

**E-COMMERCE ADOPTION AMONG SMALL AND MEDIUM  
ENTERPRISES IN SAUDI ARABIA**

**ABDUL RAHMAN NASSER A. ALMOAWI**

Thesis submitted to the College of Business, Universiti Utara Malaysia in fulfillment of  
the requirement for the Degree of Doctor of Philosophy

## DEDICATION

### الاهداء

الى والدي الغالي رحمه الله واسكنه فسيح جناته

وامي الحبيبة انعم بها من حنونة والحديث عن تضحيتها يطول

واخي الاكبر فائز من ضحي براحته ووقته من اجل اسعد العيش لمن حوله

وزوجتي الحبيبة سارة شريكة حياتي ومن تحملت الصعاب من اجلي

وابنائي الغالين فائز وناصر وغلا وجنى

واخواني واخواتي اليكم جميعا اهدي هذا الجهد المتواضع

## PERMISSION TO USE

In presenting this thesis in fulfilment of the requirements for a postgraduate degree from Universiti Utara Malaysia, I agree that the University Library may make it freely available for inspection. I further agree that permission for copying of this thesis in any manner, in whole or in part, for scholarly purpose may be granted by my supervisor, or in his absence, by the Dean Othman Yeop Abdullah Graduate School of Business. It is understood that any copying or publication or use of this thesis or parts thereof 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 for any scholarly use which may be made of any material from my thesis.

Request for permission to copy or to make use of the materials in this thesis, in whole or in part, should be addressed to:

Dean Othman Yeop Abdullah Graduate School of Business  
College of Business  
Universiti Utara Malaysia  
06010 Sintok  
Kedah, Malaysia.

## ABSTRACT

The purpose of this study was to determine the relationships between contexts and the e-commerce adoption among SMEs in Saudi Arabia. These contexts included organisational (firm size, attitude, innovativeness, knowledge), technology (relative advantage, compatibility, complexity), and environmental characteristics (competition intensity, information intensity). The study also attempted to determine the moderating effect of culture on these relationships. Rogers's (2003) Diffusion of Innovations Theory and Tornatzky and Fleischer's (1990) method were used as a basis for the framework. In addition, Hofstede's cultural dimensions (power distance, uncertainty avoidance, individualism, and masculinity) were used as moderators.

A quantitative and survey research design was adopted to collect data, test hypotheses, and answer research questions in the study. A total of 1150 questionnaires were sent to SME owner/managers in Saudi Arabia, and 400 were returned, giving a response rate of 34.78 percent.

The results of the study revealed that attitude, firm size, competition intensity, and information intensity had a significant, positive relationship with the e-commerce adoption. However, knowledge and relative advantage had a significant negative relationship with the e-commerce adoption. In addition, the results showed that power distance, uncertainty avoidance, individualism, and masculinity had partially moderating effect on the relationship between organisational context and e-commerce adoption and the relationship between environmental context and e-commerce adoption. Regarding technology context, the result showed that power distance and masculinity had partially moderating effect on e-commerce adoption. On the contrary, the results found that



## SUBMISSION OF PROJECT PAPER/THESIS

Dean

Othman Yeop Abdullah Graduate School of Business  
UUM College of Business  
(Accounting Building)  
Universiti Utara Malaysia  
06010 UUM Sintok, Kedah  
Tel: 6 04 9283904 / 4821  
Fax: 6 04 9285220  
www.cob.uum.edu.my  
(Attn: Mdm. Zaidah binti Abd. Wahab)

Sir/Madam

### SUBMISSION OF PROJECT PAPER/THESIS

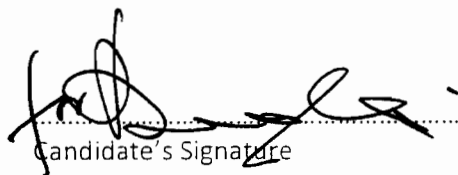
I ABDUR RAHMAN MASYEK A. ALMOAWI Matric No: 91102

graduate student programme PHD hereby

submit the project paper/thesis title:

E-COMMERCE ADOPTION AMONG SMALL AND MEDIUM  
ENTERPRISES IN SAUDI ARABIA

Graduate student of Master/PhD submit two (2) binded copies, one (1) loose copy and one (1) in soft copy/CD of my Project Paper/Thesis entitled to Othman Yeop Abdullah Graduate School of Business, UUM College of Business, Universiti Utara Malaysia.

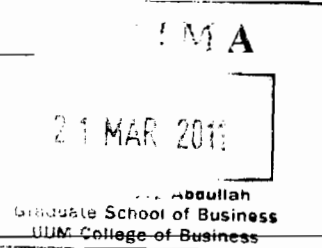
  
Candidate's Signature

Date: 21/3/11

### CERTIFIED

The above Project Paper/Thesis is received on: \_\_\_\_\_

Receiver: Zaidah  
for Dean  
Othman Yeop Abdullah Graduate School of Business

  
UUM  
21 MAR 2011  
Othman Yeop Abdullah  
Graduate School of Business  
UUM College of Business

uncertainty avoidance and individualism had no moderated effects.

This research adds to the existing body of knowledge on e-commerce adoption and discovers additional contexts by offering organisational, technology, and environmental characteristics and the moderating effect of culture on the influence of these contexts regarding the adoption of e-commerce technology among SMEs for more informed decisions. The OTE Model of Innovation Adoption, the DOI theory, and Hofstede's cultural dimensions combined to form a richer theoretical framework that guided the understanding and prediction of e-commerce adoption among SMEs. In addition, this study showed SME owner/managers the opportunities and benefits of e-commerce adoption in a business environment. Furthermore, the results of the study may provide solutions and recommendations for SMEs and governments to successfully implement e-commerce.

## ACKNOWLEDGEMENTS

All praise due to the Lord, Allah alone. I praise him, seek his aid and seek his forgiveness. I testify that there is no god but Allah, and that Mohammed (peace be upon him) is his slave and messenger. All grand thanks and praise to Allah for giving me the audacity, endurance, and strength during this long process. It is with Allah's power, blessings, guidance, love, grace, and help that this process has been possible.

I would like to mention that this thesis is the result of the collective efforts of a number of important and valued people who have directly or indirectly assisted and supported me during my doctoral studies and in this present endeavor. Therefore, to these people, I would like to express my profound gratitude and thanks and to all of them I am greatly beholden. It is not possible to mention every one of them, but it is unfair not to express special gratitude to the following.

First, my profound gratitude, sincere appreciation, and thanks to my supervisor, Prof. Dr. Rosli Mahmood, for his unfailing assistance, patience, support, and dedication Prof. Dr. Rosli, I could hardly find the words to express my appreciation for everything you have provided. Again, I thank you for being very patient and supportive, nourishing and cherishing not just during my studies, but also for your help and guidance throughout my time at The University Utara Malaysia. Your patience and willingness to talk about all aspects of this thesis were invaluable as were your insights into the topic and your enthusiasm for philosophical inquiry.

I also would like to express my sincere appreciation and thanks to my first colloquium committee members, Prof. Dr. Noor Azizi Ismail and Assoc. Prof. Dr. Zulkifli

Mohamed Udin, for their time, encouragement and invaluable assistance, and most importantly, for their advices to write my research properly before my defense, which helped me to stay on the right track.

