UNIVERSITI TEKNOLOGI MARA

E-EDUCATION SYSTEMS IMPLEMENTATION SUCCESS: AN INFORMATION SYSTEMS CONTINUANCE MODEL

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Thesis submitted in fulfillment of the requirements for the degree of

Doctor of Philosophy

Faculty of Information Technology & Quantitative Sciences

September 2008

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ABSTRACT

Universities worldwide are increasing their investments on information technology (IT) infrastructure, and on online learning technologies, collectively known as e-education systems. With their powerful functionalities and ERP-like integrative capabilities, these systems are increasingly used in higher education institutions to deliver seamless education services and blended learning; and also as a means for organizational transformation. Adoption of these evolving systems are however large-scale, high-risk. costly and requires changes to existing educational practices. Adding to these challenges is the fact that these technologies are traditionally studied and evaluated as educational technology despite their growing importance towards organizational performance. Thus, there is a need for new perspectives on e-education systems research in order to stay relevant. To remain within this paradigm would mean studies are solely focused on pedagogical issues, isolated from organizational context and do not address current realities of their implementations. This study addresses the research gaps by proposing a model of e-education systems implementation success based on its organizational and pedagogical relevance. A causal model was developed by synthesizing several theories from the technology diffusion, technology acceptance, information systems (IS) evaluation and IS implementation literature. The model assumes sustained use or continuance of the systems as an indicator of their implementation success. The model is an attempt to extend Bhattacheriee's (2001) model of IS Continuance by proposing two new constructs, perceived organizational benefits, and organizational IS continuance. Since measurement of the perceived organizational benefits construct requires the identification of specific organizational benefits of e-education systems, a classification framework for e-education systems benefits was also developed. The framework is an extension of Shang & Seddon (2002) ERP benefits framework. To test the model and framework, data was collected through a survey of 262 users (lecturers and students) of an education enterprise portal in a Malaysian public university. Using a confirmatory factor analysis approach and structural equation modeling techniques for analyses, the data confirmed the causal relationships proposed in the model. Perceived organizational benefits, perceived usefulness and expectations-confirmation successfully explained 84 % of the variance in the dependent variable, organizational Information Systems Continuance. There was also statistical evidence for the model to be applicable to both groups of stakeholders thus further supporting the hypothesis that organizational IS continuance can be an objective proxy for IS implementation success.

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