

The copyright © of this thesis belongs to its rightful author and/or other copyright owner. Copies can be accessed and downloaded for non-commercial or learning purposes without any charge and permission. The thesis cannot be reproduced or quoted as a whole without the permission from its rightful owner. No alteration or changes in format is allowed without permission from its rightful owner.



**PERCEPTION OF STUDENT'S SATISFACTION  
TOWARDS ONLINE LEARNING: A STUDY AMONG  
SBMS' STUDENTS IN UUM**



**MASTER OF SCIENCE (MANAGEMENT)**

**UNIVERSITI UTARA MALAYSIA**

**JUNE 2016**

**PERCEPTION OF STUDENT'S SATISFACTION TOWARDS ONLINE  
LEARNING: A STUDY AMONG SBMS' STUDENTS IN UUM**



By  
**AMIRA RAFHAN BINTI JAFRI**

**UUM**  
Universiti Utara Malaysia

**Thesis Submitted to  
School of Business Management,  
Universiti Utara Malaysia,  
In Partial Fulfillment of the Requirement for the Master of Sciences  
(Management)**



**Pusat Pengajian Pengurusan  
Perniagaan**

SCHOOL OF BUSINESS MANAGEMENT

**Universiti Utara Malaysia**

**PERAKUAN KERJA KERTAS PENYELIDIKAN**  
(*Certification of Research Paper*)

Saya, mengaku bertandatangan, memperakukan bahawa  
(*I, the undersigned, certified that*)  
**AMIRA RAFHAN BINTI JAFRI (817297)**

Calon untuk Ijazah Sarjana  
(*Candidate for the degree of*)  
**MASTER OF SCIENCE (MANAGEMENT)**


telah mengemukakan kertas penyelidikan yang bertajuk  
(*has presented his/her research paper of the following title*)

**PERCEPTION OF STUDENT'S SATISFACTION TOWARDS ONLINE LEARNING: A STUDY AMONG SBMS'  
STUDENTS IN UUM**

Seperti yang tercatat di muka surat tajuk dan kulit kertas penyelidikan  
(*as it appears on the title page and front cover of the research paper*)

Bahawa kertas penyelidikan tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan.  
(*that the research paper acceptable in the form and content and that a satisfactory knowledge of the field is covered by the research paper*).

Nama Penyelia : **DR. KHAIROL ANUAR ISHAK**  
(*Name of Supervisor*)

Tandatangan :   
(*Signature*)

Tarikh : **8 JUN 2016**  
(*Date*)

## PERMISSION TO USE

In presenting this dissertation/project paper in partial fulfillment of the requirements for a 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 copying this dissertation/project paper in any manner, in whole or in part, for scholarly purposes may be granted by my supervisor(s) or in their absence, by the Dean of School of Business Management where I did my dissertation/project paper. It is understood that any copying or publication or use of this dissertation/project paper 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 the UUM in any scholarly use which may be made of any material in my dissertation/project paper.

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



Dean of School of Business Management  
Universiti Utara Malaysia  
06010 UUM Sintok  
Kedah Darul Aman

**UUM**  
Universiti Utara Malaysia

## ABSTRACT

Online learning is one of the biggest concerns in Ministry of Higher Education in order to achieve Malaysia's goal towards access, quality and efficiency. Online learning is known to be one of the medium in education that reduce the space, time and cost for students and at the same time provide a competitive advantage to the university. This study attempts to examine the perception of School of Business Management students in online learning satisfaction towards online learning system in Universiti Utara Malaysia. Factors used in this study to evaluate the satisfaction over online learning system are user interface design, online course design, perceived ease of use and perceived of usefulness. It is important to know the levels of student satisfaction towards online learning system from the perspective of student's behaviour and the design of system in order to enhance the quality of online education. This study also examined the level of usage for online learning system used in Universiti Utara Malaysia among School of Business Management students. A total of 331 students participated in the research from four different courses; Marketing, Human Resource Management, Entrepreneurial and Business Administration. In order to test the hypotheses, SmartPLS version 2.0 was used and the findings of this study showed that the user interface design, online course design, perceived ease of use and perceived of usefulness have a significant relationship to student online learning satisfaction.