Second, I also would like to express my sincere appreciation and thanks to my defense committee members, Assoc. Prof. Dr. Sobri Minai, Assoc. Prof. Dr. Hartini Ahmad and Dr. Abdul Rahim Othman, for their time, assistance and advice, and most importantly, for their understanding during the completion process of my thesis, which helped me to continue on the right track.

Third, my deep appreciation and very sincere special thanks go to my family for their thoughts and prayers: my mother for her endless love and devotion; whose continuous prayers and encouragements helped me accomplish my goals and thank you for your patience and please forgive me for being away from you all these years. Of course, I would like to express my appreciation and the most heartfelt thanks to my wife (Sara) who stood beside me and tolerated me and provided endless love, encouragement, support, kindness, and patience throughout the long years. My love and gratitude go to my children (Fayez, Nasser, Gala and Jana) who shared the good and bad days with me during all these difficult years and who were denied ample time to spend with me because of my studies. They were always supportive of me and never made me feel guilty for putting my schoolwork first. Thank you again for your support and patience during my extensive studies. Special thanks to my brothers for their encouragement and support, especially my brother Fayez who sacrificed a lot to help me finish my studies; my sisters and their husbands for their sincere wishes, love, prayers and care, especially Mesfer; nephews for their kindness and good wishes, especially my nephew Mohammed. May Allah keep you and provide you with good health and make all your dreams come true.



Fourth, I also would like to offer my sincere appreciation and thanks to members of the support panel in Saudi Arabia , Prof. Dr. Said S. Al-Gahtani , Assoc. Prof. Dr. Mohammed A Alabbas, Assoc. Prof. Dr. Abdullah T. Mallah, Assoc. Prof. Dr. Ibrahim S. Abdullah and Assoc. Prof. Dr. Nabeel Al-Qirim for their help, comments and supported me during my doctoral studies.

I also would like to express my sincere indebtedness for all the participants in this study who gave me their time to share their information and opinions and complete the surveys. Finally, I am grateful to members of General Organisation for Social Insurance (GOSI) in Saudi Arabia, Mr. Abdul Aziz Al saif, Mr. Salem Al alyani and Mr. Salman Alkharra'a who helped me during the data collection stages, without whom this research would have been impossible.

Thank you and I wish you all the best in your lives.

## **Table of Contents**

PERMISSION TO USE .....	iii
ABSTRACT .....	iv
ACKNOWLEDGEMENTS .....	vi
CHAPTER ONE: INTRODUCTION .....	1
1.0 Introduction .....	1
1.1 Background .....	2
1.2 Saudi Arabia: An Interesting Case Study .....	5
1.3 Small- and Medium-sized Enterprises (SMEs) in Saudi Arabia .....	10
1.4 Problem Statement .....	13
1.5 Objectives of Study .....	27
1.6 Significance of Study .....	33
1.7 Definitions and Concepts .....	34

1.8 Limitations and Scope of Study .....	38
1.9 The Organisation of the Remaining Chapters .....	39
CHAPTER TWO: LITERATURE REVIEW .....	41
2.0 Introduction .....	41
2.1 Internet History and Use in the Kingdom Of Saudi Arabia .....	42
2.1.1 Introduction .....	42
2.1.2 The future of the Internet and the importance of e-commerce in Saudi Arabia .....	45
2.1.3 The historical perspectives on Internet use by SMEs in Saudi Arabia. ....	47
2.1.4 The current developments at Saudi SMEs .....	49
2.1.5 Saudi Arabia’s Internet-related policy framework and SMEs’ Internet-based strategy .....	52
2.1.6 Strategic focus on Saudi Arabia’s SMEs’ Internet use .....	55

2.2 SMEs Adopting e-commerce Overview .....	57
2.3 Tornatzky and Fleischer OTE Model.....	62
2.3.1 Organisational context .....	63
2.3.2 Technology context.....	65
2.3.3 Environmental context .....	67
2.4 Theories/Models Related to Innovation Adoption.....	69
2.4.1 Theory of Reasoned Action (TRA).....	70
2.4.2 Theory of Planned Behaviour (TPB) .....	72
2.4.3 Technology Acceptance Model (TAM).....	74
2.4.4 Diffusion of Innovation Theory (DOI) .....	76
2.5 The Culture Effect.....	85
2.6 Summary of the Chapter .....	89
CHAPTER THREE: HYPOTHESES AND THEORETICAL DEVELOPMENT .....	90
3.0 Introduction.....	90

3.1 Organisational context .....	92
3.1.1 Firm size.....	92
3.1.2 Owner’s attitude .....	94
3.1.3 Owner’s innovativeness .....	96
3.1.4 Owner’s technological knowledge.....	97
3.2 Technology context.....	98
3.2.1 Relative advantage .....	98
3.2.2 Compatibility .....	100
3.2.3 Complexity.....	102
3.3 Environmental context.....	104
3.3.1 Information intensity.....	104
3.3.2 Competition intensity.....	105
3.4 Cultural context.....	106
3.4.1 Power distance .....	107

3.4.2 Uncertainty avoidance .....	109
3.4.3 Individualism/collectivism.....	111
3.4.4 Masculinity/femininity.....	113
CHAPTER FOUR: METHODOLOGY .....	116
4.0 Introduction.....	116
4.1 Research Design.....	118
4.1.1 Population and sampling.....	122
4.1.2 Data Type and Collection Technique.....	123
4.1.3 Research Information.....	123
4.1.4 Pilot Study.....	124
4.1.5 Description – Part one: Organisational context .....	126
4.1.6 Description – Part two: Technology context.....	129
4.1.7 Description – Part three: Environmental context.....	130
4.1.8 Description – Part four: Cultural context.....	131

4.1.9 Description – Part five: E-commerce adoption.....	133
4.2 Data Analysis .....	134
4.3 Summary of the Chapter .....	139
CHAPTER FIVE: DATA ANALYSES AND RESULTS .....	140
5.0 Introduction.....	140
5.1 Sample Characteristics.....	140
5.3 Exploratory Factor Analysis .....	149
5.4 Reliability Analysis.....	157
5.5 Descriptive Statistics and Assessment of Normality .....	159
5.6 Tests of Hypotheses .....	161
5.7 Sociodemographic Comparisons .....	205
5.8 Summary of Results .....	208
CHAPTER SIX: DISCUSSION AND CONCLUSION .....	215
6.0 Introduction.....	215

6.1 General Characteristics of the Owners.....	216
6.2 General Characteristics of SMEs .....	216
6.3 The Findings of Determinant Factors .....	217
6.3.1 Determinant factors within the organisational context .....	218
6.3.2 Determinant factors within the technology context.....	223
6.3.3 Determinant factors within the environmental context.....	228
6.3.4 Determinant factors within the cultural context.....	230
6.3.4.1 Power distance .....	231
6.3.4.2 Uncertainty avoidance.....	234
6.3.4.3 Individualism/collectivism.....	238
6.3.4.4 Masculinity/femininity.....	241
6.4 Implications For Research .....	243
6.4.1 Theoretical implications.....	244
6.4.2 Implication for practice.....	246



6.5 Limitations and Recommendations For Future Research .....	251
6.5.1 Limitations .....	251
6.5.2 Recommendations for future research .....	253
6.6 Concluding Remarks.....	255
REFERENCES .....	258
Appendix A.....	289
English Questionnaire.....	289
Appendix B .....	298
Arabic Questionnaire .....	298

