

ACCEPTANCE MODEL FOR M-LEARNING SERVICES :
A CASE STUDY AT IIUM AND USIM

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**ACCEPTANCE MODEL FOR M-LEARNING SERVICES: A CASE
STUDY AT IIUM AND USIM**

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ABSTRAK

Pembelajaran mobil (atau m-learning) adalah satu kaedah pembelajaran moden dan terkini dalam usaha untuk memudahkan secara teknik pendidikan yang merentasi sempadan masa dan lokasi. Penggunaan m-learning di institusi pendidikan tinggi di Malaysia dapat maningkatkan mutu pendidikan di kalangan pelajar-pelajar di negara ini. Kesedaran pelajar-pelajar terhadap teknologi baru ini merupakan kunci kepada penerimaan dan pelaksanaan m-learning. Kajian ini membuktikan bahawa ada dua aspek penting dalam melaksanakan m-learning di institusi-institusi pendidikan tinggi. Aspek tersebut adalah perbezaan dalam memahami teknologi antara pelajar dan universiti, dan pengetahuan yang kurang mendalam mengenai teknologi baru di kalangan pelajar-pelajar dalam menentukan penerimaan mereka terhadap m-learning. Kajian ini bertujuan untuk mengkaji penerimaan dan penggunaan servis m-learning di kalangan IIUM dan USIM pelajar. Objektif utama kajian ini adalah untuk menghasilkan cadangan model penerimaan pelajar terhadap m-learning dalam persekitaran institusi pengajian tinggi. Kajian ini mendalami penerimaan pelajar terhadap penggunaan dan aplikasi m-learning, serta kesannya terhadap tingkah laku penggunaan dalam persekitaran pendidikan tinggi. Ia juga menyediakan asas pengetahuan mengenai keadaan semasa yang membentuk kesedaran dan pengetahuan pelajar mengenai perkhidmatan m-learning. Data telah dikumpul daripada 381 orang pelajar daripada dua universiti di Malaysia menggunakan teknik-teknik pensampelan rawak sistematis (systematic random sampling). Kajian ini menggunakan teknik-teknik analisa SPSS bagi menguji model-model pengukuran dan pengstrukturkan menggunakan sampel mudah (convenience sample) 381 pelajar. Kajian ini mendapati bahawa faktor-faktor persekitaran dan infrastruktur yang sesuai adalah penting dalam aplikasi m-learning di dalam proses pendidikan di institusi pengajian tinggi. Tambahan pula, keputusan kajian menunjukkan bahawa rata-rata pelajar mempunyai pengetahuan dan kesedaran yang mencukupi untuk menggunakan teknologi tersebut. Batasan dalam m-learning juga telah diketahui oleh pelajar-pelajar ini. Perspektif pelajar adalah sangat penting dalam mengkaji tingkah laku penggunaan m-learning dalam persekitaran pengajian tinggi. Hasil kajian juga menunjukkan bahawa sikap dan penerimaan untuk menggunakan m-learning oleh pelajar dalam persekitaran pengajian tinggi mempunyai pengaruh yang positif ke atas persepsi pelajar. Oleh itu, perlu ada situasi penting yang mampu mempengaruhi sikap dan persepsi pelajar. Kajian ini menyenaraikan beberapa faktor penentu yang penting dalam membentuk sikap dan persepsi dalam menggunakan m-learning. Secara khusus, sikap dan persepsi dalam menggunakan m-learning wujud dengan adanya kepentingan dan nilai relevan dalam servis tersebut. Jadi, peningkatan dalam penggunaan m-learning akan membawa kepada peningkatan penerimaan positif di kalangan pelajar di institusi-institusi pengajian tinggi.

Kata Kunci: Perkhidmatan Pembelajaran Mudah alih, Model Penerimaan Pembelajaran Mudah, M-learning.

