DECLARATION

I certify that this thesis and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline

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APPROVAL

HELP DESK SYSTEM IN I-LEARN PORTAL
AN ENHANCEMENT

BY

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This thesis was prepared under the supervised of thesis coordinator, Puan Rogayah Abdul Majid and it has be approved by the supervisor, Cik Sofianita Bt Mutalib. It was submitted to the Faculty of Information Technology and Quantitative Science and was accepted in partial fulfillment of the requirement for the degree of Bachelor of Science.

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ABSTRACT

New information and communication technologies (ICT) allow learning "far away" from the teaching source. Nowadays e-Learning is a new learning methods growing significantly with the development of Information Technology. E-Learning is first and foremost about learning. The definition of e-Learning is very broad and generally refers to 'learning in a way that uses information and communication technologies'. The term e-learning is most frequently used to refer to computer-based training which incorporates technologies that support interactivity beyond that which would be provided by a single computer. I-Learn Portal is a new vision and approach implemented by UiTM that uses a range of learning technologies and media to integrate e-learning into its courses. E-learning on i-learn Portal, therefore, is an approach to facilitate and enhance learning thru, and based on, both computer and communications technology. It is believed that the real importance and significance in e-learning lies in its potential (Posiah Mohd Isa, 2005). To survive in the highlights competitive advantage, it is apparent that UiTM needs to provide user with the high quality services. The objective of this research is to identify the problem students face while using I-Learn and to enhance features of online help desk system in I-Learn Portal. Data is collected through the questionnaires and web observation. The web observation was considered of E-Learning institution web that affords help desk system services. Respondents was selected based on three criteria that were, they must UiTM student, user of I-Learn Portal and know the existence of help desk system. Through the analysis that has been done regards to the features, it shows that help desk in the I-Learn Portal still need to improve its features. The data that had been collected were analyzed by using SPSS Version 12.0 and Microsoft Office Excel.

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INTRODUCTION

1.1   Introduction

As the world moving towards new century, the development of information and communication technology (ICT) allows learning "far away" from teaching source. Online learning, also known as e-learning will ultimately become the new training paradigm, taking its place alongside traditional contact situation training and changing the face of training generally. A number of trends, which include technological developments and the growth of the Internet, have accelerated the move to e-learning in educational institutions and the corporate world by (Dagada, 2004). The impacts from the changing of new learning method have given a significant contribution to the world of education.

Online learning offers a variety of possibilities in terms of training, ranging from highly complicated flight simulation to basic drill and practice, from video conferencing to tutor support across and electronic e-mail (e-mail) link, and learning over the information superhighway using a stand-alone personal computer. E-learning, therefore, is an approach to facilitate and enhance learning thru, and based on, both computer and communications technology. Such devices can include personal computers, CDROMs, Digital Television, P.D.A.s and Mobile Phones. Communications technology enables the use of the Internet, email, discussion forums, collaborative software and team learning systems.

To college community, e-learning represents a real opportunity to create learning experiences that can provide the right learning at the right time and in the right place for every individual, not just at work, but in schools, universities and even at home. A significant benefit of online learning is that it allows learners and teachers access to

learning material at their convenience. Academic people already realize about this fact and in certain country the development and adaptation to e-learning have been taken at early time. Students and university staffs could see how the vision of e-learning can increase their efficiency of learning process to a satisfy level.

In Malaysia the progression of e-learning development in certain university and college are still in early stages. Only a few of them have already fully adopted it. The Open University Malaysia is one of the academic institutions in Malaysia that have become and early apprentice to this technology. According to its President (Anuwar Ali, 2005) as academic people face numerous challenges during the formative years, they will continue to strive to be an excellent Open and Distance Learning provider in the country, where the University employs a variety of approaches in the teaching-learning process, especially designed to meet the needs of the ever-changing borderless world.

University Technology Mara (UiTM) sees the potential of e-learning and for that reason it takes the effort to implement a specialized portal for e-learning also known as i-Learn Portal early 2005. The mission of UiTM is determined to grow alongside the ICT and MISC technology. The i-Learn Portal that already been developed was targeted to support a traditional lecture-based educational process in this university. It supported a lecturer in structuring a Web course as a sequence of learning units. With due importance, this research is made particularly to find out the perception of UiTM lecturers towards the implementation of i-Learn portal in learning.

