academicians. However, there still exists a group of staff who do not use e-mail every day and among them are the security guards (7.3%).

**TABLE 2.** E-mail Usage Pattern

	Academicians	Non-academicians	Total
Everyday	25 (61%)	12 (29%)	<b>37 (90.2%)</b>
Once in 2-3 days	0 (0%)	1 (2.4%)	<b>1 (2.4%)</b>
Once in a week	0 (0%)	2 (4.9%)	<b>2 (4.9%)</b>
Once in a month	0 (0%)	1 (2.4%)	<b>1 (2.4%)</b>
Total	<b>25 (61%)</b>	<b>16 (39%)</b>	<b>41 (100%)</b>

Next, the respondents were asked if they are aware of the e-mail inbox size limitation. Most of them knew about it (93%), while only 7% did not know. Figure 1 represents the result.



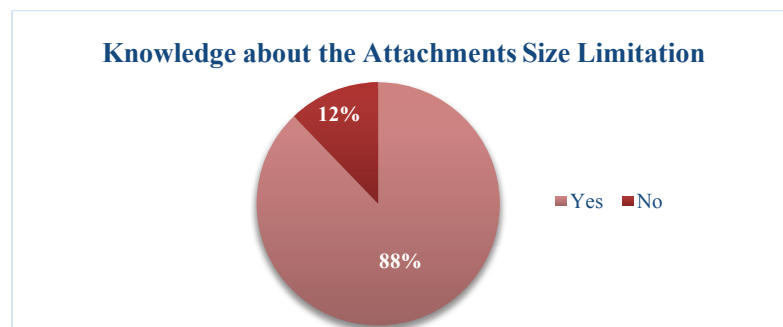
**FIGURE 1.** Knowledge about E-mail Inbox Size Limitation

The respondents were then asked whether they plan to use UUM e-mail in the future. Majority answered ‘yes’ (97.6%) while only 2.4% answered ‘no’. To understand better, the respondents were asked why they plan to use UUM e-mail in future, and why not. They are allowed to write their own perceptions. The reasons are categorized as portrayed in Table 3. In a nutshell, the respondents utilize UUM e-mail since it gives various benefits for their working environment. However, one respondent stated that he do not want to use UUM e-mail because there are too many announcements and repeating e-mails.

**TABLE 3.** Reasons for using UUM E-mail in Future

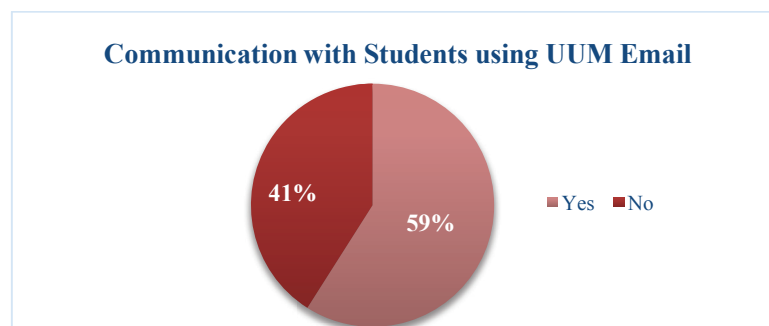
	Frequencies	Percentages
Work purposes	16	39.0
To send and get information	10	24.4
It is an official e-mail	8	19.5
It is current needs	3	7.3
To know latest news	2	4.9
It can be accessed fast and easily	2	4.9
<b>Total</b>	<b>41</b>	<b>100</b>

Furthermore, the respondents were asked whether they know that the attachments size has limitation. Most of them are aware (88%) whilst 12% are not. Figure 2 shows the result.



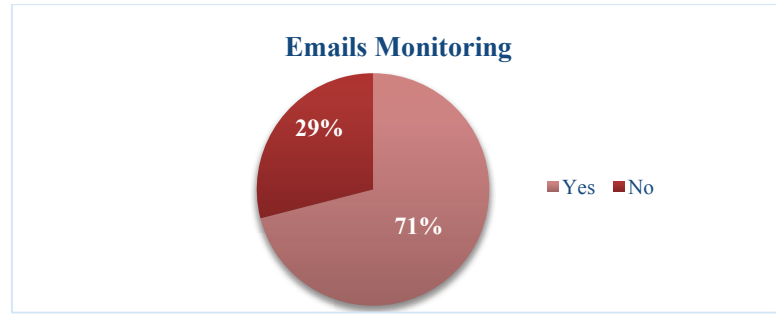
**FIGURE 2.** Knowledge about Attachment Size Limitation

Also, they were asked whether they use UUM e-mail when they communicate with their students. More than half of the respondents use it (59%) while the rest do not (41%). This might be because they use other communication media like WhatsApp, Facebook or personal e-mails. Figure 3 portrays the result.