ABSTRACT

Mobile learning (m-learning) is considered as the next form of e-learning using mobile technologies to facilitate education for teachers and learners anywhere and anytime. Engaging the m-learning services in the Malaysian higher education could improve the availability of education. Students' awareness of such technology is a key for success acceptance. The study shown the evident that there are two issues that prevail in the implementation of m-learning in the higher education institutions. These issues are: disparity with regard to the perceptions of technology between students and the university, and insufficient knowledge and incorporation of students' acceptance when deciding on technology investment. This research aims to study the acceptance and use of m-learning services among IIUM and USIM students. The main objective is to propose a students' acceptance model of m-learning in the higher education environment. The study investigates the students' acceptance of behavior intention to use m-learning and its effect on usage behavior in the higher education environment. It provides the knowledge base about the current state of students' awareness about m-learning services. Data was collected from 381 students at two universities in Malaysia using systematic random sampling techniques. This research employed SPSS analysis techniques to test the measurement and structural models using a convenience sample of 381 students. The study found that both of the environment and the infrastructure are appropriate to diffuse and utilize m-learning in the higher education environment. Furthermore, the results showed that the students have adequate knowledge and awareness to use such technology in their education environment. The limitations of m-learning for education were well concerned by students. The students' perspective is very important to investigate the use behavior of m-learning in the higher education environment. Findings of the study suggest that the behavior intention to use the m-learning by students in the higher education environment have positive influence on the use behavior. Consequently, the availability of facilitating conditions is an important to influence students' use behavior. The study suggests several factors as important determinants of the behavior intention to use the m-learning in the higher education environment. Specifically, behavior intention to use appears to be adopted and facilitated by the usefulness of m-learning services, so more usefulness of m-learning leads to more acceptances among students in the higher education.

Keywords: Mobile Learning Services, Mobile Learning Acceptance Model, M-Learning.

ملخص

التعلم النقال هو النموذج استناداً من تكنولوجيا الاتصالات المتنقلة القائمة على التعلم الإلكتروني في العملية التعليمية لتشجيع المعلمين والطلاب و يمكن استخدامه في أي وقت وفي أي مكان . و وجود الخدمات التعلم النقال في التعليم العالي الماليزي يعزز من راحة التعليم. والهدف من هذا البحث التحقيق من الخدمات التعلم الجوال من حيث القبول واستخدام بين الطلبة التعليم العالي الماليزي وايضاً يهدف هذا البحث الى التحقيق في الوعي بين الطلاب في استخدام التعلم الجوال واستنتاج تأثيرها على سياق التعليم العالي. وقد تم جمع البيانات من 381 طلاب في جامعتين في ماليزيا باستخدام تقنيات منهجية العينة العشوائية. هذا البحث استخدمت تقنيات التحليل الإحصائي للعلوم الاجتماعية لاختبار القياس والتماذج الهركيية باستخدام عينة الراحة من 381 طالب وطالبة. في الدراسة تم العثور على ان الطالب لديهم معرفة واسعة ووعي لاعتماد التكنولوجيا في اعداد تعليمهم، ولكنها أيضاً تدرك جيداً حدود النظام في تعليمهم. ايضاً فمن الضروري أن نفهم وجهة نظر الطالبة من حيث التحقق في سلوك استخدام في وضع التعليم العالي للتعلم الجوال. وفقاً لذلك، وجد ان الظروف المتاحة توفر بشكل كبير على استخدام الطلاب. وأخيراً، يوصي البحث على العديد من العوامل الخامسة التي تؤثر على نية استخدام التعلم الجول في وضع التعليم العالي.

كلمات البحث: خدمات التعليم الجوال، نموذج قبول التعليم الجوال.

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LIST OF ABBREVIATIONS

The following table describes the significance of various abbreviations and acronyms used throughout the thesis.

Abbreviation	Meaning
M-learning	Mobile Learning
D-learning	Distance Learning
E-learning	Electronic Learning
LMS	Learning Management Systems
IT	Information Technology
PDAs	Personal Digital Assistants
SMS	Short Messaging Service
RSS	Rich Site Summary
MOTILL	Mobile Technologies in Lifelong Learning
CTE	Content Transformation Engine
WNIC	wireless Network Interface Card
NIC	Network Interface Card
GPS	Global Positioning System
TAM	Technology Acceptance Model
IDT	Innovation Diffusion Theory
TRA	Theory of Reasoned Action
TPB	Theory of Planned Behavior
UTAUT	Unified Theory of Acceptance and Use of Technology
PU	Perceived Usefulness
ATU	Attitude Toward Using
BI	Behavioral Intention to Use
PEoU	Perceived Ease of Use
C	Compatibility
UB	Use Behavior
IS	Information System
SQ	Service Quality
P	Personalization
A	Accessibility
ID	Interface design
CQ	Content quality
RS	Reliability And Response
SI	Social influence
IM	Image
SN	Subjective Norms
CF	Culture Factor
UA	Uncertainty Avoidance
PD	Power Distance
MF	Masculinity versus Femininity
IC	Individualism versus Collectivism
LST	Long-term versus Short-term Orientation
PPS	Probabilities Proportional to Size
IVs	Independents Variables
DVs	Dependent Variables
EFA	Exploratory Factor Analysis
CFA	Confirmatory Factor Analysis