

Information Dissemination Through SMS Among IT Students

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Abstract— Mobile technology era offered many convenience ways in communication. In the 90s we used notice boards to spread information at the work place and learning institutions. It was common for students to go to the notice boards for useful updates. But now, many students own mobile phones and thanks to Short Messaging Services or SMS information they can get access to information much easily. Nevertheless, problems occur when the lecturer wants to give urgent information. That can only be delivered through the class representative. What happens if the class representative does not have credit to pass the messages to his/her classmates? This study was conducted to examine the usefulness and students' acceptance of SMS in classroom management. 92 students taking Information Technology courses from Masjid Tanah Community College, Malacca and Segamat 2 Community College, Johore were chosen as respondents. The researchers used SMS Officer Account as a tool to sent SMSs to the students and a set of questionnaire was distributed after one month of usage. The result shows that there was a significant relationship between the factor for using SMSs and level of acceptance to the use of SMS on the part of the students.

Keywords - mobile technology; information dissemination; SMS; significant; easier; acceptance

I. INTRODUCTION

When discussing about technology it is almost highly related to communication. Communication is crucial since without communication messages or information could not be delivered. With the birth of information technology and telecommunication media rapidly expanding from time to time, Malaysia has shown her capability to showcase her prominent role as an important global agent of communication to the masses. What started as "fixed" Information technology has expanded itself becoming mobile thus enhancing the dissemination of information directly and more instantly.

Existing development in mobile and wireless technology has greatly assisted in establishing the business and service management sectors [1]. The education sector is also not left behind whereby the use of mobile technology is not merely an extension of online learning process that relies on networking but it can also activate the dissemination of information on teaching and learning to happen anytime, anywhere and anyhow. The use of mobile technology in education is also known as "m-education" or *Mobile-Education* [2]. The use of mobile technology began with the use of SMS (*Short Messaging System*) and until now many things rely on this technology. This statement is further established by the total number of studies conducted on the use of SMS especially in the dissemination of information as one of the tools in mobile learning involving education

In 2007, the *Malaysian Commission of Multimedia & Communication* (MCMC) stated that the total use of mobile phone services in Malaysia has reached 9.1 million and on average users sent a total of 500 million SMSs every month and is increasing by the day.

Short Messaging System or SMS actually forms the beginning of change in the field of education that utilizes the latest technology for information dissemination.. In a study conducted by Mayer, 2002[3], it was found that there were several aspects related to use of SMS among educational institutions as a main media for disseminating information. Among them were information and acknowledgement related to:

1. lecture, meeting and examination schedule
2. student's academic information (e.g. fee, examination results, current academic achievement status)
3. reminder for assignment submission dateline
4. links to related websites as references
5. change in class schedule and venue (postponement of class, time/venue)

6. instant message and announcements – students' activities

II. PROBLEM BACKGROUND

In a related interview with the Head of Information Technology Program Unit from Masjid Tanah Community College, Malacca it was said that announcements related to lecture, students' activities, or any other academic matters were disseminated using notice boards, memorandums or class representatives. The Head of Engineering and Skills from Segamat 2 Community College, Johore gave similar statements but added that the college also used the public announcement system (loud speakers). Other means include posting announcements on the college website or blog groups but these were not often updated and most students did not use them. As a result, many students did not get the information intended for them. Other factors for not receiving such information were lackadaisical attitude, lacked of sensitivity to current information, rarely checked emails, inaccessibility to internet and information and stayed quite distantly from the class representative.

There were also cases whereby students lived with their family and the student's very low level of communication (introvertness). As a result these group of students missed the necessary information or announcements intended for them and lost out on related matters of academic importance to them. As for the class representatives, the dissemination of information by word of mouth is undoubtedly questionable. Due to these, useful information like students' activities or other kinds of information and announcements that need to be delivered immediately or other important matters involving students could not be delivered to all students at very short notice. It is thus crucial that students' sensitivity to access of information be given due attention [4]. In a study on the use of asynchronous online platform (Nicenet) conducted by Berhannudin Mohd Salleh, 2007[5], it was found that students want to be updated and like to update others on not just academic but non-academic matters often, if not everyday. In this instance, most students have become more interested to receive information or announcements via SMS [6]. According to Ling (2000)[7], SMS application is hooked to the individual irrespective of time and place. SMS service is at its highest when it can be used anywhere, anytime and without being restricted by borders whereby anybody can freely send and receive information.

