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NAME : AMANINA BINTI SAFFI

MATRIC NO : B061410108

COURSE : 4BTMI

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SUPERVISOR : DR. NURULIZWA BINTI ABDUL RASHID

PANEL : MR. ALBERT FEISAL @ MUHD FEISAL BIN ISMAIL

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AMANINA BINTI SAFFI

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AMANINA BINTI SAFFI

This thesis is submitted in partial fulfillment of the requirements for Bachelor Degree of Technology Management (Technology Innovation)

Faculty of Technology Management and Technoprenuership
Universiti Teknikal Malaysia Melaka (UTeM)

APPROVAL

I/ We hereby declare that I/ we have read this dissertation/report and in my opinion, this dissertation/report is sufficient in terms of scope and quality as a partial fulfillment the requirements for the award of Bachelor of Technology Management

(Technology Innovation)

SIGNATURE :

NAME OF SUPERVISOR : DR. NURULIZWA BINTI ABDUL RASHID

DATE :

SIGNATURE :

NAME OF PANEL : MR. ALBERT FEISAL @ MUHD FEISAL BIN

ISMAIL

DATE :

DECLARATION

I hereby declared that this thesis entitled

"MEASURING USER'S ADOPTION OF MOOCS FROM THE PERSPECTIVE OF THE INSTITUTIONAL THEORY"

is the result of my own research except as cited in the references. The thesis has not been accepted for any degree and is not concurrently submitted in the candidature of any other degree.

SIGNATURE:

NAME : AMANINA BINTI SAFFI

DATE :

DEDICATION

I would like to appreciate the dedication to my beloved family who educated and motivated me to learn until this level, the lecturers and friends who give me moral support and also advice throughout the research. Without their blessing and encouragement, this research cannot be complete within short period of time.

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ABSTRACT

Massive Open Online Courses (MOOCs) is one of the education learning platforms that have been introduced in order to increase the technology use in the education learning system nowadays. A few years ago, MOOCs has been included in the national agenda in the institutions as it is addressed in the 11th Malaysian Plan (2016-2020), the National Economic Model, Economic Transformation Program and also includes in the Malaysian Education Blueprint which is expected for higher education. However, there is a little research about the adoption of MOOCs platform in the learning education system which is to measure the user's adoption of MOOCs from the perspective of the Institutional Theory. This proposed theory is the extension form the Technology Acceptance Model (TAM) with three factors from institutional theory includes Coercive Pressures, Normative Pressures and Mimetic Pressures. This research study will be focus at all faculties in Universiti Teknikal Malaysia Melaka (UTeM). This research found out the user's adoption of MOOCs as a technology education learning platform. Besides, this research also includes a several research method such as descriptive research design with quantitative method, survey questionnaire and also operationalization of construct measurement which is Seven-point Likert scale to confirm the conceptual framework. The survey questionnaire data was collected from 159 respondents which is will be analyses using Statistical Package for the Social Science (SPSS 23.0). Thus, the results of this research can contribute to the adoption of MOOCs among UTeM undergraduate students who apply with this education learning platform.

Keyword – Massive Open Online Courses (MOOC), MOOC platform, Institutional Theory, education learning system

ABSTRAK

Kursus Online Terbuka secara besar-besaran (MOOCs) adalah salah satu platform pembelajaran pendidikan yang telah diperkenalkan untuk meningkatkan penggunaan teknologi dalam sistem pembelajaran pendidikan pada masa kini. Beberapa tahun yang lalu, MOOCs telah dimasukkan dalam agenda nasional di institusi-institusi seperti yang ditangani dalam Rancangan Malaysia Ke-11 (2016-2020), Model Ekonomi Negara, Program Transformasi Ekonomi dan juga termasuk dalam Rangka Tindakan Pendidikan Malaysia yang dijangka untuk pendidikan tinggi. Walau bagaimanapun, terdapat sedikit kajian tentang penggunaan platform MOOCs dalam sistem pendidikan pembelajaran yang mengukur penerimaan pengguna MOOCs dari perspektif Teori Institusi. Teori yang dicadangkan ini adalah pelanjutan bentuk Model Penerimaan Teknologi (TAM) dengan tiga faktor dari teori institusi termasuk Tekanan Berkuasa, Tekanan Normatif dan Tekanan Mimetik. Kajian penyelidikan ini akan memberi tumpuan kepada semua fakulti di Universiti Teknikal Malaysia Melaka (UTeM). Kajian ini mendapati penerapan pengguna MOOC sebagai platform pembelajaran pendidikan teknologi. Selain itu, kajian ini juga merangkumi beberapa kaedah penyelidikan seperti reka bentuk penyelidikan deskriptif dengan kaedah kuantitatif, soal selidik kaji selidik dan juga pengoperasian pengukuran konstruk yang merupakan skala Likert Tujuh titik untuk mengesahkan rangka kerja berkonsep. Data soal selidik kaji selidik telah diambil dari 159 responden yang akan dianalisis menggunakan Pakej Statistik untuk Sains Sosial (SPSS 15.0). Oleh itu, hasil penyelidikan ini dapat menyumbang kepada penggunaan MOOCs di kalangan mahasiswa siswazah UTeM yang memohon dengan platform pembelajaran pendidikan ini.