Keyword: user interface design, online course design, perceived ease of use, perceived of usefulness and online learning satisfaction

## ABSTRAK

Kementerian Pengajian Tinggi memandang tinggi kepentingan pembelajaran dalam talian dalam usaha untuk mencapai matlamat Malaysia ke arah akses, kualiti dan kecekapan. Pembelajaran dalam talian merupakan salah satu medium dalam pendidikan yang mengurangkan ruang, masa dan kos untuk pelajar dan pada masa yang sama ia memberikan kelebihan daya saing terhadap universiti. Kajian ini bertujuan untuk mengkaji persepsi pelajar School of Business Management dalam kepuasan pembelajaran dalam talian ke arah sistem pembelajaran dalam talian yang terdapat di Universiti Utara Malaysia. Faktor-faktor yang digunakan dalam kajian ini adalah untuk menilai kepuasan ke atas sistem pembelajaran dalam talian ialah reka bentuk antara muka, reka bentuk kursus dalam talian, persepsi kemudahan penggunaan, persepsi tanggapan kebergunaan. Adalah penting untuk mengenal pasti tahap kepuasan pelajar terhadap sistem pembelajaran dalam talian dari perspektif tingkah laku pelajar dan reka bentuk sistem demi meningkatkan kualiti pendidikan dalam talian. Kajian ini turut mengkaji tahap penggunaan sistem pembelajaran dalam talian yang digunakan dalam kalangan pelajar School of Business Management di Universiti Utara Malaysia. Seramai 331 pelajar dari empat kursus berbeza; Pemasaran, Pengurusan Sumber Manusia, Usahawan dan Pentadbiran Perniagaan telah mengambil bahagian dalam penyelidikan ini. SmartPLS 2.0 digunakan untuk menguji hipotesis kajian dan hasil kajian menunjukkan bahawa reka bentuk antara muka, reka bentuk kursus dalam talian, persepsi kemudahan penggunaan, persepsi tanggapan kebergunaan mempunyai hubungan yang signifikan terhadap kepuasan pelajar dalam pembelajaran dalam talian.

Kata kunci: reka bentuk antara muka, reka bentuk kursus dalam talian, persepsi kemudahan penggunaan, persepsi tanggapan kebergunaan dan kepuasan penggunaan pembelajaran dalam talian

## ACKNOWLEDGEMENT

I would like to express my special appreciation and thanks to my helpful supervisor, Dr Khairol Anuar Bin Ishak. The supervision and support that he gave truly help the progression and smoothing of my research. The co-operation is much indeed appreciated.

I would especially like to thank the respondents and my friends for giving their time to help me in completing this research. Without your help I would not be able to finish the study according to what I have been planned for.

A special thanks to my family for their understanding and support throughout the research process. Your prayer for me was what had sustained me this far. Thank you for supporting me in everything I did.

Finally, I thank Allah s.w.t, for letting me through all the difficulties. I have experienced your guidance day by day and with your blessing I was able to finish the research. I will keep on trusting you for my future.



## Table of Contents

Title	
Certification of Research Paper	i
Permission to Use	ii
Abstract	iii
Abstrak	iv
Acknowledgement	v
Table of Content	vi
List of Tables	viii
List of Figures	ix
<b>CHAPTER 1: INTRODUCTION</b>	
1.0 Introduction	1
1.1 Background of the study	1
1.2 Statement of problem	5
1.3 Research questions	7
1.4 Research objectives	8
1.5 Significance of study	9
1.6 Organizational study	9
<b>CHAPTER 2: LITERATURE REVIEW</b>	
2.0 Introduction	10
2.1 Theory in online learning	10
2.1.1 Theory of Planned Behaviour	10
2.1.2 Technology Acceptance Model Theory	12
2.2 Online Learning	14
2.3 Online Learning Satisfaction	17
2.4 Perceived variables	19
2.4.1 Perceived Ease of Use	19
2.4.1 Perceived of Usefulness	20
2.5 System design	20
2.5.1 User Interface Design	21
2.5.2 Online Course Design	23
2.6 Research framework	25
2.6.1 Research model	25
2.6.2 Justification of variables	26
2.7 Hypotheses development	27
2.8 Summary	30

