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"I/We hereby declare that I/We had read through this thesis and in my/our opinion that this thesis is adequate in terms of scope and quality which fulfill the requirements for the award of Bachelor Degree of Technology Management (Technology Innovation)"

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THE PERCEPTION ON MOODLE LEARNING SYSTEM AS PLATFORM FOR STUDENTS IN EDUCATION SYSTEM AT UNIVERSITI TEKNIKAL MALAYSIA MELAKA (UTeM)

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DECLARATION

"I hereby declare that the work of this exercise is mine except for the quotations and summarize that have been duly acknowledge"

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Date :…….

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DEDICATION

To my beloved parents and siblings, thank you for raising me and support me until now. A special thanks to my supervisor, panels and my friends for helping me throughout the project towards accomplishing my thesis.

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ABSTRACT

New e-learning system technologies and services enable activities that allow users to be active learners, actively participating in the on-line learning process. When an e-learning system with new technologies and services is presented, it needs to be adopted by its users. The acceptance and use of an e-learning system can be influenced by different factors. The aims are to identify the factor for learning by using Moodle for student at UTeM, investigate the factors that affecting student perception using Moodle and to analyze the relationship between factors that describes the Moodle from UTeM student perceptions. To meet objectives, the theoretical framework has been developed. The method will be used during survey is by using questionnaires which is a total of 370 questionnaires were coded and the scope of the survey is respondents where located at UTeM which is to collect the quantitative data for analysis. The data will be analyzed with statistical techniques. The results of the analysis have revealed the most factors that contribute to the actual use of Moodle which is behavioral intentions and followed by factors of satisfaction, perceived ease of use, and perceived usefulness toward using Moodle. This research examines the perception on Moodle Learning System as a platform for student in Education System at Universiti Teknikal Malaysia Melaka (UTeM).

Keywords : MOODLE Learning System, UTeM, student perception, Technology Acceptance Model, Perceived Ease of Use, Perceived Usefulness, Satisfaction.

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ABSTRAK

Teknologi dan perkhidmatan sistem e-pembelajaran baru membolehkan aktiviti yang membolehkan pengguna menjadi pelajar aktif, secara aktif mengambil bahagian dalam proses pembelajaran dalam talian. Apabila sistem e-pembelajaran dengan teknologi dan perkhidmatan baru dibentangkan, ia perlu diguna pakai oleh penggunanya. Penerimaan dan penggunaan sistem e-pembelajaran boleh dipengaruhi oleh faktor-faktor yang berbeza. Tujuannya adalah untuk mengenal pasti faktor pembelajaran dengan menggunakan Moodle untuk pelajar di UTeM, menyiasat faktor-faktor yang mempengaruhi persepsi pelajar menggunakan Moodle dan menganalisis hubungan antara faktor-faktor yang menggambarkan Moodle dari persepsi pelajar UTeM. Untuk mencapai matlamat, rangka kerja teori telah dibangunkan. Kaedah yang akan digunakan semasa tinjauan adalah dengan menggunakan soal selidik yang terdiri daripada 370 soal selidik yang dikodkan dan skop kajian adalah responden yang terletak di UTeM yang mengumpul data kuantitatif untuk analisis. Data akan dianalisis dengan teknik statistik. Hasil analisis telah mendedahkan faktor-faktor yang paling menyumbang kepada penggunaan sebenar Moodle yang merupakan niat tingkah laku dan diikuti oleh faktor-faktor kepuasan, kemudahan penggunaan yang mudah, dan kegunaan yang dilihat terhadap penggunaan Moodle. Kajian ini meneliti persepsi tentang Sistem Pembelajaran Moodle sebagai platform untuk pelajar dalam Sistem Pendidikan di Universiti Teknikal Malaysia Melaka (UTeM).

Kata kunci: Sistem Pembelajaran MOODLE*, UTeM, persepsi pelajar,* Technology Acceptance Model (TAM), Perceived Ease of Use (PEOU), Perceived Usefulness (PU).

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LIST OF ABBREVIATIONS

MOODLE	=	Modular Object Oriented Dynamic Learning Environment
MOHE	=	Ministry Of Higher Education
MQA	=	Malaysian Qualifications Agency
ICT	=	Information Communication Technology
NKEA	=	National Key Economic Area
LMS	=	Learning Management System
SCORM	=	Shareable Content Object Reference Model
TAM	=	Technology Acceptance Model
PU	=	Perceived Usefulness
PEOU	=	Perceived Ease of Use
BI	=	Behavioral Intention
SPSS	=	Statistical Package for Social Sciences

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LIST OF SYMBOLS

%	=	Percent
<	=	Greater-than
>	=	Less-than
=	=	Equals
β	=	Beta
R^2	=	R Square

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CHAPTER 1

INTRODUCTION

1.1 Background of Study

This chapter consists about the background of study, problem statement, research objective and question, scope, limitation and key assumptions of study, and summarization of this chapter. Besides, there are important researches to cover in this chapter. This research will conduct to identify the factor that affect the perception on Moodle Learning System as a platform in education system. Over recent years, e- learning platform has become highly sophisticated, their potential as an effective way for improving the learning process. According to Martin & Serrano, 2009; Romero et al., 2008), Moodle is one of the e-learning platform that is free even though there are exist some e-learning platform that require paying for access the software. An open-source software also can be considered as Moodle (De Pablos, Lopez, & Santos, 2010).

