UNIVERSITI PUTRA MALAYSIA

CONDITIONS INFLUENCING FACULTY MEMBERS' STAGES OF CONCERN AND LEVELS OF IMPLEMENTATION OF ONLINE LEARNING TECHNOLOGY AT E-LEARNING CENTRES IN IRANIAN UNIVERSITIES

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By

MAJID REZA RAZAVI

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirement for the Degree of Doctor of Philosophy

March 2013

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DEDICATIONS

Dedicated to my beloved wife, Fahimeh,

for her boundless love, support and encouragement;

To my loving daughters, Saba and Sahar

To my beloved parents to whom I owe everything;

To my generous brother, Mohammad Amin

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy

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By

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March 2013

Chairperson : Rosnaini binti Mahmud

Faculty : Educational Studies

The main objectives of this study were to determine: (i) the conditions that facilitate the implementation of online learning technology among faculty members at e-learning centres in Iranian universities, (ii) the stages of concern towards the use of online learning technology, (iii) the levels of implementation of online learning technology, (iv) the relationship between the levels of implementation and the stages of concern towards the use of online learning technology, (v) the relationship between conditions and the faculty members' stages of concern towards the use of online learning technology, (vi) the relationship between conditions and the levels of implementation of online learning technology, (vii) the relationship between conditions, levels of implementation and the stages of concern towards the use of online learning technology, and (viii) the final model to show the relationship

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between conditions, levels of implementation and the stages of concern towards the use of online learning technology among the faculty members at e-learning centres in Iranian universities.

This study has relied largely on the survey methodology. The instrument used was in the form of a computerized self-administered questionnaire that was accessible via the Internet (http://iranform.com/). Data were analyzed descriptively (frequency, mean and standard deviation) and inferentially using Analysis of Moment Structure (AMOS) version 16 and the Statistical Package for the Social Science (SPSS) version 16. A total of 220 faculty members were randomly selected from ten e-learning centres in Iranian universities as the research samples. The questionnaire was divided into four sections: (a) demographic factors, (b) conditions facilitating technology implementation, (c) stages of concern towards online learning technology, and (d) levels of online learning technology implementation.

Findings of the study indicated that all of the conditions were present, however the degree of presence varied. The condition found to be most present was dissatisfaction with status quo, while the least present was the condition availability of resources.

Findings related to stages of concern found that majority of the faculty members had intensity peaks at the impact-concern stages. This was followed by faculty members at the task-concern stage and self-concern stages.

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Findings related to levels of implementation of online learning technology among faculty members demonstrated that over a quarter of them were at the mechanical integration level. This was followed by the faculty members at the routine integration level and the infusion level, with the remainder being at the awareness, exploration, expansion, and refinement stages. No non-user was found.

Results of the study indicated that there was a significant and positive relationship between LoTi and SoC. Based on the value of the path coefficient which indicated the strength of the relationship between the constructs, SoC was found to be the most significant factor.

Results of the study also showed that the conditions availability of time, existence of rewards or incentives and participation expected and encouraged were found to have significant positive relationships with SoC. Although the conditions existence of knowledge and skills, availability of resources, commitment by those involved, dissatisfaction with the status quo, and leadership were evident, they were found not to be significantly related to SoC. Based on the Structural Equation Modelling (SEM) results, the conditions availability of time, existence of rewards or incentives, and participation expected and encouraged, were found to be indirectly related to the LoTi, and being mediated by the SoC.

The conditions dissatisfaction with the status quo and existence of knowledge and skills, were found to have significant relationships with LoTi. On the contrary, availability of resources, availability of time, existence of rewards or incentives,

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participation expected and encouraged, commitment by those involved, and leadership were found to be not significantly related to LoTi.

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

KONDISI YANG MEMPENGARUHI PERINGKAT KEPERIHATINAN DAN TAHAP PELAKSANAAN TEKNOLOGI PEMBELAJARAN DALAM TALIAN AHLI FAKULTI DI PUSAT E-PEMBELAJARAN UNIVERSITI DI IRAN

Oleh

MAJID REZA RAZAVI

March 2013

Pengerusi : Rosnaini binti Mahmud

Fakulti : Pengajian Pendidikan

Objektif utama kajian ini adalah untuk menentukan: (i) kondisi yang menyokong pelaksanaan teknologi pembelajaran dalam talian dalam kalangan ahli fakulti di pusat e-pembelajaran universiti di Iran, (ii) peringkat keperihatinan terhadap penggunaan teknologi pembelajaran dalam talian, (iii) tahap pelaksanaan teknologi pembelajaran dalam talian, (iv) hubungan antara tahap pelaksanaan dan peringkat keperihatinan terhadap penggunaan teknologi pembelajaran dalam talian, (v) hubungan antara kondisi dan peringkat keperihatinan ahli fakulti terhadap penggunaan teknologi pembelajaran dalam talian, (vi) hubungan antara kondisi dan tahap pelaksanaan teknologi pembelajaran dalam talian, (vii) hubungan antara kondisi, tahap pelaksanaan dan peringkat keperihatinan terhadap penggunaan teknologi pembelajaran dalam talian, dan (viii) model akhir untuk menunjukkan

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hubungan antara kondisi, tahap pelaksanaan dan peringkat keperihatinan terhadap penggunaan teknologi dalam talian dalam kalangan ahli fakulti di pusat pembelajaran universiti di Iran.

