CRITICAL SUCCESS FACTORS FOR E-LEARNING IN EDUCATIONAL

CONTEXT: AN IRANIAN UNIVERSITY EXPERIENCE

SEYED MOHAMMAD REZA BATHAEIAN

UNIVERSITI UTARA MALAYSIA

2009

CRITICAL SUCCESS FACTORS FOR E-LEARNING IN EDUCATIONAL

CONTEXT: AN IRANIAN UNIVERSITY EXPERIENCE

A project paper submitted to the College of Business in partial

fulfillment of the requirements for the degree of Master of Science

(Management)

Universiti Utara Malaysia

BY

SEYED MOHAMMAD REZA BATHAEIAN

PERMISSION TO USE

In permission this project paper in partial fulfillment of the requirement for Post Graduate degree from the Universiti Utara Malaysia (UUM), I agree that the Library of this university may make it freely available for inspection. I further agree that permission for copyright this project paper in any manner, in whole or part, for scholarly purposes may be granted by my supervisor or in their absence, by the Assistant Vice Chancellor of the College of Business where I did my project paper. It is understood that any coping or publication or use of this project paper or parts of it for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to Universiti Utara Malaysia (UUM) in any scholarly use which may be made of any material in my project paper.

Request for permission to copy or to make other user of materials in this project paper in whole or part should be addressed to:

Dean
Research and Innovation
College of Business
Universiti Utara Malaysia (UUM)
06010 Sintok
Kedah Darul Aman

DISCLAIMER

The author is responsible for the accuracy of all opinion, technical comment, factual report, data figures, illustrations and photographs in this dissertation. The author bears full responsibility for the checking whether material submitted is subject to copyright or ownership right. Universiti Utara Malaysia (UUM) does not accept any liability for the accuracy of such comment, report and other technical and factual information and the copyright or ownership rights claims.

The author declares that this dissertation is original and his own expect those literatures, quotations, explanations and summarization which are duly identified and recognized. The author hereby granted the copyright of this dissertation to College of Business, Universiti Utara Malaysia (UUM) for publishing if necessary.

Student Signature:

Date:

Abstract

This study examines factors that are perceived by university students to be critical for e-learning effectiveness. The study was a cross sectional study where respondents' perceptions was measured at one point in time. 169 students around Tehran participated in this study.

Correlation analyses were conducted to test the relationship between instructor characteristics, students characteristics and information technology and e-learning system effectiveness, whereas descriptive analysis was conducted to analyze demographic characteristics of participants.

The results show that there was an association between instructor characteristics and e-learning effectiveness. The findings indicated that the role of instructor in e-learning is important in determining its success. Students' characteristics such as students' motivation to use e-learning technology and students' computing competency have also found to be related with e-learning effectiveness. As compared with the instructor and students' characteristics, technology quality in terms of access, navigation, interface and the reliability and effectiveness of technology infrastructure have the highest relation to e-learning effectiveness.

In conclusion, the results from this study indicate that instructor characteristics, student characteristics and the technology have strong relationships with e-learning effectiveness.

Acknowledgements

Every endeavor is a culmination of inspiration and partnership. Therefore, I would like to express my gratitude to those who inspired me during this journey. Their inspiration, motivation, encouragement, and support were my constant companions during this research.

I would like to acknowledge my Supervisor Madam Siti Zubaidah Othman, who guided me through this complex maze. There are many who offered assistance and support along the way. It was her faithful assessment, critique, and encouragement that made this research one of growth and enjoyment.

To my loving wife, Sara Aliabadizadeh, my beloved parents, Fatemeh and Mohammad, and my brother, Mohammad Iman, thank you for all your love, patience, sacrifice, and word of encouragement to pursue and complete this degree.

I also would like to thank all my lecturers at UUM, and among them are Associate Professor Dr. Haji Hamzah Bin Abd. Rahman, Dr. Faridahwati Mohd Shamsudin, Ms. Padmini Pillay, and Dr. Thi Lip Sam.

Finally, yet importantly, I would like to express my gratitude to all the students at Virtual Hadith Science Faculty for participating in my study. Without their sincere participation, this study will not be as successful as today.

