THE EFFECT OF PERSONALITY TRAITS ON THE INTENTION TO
ADOPT M-LEARNING

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This dissertation is dedicated to my beloved family and my husband for their endless support and encouragement.

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ABSTRACT

Students need motivation to use mobile devices for educational aims, but it is required to analyze their motivation. However, students and lecturers have been motivated recently to use mobile devices for educational aim. Many things can affect student willing to improve Mobile learning which personality traits is one factor which can motivate students. Although M-Learning has many advantages and benefits that make individuals to accept and adopt it, it is required to realize the factors that formulate their behavior in favor of M-Learning. This study proposed a model that identifies effect of personality traits on the intention to adopt M-learning. The model used TAM and Big Five models for analyzing personality and adoption of students. In this study, survey was conducted among two faculties that used E-learning in high and low stage. These faculties were Faculty of Computing (FC) and Faculty of Health Science and Biomedical Engineering (FHSBE). The result of study shows that three factors of personality which analyze by Big Five model was accepted and two external factors like Perceived Enjoyment and Computer Self-Efficacy from TAM model can have influence to adoption a new technology like Mobile learning . The study found Perceived Usefulness and Conscientiousness are the most factors that influence on students to adoption Mobile learning.

ABSTRAK

Pelajar perlu motivasi untuk menggunakan peranti mudah alih untuk tujuan pendidikan, tetapi ia diperlukan untuk menganalisis motivasi mereka. Walau bagaimanapun, pelajar dan pensyarah bermotivasi baru-baru ini untuk menggunakan peranti mudah alih untuk tujuan pendidikan. Banyak perkara yang boleh memberi kesan kepada pelajar bersedia untuk meningkatkan pembelajaran Mobile yang personaliti adalah salah satu faktor yang boleh memberi motivasi kepada pelajar. Walaupun M-Pembelajaran mempunyai banyak kelebihan dan manfaat yang membuat individu untuk menerima dan mengguna pakai ia, ia diperlukan untuk menyedari faktor-faktor yang merumuskan tingkah laku mereka kepada M-Pembelajaran. Kajian ini mencadangkan satu model yang mengenal pasti kesan personaliti kepada niat untuk menerima pakai M-pembelajaran. Model ini digunakan TAM dan Big Five model untuk menganalisis personaliti dan penerimaan pelajar. Dalam kajian ini, kajian telah dijalankan di kalangan dua fakulti yang digunakan E-pembelajaran di peringkat tinggi dan rendah. Ini adalah fakulti Fakulti Pengkomputeran (FC) dan Fakulti Sains Kesihatan dan Kejuruteraan Bioperubatan (FHSB). Hasil kajian menunjukkan bahawa tiga faktor personaliti yang menganalisis oleh Big Five model telah diterima dan dua faktor-faktor luaran seperti Kenikmatan Persepsi dan Komputer sendiri keberkesanan-dari model TAM boleh mempunyai pengaruh dengan pengangkatan teknologi baru seperti pembelajaran Mobile. Kajian mendapati Persepsi Kegunaan dan berhati-hati adalah yang paling faktor yang mempengaruhi pelajar untuk penggunaan pembelajaran Mobile.

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PROJECT OVERVIEW

1.1   Introduction

Like all aspects of human life, Technology is revolutionizing education as well. Through data sharing and communication facilitating by connecting people, the Internet could assist people to learn informally which this privilege beside the other advantages of the Internet and related technologies merged to support education and training to enhance and eliminate the constraints of traditional learning methods.

The big revolution in information and communication technology (ICT) has been a root cause of the fundamental changes and a pivotal factor for learning and innovation based on (Hanna, 2010). ICT has provoked the wishes and concerns of countries at all development conditions. Globalization, enterprise transformation, and business networking have been shaped after rapid developments in ICT.

The network services in term of scale and speed experienced significant changes like becoming universal, becoming more automated, using the Internet, and mobile devices because of some reasons. The role of mobile devices in education and in learning procedure is not ignorable due to the rapid developments of mobile devices and wireless systems.

Proposing some samples and systems to deliver the educational contents to the personal computer devices located in the users' home or workplace was the major focus in a time. These computers are very heavy and have large screens. However, students and lecturers have been motivated recently to use mobile devices for educational goals. Thus, it is possible to have educational world at any time and in anywhere (Attewell, Savill-Smith, & Britain, 2004).

Students need motivation to use mobile devices for educational aims, but it is required to analyse their motivation. Many things can affect student's willing to improve Mobile learning (M-learning) which personality traits is one factor which can motivate students.

Although M-learning have many definitions, in current research M-learning is the use of electronic learning (E-learning) materials inside mobile devices such as PDAs (personal digital assistants), Tablets, smart phones, Pocket PCs, palmtops, and in general any small and autonomous devices, which help us at any time and in anywhere (Attewell, et al., 2004). The education and training delivery through information and communication technologies is the definition of (Maldonado, Khan, Moon, & Rho, 2011) for M-learning.

Because of the ability of M-learning to reduce costs through content centralizing, decreasing logistics costs, facilitating persistent storage, and creating uniformity in content delivery, it holds an edge over other computer-based training initiatives. M-Learning as a new type of E-learning has combined E-learning and mobile computing. Through using M-Learning, learning will become more informal and learner-cantered compared to teacher-centred and formal.