Kata Kunci - Kursus Terbuka Secara Besar-besaran (MOOC), platform MOOC, Teori Institusi, sistem pembelajaran pendidikan

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LIST OF ABBREVIATIONS

ABBREVIATION

MEANING

 H_0 Null hypothesis

ANOVA Analysis of Variance

UTAUT Unified Theory of Acceptance and Use of Technology

MOOC Massive Open Online Courses

E-Learning Electronic learning

PSTP Pusat Sumber Teknologi Pengajaran

PSPTN Pelan Strategik Pendidikan Tinggi Negara

MOHE Ministry of Higher Education

BI**Behavioural Intention**

UTeM Universiti Teknikal Malaysia Melaka

UTM Universiti Teknologi Malaysia **FKM** Fakulti Kejuruteraan Mekanikal **FTK**

Fakulti Teknologi Kejuruteraan

FPTT Fakulti Pengurusan Teknologi & Teknousahawan

PBPI Pusat Bahasa & Pembangunan Insan

PU Perceived Usefulness PEU Perceived Ease of Use CP Coercive Pressures NP Normative Pressures MP Mimetic Pressures

MRA Multiple Regression Analysis

SPSS Statistical Package Social Science

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CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter includes several parts of the study which the first part is research background that the researcher gives a general review about the user's adoption of MOOCs from the perspective of Institutional Theory. The second part is the problem statement which is the researcher gives ideas in order to solve the problem that occurred related to the topic. Next is the research objectives which is a research question is an answerable inquiry into a specific issue. The next part of the study is the research objectives. A research objective is 'how' we intend to structure the process to answer the research question as it affects the results at the end of this research. The scope of the study is also one of the parts of this research and it continued with the significance of the study that gives some reasons about why open learning such as MOOCs have been implemented to the students nowadays. Lastly, the last part of this chapter is the research will conclude with the summary of this chapter.

1.2 Research Background

A research background is one of the preliminary steps to completing a study includes a review of the area that being researched, current information surrounding the issue, previous studies and also the relevant history that related to the topic. In this research, the researcher explains about why users especially university students use elearning such as Massive Open Online Courses (MOOCs) as one of their media in order to learn, getting knowledge and enhance their skill. Besides, the researcher also explains the user's adoption of MOOCs from the perspective of Institutional Theory. Institutional theory is considered general social concept includes appropriate structures, beliefs, attitudes, and behaviors that ordered rules and behaviors in modern society rationally.

Over the past few years, MOOCs, as a new platform of e-learning forms has attracted numerous people users all over the world to be involved in it. As this education platform is unlimited to time and space, MOOCs provides people an opportunity to obtain the best educational resources and learning experiences. Therefore, according to Pappano (2012), the year 2012 is referred to as "the year of MOOC". Another reason why MOOCs is widespread all over the world because it is free for everyone excludes for an optionally paid signature certification people that do not need to pay any fee to take a course.

In Malaysia, there are some universities have shown a great interest in MOOCs such as Universiti Teknikal Malaysia Melaka (UTeM). This is because the universities want to establish Malaysian national e-learning centers as a central support for shareable content creation and best practices, particularly using MOOCs. In addition, the universities also want to transform and diversify learning and teaching experiences as well as increase access to education through innovative practices and open online education. According to Ministry of Higher Education, Sept 2014, 16,000 used the MOOCs for compulsory subjects for all the first year students in the public universities-Islamic Civilisation and Asian Civilisation (TITAS), Ethnic Relations, Entrepreneurship, and ICT Competency. They also estimated 15% learning in public universities will be done through the concept by 2015, increasing to 30% in 2020. However, Universiti Teknikal Malaysia Melaka (UTeM) provides seven subjects for their students which include

Technopreneurship, Japanese, Programming Techniques, Database, Critical and Creative Thinking, Multimedia System and also Mandarin that can be enrolled by them.

1.3 Education Overview

Education is the process of conducting learning or the acquisition of knowledge, skills, values, and beliefs. There are several methods or education which are storytelling, discussion, teaching, and training and also includes the directed research. Besides, education frequently takes places under the guidance of educators but the learners can also educate themselves. In Malaysia, there are several types of the education system that have been implemented by the ministry of education and government includes preschool education, primary education, secondary education, post-secondary education and last but not least tertiary education. In addition, education may be obtained from a multilingual public school system which provides free education for all Malaysians, private schools and also through home schooling.

