

THE EFFECT OF USABILITY AND  
INFORMATION QUALITY ON USER'S  
SATISFACTION OF MALAYSIAN STUDENT  
INFORMATION SYSTEMS IN HIGHER  
EDUCATION INSTITUTIONS

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## **SUPERVISOR'S DECLARATION**

I hereby declare that I have checked this thesis and in my opinion, this thesis is adequate in terms of scope and quality for the award of the degree of Master of Science.

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## **STUDENT'S DECLARATION**

I hereby declare that the work in this thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Malaysia Pahang or any other institutions.

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MOHAMMED THAMIR ATTA

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## ABSTRAK

Perkembangan yang luas dalam sistem maklumat telah mengubah prestasi semua jenis organisasi termasuk Institusi Pendidikan Tinggi. Hari ini, kebanyakan universiti di negara membangun seperti Malaysia telah menggunakan Sistem Maklumat Pelajar (SIS) yang menyediakan perkhidmatan dalam talian untuk pelajar. Penyataan masalah kajian ini terletak pada jurang kesusasteraan dalam meningkatkan kualiti SIS. Sastera sistem maklumat, menunjukkan jurang tertentu dalam membangunkan model berkualiti berdasarkan kebolegunaan SIS. Secara khususnya, penyelidikan lanjut dalam SIS diperlukan untuk menyiasat penyepaduan pembolehubah yang berkualiti dalam teori DeLone & McLean (D&M). Oleh itu, tujuan penyelidikan ini adalah mengamalkan teori D&M yang menghubungkan empat pembolehubah iaitu kebolegunaan, kualiti maklumat, niat untuk menggunakan SIS, dan kepuasan pengguna dalam model laman web kegunaan yang diguna pakai. Untuk mencapai matlamat ini, kajian ini menyiasat kesan kebolegunaan dan kualiti maklumat SIS terhadap kepuasan pengguna serta mengesahkan peranan pengantara niat untuk menggunakan SIS dalam model ini. Kepentingan utama kajian ini terletak pada mengisi jurang berkenaan dengan teori D&M dan mengesahkan versi pembaharuan model ini berdasarkan pengaruh kebolegunaan dalam konteks IPT. Selain itu, pengesahan model kejayaan bagi SIS berdasarkan teori D&M dicapai dalam kajian ini. Metodologi yang digunakan untuk mencapai matlamat ini adalah pendekatan kuantitatif. Instrumen pengumpulan data adalah soal selidik yang diedarkan kepada sampel pelajar pascasiswazah di universiti-universiti Malaysia. Kajian ini menggunakan persampelan random purposive dimana responden sasaran adalah pengguna SIS. Hasil kajian menunjukkan bahawa kebolegunaan dan kualiti maklumat SIS mempengaruhi kepuasan pengguna dengan ketara. Di samping itu, niat untuk menggunakan SIS memainkan peranan berpengaruh yang berpengaruh antara kebolegunaan dan kepuasan pengguna. Hasil kajian ini akan menyumbang kepada teori-teori sistem maklumat secara umum dan SIS khususnya. Selain itu, hasil kajian ini menunjukkan bahawa kebolegunaan dan kualiti maklumat secara empirikal terbukti menjadi faktor penting dalam melaksanakan model kejayaan D&M dalam domain SIS.

## **ABSTRACT**

The vast development in information systems has changed the performance of all kinds of organizations including Higher Education Institutions (HEIs). Today, most of universities in developing countries like Malaysia have adopted Student Information System (SIS) that provides online services for students. The problem statement of this study lies in the gap of literature in enhancing quality SIS. The literature of information system, shows certain gaps in developing a quality model based on usability of SIS. In particular, further researches in SIS is required to investigate the integration of quality variable in the theory of DeLone & McLean (D&M). Thus the aim of this research is to adopt D&M theory that correlates four variables namely usability, information quality, the intention to use SIS, and user's satisfaction in adopted usability website model. To achieve this objective, this study investigated the effect of usability and information quality of SIS on user's satisfaction as well as validating the mediation role of intention to use SIS in this model. The main significance of this study lies in filling the gaps with regard to D&M theory and validate an update version of this model based on usability influence within the context of HEI. Moreover, a validation of success model for SIS based on D&M theory is achieved in this study. The methodology used to achieve these objectives is a quantitative approach. Data collection instrument is questionnaires which are distributed to a sample of postgraduate students in Malaysian universities. This study used purposive random sampling where the target respondents are SIS users. The result of this study showed that usability and information quality of SIS affect user's satisfaction significantly. In addition to that, intention to use SIS plays an influential mediating role between usability and user's satisfaction. The outcome of this study will contribute to the theories of information systems in general and SIS in particular. Moreover, this the result of this study revealed that usability and information quality are empirically proven to be significant factors in implementing D&M success model in SIS domain.

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## **LIST OF ABBREVIATIONS**

<b>SIS</b>	Student Information System
<b>IS</b>	Information System
<b>IQ</b>	Information Quality
<b>HEI</b>	Higher Education Institutions
<b>D&amp;M</b>	Delone &McLean
<b>HE</b>	Higher Education
<b>TAM</b>	Technology Acceptance Model
<b>TRA</b>	Theory of Reasoned Actions
<b>SPSS</b>	Statistical Package for the Social Sciences
<b>EFA</b>	Exploratory Factor Analysis
<b>FA</b>	Factor Analysis
<b>SAQ</b>	Self-Administrated Questionnaire

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