COMMUNICATION IN LEARNING MANAGEMENT SYSTEM (LMS): THE IMPACT ON ACADEMICIAN SATISFACTION

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ABSTRACT

Learning Management System (LMS) is one of the information technology tools that support knowledge sharing and communication among lecturer and student. Universiti Utara Malaysia (UUM) have implement LMS since the year 2000, known as learningzone UUM. This study is investigate the communication in learningzone UUM. This study also investigates the impact on academician satisfaction which is lecturer of UUM on communication through learningzone UUM. The respondent of this study is lecturer from School Of Technology and Logistics (STML) UUM. Communication is an important item in learning process, it will make more understanding about the course and construct and good relationship between each other. The communication module in learningzone UUM are forum, chatting module and web meeting Module. The effectiveness and satisfaction of lecturer by communication on learningzone UUM will success the digital learning program of UUM and Malaysia.

Keywords
learning management system(LMS), learningzone UUM, Communication, Satisfaction, Academician

1.0 INTRODUCTION

Now, in the knowledge age, the information technology (IT) tools such as learning management system (LMS) has become very important criteria. Today’s students work, are mobile, can commonly find access to learning resources on their own, place limited value on physical presence and face to face communication, and want credentials of value (Daniel et al, 2009). A study suggests some high school students find it difficult to demarcate formal and informal learning – as well as in and out of class – on social networks such as Facebook and via laptop, mobile phones and tablet device (Clark et al.,2009). Technology, particularly the internet, is the main resource for teaching and lecture in the twenty first century. A study by Sian et al (2013) shows that students are actively using internet to support their learning. Another concern is how current online teaching tools of LMS meet academician expectation and satisfaction, so they will fully utilize the tools.

The internet is easily accessible by almost all area in Malaysia. Even Universiti Utara Malaysia (UUM ) in rural area also consist of good internet available. UUM as a higher educational institution are dramatically reshaped by technological innovation. Nowadays, Information and Technology (ICT) is rapidly changing the way these institutions conduct their teaching, learning and research. This is also revealed that the conventional education delivery becoming obsolete, and is being slowly replaced to digital teaching method.

2.0 LITERATURE RIVIEW

The Learning management system (LMS) has been established digital world today to help connect student and teacher or lecturer without confines of the conventional teaching method. Nowadays, the education method has been change, LMS phenomena have been assistance in the whole university in Malaysia. University now operate learning platforms on which student access course material online which are continually available and therefore promotes the culture of learner centered (Masizana-Katongo A, et al, 2008).

University Utara Malaysia (UUM) is using Learning zone (Moodle) as an e-learning portal to support teaching and learning process at the university. The platform of university’s LMS is Moodle. Moodle is an Open Source Course Management System (CMS), and also called Virtual Learning Environment (VLE) (Raman & Don, 2013).

2.1 Definition

LMS is a broad term used to describe that computer software tools designed to manage user learning
interventions and provide access to online learning and communication services for students, academician, and administrator. Software that allows the development and delivery of the educational courses using the internet as a delivery system.

LMS is a web-base technology or software application used to plan, implement and assess a specific learning process (Aziah.N, & Marzuk.W, 2005). It can be used to support online teaching or supplement to face to face instruction (K. Passerini, 2006). The LMS or popular know as LMS in the community of higher institutions is an online portal that connects academician or lecturer and students. It provides an online space for classroom materials or activities to be shared easily. It is also a portal that enables lecturer and students to interact out of the classroom, having discussion through forum that could otherwise take up too much of the time supposed to be spent learning in the classroom (Adzhharuddin N.A & Lee L.H, 2013; Min et al., 2012)

2.2 LMS design pattern

These days Learning management system is being adopted by many institutions and school to satisfies the needs and requirement. The user of LMS can be divided into following:

- The learners: They use the system for educational process. The students or learner are the basic or the main user of LMs
- The instructors/ lecturer: The instructors are the lecturer and the assistants who use the LMS to super and evaluate learners.
- The administrator: The administrator can take the support of all the user of the system to keep a check on the proper operating status.(Sharma.A & Dr.Vatta.S, 2013)

2.3 LMS as a communication tools

According to A.Sharma & Dr.S.Vatta (2013) state that LMS must included the communication criteria, such as text based chat, forum, wikis, internet messages system should be supported by the system. The use of LMS in schools is not limited to a strictly determined educational role emphasized in most of the research literature; some system also function as a new way for online communication and interaction (Blau and Hameirie, 2010; Georgouli et al., 2008). Inevitably, technology has become the most powerful tool in almost every aspect of humans’ daily lives. Technology is regarded as a major revolution, and this has had a significant impact on education. The use of information technology (IT) and the internet are the new paradigms of learning in the twenty-first century (Alfadly A.A, 2011).