<b>CHAPTER 3: RESEARCH METHODOLOGY</b>	
3.0 Introduction	31
3.1 Type of study	31
3.2 Research design	32
3.3 Population and sample	34
3.4 Data collection procedure	36
3.5 Questionnaire design	37
3.6 Pilot study	41
3.7 Statistical analysis	42
3.8 Summary	44
<b>CHAPTER 4: RESULTS AND DISCUSSION</b>	
4.0 Introduction	45
4.1 Response rate	45
4.2 Profile of respondents	46
4.3 Descriptive statistics	48
4.4 Frequency analysis	49
4.5 Open question and opinion analysis	50
4.6 Reliability analysis	51
4.7 Measurement structure model analysis	51
4.8 Discriminant variables of constructs	53
4.9 Hypotheses testing	53
4.10 Summary	56
<b>CHAPTER 5: CONCLUSION AND RECOMMENDATION</b>	
5.0 Introduction	57
5.1 Discussion	57
5.2 Limitations	61
5.3 Recommendations	63
5.4 Conclusion	64
<b>REFERENCES</b>	65
<b>APPENDIX A: Questionnaire</b>	71
<b>APPENDIX B: SPSS and SmartPLS Output</b>	77

## LIST OF TABLES

Table 3.3.1	Statistics of SBMs' students	34
Table 3.3.2	Cross section of population for SBMs' students	35
Table 3.5	Constructs in the questionnaire	37
Table 3.6	Cronbach's Alpha for variables	41
Table 4.2	Demographic of respondents	47
Table 4.3	Descriptive statistics of variables	48
Table 4.4	Frequency of online learning UUM usage	49
Table 4.6	Reliability for variables	51
Table 4.7	Measurement model	52
Table 4.8	Discriminant validity of constructs	53
Table 4.9	Path coefficient and hypotheses testing	55



**UUM**  
Universiti Utara Malaysia

## LIST OF FIGURES

Figure 2.1.1	Model of Theory of Planned Behaviour	11
Figure 2.1.2	Model of TAM Theory	13
Figure 2.6.1	Research model	25
Figure 4.1	Response rate of questionnaire from respondents	46
Figure 4.9	Results of the path analysis	54

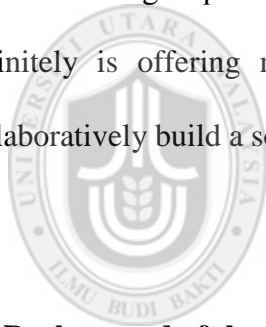


# CHAPTER 1

## INTRODUCTION

### 1.0 Introduction

The chapter of introduction will lead readers to understand about the research that will be conducted by the researcher. It provides the necessary background of the study, statement of problem and lead to the research objectives and research questions of the study. Besides that, significance of study and organization of the study will be highlighted. Various term used for online learning to describe the virtual learning experience that is widely used in today's world. Online learning definitely is offering new exciting possibilities for instructors and students to collaboratively build a social constructivist learning environment (Renner, 2006).



UUM  
Universiti Utara Malaysia

### 1.1 Background of the study

Advanced in technology has changed the nature of learning nowadays and there is major development in providing a good quality of online learning for students in ensuring that they are able to study in a convenient way. Online learning is one of the facilities that have been provided by most universities to facilitate the learning process and improve learning experience among the students and instructors. Online education is defined as an approach to education that is facilitated by information communication technology and promoted by social learning that leads to the creation of a relationship between instruments and students through regular interaction (Lee, 2010).