1.2   Background of the research

For this time being, to diversified system and expanded services in I-Learn portal, UiTM has established its own help desk system to support their user. The help desk system has become the 'hub' of support with many of user services centered on it. The help desk directs the communication between the services and end users, and unifies the support to the users. So, help desk system with enhancement of features was need in I-Learn Portal.

The outline of this study is to emphasis on problem student face while using I-Learn portal and to enhance help desk system in I-Learn Portal. The enhancement of help desk system will be based on the other E-Learning system.

The portal is the first version of e-learning system for UiTM, and students can access or use the portal. No study or researches have been made to identify the problem students' face and the suitable features for of helpdesk system in I-Learn portal. By using the TTF (Task Technology Fit), it will guide thru the whole process in the research study. The Task Technology Task (TTF) Perspective:

- Fitness for the use of a technology
- The ability to support task
- The matching of the capabilities of the technology to the demands of the task in the context of differing individual abilities

1.3   Problem Statement

Since I-Learn Portal still in early stage, the studies of it help desk system with suitable features in not yet been done because it still new area. Not all students are exposed to the I-Learn Portal and most often, they are still hesitating to use the E-Learning due to the problems associated with the usage and etc. Moreover, I-Learn require a level of computer literacy compare to the traditional learning. Most students are still lack of knowledge and skill to use it. Most of the students also still not aware the important of Help Desk System in I-Learn Portal that actually will lead to the success factors of E-Learning.

The research problem, which is also are issues to this study, is to identify the problem student face while using I-Learn Portal and the enhance features for help desk system. To this date, I-Learn Portal help desk can be accessed by UiTM students, if they have any queries regarding to the usage of I-Learn portal. They can used helpdesk to submit their ticket for any queries. Current help desk in I-Learn portal offered the features that can be enhance by identify the type of problem user face first. All the information

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related to the problem will be the features in implementing knowledge based for help desk system with other features gained from web observation. Lack the knowledge about help desk system among users is one of the problems. So, the enhancement with additional features in helpdesk is needed.

1.4 Objective of the Research

(Campbell, 2001) state that in order to understanding the impact of e-teaching and e-education is seen as fundamental to moving us forward so we can make greater use of the opportunities provided by the internet. Underpinning this overall aim, the specific objectives of the research were to:

- To identify the problem user face while using I-Learn portal
- To enhance the features of help desk system in I-Learn portal

1.5 Scope of the Research

This research will focus on the UiTM Shah Alam students that are user of I-Learn portal and have used help desk system. Students were selected from faculties Faculty of Applied Science, Faculty of Pharmacy and Faculty of Information Technology & Quantities Sciences. Questionnaires will be distributed to these students to discover their problem and expected features for help desk system.

1.6 Research Questions

1. What kind of queries user have while using I-Learn portal?
2. What are the features need to be enhance I-Learn portal help desk?

1.7   Significance of the Research

This research will identify the problem user face and enhance features for the current help desk in I-Learn Portal. This research is important for the user of I-Learn Portal especially UiTM Shah Alam students that focus to the usage of help desk system. The result of this research will be beneficial and useful to several parties include:

1.7.1   Important to developers

From the information, the developers can get more idea and would be able to increase their efforts to enhance the help desk features in I-Learn portal. Developers can increase their efforts to comply with design suitable for help desk to make it a complete support services system that can help towards implementation of E-Learning. This can improve the development of help desk system in I-Learn portal. It also helps developers to determine important elements, features and variable to make I-Learn Portal help desk more interactive and usable for all users.

1.7.2   Important to students

This research provides valuable information that can be used by UiTM students. The students can benefits from this research where it will give them the best quality of help desk on what can be expected from support service through I-Learn portal. This can attract their interest towards the usage of help desk as the choice to solve their queries regarding to the usage of I-Learn portal.

1.8   Research Approach and Methodology

Towards the whole process in this study, primary and secondary data will be use. This study employed a field survey using questionnaire to empirically test the research

hypotheses. The students who become the survey respondents will be asked a series of questions to gauge their use of e-learning technologies and help desk system on I-Learn Portal. Task Technology Fit (TTF) will be a referred in order to make a survey on the help desk in I-Learn Portal. Students whose use the I-Learn Portal was the test subjects for this study. Questionnaire will be distributed to these students and all the feedback will give significant statistics analysis on the problem face and enhance features need. Article, books, magazine, newspapers cutting, journal and other internet-based article relate with the e-learning and help desk will be the main focus on resource for literature review.

