



UNIVERSITI PUTRA MALAYSIA

**FACTORS INFLUENCING UTILISATION OF LEARNING MANAGEMENT
SYSTEM AMONG UNIVERSITY FACULTY MEMBERS IN SAUDI ARABIA**

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By

MOHAMMED J. SHERBIB ASIRI

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The Jusur Learning Management System (Jusur LMS) was first introduced into the Saudi public universities in 2008. However, little is known about its utilisation and influencing factors among faculty members as not many comprehensive studies have been done related to it. A review of related literature demonstrates that factors, namely competency, attitude, barriers, pedagogical beliefs toward e-learning, and demographic variables influence technology uptake. Thus, the main objectives of the study were to identify the factors influencing the utilisation of the Jusur Learning Management System of faculty members in Saudi-Arabian universities.

This study is quantitative in nature and a descriptive correlational research design was employed to gather relevant data. The

population of the study comprised of faculty members from 11 public universities in Saudi Arabia (N= 18328). Based on Israel's formula, the minimum sample size for this study was 392 faculty members. They were selected based on the cluster random sampling technique.

The research instrument was in the form of an online questionnaire (<http://www.smart-survey.co.uk/v.asp?i=35187abvln>). A total of 710 faculty members were emailed this link, and out of this number, a total of 454 responses were valid and analyzed. The research instrument was adapted from previous studies and validated by a panel of experts from the field of Instructional Technology. The reliability of the instrument ranged from 0.71 to 0.97. The research instrument was divided into six sections, namely, demographic variables (7 items), utilisation of Jusun LMS (18 items), competency in using Jusun LMS (20 items), attitude towards Jusun LMS (20 items), barriers in using Jusun LMS (22 items), and pedagogical beliefs towards e-learning (19 items).

The results of this study indicated that the faculty members' competency, attitude, barriers, and pedagogical beliefs were related more to utilisation of Jusun LMS than the demographic variables. The utilisation level of the Jusun LMS among the faculty members in the Saudi universities was considered as at moderate level. Also found, the faculty members had positive attitude towards Jusun LMS ($M= 3.68$, $SD= .92$) and positive pedagogical belief towards e-learning

($M= 3.21$, $SD= .86$). The competency and the barrier levels in using Jusur LMS among the faculty members in Saudi universities were considered at a moderate level.

Generally, the male faculty members were found to use more likely the Jusur LMS than their female counterpart. In contrast, specialization, nationality, and position did not significantly differ in the utilisation of the Jusur LMS. Also found, positive correlations existed between the utilisation of the Jusur LMS and five independent variables, which included faculty members' competency in the use of the Jusur LMS, their attitude towards using Jusur LMS and pedagogical beliefs towards e-learning, as well as e-learning workshops and computer experience.

A negative correlation existed between the utilisation of the Jusur LMS and the barriers faced by faculty members in using Jusur LMS. The multiple regression analysis showed that competency in the use of the Jusur LMS, attitude towards Jusur LMS, barriers in using Jusur LMS, and the pedagogical beliefs toward e-learning were significant predictors of the utilisation of the Jusur LMS.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

**FAKTOR-FAKTOR YANG MEMPENGARUHI PENGGUNAAN SISTEM
PENGURUSAN PEMBELAJARAN DALAM KALANGAN AHLI
FAKULTI DI UNIVERSITI-UNIVERSITI ARAB SAUDI**

Oleh

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Jusur Learning Management System (Jusur LMS) telah mula diperkenalkan di universiti-universiti awam di Arab Saudi pada 2008. Namun, hanya sedikit sahaja yang diketahui tentang penggunaan dan juga faktor-faktor yang mempengaruhinya dalam kalangan ahli fakulti kerana tiada penyelidikan yang komprehensif berkaitan dengan amalan penggunaan sistem tersebut telah dilakukan setakat ini. Tinjauan kepustakaan yang berkaitan menunjukkan bahawa faktor-faktor seperti kompetensi, sikap, halangan, kepercayaan pedagogi terhadap e-pembelajaran dan pembolehubah demografi mempengaruhi kadar penggunaan teknologi. Justeru, objektif utama kajian ini adalah untuk mengenal pasti faktor-faktor yang mempengaruhi penggunaan *Jusur Learning*

Management System dalam kalangan ahli fakulti universiti-universiti di Arab Saudi.

Kajian ini berbentuk kuantitatif dan reka bentuk kajian korelasi perihalan telah digunakan untuk memperolehi data yang berkaitan. Populasi kajian ini terdiri daripada ahli-ahli fakulti dari 11 universiti awam di Arab Saudi (N=18328). Berdasarkan formula Israel, sampel saiz minima untuk kajian ini ialah 392 ahli fakulti. Mereka dipilih berdasarkan teknik rawak pensampelan berkelompok.

Instrumen kajian berbentuk soal selidik dalam talian (<http://www.smartsurvey.co.uk/v.asp?=35187abvln>). Seramai 710 ahli fakulti telah diberikan *link* ini melalui e-mel, dan daripada bilangan tersebut, sebanyak 454 respons didapati sah dan dianalisis. Instrumen kajian ini telah diadaptasi daripada kajian-kajian lepas dan disahkan oleh panel pakar di dalam bidang Teknologi Pengajaran. Kebolehpercayaan instrumen tersebut adalah antara 0.71 hingga 0.97. Instrumen kajian dibahagikan kepada enam seksyen iaitu pembolehkan demografi (7 item), penggunaan *Jusur* LMS (18 item), kompetensi menggunakan *Jusur* LMS (20 item), halangan dalam penggunaan *Jusur* LMS (22 item) dan kepercayaan pedagogi terhadap e-pembelajaran (19 item).