## List of Tables

Table 2.1 SME Business Opportunities and Customer Benefits Of E-commerce .....	59
Table 2.2 Some Selected Studies Focusing on SMEs.....	61
Table 2.3 Studies That Have Used DoI .....	84
Table 4.1 Contexts and Variables Name.....	118
Table 4.2 Numbers of Firms and Percentages in Area's Location .....	121
Table 4.3 Sample Size Determination.....	138
Table 4.4 Contexts of the Questionnaire.....	124
Table 4.5 Firm Profile .....	126
Table 4.6 Owner Characteristics.....	126
Table 4.7 Variables and Questions of the Organisational Context.....	127
Table 4.8 Variables and Questions of the Technology Context.....	129
Table 4.9 Variables and Questions of the Environmental Context.....	130
Table 4.10 Variables and Questions of the Cultural Context .....	131

Table 4.11 Variables and Questions of the e-commerce Context.....	133
Table 4.12 Reliability Analysis.....	136
Table 5.1 Frequencies and Percentages for Number of Employees (N = 400).....	141
Table 5.2 Frequencies and Percentages for Location (N=400).....	142
Table 5.3 Frequencies and Percentages for Web Site (N = 400).....	143
Table 5.4 Frequencies and Percentages for Gender (N = 400).....	144
Table 5.5 Frequencies and Percentages for Age (N = 400).....	145
Table 5.6 Frequencies and Percentages for Education (N = 400).....	146
Table 5.7 Frequencies and Percentages for Owner's Tenure (N = 400).....	147
Table 5.8 Response Rate of the Questionnaires.....	149
Table 5.9 Factor Loadings for Seyal and Rahman (2003) Items.....	150
Table 5.10 Factor Loadings for Thong and Yap (1995) Items.....	152
Table 5.11 Factor Loadings for Dorfman and Howell (1988) Item.....	153
Table 5.12 Factor Loadings for Innovativeness Items.....	155

Table 5.13 Factor Loadings for e-commerce Items .....	157
Table 5.14 Cronbach's Alpha Reliabilities for Scales (N = 400) .....	158
Table 5.15 Descriptive Statistics for Scales.....	160
Table 5.16 Correlations Between e-commerce and Other Scales.....	161
Table 5.17 Regression Model for Predicting e-commerce from all Independent Variables (Hypotheses 1–9) .....	166
Table 5.18 Regression Model for Predicting e-commerce from Organisational and Power Distance and Their Interactions (Hypothesis 10).....	169
Table 5.19 Regression Model for Predicting e-commerce from Technology and Power Distance and Their Interactions (Hypothesis 11).....	172
Table 5.20 Regression Model for Predicting e-commerce from Environment and Power Distance and Their Interactions (Hypothesis 12).....	175
Table 5.21 Regression Model for Predicting e-commerce from Organisational and Uncertainty Avoidance and Their Interactions (Hypothesis 13) .....	178
Table 5.22 Regression Model for Predicting e-commerce From Technology and Uncertainty Avoidance and Their Interactions (Hypothesis 14) .....	182

Table 5.23 Regression Model for Predicting E-commerce from Environment and Uncertainty Avoidance and Their Interactions (Hypothesis 15) .....	184
Table 5.24 Regression Model for Predicting e-commerce from Organisation and Individualism/Collectivism and Their Interactions (Hypothesis 16).....	188
Table 5.25 Regression Model for Predicting e-commerce From Technology and Individualism/Collectivism and Their Interactions (Hypothesis 17).....	191
Table 5.26 Regression Model for Predicting e-commerce From Environment and Individualism/Collectivism and Their Interactions (Hypothesis 18).....	193
Table 5.27 Regression Model for Predicting e-commerce From Organisational and Masculinity/Femininity and Their Interactions (Hypothesis 19).....	196
Table 5.28 Regression Model for Predicting e-commerce from Technology and Masculinity/Femininity and Their Interactions (Hypothesis 20).....	200
Table 5.29 Regression Model for Predicting e-commerce from Environment and Masculinity/Femininity and Their Interactions (Hypothesis 21).....	204
Table 5.30 Significant ANOVA Results for Differences in e-commerce Scores on Sociodemographic Variables .....	207

## List of Figures

Figure 1.1 Internet User Growth 2001- 2007 in Saudi Arabia .....	8
Figure 1.2 E-readiness Rankings, 2005, 2006, 2007, 2008 .....	9
Figure 2.1 Theoretical Framework Based on OTE Model.....	63
Figure 2.2 Hofstede's (1980) Model of Cultural Differences.....	66
Figure 2.3 The Theory of Reasoned Action.....	71
Figure 2.4 The Theory of Planned Behaviour .....	72
Figure 2.5 The Technology Acceptance Model.....	74
Figure 2.6 Rogers' Innovation Adoption Curve .....	78
Figure 2.7 Diffusion of Innovation Process Model .....	79
Figure 2.8 Attributes of Innovation .....	83
Figure 3.1 The Proposed Research Model and Hypothesised Relationships.....	91
Figure 5.1 Percentages of Number of Employees.....	141
Figure 5.2 Percentages of participants from different locations .....	142

Figure 5.3 Percentages of Participants Whose Firm Had a Web Site.....	143
Figure 5.4 Percentages of Participants by Gender .....	144
Figure 5.5 Percentages of Participants in Different Age Groups.....	145
Figure 5.6 Percentages of Participants at Different Levels of Education .....	147
Figure 5.7 Percentages of Different Groups of Owner's Tenure 5.2 Response Rate ...	148
Figure 5.8 Scatterplot of Standardised Residuals and Standardised Predicted Values for Regression for Testing Hypotheses 1–9.....	165
Figure 5.9 Significant Interaction Between Power Distance and Size of Firm in Predicting e-commerce Adoption Among SMEs.....	170
Figure 5.10 Significant Interaction Between Power Distance and Compatibility in Predicting e-commerce Adoption Among SMEs.....	173
Figure 5.11 Significant Interaction Between Power Distance and Information Intensity in Predicting e-commerce Adoption Among SMEs.....	176
Figure 5.12 Significant Interaction Between Uncertainty Avoidance and Knowledge in Predicting e-commerce Adoption Among SMEs.....	179

Figure 5.13 Significant Interaction Between Uncertainty Avoidance and Innovativeness in Predicting e-commerce Adoption Among SMEs .....	180
Figure 5.14 Significant interaction Between Uncertainty Avoidance and Information Intensity in Predicting e-commerce Adoption Among SMEs .....	185
Figure 5.15 Significant interaction Between Uncertainty Avoidance and Competition Intensity in Predicting e-commerce Adoption Among SMEs .....	186
Figure 5.16 Significant Interaction Between Individualism/Collectivism and Innovativeness in Predicting e-commerce Adoption Among SMEs .....	189
Figure 5.17 Significant Interaction Between Individualism/Collectivism and Competition Intensity in Predicting e-commerce Adoption Among SMEs .....	194
Figure 5.18 Significant Interaction Between Masculinity/Femininity and Size of Firm in Predicting e-commerce Adoption Among SMEs.....	197
Figure 5.19 Significant Interaction Between Masculinity/Femininity and Innovativeness in Predicting e-commerceAdoption Among SMEs .....	198
Figure 5.20 Significant Interaction Between Masculinity/Femininity and Compatibility in Predicting e-commerceAdoption Among SMEs .....	202