Although M-Learning has many advantages and benefits that make individuals to accept and adopt it, it is required to realize the factors that formulate their behaviour in favour of M-Learning. Satisfaction and behaviour of students to use mobile learning (M-learning) are the factors determining the success of online learning programs.

1.2   Background of the Study

In E-learning era, a new, modern, and effective learning environment is the web (C.-L. Chen, Lee, Wu, Kuo, & Hossain, 2008). The learners in E-learning systems are not limited to a specific content system (interoperability). It is not required to rewrite the material in case of updating the course or an interactive training electronic manual. In addition, creating a high quality course prevents redoing effort from the design procedure (reusability) based on (Ionascu & Berceanu, 2009). Learning Management Systems (LMS) have used by many universities to make a flexible learning environment through promoting the collaboration and online communication. Although LMS recommends many advantages to students, the problem of this breakthrough is that it really needs a computer terminal. The recent generation of this technology, which has made many discussions, called Y generation. Using the small devices and mobile appliances to enhance the learning process by thorough existing methods are the famous characteristic of Y generation (Mellow, 2005). Recently, some educational centers use Short Message Service (SMS) for learning purposes. Organization or institute must introduce mobile delivery methods based on the students' feeling about adopting and using mobile phones and this is the precise time to start this modern educational step (Mellow, 2005).

This technology communicates and collaborates students and lecturers like a bridge. The physical places and time cannot make limitation for this system. Many problems of the students have solved by current E-learning. For instance, it fastens and eases the relationships for students and lecturers because face-to-face meeting with lecturers is not necessary for the students. Through E-learning, communication between students and lecturers, receiving assignments, and checking the marks is possible anytime and anywhere. Moreover, lecturers can utilize new methods of teaching, save time, and identify the best students very easy.

Mobile technology can solve some of these problems with its new features. Mobile devices comparing to other devices such as PC are cheaper and more usable

and this helps people to get access to the learning materials, the facilitators and the fellow learners (Fozdar & Kumar, 2007). It provides easier learning access and many opportunities for developing participation. M-learning could change the learning methods and let users to take advantages from its immeasurable capabilities for educational framework (MacCallum & Jeffrey, 2009). According to Callum, an important matter is that it is a complex and long-term process for teachers and the learners to choose M-learning and this adoption depends on many factors. Identifying the main factors, modify the problems, and introducing the benefits of this breakthrough are crucial for users to have a successful M-learning adoption. According to (Attewell, et al., 2004), the presentation and use of learning materials is possible by Mobile learning portals and this makes it more adaptable to individual learning methods and even levels the way for solving problems with numeracy and literacy.

Following the discussion, the research aim is to realize factors that affect M-learning adoption by users in UTM. Although M-learning as a new technology in education has many advantages, it is required to identify the determining factors, which shape the individuals behaviour in favour of M − learning to be accepted and adopted successfully. On the other hand, successful adoption depends not only on students' satisfaction but also their intention to continue using it (Brahmasrene & Lee, 2012). People have different ideas for acceptance a new technology based on their personality traits and the outcome for individuals varies. Therefore, it can be an effective factor in M-learning adoption.

Personality categorizes people for instance some people accept immediately after facing it. Another individual maybe accepts after a long time or never accepts. The first person can call risky because they accept very fast and are in formal activities of the community. The main concern of other individuals is losing their money and time. They like to know benefits before they decide to use. In conclusion one of the factors that have an important role to adopt a new technology is personality traits.

Many researchers worked on effects of personality traits on social networks, E-learning, Blogging and other areas of education, for example, many people accepted the social networks but there is not a clear proof, which they adopt the technology based on their commonalities or according to their own behavioural characteristics. According to (Haron & Sahar, 2010) learners' behaviour including their character and learning methods is one of the effective factors in learning era. All of the previous studies in other contents noted in this matter that personality traits have a big effect on perception of users. This research investigates the impact of the Big Five personality variables on the adoption of Mobile learning.

1.3   Problem Statement and Research Questions

The main issues which mentioned according to the previous sections make these research questions for this study.

How do students' personality traits influence the adoption of M-learning?"

The three sub questions have been formulated:

1.   What are the currently available models related to personality traits?

2. What are the personality traits influence M-learning adoption?

3. Which factors are the most important and which are the significant casual relationships?

1.4   Project Objectives

The objectives of the current research are as the following:

1. To identify models related to personality traits which influence the adoption of M-Learning.
2. To propose a M-learning adoption model that includes personality traits.
3. To identify the most influential factors and significant casual relationships.

1.5   Research Scope

The students of two different faculties that use E-learning are the focus of the current study, which these faculties are the faculty of Computing (FC) with the highest usage and the Faculty of Health science & Biomedical Engineering (FHSBE) with the lowest usage of E-learning. The reason for such a choice was that when two groups having the highest different could reveal the clearest comparison.

1.6   Significance of the Study

This study has some benefits including:

1. The major focus of this study is proposing a model for M-learning adoption.
2. Identifying the factors and personality traits which contribute to adoption of M-learning by users is another target of this research.
3. This research presents the most influential factors of personality traits to help CTL to make adoption of M-learning easier in UTM.

1.7   Chapter Summary

In this chapter, the survey's major points have been explained at first then the problem background and statements explained which determined the purpose of the project and the reason of choosing this project. At the end of this project, the results should show the influence of personality traits on adoption of M-learning. Furthermore, the objectives, scope and the importance of this project have been explained.

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