Next, education is very important to all generation especially to the young generations in order to develop education to the higher level in the future. Nowadays, the majority of parents has the self-awareness to give their children an early education which has started as early three years old. There is a difference between formal and informal education which the former education is authorized by institutions while the final education acquired through individual effort and also personal experience. Formal education system includes the examinations that used as a measure of the extent of the ability in order to understand the concepts and relate to the topics that they have learned in several circumstances. For example, Bachelor Degree, Master Degree and also Ph.D. are one of the ways in order to evaluate the extent of formal education in specific subjects. Formal or informal education provides benefits in order to develop the capacity to think critically and creatively which able to make a sound judgment. Besides, there also have differences between people who have higher and minimum level of education which is they tend to have high standards living lifestyle and also better quality of life.

1.3.1 Policy of E-Learning

E-learning also has their own policy in which a policy is a document that provides a general guideline for any institution or organization in order to achieve certain results, goals or objectives. A policy is different from the processes, procedures or protocols that are implemented in order to achieve the results, goals or objectives. A policy is approved by the executive members of the institution or organization and it will carry out by the officers and staff which is from the lower level. Apart from that, policies are important to be applying in any institutions or organization because the policies provide guidelines in order to develop the strategies and also the action plans to achieve a result, aim or objective. With the implementation of the policies, the process will become more structured and more systematic which can ensure the effectiveness of the expected results or outcomes.

In Malaysia, a policy of e-Learning has been introduced at the initial stage of Phase 2 PSPTN, Dasar e-Pembelajaran Negara (DePAN) which has been launched on 16 April 2011. According to Dasar e-Pembelajaran Negara Institut Pengajian Tinggi (2011), there are several pillars of Malaysia e-Learning Roadmap which are Infrastructure, Organization Structure, Curriculum and Content, Professional Development and also Enculturation. The initiatives taken by the organization in order to visualize DePAN is the Globalized Online Learning (GOL) which is one of the 10 shifts to transform the higher education system in Malaysia. In order to move forward, the government or the institution that involves needs to make the improvement and alteration in order to ensure that the implementation of the initiative move as plan. DePAN 2.0 have been introduced and improved version with the conjunction of DePAN.

The policies of DePAN 2.0 also have been implemented and it helps with the encouragement of innovation in education, branding of Malaysian education, cost reduction, the efficiency of human resource and also the lifelong learning but it was not only focused on the feature on the quality. Next, in contrast with Ab Jalil et al. (2016), DePAN 2.0 has six main domains outlines which are known as organizational structure and governance, online teaching and learning, infrastructure and infostructure,

development of e-content, training and professional development and also guidelines for e-learning acculturation.

1.3.2 Malaysia Blueprint in Higher Education

The Ministry of Education has launched a comprehensive review of the education system in Malaysia in October 2011 and introduce a new National Education Blueprint. This National Education Blueprint evaluates the performance of current Malaysia education system and offers a vision of the education system that gives students aspirations that Malaysia needs and deserves and also suggests 11 strategic and operational shifts that need to be required in order to achieve that vision. Besides, there are three specific objectives of the Education Blueprint includes understanding the current performance and challenges of the Malaysian education system, establishing a clear vision and aspirations for individual students and also outlining a comprehensive transformation programme for the system including key changes to the Ministry which allow it to create new demands and increase the expectations.

This Blueprint consists of multiple perspectives which gathered from the various experts and also from the international agencies in order to evaluate and improve the performance of Malaysia's education system. The agencies include the World Bank, the United Nations Educational, Scientific and Cultural Organisation (UNESCO), the organization for Economic Co-Operation and Development (OECD) and also six local universities. Besides, the Ministry also cooperate with other government agencies to ensure the alignment with other public policies that related to the education system. For example, the Ministry works closely with the Performance Management and Delivery Unit (PEMANDU) in order to develop the Government Transformation Programme (GTP) 2.0 that includes the initiatives on education. So they reflect the main priority reforms in the Blueprint 2013 to 2025.



Figure 1.1: Six Attributes for Students Aspirations

A figure 1 show that the Malaysian education system aspires to ensure all students in every school in every state achieves their full potential. By moving forwards through these aspirations, each and every school leader, teacher, parent and also the community has their own important roles to play.

1.4 Massive Open Online Course (MOOC)

According to McAuley et al. (2010), Massive Open Online Courses (MOOC) defines an online course with the option of free and open registration, a publicly shared curriculum and open-ended outcomes. MOOCs also define as an online course that resembles an on-campus course in many ways. For example, MOOC application has teaching videos and course materials for the educators while learners can access this MOOC course freely (Lee, 2017). However, the students and the instructors are not in face-to-face like they sit in their real campus classes.