Figure 5.21 Significant Interaction Between Masculinity/Femininity and Information

Intensity in Predicting e-commerce Adoption Among SMEs .....205

## CHAPTER ONE: INTRODUCTION

### 1.0 Introduction

The rapid advancements and developments in the information and communication technology (ICT) sphere that have taken place, and continue to occur have changed the entire scenario of the way business is done. These accelerations in ICT have transformed the industry structure and taken the competitiveness in the market to a new level. This transformation has no doubt created more opportunities, but it has also posed a threat for small and medium enterprises (SMEs) of being run over by large and high-profile companies and enterprises, as the SMEs still lag far behind in strategy development and implementation (Schlemmer & Webb, 2009). However, the adoption of e-commerce is not a universal solution to the generation of profit opportunities. It is a technology that, with its set of powerful tools which if used with prudence can be a part of any industry's competitive strategy that will enhance and enable it to gain a competitive advantage over its competitors (Egan, Clancy, & O'Toole, 2003; Porter, 2001; Soliman & Janz, 2004; Li, 2008).

The contents of  
the thesis is for  
internal user  
only

## REFERENCES

- Aaker, D. A., Kumar, V., & Day, G. S. (2004). Marketing research (8th ed.). New Jersey: John Wiley & Sons.
- Aiken, L. S., & West, S. G. (1991). Multiple Regression: Testing and interpreting interactions. Newbury Park, CA: Sage.
- Ajzen, I. & Fishbein, M. (1980). Understanding Attitudes and Predicting Social Behaviour. New Jersey: Prentice-Hall.
- Ajzen, I. (1985). From intentions to actions: A theory of planned behaviour. In J. Kuhl & J. Beckmann (Eds.). Action-control from cognition to behaviour (11-39). New York: Springer.
- Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179–211.
- Aladwani, A. M. (2003). Key Internet Characteristics and E-commerce Issues in Arab Countries. Information Technology and People, 16(1), 9-20.
- Al-Gahtani, S. (2008). Testing for the Applicability of the TAM Model in the Arabic Context: Exploring an Extended TAM with Three Moderating Factors. Information Resources Management Journal, 21(4), 1-26.
- Al-Gahtani, S.S. (2003). Computer Technology Adoption in Saudi Arabia: Correlates of perceived innovation attributes. Information Technology for Development, 10(1), 57-69.
- Al-maghrabi, T., & Dennis, C. (2010). Driving online shopping: Spending and behavioral differences among women in Saudi Arabia. International Journal of Business Science & Applied Management, 5(1), 30-47.
- Al-Qirim, N. (2005). An empirical investigation of an e-commerce adoption- capability model in small businesses in New Zealand. Electronic Markets, 15(4), 418-437.
- Al-Qirim, N. (2006). Personas of e-Commerce adoption in small businesses in New Zealand. Journal of Electronic Commerce in Organizations, 4 (3), 18-45.

Al-Qirim, N. A. Y. (2007). The adoption of eCommerce communications and applications technologies in small businesses in New Zealand. Electronic Commerce Research and Applications, 6(4), 462 - 473.

Alrawi, KW & Sabry, KA (2009). E-commerce evolution: a Gulf region review. International Journal of Business Information Systems, 4( 5), 509-526.

Al-Shohaib, K, Al-Kandari, A.J & Abdulrahim, M.A .(2009). Internet adoption by Saudi public relations professionals. Journal of Communication Management, 13(1), 21-36.

Al-Shohaib, K., Frederick, E., Al-Kandari, A., & Dorsher, D. (2010). Factors Influencing the Adoption of the Internet by Public Relations Professionals in the Private and Public Sectors of Saudi Arabia. Management Communication Quarterly, 24(1), 104-121.

Al-Subaihi, A. A.(2008). Comparison of Web and Telephone Survey Response Rates in Saudi Arabia. The Electronic Journal of Business Research Methods , 6 (2), 123 – 132.

Al-Tawil, K. (2001). The internet in Saudi Arabia. Telecommunications Policy, 25(8/9), 625-632.

Al-Twajjri, M. and Al-Muhaiza, I. (1996). Hofstede's cultural dimensions in the GCC countries: an empirical investigation, International Journal of Value Based Management, 9( 2).

Alzougool, B & Kurnia, S. (2008). Electronic Commerce Technologies Adoption by SMEs: A Conceptual Study. Proceedings of the 19th Australasian Conference on Information System, 42-54.

Amoako-Gyampah, K. (2003). The relationships among selected business environment factors and manufacturing strategy: insights from an emerging economy. Omega, 31, 287-301.

Andal-Ancion, A., Cartwright, P.A. & Yip, G.S. (2003). The digital transformation of traditional business. MIT Sloan Management Review, 44(4), 34-41.

Angelo, L., & Stefano, P. (2010). Parametric cost analysis for web-based e-commerce of layer manufactured objects. International Journal of Production Research, 48(7), 2127-2140.

Ang, S. (2008). Competitive intensity and collaboration: impact on firm growth across technological environments. Strategic Management Journal, 29(10), 1057-1075.

Antonelli, A., Ravarini, A., & Tagliavini, M. (2001). An evaluation model for electronic commerce activities within SMEs. Information Technology and Management, 2, 211-230.

Arab Advisors Group. (2008). Total B2C e-commerce volume exceeded US\$ 4.87 billion in Kuwait, Lebanon, Saudi Arabia and UAE in 2007. Retrieved May 14 , 2009, from <http://www.arabadvisors.com/node/10890>

Arenius, P., Sasi, V & Gabrielsson, M. (2005). Rapid internationalisation enabled by the Internet: The case of a knowledge intensive company. Journal of International Entrepreneurship, 3(4), 279-290.

Armstrong, J. S., & Overton, T. S. (1977). Estimating non-response bias in mail surveys. Journal of Marketing Research, 14(3), 396-402.

Atrostic, B.K., Gates, J. & Jarmin, R. (2000). Measuring the Electronic Economy: Current Status and Next Steps. U.S: Census Bureau.

Awa, H. Nwibere, B. & Inyang, B. (2010). The uptake of electronic commerce by SMES: A meta theoretical framework expanding the determining constructs of TAM and TOE frameworks. Journal of Global Business & Technology, 6(1), 1-27.

Babbie, E. R. (2004). The practice of social research (10th ed.). Belmont, CA: Wadsworth Thomson Learning.

Bagozzi, R. 2007. The Legacy of the Technology Acceptance Model and a Proposal for a paradigm shift. Journal of the Association for Information Systems, 8(4), 244-254.

Baker, D., Carson, K., & Carson, P. (2009). An Individual-Level Examination of the Impact of Cultural Values on Organizational Identification. Journal of Applied Management and Entrepreneurship, 14(2), 29-43.

Balanda, K. P., & MacGillivray, H. L. (1988). Kurtosis: A critical review. American Statistician, 42(2), 111-119.

Banham, H. C. (2010). External Environmental Analysis For Small And Medium Enterprises (SMEs). Journal of Business & Economics Research, 8(10), 19-26.