III. PROBLEM STATEMENT

This study was conducted to identify the usage and acceptance level of SMS services for the purpose of disseminating information related to class management among IT students.

IV. OBJECTIVES

The objectives of this study:

1. to identify factors for use in information dissemination technique using SMS among community college students
2. to identify the level of acceptance towards use of SMS among community college students
3. to test the following hypothesis:
 - a. H_{01} = there is no significant relationship between usage factor and SMS acceptance level among community college students

V. METHODOLOGY

This study was conducted using a survey and analyzed descriptively and inferentially. The study was aimed at identifying the factors for using SMS application and the level of acceptance for use in the dissemination of educational information. A set of questionnaire was used and the sample of study was a group of students studying information technology at two community colleges. Using purposive sampling, a total of 92 students were chosen in this study and they were 2nd and 4th semester students of Masjid Tanah Community College in Malacca and Segamat 2 Community College in Johore, Malaysia, respectively. The selection of these two colleges was made due to the fact that these were the only two community colleges in Malaysia offering information technology and computer system and support courses at the same place.

VI. RESULT

Table 1 below displays the reasons for use of SMS by the students:

TABLE 1: OVERALL MEAN FOR THREE PERCEPTIONS IN USAGE FACTOR

Perception	Mean	Level
Ease of Use	4.18	High
Usefulness	4.14	High
Fun	3.89	Moderate

Scale: < 2.00 = Low, 2.00 – 3.99 = Moderate, 4.00 – 5.00 = High

*N=97

The overall mean of students' acceptance in use of SMS was 4.14. Meanwhile, the relationship between SMS application use and level of students' acceptance is as in Table 2.

TABLE 2: RELATIONSHIP BETWEEN USE OF SMS AND LEVEL OF ACCEPTANCE

N	Spearman 'rho'	Type of Relationship	p	H0
97	0.627	Moderately strong	0.000	Rejected

VII. DISCUSSION

From the three aspects, it was found that the statement in Research Question 1 has the highest mean when students agreed that information dissemination was much easier using SMS. Students felt that using SMS had enabled them to receive educational information much easier throughout the study period. This finding coincided with the findings of Aslina et al, 2005[8] whereby the easiness of sending messages using SMS could speed up information sharing and enhance communication. A study conducted by Hazlina and Sharmila, 2005[9] also discovered the same finding where most students mentioned that it was easier to gain information via SMS.

The overall acceptance level for use of SMS was very high and greatly accepted at a mean of 4.14. According to a study conducted by Jens Olav cited from Adham Shadan, 2008[10], acceptance level of using SMS among teens was high. Findings on 1,718 Malaysian youths whose age ranges from 15 to 29 found that their acceptance level was high whereby they considered the mobile phone as an asset to them for getting the latest information.

In general, it can be explained that students' acceptance level towards use of SMS was very high based on the view that SMS was important in their learning environment at the respective community college and that it should be maintained as a media for information dissemination. Findings of previous studies also established the same outcome. Among them was a study conducted by Kadirire, 2005[11] whereby use of SMS had been greatly accepted by users. As such the volume of SMS messages increased signaling the necessity for urgent and important information be disseminated using SMS service for ease of use and especially speed.

Generally, the third research question had been answered. Using hypothesis testing it was found that there was a significant relationship between the factors for using SMS and acceptance level among students in using SMS service as a media for receiving information. In conclusion, as the factors for using SMS became higher so did the level of acceptance for using SMS. Mayer's study, 2002[3], also showed that a level of acceptance and factors for using SMS were essential for sending and receiving every information stated in his study.

VIII. CONCLUSION

In conclusion, the outcomes show that all three objectives of the study had been achieved. Overall, the factors for using SMS was high as regards usefulness and ease of use. Among the two aspects, it was the factor for using SMS that actually motivated such information technology system be applied in the dissemination of educational information among students.

Students' choice were more towards something that that is easy to use and usefulness for their learning process. Consequently, this led to show that today's students are ready to accept change. It could also be said that students do take it seriously when it comes to maximizing use of technology such as mobile phones that come with SMS facility for purposes of getting information as part of their learning repertoire or tool. Despite the presence of certain aspects that are not considerably high like fun and attractiveness high but merely acceptable, the overall mean may still be classified as something that can be accepted and use.

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