The contents of  
the thesis is for  
internal user  
only

## REFERENCES

- Ajzen, I. (n.d.). Behavioural interventions based on the theory of planned behaviour.
- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Ajzen, I. (2011). The theory of planned behaviour: Reactions and reflections. *Psychology & Health*, 26(9), 1113-1127.
- Anshari, M., Alas, Y., Yunus, N., Sabtu, N. I. & Hamid, M. H. (2015). Social customer relationship management and student empowerment in online learning systems. *Int. J. Electronic Customer Relationship Management*, 9(2/3).
- Bolliger, D. U. & Martindale, T. (2004). Key factors for determining student satisfaction in online courses. *International Journal on E-Learning*.
- Bouhnik, D. & Marcus, T. (2006). Interaction in distance-learning courses. *Journal of the American Society for Information Science and Technology*, 57(3), 299-305.
- Calisir, F. & Calisir, F. (2004). The relation of interface usability characteristics, perceived usefulness and perceived ease of use to end-user satisfaction with enterprise resource planning (ERP) systems. *Computers in Human Behaviour*, 20, 505-515.
- Chang, S. C. & Tung, F. C. (2008). An empirical investigation of students' behavioural intentions to use the online learning course websites. *British Journal of Education Technology*, 14 (3).
- Cho, V., Cheng, T. C. E. & Lai, W. M. J. (2009). The role of perceived user-interface design in continued usage intention of self-paced e-learning tools. *Computers & Education*, 53, 216-227.

- Dabaj, F. & Basak, H. (2008). The role of gender and age on students' perceptions towards online education case study: Sakarya University, Vocational High School. *International Journal of Social, Behavioural, Educational, Economic, Business and Industrial Engineering*, 2(2).
- Danesh, S. Y. S., Hashemina, S., Sirousbakht, S. & Danesh, M. M. S. (2012). Education of effective factors on electronic learning and satisfying learners in virtual universities of Tehran. *Interdisciplinary Journal of Contemporary Research in Business*, 3(9).
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
- Economics Network. (2011). What is the purpose of questionnaire? Retrieved April 17, 2016, from <http://www.economicsnetwork.ac.uk/handbook/questionnaires/13>
- Ehlers, U. D. (2009). Web 2.0 – e-learning 2.0 – quality 2.0? Quality for new learning cultures. *Quality Assurance in Education.*, 17(3), 296-314.
- Eom, S. B., Wen, H. J. & Ashill, N. (2006). The determinants of students' perceived learning outcomes and satisfaction in university online education: An empirical investigation. *Decision Sciences Journal of Innovative Education*, 4(2).
- Fisher, M. & Baird, D. E. (2005). Online learning design that fosters student support, self-regulation, and retention. *Campus-wide Information Systems*, 22(2), 88-107.
- Fornell, C. & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Fredericksen, E., Pickett, A., Shea, P., Pelz, W. & Swan, K. (2000) Student satisfaction and perceived learning with on-line courses: Principles and examples from the SUNY learning network.



- Gibson, P. A. & Dunning, P. T. (2012). Creating quality online course design through a peer-reviewed assessment. *Journal of Public Affairs Education*, 18(1), 209-228.
- Hair, J. F., Ringle, C. M. & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-152.
- Hur, M. H. & Im, Y. (2013). The influence of e-learning on individual and collective empowerment in the public sector: An empirical study of Korean government employees. *I4*(4).
- Hom, W.C. (2002). Applying customer satisfaction theory to community college planning of counselling services.
- Klopfenstein, B. J. (2003). Empowering learners: Strategies for fostering self-directed learning and implications for online learning.
- Kuong, H. C. (2015). Enhancing online learning experience: From learner's perspective. *Social and Behavioural Sciences*, 191, 1002-1005.
- Krejcie, R. V. & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Lee, J. W. (2010). Online support service quality, online learning acceptance, and student satisfaction. *Internet and Higher Education*, 13, 227-283.
- Loon, O. K., Yamin, F. M. & Yaacob, N. A. (2013). Communication in learning management system (LMS): The impact on academicians satisfaction. *Prosiding Simposium Pengurusan Teknologi, Operasi & Logistik*.
- Liao, C., Chen, J. L., & Jen, D. C. (2007). Theory of planning behaviour (TPB) and customer satisfaction in the continued use of e-service: An integrated model. *Computers in Human Behaviour*, 23, 2804-2822.