1.9 Overview of the Research

The research framework or methodology will plan and organized the study within chapter boundary. There will be five chapters in this report consistence with the main objective as been stated above and discuss more about the topic.

Chapter 1: In this chapter, there will be an introduction and explanations on the whole background of the case study. It will cover up from most important aspect of the topic chosen where it will fully explain by the motive and objective of research, problems arises, scope of research, approach, limitations and significant of the research.

Chapter 2: Throughout this chapter it will explain more in detail about e-learning and help desk system. This chapter will discuss the analyzed related reading material through its definition and current or past experiences.

Chapter 3: This chapter will discuss in detail about the research methodology applied in this study. Various approaches to gathered information will be use such as research model, hypothesis, data collection and questionnaire design.

Chapter 4: The outcome of the research survey will be presents in descriptive and statistical data. All the data information will be input to be process to produce an output in the form of report, graph, table and so on.

Chapter 5: This chapter will focus on the conclusions and recommendation based on the analysis and findings that have been made throughout the study and how it contributes to e-learning development in future.

1.10 Limitations of the Study

1.10.1 Time constraint

Researcher has less concentration over this research because at the same time taking other subject as programme requirement. Researcher needs to do two things at the same time and it gives a bit difficulty to adjust and fit with time available. In order to obtain accurate and reliable data, plenty of time needed for analyzes thoroughly the data captured. Most of the time spends to collect and analysis data. To allocate the appropriate Help Desk System to analyze is very time consuming and need extra efforts.

1.10.2 Lack cooperation

During conducting this study, there was lack cooperation from the respondents. They don't' give a great cooperation in getting data. But some of them will cooperate and give feedback to the questionnaire.

1.10.3 Lack of resource

This research requires high cost in term of photocopy, Internet bills, plain paper, printer ink and the use of electricity that can be done according to my ability.

1.10.4 Budgets

Since the budget of this research is not sponsored, the researcher needs to use own pocket money to complete the research. The researcher also needs to spend time at cyber café to gather data.

1.10.4 Difficulty in locating

Difficult to retrieve information from internet. At the designing phase, researcher could not find the information needed. Fortunately, researcher finally initiates the website that included information needed.

1.11   Summary

This chapter views the whole important aspect and elements that give identity to the study. By identifying the real meaning of e-learning and the brief information about I-Learn Portal and help desk, it will give more understanding on what the purpose and objective of why this study to be conduct and the importantly. Here all the background of the research will be view in more detail way.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter will review the literatures related with the study include of pertinent terminology and the description ongoing research. All these information might be useful to give better understanding about the research.

2.2 E-Learning

2.2.1 Definition

According to the Hagen & Quilter (2002), e-Learning was the delivery of teaching material electronically with the added value of the maintaining standards and quality across the board without the limitation of a specific location. It was interactive and involved the use of multimedia. Multimedia included more than one form of media such as graphics, animation, audio, video and video conferencing. Interactive (interactive learning) was term that means a computer was used in the delivery of learning materials in the context of education and training. In an interactive learning environment, a person can navigate through it, select relevant information, and respond to questions using input devices such as keyboard, mouse, touch screen, or voice command system, completed tasks, communicate with others and received assessment feedback.

As opposed to the computer-based training of the 1980s, the term e-learning refers to computer-enhanced training. E-learning is usually delivered via a personal computer. It includes learning delivered by other communications technologies. Methods used include online lectures, tutorials, performance

support systems, simulations, job aids, games, and more. Effective e-learning is often a blend of methods. E-learning, therefore, is an approach to facilitate and enhance learning through both computer and communications technology. Such devices can include personal computers, CD ROMs, Television, PDAs, MP3 Players, and Mobile Phones. Communications technology enables the use of the Internet, email, discussion forums, collaborative software, classroom management software and team learning systems.

Peters (1992) also agreed that E-learning be used to suit distance learning through the use of WANs (Wide Area Networks), and may also be considered to be a form of flexible learning where just-in-time learning is possible. Courses can be tailored to specific needs and asynchronous learning is possible.

Some view e-learning as a means to effective or efficient etc. learning, due to its ease of access and the pace being determined by the learner. Others point out that e-learning software developers tend to limit their focus on course delivery and content, while online education institutions require a much wider range of educational services.