**FIGURE 3.** Communication with students using UUM e-mail

The respondents were also asked whether they think that their e-mails are being monitored. 71% of the respondents think that their e-mails are being monitored while 29% think no. Figure 4 exhibits the result.



**FIGURE 4.** E-mails being monitored by UUM

### Perceptions on E-mail Service

The respondents were then asked about their perceptions on e-mail service provided to them. The results are portrayed in Table 4.

**TABLE 4.** UUM staff's Perception on UUM E-mail

No.	Statements	Strongly Disagree	Disagree	Agree	Strongly Agree
1.	Sufficient e-mail storage size is provided	9 (22%)	14 (34.1%)	13 (31.7%)	5 (12.2%)
2.	Too many repeating e-mails in inbox	-	10 (24.4%)	18 (43.9%)	13 (31.7%)
3.	Abuse on UUM e-mail in terms of advertisement and news (e.g. personal loan advertisements)	1 (2.4%)	15 (36.6%)	17 (41.5%)	8 (19.5%)
4.	E-mail as an effective way to communicate with other in workplace.	2 (4.9%)	3 (7.3%)	16 (39%)	20 (48.8%)
5.	Expectation on privacy intrusion when using e-mail	3 (7.3%)	11 (26.8%)	23 (56.1%)	4 (9.8%)
6.	The needs of more stringent e-mail policy	-	4 (9.8%)	21 (51.2%)	16 (39%)
7.	The number of meetings and phone conversations can be reduced through e-mail	3 (7.3%)	2 (4.9%)	25 (61%)	11 (26.8%)
8.	The ability to communicate effectively through e-mail	2 (4.9%)	6 (14.6%)	22 (53.7%)	11 (26.8%)
9.	The needs of training on how to use e-mail	4 (9.8%)	20 (48.8%)	14 (34.1%)	3 (7.3%)

As a whole, the respondents have good perceptions on the UUM e-mail, whereby it is found as an effective communication method. 87.8% of the respondents agreed on this. Similarly, 87.8% of them agreed that through the use of e-mail, the number of meetings and phone conversations can be reduced. Moreover, 80.5% feel that they can communicate effectively by using e-mail. Additionally, about one third of the respondents (65.9%) do not expect any privacy intrusion when using UUM e-mail. However, the respondents think that UUM e-mail can be improved in future for better service. For instance in term of the e-mail storage size, more than half of the respondents think that it is insufficient. Furthermore about three quarter of the respondents feel that the e-mails are sent to them repeatedly. This will caused the inbox to be filled up in a short time. Consequently, more than half of them foresee that UUM e-mail is being abused through advertisements and news sent to them (61%). Hence, a great percentage of

the respondents think that UUM should implement a more stringent e-mail policy to prevent abuses (90.2%). However, when asked whether they need trainings on how to use e-mail, more than half of them think that they do not need any training (58.6%). This shows that they are confident that they know the ins and outs of the e-mail system. Furthermore, the respondents gave suggestions on improvements such as enabling specific section for advertisements and providing auto-delete functions for old e-mails.

These results give insight to the UUM management on the improvements that can be made on the e-mail service by revising the UUM e-mail policy. Among them are to increase the e-mail inbox size and create new rule for sending e-mails. For instance, a particular e-mail should be sent only to the related staff without sending it to everyone in the University. This might reduce the problem of repeating e-mails and insufficient storage. Also, specific advertisement section would help in differentiating important e-mails with less important ones.

## CONCLUSION AND FUTURE WORK

The findings of the study reveal that UUM staff have good perceptions on the UUM e-mail. However there exist problems faced by them, namely insufficient storage size, overwhelming e-mails and repeating advertisements and news. Thus, further improvements need to be done by UUM management to enhance the e-mail service quality. The output of this pilot study can be used as a guideline to the UUM management for further improvements. Next step of this research is to collect the real data.

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