Liaw, S. S. (2008). Investigating students'perceived satisfaction, behavioural intention, and effectiveness of e-learning: A case study of the Blackboard system. *Computers & Education*, 51, 864-873.

Liu, I. F., Chen, M. C., Sun, Y. S., Wible, D. (2010). Extending the TAM model to explore the factors that affect intention to use an online learning community. *Computers & Education*, 54, 600-610.

USC Libraries. (2016). Research Guide. Retrieved June 15, 2016, from <http://libguides.usc.edu/writingguide/quantitative>

Masrom, M. (2007). Technology acceptance model and e-learning. *12<sup>th</sup> International Conference on Education*.

Ministry of Education Malaysia. (2015). Malaysian Education Blueprint 2015-2025 (Higher Education).

Min, K. S., Yamin, F. M. & Ishak, W. H. W. (2012). Design, purpose of usage and the impact of LMS on student learning: A preliminary findings. *Knowledge Management International Conference*.

Mondofacto (2009).Research Design. Retrieved March 15, 2016, from <http://www.mondofacto.com/facts/dictionary?research+design>.

Picianno, A. G. (2002). Beyond student perceptions: Issues of interaction, presence, and performance in an online course. *JALN*, 6(1).

Poe, M. & Stassen, M. L.A. (n.d.). Teaching and learning online, communication, community and assessment.

Palmer, S. R. & Holt, D. M. (2009). Examining student satisfaction with wholly online learning. *Journal of Computer Assisted Learning*, 25, 101-113.

- Raaij, E. M. V. & Schepers, J. J. L. (2008). The acceptance and use of a virtual learning environment in China. *Computers & Education*, 50, 838-852.
- Ramayah, T. (2010). The role of voluntariness in distance education students' usage of a course website. *The Turkish Online Journal of Educational Technology*, 9(3).
- Renner, W. (2002). E-learning 2.0: New frontier for student empowerment. *EDU-COM International Conference*.
- Sekaran, U. (2003). *Research methodology for business: A skill building approach* (4<sup>th</sup> edition.). New York: John Wiley & Sons.
- Sekaran, U. & Bougie, R. (2010). *Research methods for business: A skills building approach* (5<sup>th</sup> edition.). New York: John Wiley & Sons.
- Selim, H. M. (2003). An empirical investigation of student acceptance of course websites. *Computers & Education*, 40, 343-360.
- Selim, H. M. (2005). E-learning critical success factors: An exploratory investigation of student perceptions. *Managing Modern Organizations Through Information Technology*.
- Sharma, S. K., Chandel, J. K. & Govindaluri, S.M. (2014). Students' acceptance and satisfaction of learning through course websites. *Education, Business and Society: Contemporary Middle Eastern Issues*, 7(2/3), 152-166.
- Stachiowack, J. (2008). Pilot Study. About. com Guide. Retrieved April 24, 2016, from [http://ms.about.com/od/newsresearch/g/pilot\\_study.htm](http://ms.about.com/od/newsresearch/g/pilot_study.htm).
- Song, S. M. (2010). E-learning: Investigating student's acceptance of online learning in hospitality programs. *Graduate Theses and Dissertations*. Paper 11902.

Sun, P. C., Tsai, R. J., Finger, G., Chen, Y. Y. & Yeh, D. (2008). What drives a successful e-learning? An empirical investigation of the critical factors influencing learner satisfaction. *Computers & Education*, 50, 1183-1202.

Swan, K. (2001). Virtual interaction: Design factors affecting student satisfaction and perceived learning in asynchronous online courses. *Distance Education*, 22(2), 306-331.

Wang, S. K. & Yang, C. (2005). The interface design and the usability testing of a fossilization web-based learning environment. *Journal of Science Education and Technology*, 14(3).

Wikipedia. (2016). System Design. Retrieved June 17, 2016 from [https://en.wikipedia.org/wiki/Systems\\_design](https://en.wikipedia.org/wiki/Systems_design)

Wong, K. K. K. (2013). Partial least squares equation modelling (PLS-SEM) techniques using SmartPLS. *Marketing Bulletin*, 24(1).