Barnes, D., Hinton, M. & Mieczkowska, S. (2003). Competitive advantage through e-operations. Total Quality Management & Business Excellence, 14(6), 659-676.

Barry, H. & Milner, B. (2002). SMEs and electronic commerce: A departure from the traditional prioritisation of training? Journal of European Industrial Training, 26(6/7), 316-326.

Barua, A., Konana P., Whinston, A.B. & Yin F. (2001). Driving e-business excellence. MIT Sloan Management Review, 43(1), 36-44.

Bedford, D. W. (2005). Empirical investigation of the acceptance and intended use of mobile commerce: Location, personal privacy, and trust. Unpublished doctoral dissertation, Mississippi State University, Mississippi.

Beveren, J., & Thomson, H. (2002). The Use of Electroni Commerce by SMEs in Victoria, Australia. Journal of Small Business Management, 40(3), 250-253.

Bharadwaj, P., & Soni, R.. (2007). E-Commerce Usage and Perception of E-Commerce Issues among Small Firms: Results and Implications from an Empirical Study. Journal of Small Business Management, 45(4), 501-521.

Bharadway, A.S. (2000). A recourse based perspective on information technology capability and firm performance: an empirical investigation. Management Information Systems Quarterly, 24 (1).

Black ,B. (2001). Employment Relations and National Culture: Continuity and Change in the Age of Globalisation. Industrial Relations Journal, 32(2), 177-178.

Bly, R. (2010). The More You Tell, the More You Sell. Target Marketing, 33(12), 13-14.

Boyer, K. K., & Olson, J. R. (2002). Drivers of Internet purchasing success. Production and Operations Management, 11(4), 480-498.

Brewer, J., Blake, A., Rankin, S., & Douglas, L. (1999). Theory of reasoned action predicts milk consumption in women. Journal of the American Domestic Association, 99(1), 39-44.

Bundagji, F. Y. (2005). Small Business and Market Growth in Saudi Arabia. Arab News (24/October/ 2005). <http://www.benadorassociates.com/article/18663>.

Bunker, D.J. & MacGregor, R.C. (2000). Successful Generation of Information Technology (IT) Requirements for Small/Medium Enterprises (SME's) – Cases from Regional Australia. Proceedings of SMEs in a Global Economy. Wollongong: Australia.

Buragga, K.A. (2001). An investigation of the relationship between national culture and the adoption of information technology. Unpublished Ph.D. dissertation, George Mason University, United States.

Cao, Y., Gruca, T. S., & Klemz, B. R. (2007). An empirical study of B2B migration from traditional stores to the Internet. Journal of Customer Behaviour, 6(1), 75-92.

Carayannis, E., & Sagi, J. (2001). Dissecting the professional culture: Insights from inside the IT “black box.” Management of Engineering and Technology, 2, 521-531.

Carter, L., & Belanger, F. (2005). The utilization of e-government services: citizen trust, innovation and acceptance factors. Information Systems Journal, 15(1), 5-25.

Chang-Shuo, L. (2006). Organizational, technological, and environmental determinants of electronic commerce adoption in small and medium enterprises in Taiwan. Unpublished Ph.D. dissertation, Lynn University, United States.

Chau, P., Cole, M., Massey, A., Weiss, M., & O'Keefe, R. (2003). Cultural differences in the online behavior of consumers. Communications of the ACM, 45(10), 138-143.

Chau, P.Y.K. & Tam, K.Y. (1997): Factors affecting the adoption of open systems: an exploratory study. MIS Quarterly, 21 (1) 1-21.

Ching, H., & Ellis, P. (2004). Marketing in Cyberspace: What Factors Drive E-Commerce Adoption? Journal of Marketing Management, 20(3/4), 409-429.

Choe, J. M. (2004). The consideration of cultural differences in the design of information systems. Information & Management, 41(5), 669-684.



- Commander, S., & Svejnar, J. (2011). Business environment, exports, ownership, and firm performance. Review of Economics & Statistics, 93(1), 309-337.
- Chong, A., Ooi, K., Tak, Y., & ShuYang, Z. (2009). Factors Affecting the Adoption of E-commerce: A Study of the Textile Industry in Wujin, China. International Journal of Business and Management Science, 2(2), 117-130.
- Chu, C., & Smithson, S. (2007). E-business and organizational change: a structural approach. Information Systems Journal, 17(4), 369-389.
- Churchill, G. A. Jr., & Iacobucci, D. (2005). Marketing research: Methodological foundations (9th ed.). Mason, OH: Thomson-South Western.
- Chwelos, P, Benbasat, I & Dexter, A (2001). Research Report: Empirical Test of an EDI Adoption Model. Information System Research, 12 ( 3) 304-321.
- CITC.(2007). Annual Report Figures & Facts . Retrieved January 11 , 2008, from [http://www.citc.gov.sa/NR/rdonlyres/1058FF74-3DA2-4B3B-840B-5B5A292A5A4D/0/CITC\\_AR2007\\_EN.pdf](http://www.citc.gov.sa/NR/rdonlyres/1058FF74-3DA2-4B3B-840B-5B5A292A5A4D/0/CITC_AR2007_EN.pdf)
- CITC.(2008). Internet Usage in the Kingdom of Saudi Arabia. Retrieved May 10, 2009, from [http://www.citc.gov.sa/NR/rdonlyres/2DB93B05-EAFA-4D8F-A680-3AC5CAD2F45A/0/Internet\\_Usage\\_Study\\_in\\_Saudi Arabia All\\_sectorsEN.pdf](http://www.citc.gov.sa/NR/rdonlyres/2DB93B05-EAFA-4D8F-A680-3AC5CAD2F45A/0/Internet_Usage_Study_in_Saudi Arabia All_sectorsEN.pdf)
- Coates, J.F. (2000). Consequences of information technology on work in the twenty-first century. Employment Relations Today, 26(1), 83-94.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). Applied multiple regression/correlation analysis for the behavioral sciences (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Cohen, P., Cohen, J., West, S. G., & Aiken, L. S. 2003. Applied multiple regression/correlation analysis for the behavioral sciences (3rd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Cohen, S. (1998). Big ideas for trainers in small companies. Training and Development, 52(4), 26-31.

Cross, R., Dowling, C., Gerbasi, A., Gulas, V., & Thomas, R. J. (2010). How organizational network analysis facilitated transition from regional to a global it function. MIS Quarterly Executive, 9(3), 133-145.

Courtheoux, R. J. (2003). Marketing data analysis and data quality management. Journal of Targeting Measurement and Analysis for Marketing, 11(4), 299-313.

Cragg B. P. & Mills, M.A. (2009). Internet Adoption by Small Firms. New Zealand: University of Canterbury.

Creswell, J. W. (2003). Research design: Qualitative, quantitative, and mixed method approaches (2nd ed.). Thousand Oaks, CA: Sage.

Curran, J. (2000). Journal of small business and enterprise development (review), International Small Business Journal, 18(3), 78-80.

Currie, W. (2002). Application outsourcing: A new business model for enabling competitive electronic commerce. International Journal of Services Technology and Management, 3(2), 139-153.

Damanpour, F. (2001). E-Business E-commerce Evolution: Perspective and Strategy. Managerial Finance, 27(7), 16 – 33.

Dandridge, T., & Levenburg, N.M. (2000). High-tech potential? An exploratory study of very small firms' usage of the Internet, International Small Business Journal, 18(2), 81-91.