Online learning descends from computer-based training, interactive multimedia (dating from laser discs and more recently, CDs with online learning) and integrated learning centers. With the internet boom since the mid 1990s, the concept of online learning has spread broadly. Online learning can be thought of as a subset of the broader e-learning category because it refers specifically to content delivered via the Internet or Intranet. As the number of students taking online classes continues to grow at a quick pace, the good features of help desk system was needed to solve any problem exist.

The internet has dramatically changed the efficiency of information dissemination and human communication. Advances in ICT over the last two decades have placed schools and colleges in a unique position to take advantage

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of new learning opportunities. Coopers (2004) stated that e-learning defined as the exploitation of interactive technologies and communication system to improve the learning experience in principle, reach into every part of the educational experience both in the classroom and increasingly outside the normal learning environment.

There is and increased recognition of the effectiveness of skills and know-how acquisition through information and training delivered to the desktop. Clearly, e-learning has become one of the most popular solutions to meet this need. While e-learning enthusiasts extol its lower costs, broader accessibility and personalization potential, e-learning also has experienced slow user adoption and high dropout rates in many organizations by (Shilwant & Haggarty, 2005).

"It is no longer a question of whether or not we will implement e-learning in our schools, but whether we will do it well". Campbell (2001).

2.2.2 Adaptation of e-Learning

To understand the social realities and experiences of online faculty members, it is a need to recognize the interplay of factors, including prevailing attitudes among faculty and administrators about online education, and the current and historical climate and philosophy about distance education on e-learning.

Streaming e-Learning systems have become widely available lately. Web-based streaming media, due to its low production cost, are generally the most popular way of providing e-learning services by (Liu, Liao & Peng, 2005). The internet enables receiving, updating and processing of information immediately worldwide. E-learning has played an important role in realizing, broadcasting and deploying the new technology and engineering through the internet. Most colleges and universities worldwide currently already offer Internet-based coursework. With a PC connected to the web, e-learning allows students to attend any courses from anywhere at any time. The continuous growth of the e-

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learning market has drawn much discussion about the user's acceptance of various e-learning methods.

2.3 Help Desk System

2.3.1 Definition

Regarding to the usage of E-Learning, there is several problem that will faced by the user of the system. The problems that face by the user in term of using help desk are differenced. So, the good features and performance of help desk is need as the center to help user solve their problem.

A help desk is a system designed to help and support user of E-Learning. The help desk system provides information and helps solve questions that relate to the portal. In today's world, many help desks are web-based (www.kemma.com). Users can go to the help desk and find answers to a particular question or problem about E-Learning. Help desk should help to manage and track requests using the most efficient methods. The results of implementing a help desk should higher user satisfaction and productivity.

A helpdesk solution is becoming a necessary part of E-Learning. Whether with a simple helpdesk, it should support users. The help desk will ensure the effectiveness of the E-Learning and ensure smooth used of it.

Help desk system are now a fundamental and core part of good service and operation. However, addressing the tricky issues and managing the help desk correctly can actually be a very daunting task. It is essential as a central point through which problems or issues are reported and subsequently managed and coordinated. From a general or wider perspective, it is an integral part of services function, responsible to bringing resources together to address a problem or other

issues. Regarding to the usage of help desk, users can making the function of I-Learn portal smooth running with the high quality of support offered to users.

Help desk serve as the central hub for technological support, receiving, and distributing information with strong help desk will adds values and serves time. Minimizing the repeat request allows help desk staff/ administrator to reduce repetitiveness which can lead to burn out (Pair and Boyle / 2005).

Patrick and Gurgan (1993) also described that online help systems can bridge the gap between the user's need for simplicity and the software's complexity, by providing relevant information within the very specific context of a user's lack of adeptness at a particular task or lack of familiarity with a particular concept. According to Cruess (2002) educational institutions face the challenge of providing technical support to users for diversified systems and expanded services. Help desk has become the hub of support with the user services centered on it. The help desk directs the communication between services and unifies the support to users. Marcella and Middleton (1996) also stated that help desk system was an accessible service point which will provide on-demand advice, information or action to aid the user in carrying out an IT-related task. While Blaisdell (1995) described that the purpose of a help desk is in fact "to prevent support calls."

Borkowski et al., (2004) also agree that help desk service is the provision of a telephone and/or walk-up service desk, where users ask questions about their computing environment and report issues. A Help Desk is staffed during the entirety of its business hours, providing a reliable point of contact for users' requests.

2.3.2 Features

Build the best features of helpdesk is important. Knowing how well help desk works best for the system is important to. Keep in mind several things when

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