Dedication

To my wife, Sara Aliabadizadeh, my mother, Fatemeh Yektaee, my father,

Seyed Mohammad Bathaeian, and my brother, Iman.

TABLE OF CONTENTS

References

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

1.0 Background of the study

Information technology in teaching and learning has created a need to transform how university students learn by using more modern, efficient, and effective alternative such as e-learning. According to New Report by Global Industry Analysts, Inc., e-learning has emerged as an imperative tool to impart knowledge in the academic as well as corporate sectors. Since e-learning has several advantages in terms of cost reduction, simplified training programs, flexibility and convenience; it is poised to become an integral component of information dissemination, and emerges as the new paradigm of modern education. Backed by several favorable trends, the world of e-learning market is projected to exceed US$52.6 billion by 2010 (Global Industry Analysts, 2008). It is believed that the role of e-learning and information technology in education will continue to expand in scope and complexity.

Though e-learning has been growing worldwide, it is still new in Iran. One of the driving forces of implementing e-learning in Iran is due to the vastness of the country. Iran is a big country when compare to most of the European and Asian countries. Since most of the universities are located in big cities, it is difficult for majority of Iranians to get education there. Factors such as high cost of living and difficulty to travel have made e-learning an attractive alternative in education. However, the success implementation of e-

The contents of the thesis is for internal user only

REFERENCE

Aldexander, S., McKemzie, J., & Geissinger, H. (1998). An evaluation of information technology projects for university learning. Retrieved 27th April 2009 from *http://www.dest.gov.au/archive/cutsd/publications/exsummary.html* .

Beyth-Marom, R., Chajut, E., Roccas, S., & Sagiv, L. (2003). Internet-assisted versus traditional distance learning environments: Factors affecting students' preferences. *Computers & Education, 41*(1), 65–76.

Burgess, J.R.D., & Russell, J.E.A. (2003). The effectiveness of distance learning initiatives in organizations. *Journal of Vocational Behavior, 63* (2), 289-303

Chen, L., Chen, H., & Wang,N. (2009). Distance education in China: The current state of e-learning. *Campus-Wide Information Systems, 26*(2), 82-89

Chute, A. G., Thompson, M. M., & Hancock, B. W. (1999). *The McGraw-Hill handbook of distance learning.* New York: McGraw-Hill.

Collis, B. (1995). Anticipating the impart of multimedia in education: Lessons from the literature. *Computers in Adult Education and Training, 2*(2), 136-149.

Dagada, R., & Jakovljevic, M. (2004). *Where have all the trainers gone? E-learning strategies and tools in the corporate training environment.* Presented at SAICSIT, Pretoria, South Africa.

DeLone, W. H., & McLean, E. R. (2003). The Delone and Mclean model of information systems success: A ten-year update. *Journal of Management Information System, 19*(4), 9-30.

Dillon, C. L., & Guawardena, C. N. (1995). *A framework for the evaluation of telecommunications-based distance education.* Paper presented at the 17th Congress of the International Council for Distance Education, Open University, Milton Keynes.

Distance Learning Search. (2009). Peterson's distance learning. Retrieved 23rd April, 2009, from http://www.petersons.com/distancelearning/

Ef-Odl. (2008). E-learning 2.0: A second life for e-learning. Retrieved 10th November 2009, from http://www.efodlseminars.eu/charleroi/index.php?option=com_content&task=view&id=2

E-learning. (2001). What is the e-learning and how to develop it. Retrieved 16th April 2009, from http://www.primelearning.com

Freire, P. (1994). *Pedagogy of the oppressed.* London, UK: Continuum.

Global Industry Analysts, Inc. (2008), "e-learning: A global strategic business report", available Retrieved April 16th 2009, from at: www.strategyr.com/pressMCP-4107.asp.

Govindasamy, T. (2002). Successful implementation of e-learning: Pedagogical considerations'. *Internet and Higher Education, 4*(3-4), 287-299.