The introduction of LMS has changed the reactions of the instructors. LMSs are information systems and their purpose is to store data in the course contents and provide the same to the learner’s communication pathways to help them in their learning process (Sharon James, 2010). In additional, according by Snowball & Mostert (2008) stated that communication through the new forum proved to be quick way to communicate with the student. The discussion forum was proved that have a particular benefit to the lecturer. In addition, LMS could faster the learning process, and improve the effectiveness of the communication between educators, staff and students ( Cavus . N and Momani A.M., 2009).

2.3 User satisfaction

The main perspective approach of any business or services is to satisfy user. Different contain different level of satisfaction. For example, many people like to drive car but all don’t like same brand, some may like same brand but not same model (P.Pokhrel & S.P.B. Vemulapalli, 2010). User satisfaction level consists different for service also. LMS also belonging to one of the online service. The satisfaction factor for everyone keep on changing so it becomes hard for organization’s to deal with them. User should be considered the centric since users are the main motive to run services (Wang F. & Head M.M., 2001)

User involvement in information system (IS) development is generally consider an important mechanism for improving system quality and ensuring successful system implementation. Satisfaction normally regarded as the most measure of IS system. If software designer first understand and satisfy user’s need, the it can serve higher education institutions problem (Pokhrel P. & S.P.B. Vemulapalli, 2010).

Pearson (1983), defines user satisfaction as “user satisfaction is the sum feeling or effective responses to distinguishable factor of the computer- based information products and service that are provided the organization”.

According to Lee (2010), the users’ perceived satisfaction in multiple aspects of the system was significantly correlated with their responses to the organizational effectiveness. In addition, identified a high level of correlation between the users’ perceived system satisfaction and their applications of the system output. User satisfaction is the important criteria for system success. Although not a single standard measure
has been proposed yet, user satisfaction is a viable indicator of system effectiveness.

2.4 Problem and challenge for academician to LMS

![Figure 1](image)

According to Embi M.A (2010) state that, the challenge face by higher educational institute (HEI) (88.9%) in relation to the utilization of the LMS by academician was the current teaching practice, it has shown in Figure 1. It is nearly two third of HEIs faced the problem of staff not being versed in IT (69.2%), academician staff too busy with research and publication (64.5%), heavy teaching load burdened to academician, and staff skeptical of e-learning (64.5%) only three HEIs (11.5%) felt that the major challenging the use of LMS was tendency towards open-source platforms. In addition, only two HEIs felt that the major challenges in the use of LMS were that the existing LMS was not User-friendly and lack of training related to the LMS.

The main reasons given by the sample of lecturer who did not use the LMS provided by their respective institutions include lack of training (37.4%), lack of time (36.5%), prefer conventional teaching method (30.1%), lack of technical support (29.6%), lack of facilities (28.3%), and additional burden to existing teaching load (27%).

2.5 LMS DESIGN CONSIDERATION

There are five categories have proposed and stated by Chung, Pasquini and Koh (2013) to the higher education:

2.5.1 Transmitting course content category

It is contain three major feature of an LMS in the transmitting course content category. Which is course content, announcement and the grade book. The research state that, most of the LMS do not offer effective grade book for lecturer. Lecturer adopts other techniques and tools to process more complex evaluation. So, the designer of the LMS must consider improving these features and providing more suitable design when building a new LMS.

2.5.2 Creating a discussion category

According to the Chung, Pasquini and Koh (2013), in this categories, asynchronous discussion had higher approval ratings than synchronous discussions, it is because participants have more time to read and make respond to questions. Whereas, synchronous discussion in the LMS’s were difficult for users since the message could be quickly scrolled away from the user’s view, as well as many users needed more time to concentrate on reading and make responding to the quick discussion. As state by the researcher, synchronous discussion have certain advantage that could help participants feels a stronger sense of social interaction. Therefore, designing a feature that creates longer discussion formats should be considered as a viable option to provide users the opportunity to participate in discussion.

2.5.3 Evaluating students category

This is most commonly used LMS tool in the evaluation and assessment category is the test generator, there is help lecturer create course assessments and allows students to submit the test via the drop box function. The test generator allows lecturer to create various types of assessment, such as multiple choice, multi select, matching, ordering, arithmetic test, long and short answer, fill in the blank, and true/false. In addition, the drop box function is more easy to use for the student and easy to access for the lecturer. As a best test generator must consists a flexible approach to create various evaluation method; however, both variations of the LMS, Balckboard and Moodle, are limited in their assessment design.

According to Fritz (2011) was point out the importance of the interaction in the evaluation process, which could allow the students to check and monitor their academic activities and improve student learning performance. In contrast, simply delivering a grade without the ability to
interact with the student would fail to enhance student participant, and their learning experience.

2.5.4 Evaluating course and instructors category

According to Chung, Pasquini and Koh (2013) state that, in this category. The LMS allows students to evaluate both the course and the lecturer at the end of the semester. Course evaluation is very important function in education because it can help lecturer to understand if they need to modify the course content and teaching approaches to improve overall learning and teaching experience. Although this feature provides more information to institutions, it has seldom been utilized to evaluate courses by universities because most have their own evaluating systems. This feature of an LMS might not be broadly applied since universities have established evaluating systems to collect survey data. For example, the University of North Texas uses the SETE and Blackboard learning management system separately, thereby increasing maintenance costs.