Darmawan, N. (2001). The change of structural, perception and attitudinal dimensions in information technology adoption in local government of Bali. International Education Journal, 1 (3), 181-200

Davenport, S., & Bibby, D. (1999). Rethinking a national innovation system: the small country as SME. Technology Analysis & Strategic Management, 32(3), 241-55.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and end user acceptance of information technology. MIS Quarterly, 13(3), 318-339.

Davis, F; Bagozzi, R; & Warshaw, P. (1989) User Acceptance of Computer Technology: A Comparison of two Theoretical Models. Management Sciences, 35(8), 982-1002.

Davis, L., Ajzen, I., Saunders, J., & Williams T. (2002). The decision of African American students to complete high school: an application of the theory of planned behavior. J Educ Psychol , 94(4), 810–9.

Dawkins, C. E., & Frass, J. W. (2005). Decision of union workers to participate in employee involvement: An application of the theory of planned behaviour. Employee Relations, 27(5), 511-531.

Debreceeny, R., Putterill, M., Tung, L., & Gilbert, A. (2003). New tools for the determination of e-commerce inhibitors. Decision Support Systems, 34(2), 177.

De Carlo, L. T. (1997). On the meaning and use of kurtosis. Psychological Methods, 2(3), 292-307.

Denise, E. G. & Standing, C. (2005). A framework to assess the factors affecting success or failure of the implementation of government-supported regional e-marketplaces for SMEs. European Journal of Information Systems: Including a special section on the pacific asia conference, 14(4), 417-433.

Dess, G. G., & Robinson, R. (1984). Measuring Organisational Performance in the Absence of Objective Measures: The Case of the Privately-Held Firm and Conglomerate Business Unit. Strategic Management Journal, 5, 265–273.

Dinev, T., Goo, J., Hu, Q., & Nam, K. (2009). User behaviour towards protective information technologies: the role of national cultural differences. Information Systems Journal, 19(4), 391-412.

Dirksen, V. (2001). The cultural construction of information technology. Journal of Global Information Management, 9(1), 5-10.

Doherty, N.F. & Ellis-Chadwick, F.E. (2003). The relationship between retailers' targeting and e-commerce strategies: an empirical analysis, Internet Research, 13(3), 170-82.

Doing business report.(2009).Saudi Arabia. Retrieved October 13, 2009 from <http://www.doingbusiness.org/Documents/CountryProfiles/SAU.pdf>

Dorfman, P. W. & Howell, J.P. (1988). Dimensions of National Culture and Effective Leadership Patterns: Hofstede Revisited. Advances in International Comparative Management , 3,127-150.

Dos Santos, B. L., & Peffers, K. (1998). Competitor and vendor influence on the adoption of innovative applications in electronic commerce. Information & Management, 34(3), 175-184.

Douglas, S., & Craig, S. (1997). The changing dynamic of consumer behavior: Implications for cross-cultural research. International Journal of Research in Marketing, 14(4), 379-395.

Downing, C. Gallagher, M. & Segars, A. (2003) Information technology Choices in Dissimilar Cultures: Enhancing Empowerment. Journal of Global Information Management, 11(1), 20- 39.

Dubelaar C., Sohal A., & Savic V. (2005). Benefits, impediments and critical success factors in B2C E-business adoption. Technovation, 25, 1251–1262.

Dwyer, S., Mesak, H., & Hsu, M. (2005). An Exploratory Examination of the Influence of National Culture on Cross-national Product Diffusion, Journal of International Marketing, 13(2), 1-27.

Economic Intelligent Unit. (2006). The 2006 e-readiness rankings, Retrieved June 10, 2009, from [http://graphics.eiu.com/files/ad\\_pdfs/2006Ereadiness\\_Ranking\\_WP.pdf](http://graphics.eiu.com/files/ad_pdfs/2006Ereadiness_Ranking_WP.pdf)

Economic Intelligent Unit. (2007). The 2007 e-readiness rankings, Retrieved June 10, 2009, from [http://graphics.eiu.com/files/ad\\_pdfs/2007Ereadiness\\_Ranking\\_WP.pdf](http://graphics.eiu.com/files/ad_pdfs/2007Ereadiness_Ranking_WP.pdf)

Economic Intelligent Unit. (2008). The 2008 e-readiness rankings, Retrieved June 10, 2009, from [http://graphics.eiu.com/upload/ibm\\_ereadiness\\_2008.pdf](http://graphics.eiu.com/upload/ibm_ereadiness_2008.pdf)

Egan Tom, Clancy Steven, & O'Toole Tom. (2003). The integration of e-commerce tools into the business processes of SMEs. Irish Journal of Management, 24(1), 139-153.

El-Omari, H. & Martin, H. (2010) The University of Texas at Brownsville opinion leaders and their influence on consumer purchasing behavior in Saudi Arabia. Global Journal of Business Research (GJBR), 4(4), 51-70.

El Said, G. & Galal-Edeen, H. (2009). The role of culture in e-commerce use for the Egyptian consumers. Business Process Management Journal, 15(1), 34-47.

Eikebrokk, T., & Olsen, D. (2009). Training, Competence, and Business Performance: Evidence from E-business in European Small and Medium-Sized Enterprises. International Journal of E-Business Research, 5(1), 92-116.

Emdad, A., Badamas, M., & Mouakket, S. (2009). Factors and Impacts of Low Utilization of Internet: The Case of Arab Countries. Journal of International Technology and Information Management, 18(3/4), 299-II.

Eriksson, L. Hultman, J. & Naldi, L. (2008). Small business e-commerce development in Sweden - an empirical survey. Journal of Small Business and Enterprise Development, 15(3), 555-570.

Eugene, C. Pak, Y. & Sid, H. (2004). The Impact of E-commerce on the Role of IS Professionals. Database for Advances in Information Systems, 35(3), 50-63.

Erumban A.A. & Jong de B.S. (2006). Cross-country differences in ICT adoption: A consequence of Culture? Journal of World Business, 41(4), 302.

Fabian, F., Molina, H., & Labianca, G. (2009). Understanding Decisions to Internationalize by Small and Medium-sized Firms Located in an Emerging Market. Management International Review (MIR), 49(5), 537-563.

Fann, G.L., & Smeltzer, L.R. (1989). The use of information from and about competitors in mall business management. Entrepreneurship Theory & Practice, Summer, 35-46.

Fomin, V. V., King, J. L., Lyytinen, K. J., & McGann, . T. (2005). Diffusion and impacts of e-commerce in the united states of america: results from an industry survey. Communications of AIS, 2005(16), 559-603.

Forman, C. (2005). The corporate digital divide: Determinants of Internet adoption. Management Science, 51(4), 641-654.

Franquesa, J., & Brandyberry, A.. (2009). Organizational Slack and Information Technology Innovation Adoption in SMEs. International Journal of E-Business Research, 5(1), 25-48.

Freel, M.S. (2000). Barriers to product innovation in small manufacturing firms. International Small Business Journal, 18(2), 60-80

Frohlich, M. T. (2002). E-Integration in the supply chain: Barriers and performance. Decision Sciences, 33(4), 537–56.

Gani, L., & Jermias, J. (2009). Performance implications of environmentstrategy-governance misfit. Gadjah Mada International Journal of Business, 11(1), 1-20.