Guha, A.S., & Maji, S. (2008). E-learning: The latest spectrum. In open and distance learning. *Social Responsibility Journal, 4* (3), 297-305.

Helmi, A. (2002). An analysis on impetus of online education Curtin University of Technology, Western Australia. *The Internet and Higher Education, 4*(3), 243–253.

Herther, N. K. (1997). *Education over the web: Distance learning and the information professional.* Wilton, CT, USA: Online Inc.

Holsapple, C. W., & Lee-Post, A. (2006). Defining, assessing, and promoting E-learning success: An information systems perspective. *Decision Sciences Journal of Innovative Education, 4* (1), 67- 85.

Imamoglu, S. Z. (2007). An empirical analysis concerning the user acceptance of E-learning. *Journal of American Academy of Business, 11*(1), 132-137.

Kathawala, Y., & Wilgen, A. (2004). E-learning: Evaluation from an organization's perspective. *Training & Management Development Methods, 18*(4), 501-506.

Kenet. (2004). Why e-learning is important (Kenya education network). Retrieved 10th November 2009, from http://cbdd.wsu.edu/edev/kenet_tot/Unit1/WhyeElearning.htm

Khan, B. H. (2001). *A framework for web-based learning. Englewood Cliffs,* NJ: Educational Technology Publications.

Leidner, D. E., & Jarvenpaa, S. L. (1993). The information age confronts education: Case studies on electronic classroom. *Information Systems Research, 4*(1), 24–54.

Leonard, B. (1996). Distance learning: Work and training overlap. *HR Magazine, 41*, 41–47.

Macpherson, A., Eliot, M., Harris, I., & Homan, G. (2004). E-learning: Reflections and evaluation of corporate programmes. *Human Resource Development International, 7*(3), 295-313.

Naidu, S. (2006). *A guidebook of principles, procedures and practices*. New Delhi, CEMCA. Published on behalf of the Commonwealth Educational Media Center for Asia.

Nicholson, P. (2007). A history of e-learning. In Baltasar, F.M., Juan, M.S.P., Juan, A.G.P., Miguel, A.V.R., & Jose, B.R (Eds), *Computers and education e-learning: From theory to practice* (pp1-11). Netherlands: Springer.

Ninth Bridge. (2006). *Distance learning for nonprofit organizations*. Retrieved 29th April 2009, from http://www.ninthbridge.org/distancelearningreport.pdf

Normark, O. R., & Cetindamar, D. (2005). E-learning in a competitive firm setting. *Innovations in Education & Teaching International, 42*(4), 325-335.

Papp, R. (2000). *Critical success factors for distance learning.* Paper presented at the Americas Conference on Information Systems, Long Beach, CA, USA.

Rabak, L., & Cleveland-Innes, M. (2006). Acceptance and resistance to corporate e-learning: A case from the retail sector. *Journal of Distance Education, 21*(2), 115-134.

Selim, H.M. (2007). Critical success factors for e-learning acceptance: Confirmatory factor models. *Computers & Education 49,* 396–413.

Soong, B. M. H., Chan, H. C., Chua, B. C., & Loh, K. F. (2001). Critical success factors for on-line course resources. *Computers & Education, 36*(2), 101–120.

Tuovinen, J. E. (2000). Multimedia distance education interactions. *Educational Media International, 37*(1), 16-24.

Urdan, T. A., & Weggen, C. C. (2000). *Corporate e-learning: Exploring a new frontier*. Research Report, W R Hambrecht & Co: USA.

Volery, T., & Lord, D. (2000). Critical success factors in online education. *The International Journal of Educational Management, 14*(5), 216–223.

Wang, Y. (2003). Assessment of learner satisfaction with asynchronous electronic learning systems. *Information & Management, 41*(1), 75–86.

Webster, J., & Hackley, P. (1997). Teaching effectiveness in technology-mediated distance learning. *Academy of Management Journal, 40*(6), 1282–1309.

Willis, B. (1994). *Enhancing faculty effectiveness in distance education.* In B. Willis (Ed.). *Distance education: Strategies and tools* (pp3-39). Englewood Cliffs, NJ: Educational Technology Publications, Inc.