Recent technological advances towards new alternative style of learning in education have moved to begin in innovative modes of teaching and learning (Benkovic & Dobrota, 2012; Hannafin, Hill & Land, 1997). As mentioned in Jones et al. (2010) and Kubiatko (2013), there are different ways of thinking and functioning in young generation nowadays compare to the previous. Thus, e-learning platform

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of (Moodle) is one of the applications of technology to education and learning management system. In addition, this will create a better environment such as collaborative learning, that requiring more discussion and students interaction. Since, the innovation of technology were invented time by time, it will be much more convenient in delivering lessons and process learning of students.

A half way long ago, it has improved the teaching and learning experiences with digital media which have become commonplace with university students and lecturers. Beside the huge of internet information, it is assured that teaching resources able to use as web-based applications. These applications usually are called as e-learning platform. In Malaysia, there are some universities have shown a better interest in e-learning tools (Moodle). This is because the universities want to establish Malaysian national e- learning centre as a central support for sharable content creation and best practices, particularly in the platform of Moodle learning system.

In recent economy, there is an increasing pressure to cut costs which had faced by educational institutions and e-learning platforms with the provided with customer able to satisfy their learning goals (Cukusic, Alfirevic, Grani, & Garaca, 2011). There is also serve in a long journey of learning as well to enhance e-learning uses for technology that especially to those who unable have convenience in access to old style education cause by their environment of social-economic and geographical location (EU e-learning programmed, 2004-2006; Gulati, 2008).

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1.2 Problem Statement

In last few years, there is an increasing of the use of e-learning platform (Moodle) and become offered by most education institutions for the system. Currently, e-learning is the common term used to describe the various uses of information and communications technologies. It is to enhance learning and teaching by using new technique and strategies. E-learning is also uniting term used to define the fields of online learning and teaching, technology delivered instruction, and web-based training and management.

Research studies (Demiray, 2011; EIU, 2008; Sife, Lwoga & Sanga, 2007) have highlighted the vital of e-learning and e-learning tools for enhance learning and teaching in educational institution. Even though the application of e-learning at universities has increased rapidly and our university use Moodle platform little is known about students‟ perceptions and experiences. Until now, research is more focused on students‟ experiences with specific aspects of e-learning courses. As for examples is the interaction with an instructor, learning with a specific learning management system, or certain characteristics of a course.

According to (Martin-Blas and Serrano-Fernandez, 2009), Moodle is functions as coursework that used in learning process, that built more activities with attractiveness thus exist friendlier in learning process and increase interesting for their students. Additionally, it is easy and convenience for create the learning teaching process to be more optimised and effective but also flexible learning environment. However, there are some difficulties in the use of Moodle due to lack of abilities, knowledge and skills for use of it, which can be disregard and ignore the result (Paragia, Paragin, Jipa, Savu, & Dumitrescu, 2011).

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As stated by Despotovic-Zrakic, Markovic, Bogdanovic, Barac, and Krco (2012) , they showed an appropriate through method of development in which the form of adapting of courses of Moodle. The problem associated with e-learning platform (Moodle) is the program itself which is less effective regarding to the usability issue (Minovic, Stavljanin, Milivanovic & Starcevic, 2010). Due to this, the studied identify what factors and how do the Moodle environment effect learning performances. Also, figure out what are the relationships between factors that describe the Moodle tools from student perceptions.

1.3 Research Objectives:

Research objective is referring to the intent of our structure the research process to answer the question. Furthermore, the objectives should relate with the questions because at the end of the research it will affect the results. Research topic and research problems are used to design the research thoroughly. The objectives of the study are consists of:

1) To identify the factors for learning by using Moodle among UTeM students.
2) To investigate the factors that affecting the use of Moodle learning system among UTeM students.
3) To analyze the relationships between factors that describes the Moodle tools from UTeM student perceptions.

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1.4 Research Questions:

A research question is an answerable inquiry into a specific issue. This research begins with identifying the effective way for learning by using Moodle of UTeM students. The main purpose of this research is to investigate the factors that affecting student perception of using e-learning platform (Moodle).

1) What are factors that affect the learning by using Moodle among UTeM student?
2) What are the factors affect student perception of using Moodle learning system?
3) What are the relationships between factors that describe the Moodle tools from UTeM student perceptions?

1.5 Scope, Limitations, and Key Assumptions of the Study

The research model is developed to investigate the related question through questionnaire outline in previous section. This research only focuses on the student in UTeM. The research implements include a combination of questionnaires and surveys will be used for further validation. The result of study will focus on the factors of effective way for learning by using e-learning platform (Moodle) and how the factors affecting student perception. The data collection was from real time to support the research. The results of the research were used for further validation.

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The limitation of the research is the limited number of activities in accessing for the perceptions on ease of use, usability and satisfaction of the participants. In this study, there are different participant on the perceptions of student were assessed that revealed a limited number of activities who executed via the Moodle learning system. In addition, the limitation is more on people factors. Where there is a lack of accuracy in answering questionnaires as the researcher assumes that they will provide honest answer. The key assumptions of this research are all the respondents are willing to help the researcher to complete the research, as they know about the research topic and willing to give relevant answers on the questionnaires and give any suggestions. Hence, the research is practicable and the tabulation will be very usable in the future.

1.6 Importance of Study

E-learning platform of Moodle is one of learning management system that included with features such as assignment, exam, and material sharing among students and instructors. Nowadays, in knowledge globalisation, online learning is important learning model and become a fundamental tool to gain competitive edge for universities and other educational centres. Furthermore, the use of technology is getting higher as educational system use computer or device in the way of learning. Conceptually, e- learning also can be defined the way of learning such as online training, virtual learning, online courses, virtual campus, and distance learning. This will refer as learning method based on electronic media. Hence, all these alternative of study will affect the perception on student by using e-learning platform especially on Moodle learning system. Therefore, the researcher comes out with one solution in order to reach the better way of learning for student.

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