Developing and designing a new system needs to take this into consideration and offer alternatives which universities might be quicker to adopt. The implementation of an LMS, including a completed survey system, would enable higher education institutions to save money in both maintenance and development fees (Chung, Pasquini & Koh, 2013)

2.5.5 Creating computer base instruction (CBI)

The use of computer-based instruction (CBI) is a feature that has been designed to help instructors transmit content for years. With the developed technology, CBI could make various options and features available in an LMS for instructors to choose from (Malikowski, Thompson, & Theis, 2007). Today, several technique tools could effectively and efficiently help instructors to create teaching content, e.g., Prezi, SlideRocket, Flickr, YouTube, Sliceshare, and Knovio. These social media tools could enhance various teaching presentations and course curriculum. Therefore, the LMS should be flexible and offer an adaptable and creative in its CBI to improve the online learning experience. (Chung, Pasquini & Koh, 2013)

2.6 LEARNINGZONE UUM

Nowadays, many institutions of higher learning in Malaysia implement LMS to support their learning program. Open University Malaysia (OUM) for example has develop MyLMS since 2003 to support various e-learning activities (S.M.Kung et al, 2012). The e-learning or develop of LMS at UUM started in 2000, local IT company and UUM are joint to develop the LMS. It comprises of twelve modules that provides UUM’s academic community with arrays of innovative strategies and activities to enhance the conventional face to face instruction. (Ahmad et al, 2009).

The LMS known as Learning zone has various functionalities that support lecturers, students and administrators. Through Learning zone lecturers can setup an interactive course content, notes, create blog, forum, online quiz, assignment and etc. (S.M.Kung et al, 2012).

2.6.1 COMMUNICATION FEATURE IN LEARNINGZONE UUM

According to official Website of Computer center UUM

Chat module
- The Chat module enables participants to have real-time synchronous discussion via the web
- Participants can send a sound to other participants by clicking the beep link next their name.
- A chat time can be chosen and set to repeat at the same time each day or each week.

Forum module
- In the forum, user can start discussion add replies and attach files to their posts.

Web Meeting module
- The Web Meeting module lets you start Virtual Meet, a web conferencing classroom sessions directly from within Learning zone.
- Lecturers can schedule the web meeting in the future and the students will be acknowledged when the meeting is about to start.

3.0 METHODOLOGY

The respondent of this study was 50 lecturers form the School of Technology and Logistics UUM, They were asked to answer questionnaire to indicate their utilization learningzone UUM as communication medium and impact on their satisfaction. A total 47
questionnaires were returned only. The response rate was 94%. A descriptive analysis was performed using SPSS software.

4.0 FINDINGS

Figure 2: Percentage of level satisfaction

The figure show that most of the lecturer are not satisfied of learningzone UUM as a communication medium which is 48.94% (23) of 47 lecturers and 10.64% (5) is very unsatisfied. However, which are 21.28% (10) is satisfied, 19.15% (9) is very satisfied.

Table 1: Frequency of communication tools in learningzone UUM usage

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<thead>
<tr>
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<th>never</th>
<th>sometimes</th>
<th>often</th>
<th>very often</th>
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<tbody>
<tr>
<td>%</td>
<td>chat</td>
<td>29.8</td>
<td>40.4</td>
<td>19.1</td>
</tr>
<tr>
<td>forum</td>
<td>25.5</td>
<td>46.8</td>
<td>17.0</td>
<td>10.6</td>
</tr>
<tr>
<td>web</td>
<td>59.6</td>
<td>25.5</td>
<td>6.4</td>
<td>8.5</td>
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5.0 DISCUSSION

Most of the lecturer of the lecturer are not satisfied learningzone UUM as a communication medium. Most of the lecturer are using existing online communication tools such as facebook, twitter, blendspace and padlet wall as a communication medium and announcement throught these online application. In electronic learning time now, using ICT to communicate is one of the online learning tools and one of important criteria or tools. The finding shows that lecturers are less satisfied with communication tools in learningzone. Therefore, the online communication features and facility of learningzone to be studied and improved.

The findings also show the rate of the utilization of communication module in learningzone. The rate of the never and sometimes utilize the three module more than 50% of the usage rate. It is show that in the design consideration of the communication module in the learningzone UUM have to improve. UUM have to improve and get the opinion from the professional academician or take existing online application as a reference to make improvement and changing of the features and function of the communication tools.

6.0 CONCLUSION

This research is essential to identify the level of satisfaction among university lecturer to learningzone UUM as a communication medium. The importance of the online communication medium, it allows lecturer to communicate, discussion and interaction with students community and remove the wall of the classroom for lecturer as well as trainers through LMS.

LMS serve as one stop center for lecturer to obtain a large number of resource online whenever they want and increases efficiency by saving time and convenience.
7.0 REFERENCES