Hasil kajian ini menunjukkan bahawa kompetensi ahli-ahli fakulti, sikap, halangan dan kepercayaan pedagogi adalah lebih berkaitan

dengan penggunaan *Jusur LMS* berbanding dengan pembolehubah demografi. Tahap penggunaan *Jusur LMS* dalam kalangan ahli fakulti di universiti-universiti di Arab Saudi didapati berada pada tahap sederhana. Juga didapati, ahli-ahli fakulti memiliki sikap yang positif terhadap *Jusur LMS* ($M= 3.68$, $SP= .86$) dan juga kepercayaan pedagogi terhadap e-pembelajaran yang positif. Kecekapan dan tahap halangan menggunakan *Jusur LMS* dalam kalangan ahli fakulti di universiti-universiti Arab Saudi didapati berada pada tahap sederhana.

Pada umumnya, ahli fakulti lelaki didapati lebih berkemungkinan untuk menggunakan *Jusur LMS* berbanding dengan ahli fakulti wanita. Secara perbandingan, pengkhususan, kewarganegaraan dan kedudukan didapati tidak berbeza secara signifikan dalam penggunaan *Jusur LMS*. Turut didapati korelasi positif wujud di antara penggunaan *Jusur LMS* dengan lima pembolehubah bebas termasuk kompetensi ahli-ahli fakulti dalam penggunaan *Jusur LMS*, sikap mereka terhadap penggunaan *Jusur LMS*, kepercayaan pedagogi terhadap e-pembelajaran serta juga bengkel e-pembelajaran dan pengalaman menggunakan komputer.

Korelasi negatif didapati wujud di antara penggunaan *Jusur LMS* dan halangan yang dihadapi ahli-ahli fakulti apabila mereka menggunakan *Jusur LMS*. Analisis regresi berganda menunjukkan bahawa kompetensi menggunakan *Jusur LMS*, sikap terhadap *Jusur*

LMS, halangan dalam penggunaan *Jusur LMS* dan kepercayaan pedagogi terhadap e-pembelajaran adalah peramal yang signifikan terhadap penggunaan *Jusur LMS*.



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APPROVAL

I certify that an Examination Committee has met on 27th September 2012 to conduct the final examination of Asiri, Mohammed Jaber on his Doctor of Philosophy thesis entitled “Factors Influencing the Utilisation of the Learning Management System Among University Faculty Members in Saudi Arabia” in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The Committee recommends that the student be awarded the Doctor of Philosophy degree.

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DECLARATION

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

MOHAMMED J. SHERBIB ASIRI

Date: 27 September 2012

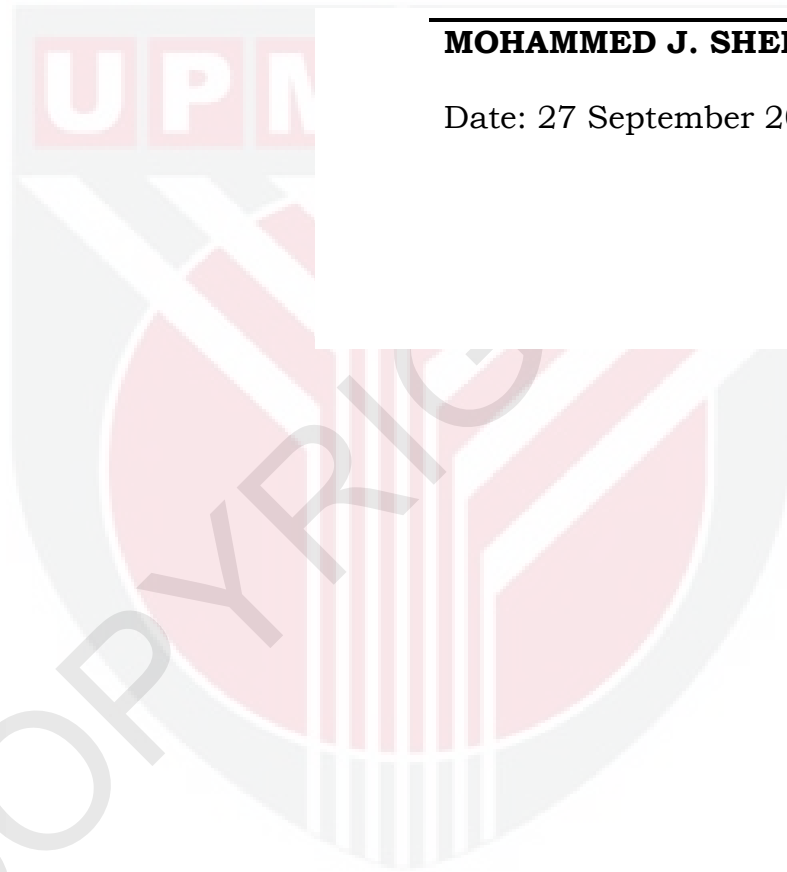


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