Sebahagian besar kajian ini bergantung kepada metodologi kajian tinjauan. Instrumen yang digunakan adalah dalam bentuk soal selidik berkomputer tadbir sendiri yang boleh di akses melalui Internet (http://iranform.com/). Data dianalisis secara deskriptif (kekerapan, min dan sisihan piawai) dan secara inferensi menggunakan Analysis of Moment Structure (AMOS) versi 16 dan Statistical Package for the Social Science (SPSS) versi 16.

Sampel kajian terdiri daripada 220 ahli fakulti yang dipilih secara rawak dari sepuluh pusat e-pembelajaran di universiti di Iran. Soal selidik terbahagi kepada empat bahagian: (a) faktor demografi, (b) kondisi menyokong pelaksanaan teknologi, (c) peringkat keperihatinan terhadap teknologi pembelajaran dalam talian, dan (d) tahap pelaksanaan teknologi pembelajaran atas talian.

Hasil kajian menunjukkan semua kondisi wujud, tetapi tahap kewujudannya adalah berbagai. Kondisi yang paling ketara wujud ialah rasa tidak puas hati terhadap status quo, manakala kondisi yang kurang ketara wujud ialah keperluan sumber.

Hasil kajian berkaitan dengan peringkat keperihatinan mendapati majoriti ahli fakulti mempunyai intensiti tertinggi pada peringkat keperihatinan-impak. Ini diikuti oleh ahli fakulti yang berada pada peringkat keperihatinan-tugasan dan

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peringkat keperihatinan-kendiri.

Hasil kajian berkaitan tahap pelaksanaan teknologi pembelajaran dalam talian dalam kalangan ahli fakulti menunjukkan lebih daripada satu perempat daripada mereka berada pada tahap integrasi mekanikal. Ini diikuti oleh ahli fakulti yang berada pada tahap integrasi rutin dan infusi. Tiada pun seorang didapati tidak mengguna teknologi.

Hasil kajian menunjukkan wujud hubungan yang signifikan dan positif antara LoTi dan SoC. Berdasarkan nilai koefisien yang menunjukkan kekuatan hubungan antara konstruk, SoC didapati menjadi faktor yang paling signifikan.

Hasil kajian juga menunjukkan kondisi keperluan masa, kewujudan ganjaran atau insentif, dan jangkaan penyertaan dan galakan menunjukkan hubungan yang signifikan dan positif dengan SoC. Walaupun kondisi kewujudan pengetahuan dan kemahiran, keperluan sumber, komitmen oleh mereka yang terlibat, rasa tidak puas hati dengan status quo, dan kepimpinan wujud, namun semuanya didapati tiada hubungan yang signifikan dengan SoC. Berdasarkan keputusan *Structural Equation Modelling* (SEM), kondisi keperluan masa, kewujudan ganjaran atau insentif, dan jangkaan penyertaan dan galakan didapati ada hubungan secara tidak langsung dengan LoTi, dan SoC menjadi pengantaranya.

Kondisi rasa tidak puas hati dengan status quo, serta kewujudan pengetahuan dan kemahiran didapati mempunyai hubungan yang signifikan dengan LoTi. Sebaliknya, keperluan sumber, keperluan masa, kewujudan ganjaran atau insentif,

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jangkaan penyertaan dan galakan, komitmen mereka yang terlibat dan kepimpinan didapati tiada hubungan yang signifikan dengan LoTi.

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Thanks to the Almighty for giving me my dear ones and granting me the opportunity to study in this beautiful country, Malaysia.

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APPROVAL

I certify that an Examination Committee has met on 18 March 2013 to conduct the final examination of Majid Reza Razavi on his thesis entitled "Conditions Influencing Faculty Members' Stages of Concern and Levels of Implementation of Online Learning Technology at E-Learning Centres in Iranian Universities" in accordance with the universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The committee recommends that the student be awarded the Doctor of Philosophy. Members of the Thesis Examination Committee were as follows:

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DECLARATION

I declare that the thesis is my original work, except for 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 any other institution.

_____

MAJID REZA RAZAVI

Date: 18 March 2013

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