Gaspay, A., Dardan, S., & Legorreta, L. (2008). Software of the mind - A review of applications of Hofstede's Theory to IT research. Journal of Information Technology Theory and Application, 9(3), 1-37.

Gay, L.(1996). Educational research: Competencies for analysis and application. Upper Saddle river, NJ: Prentice Hall, Inc.

Ghuri, P., & Grønhaug, K. (2002). Research methods in business studies: A practical guide (2<sup>nd</sup> ed). London: Prentice Hall.

Gefen, D. & Heart, T. (2006). On the Need to Include National Culture as a Central Issue in E-Commerce Trust Beliefs. Journal of Global Information Management, 14 (4), 1-30.

Gibbs, J. L., Kraemer, K. L., & Dedrick, J. (2003). Environment and policy factors shaping global e-commerce diffusion: A cross-country comparison. The Information Society, 19(1), 5-18.

Gong, W., Z. G. Li and Stump, R. L. (2007). Global Internet Use and Access: Cultural Considerations, Asia Pacific Journal of Marketing and Logistics, 19 (1), 57-74.

Grandon, E. & Mykytyn, P. P. (2004). Theory based Instrumentation to Measure the Intention to Use Electronic Commerce in Small and Medium Sized Businesses. The Journal of Computer Information Systems, 44(3), 44-57.

Grandon, E. & Pearson, J.M. (2004). E-commerce adoption: perceptions of managers/owners of small and medium sized firms in Chile, Communications of the Association for Information Systems, 2004 (13), 81–102.

Grandon, E., & Pearson, J. M. (2003). Strategic value and adoption of electronic commerce: an empirical study of Chilean small and medium businesses. Journal of Global Information Technology Management, 6(3), 22.

Groeneveld, R. A., & Meeden, G. (1984). Measuring skewness and kurtosis. The Statistician, 33(4), 391-399.

Grover, V. & Goslar, M. (1993). The Innovation, Adoption, and Implementation of Telecommunications Technologies in US Organizations. Journal of Management Information Systems, 10(1), 141-163.

Hair, J. J. F., Black, C. W., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). Multivariate data analysis (6th ed.). New Jersey: Prentice Hall.

Hall, C. (2002). Profile of SMEs and SME issues 1990-2000. Singapore: Asia-Pacific Economic Cooperation.

Haroon, M., & Zia-ur-Rehman, M. (2010). E-Recruitment: Across the Small and Large Firms in Pakistan. Interdisciplinary Journal of Contemporary Research In Business, 2(1), 179-191.

Harris, R., & Davison, D. (1999). Anxiety and involvement: Cultural dimensions of attitudes toward computers in developing societies. Journal of Global Information Management, 7(1), 26-38.

Harrison, D. A., Mykytyn, P. P., & Riemenschneider, C. K. (1997) Executive decisions about adoption of information technology in small business: theory and empirical tests. Information Systems Research, 8, 171-95.

Hartwick, J., & Barki, H. (1994). Explaining the role of user participation in information system use. Management Science, 40(4), 440-465.

Hassan, H., & Ditsa, G. (1999). The impact of culture on the adoption of IT: An interpretive study. Journal of Global Information Management, 7(1), 5-15.

Hauguel, P., & Jackson, N. (2001). Outward-looking supply-chain strategy. European Business Journal, 13(3), 113-118.

Helen, B. & Brigid, M. (2002). SMEs and electronic commerce: A departure from the traditional prioritisation of training? Journal of European Industrial Training, 26(6/7), 316-326.

Herbig, P. A. (1994). The Innovation Matrix: Culture and Structure Prerequisites to Innovation. Westport, CT: Quorum Books.

Hill, R. & Stewart, J. (2000). Human Resource Development in Small Organisations. Journal of European Industrial Training 24(2/3/4), 105-117.

Henry, O., & Temtime, Z. (2010). Recruitment and Selection Practices in SMEs: Empirical Evidence from a Developing Country Perspective. Advances in Management, 3(2), 52-58.

Herrmann, M. (2009). On the Choice and Success of Competitive Strategies. Competition & change, 13(1), 3-28.

Hofstede, G. (1980). Culture's Consequences: International Differences in Work - Related Values. Beverly Hills: Sage.

Hofstede, G. (1991). Cultures and Organizations: Software of the Mind: Intercultural Cooperation and its Importance for Survival. Cambridge, England: McGraw-Hill.

Hofstede, G. (2001). Culture's consequences: international differences in work-related values (2<sup>nd</sup> edn). Thousand Oaks, CA.

Hontou, V., Diakoulaki, D., & Papagiannakis, L. (2007). A multicriterion classification approach for assessing the impact of environmental policies on the competitiveness of firms. Corporate Social Responsibility & Environmental Management, 14(1), 28-41.

Hopkins, K. D. & Weeks, D. L. (1990). Tests for normality and measures of skewness and kurtosis: Their place in research reporting. Educational and Psychological Measurement, 50(4), 717-729.

Hrubes, D., Ajzen, I., & Daigle, J. (2001). Predicting Hunting Intentions and Behavior: An Application of the Theory of Planned Behavior. Leisure Sciences, 23(3), 165-178.

Hsiu-Fen, L. (2008). Empirically testing innovation characteristics and organizational learning capabilities in e-business implementation success. Internet Research, 18(1), 60-78.

Huang, X. & Brown, A. (1999). An analysis and classification of problems in small business. International Small Business Journal, 18(1), 73-85

Hubona, G. S., Truex, D., Wang, J., & Straub, D. (2006). Cultural and globalization issues impacting the organizational use of information technology. In P. Zhang & D.



Galletta (Eds.), Advances in management information systems (AMIS) (Vol. 2, 200-243). Armonk, NY: Sharpe.

Hunter, M. G. & J. E. Beck. (2000). Using Repertory Grids to Conduct Cross-cultural Information Systems Research. Information Systems Research, 11(1), 93-101.

Hurt, H. T., Joseph, K., & Cook, C. D. (1977). Scales for the measurement of innovativeness. Human Communication Research, 4, 58-65.

Hussin, H. & Noor, M.R.( 2002). Innovating Business through E-Commerce: Exploring the Willingness of Malaysian SMEs. Kuala Lumpur: International Islamic University.

Hutt, M. & Speh, T. (2001). Business Marketing Management : A strategic view of industrial and Organisational markets. Harcourt, Inc.

Iacovou, C. L., Benbasat, I, & Dexter, A.S. (1995). Electronic Data Interchange and Small Organizations: Adoption and Impact of Technology. MIS Quarterly, 19(4): 465-485.

Idris, A. M. (2007). Cultural Barriers to Improved Organisational Performance in Saudi Arabia. S.A.M. Advanced Management Journal, 72(2), 36-53

Internet in Saudi Arabia, Internet Services Unit, Retrieved October 13, 2009 from <http://www.isu.net.sa>.

Internet World Stats. (2009). World Internet usage and population statistics. Retrieved October 13, 2009 from <http://www.internetworldstats.com/stats.htm>

Ismail I. S. (2004). Effects of WTO on Small & Medium Enterprises, Arab News, Retrieved October 13, 2009 from <http://archive.arabnews.com/?page=1&section=0&article=38268&d=19&m=1&y=2004>

Iuliana, C., Sorin, M., & Razvan, D. (2008). The competitive advantages of small and medium enterprises. Annals of the University of Oradea, Economic Science Series, 17(4), 811-816.

Ives, B., & Jarvenpaa, S. (1991). Applications of global information technology: Key issues for management. MIS Quarterly, 15(1), pp.33-49.

Jantan, M., Ramayah, T. & Chin, W. W. (2001). Personal Computer Acceptance by Small and Medium Companies Evidence from Malaysia. Jurnal Manajemen & Bisnis, 3(1), 1-14.

Jeen, O. Bin, H. & Guan, G. (2010). The Competitive Advantage of Small and edium Enterprises (SMEs): The Role of Entrepreneurship and Luck. Journal of Small Business & Entrepreneurship, 23(3), 373-39.

Jeon, B. N., Han, K. S., & Lee, M. J. (2006). Determining factors for the adoption of e-business: The case of SMEs in Korea. Applied Economics, 38(16), 1905-1916.

Jeremy, H. & Philip, R. (2006). The Impact of Technological Turbulence on Entrepreneurial Behavior, Social Norms and Ethics: Three Internet-based Cases. Journal of Business Ethics, 64(3), 231-248.

Johnson, J. P., & Lenartowicz, T. (1998). Culture, Freedom and Economic Growth: Do Cultural Values Explain Economic Growth?. Journal of World Business, 33(4), 332.

Junglas, I. A. & Watson. R. T. (2004). National Culture and Electronic Commerce. E - Service Journal, 3(2), 3-34.

Kabasakal, H., & Bodur, M. (2002). Arabic cluster: a bridge between East and West. Journal of World Business, 37(1), 40.

KACST. (2006). Business Sector Survey. Retrieved January 11, 2008, from <http://www.isu.net.sa/surveys-&-statistics/busnes.htm>.

Kaefer, F. & Bendoly, E. (2003). Measuring the impact of organizational constraints on the success of business-to-business e-commerce efforts: a transactional focus. Information & Management, 41, 529-541.

Kalathil & Boas, TC 2003, Open Networks, Closed Regimes: The Impact of the Internet on Authoritarian Rule, Carnegie Endowment for International Peace, Washington.

Kandelin, N.A., Lin, T.W., & Muntoro, R.K. (1998). A study of the attitudes of Indonesian managers toward key factors in information system development and implementation. Journal of Global Information Management, 6 (3), 17-28.

Karahanna, E., Evaristo, R., & Srite, M. (2005). Levels of culture and individual behavior: An integrative perspective. Journal of Global Information Management, 13(2), 1-20.

Karakaya, F., & Khalil, O. (2004). Determinants of Internet adoption in small and medium sized enterprises. International Journal of Internet & Enterprise Management, 2(4) 1-1.

Kartiwi, M., & MacGregor, R.. (2007). Electronic Commerce Adoption Barriers in Small to Medium-Sized Enterprises (SMEs) in Developed and Developing Countries: A Cross-Country Comparison. Journal of Electronic Commerce in Organizations, 5(3), 35-51.

Katz, J., & Townsend, J. (2000). The role of information technology in the "Fit" between culture, business strategy and Organisational structure of global firms. Journal of Global Information Management, 8(2), 24-40.

Kaynak, E, Tatoglu, E & Kula, V (2005). An analysis of the factors affecting the adoption of electronic commerce by SMEs: Evidence from an emerging market. International Marketing Review, 22(6), 623-640.

Kendall, J, Tung, L, Chua, K, Ng, C & Tan, S (2001). Electronic commerce adoption by SMEs in Singapore, in Proceedings of the 35th Hawaii International Conference on System Sciences, Hawaii, USA.

Kendall, M., Stuart, A., Ord, J. K., & Arnold, S. (1999). Kendall's advanced theory of statistics: Vol. 2A: Classical inference and the linear model (6th ed.). Kendall's Library of Statistics.

Kevin, C. & Brian, S. (2007). Supporting SME e-commerce migration through blended e-learning. Journal of Small Business and Enterprise Development, 14(4), 670-688.

Khalfan, A., & Alshawaf, A. (2004). Adoption and Implementation Problems of E-Banking: A Study of the Managerial Perspective of the Banking Industry in Oman, Journal of Global Information Technology Management, 7(1), 47.

Khan, S. A. (2002, October 23). Expert Calls for National Agenda on Internet, Saudi Gazette, 7.

Kohn, S., & Husig, S. (2006). Potential benefits, current supply, utilization and barriers to adoption: An exploratory study on German SMEs and innovation software. Technovation, 26(8), 988-998.

Kojo, S. Walker, H. & Hinson, R. (2008). Strategic value and electronic commerce adoption among small and medium-sized enterprises in a transitional economy. The Journal of Business & Industrial Marketing, 23(6), 395-404.

Kollmann, T., Kuckertz, A., & Breugst, N. (2009). Organizational Readiness and the Adoption of Electronic Business - The Moderating Role of National Culture in 29 European Countries. Database for Advances in Information Systems, 40(4), 117-131.

Korkmaz, S., & Messner, I. (2008). Competitive Positioning and Continuity of Construction Firms in International Markets. Journal of Management in Engineering, 24(4), 207-216.

Kotter, J.P. (1996). Leading Change. Harvard Business School Press.

Kranz, D., & Santalo, J. (2010). When Necessity Becomes a Virtue: The Effect of Product Market Competition on Corporate Social Responsibility. Journal of Economics & Management Strategy, 19(2), 453-487.

Kuan, K.K.Y. & Chau, P.Y.K. (2001). A perception-based model for EDI adoption in small businesses using a technology-organization-environment framework. Information & Management, 38( 8), 507-521.

Kula, V., & Tatoglu, E. (2003). An exploratory study of Internet adoption by SMEs in an emerging market economy. European Business Review, 15(5), 324-333.

Kumar, K., Dissel, H., & Bielli, P. (1998). The merchant of Prato-revisited: Towards a third rationality of information systems. MIS Quarterly, 22(2), 67-78.

Kumar, S., & Wellbrock, J. (2009). Improved new product development through enhanced design architecture for engineer-to-order companies. International Journal of Production Research, 47(15), 4235-4254.

Kwon T.H. & Zmud R.W. (1987). Unifying the Fragmented Models of Information Systems Implementation, In R.J. Boland, Jr., and R.A. Hirschheim (eds.), Critical Issues in Information Systems Research (227-252). New York: John Wiley.

Lauden, K.C., & Laudon, J.P. (2000). Management Information Systems: Organization and Technology in the Networked Enterprise, 6th ed. Englewood Cliffs, NJ: Prentice Hall.

Lee, J. (2004). Discriminant analysis of technology adoption behavior: A case of Internet technologies in small businesses. Journal of Computer Information Systems, 44(4), 57-66.

Lee, J.W. & Runge, J.(2001). Adoption of Information Technology in Small Business: Testing Drivers of Adoption for Entrepreneur. Journal of Computer Information System

Lee, S.F., Tsai, Y. C., & Jih, W. J. (2006). An Empirical Examination of Customer Perceptions of Mobile Advertising. Information Resources Management Journal, 19(4), 39-55.

Legge, T. (2010). Changing the way we (e)learn - online learning: yesterday, today & tomorrow. Training and Development in Australia, 37(3), 32-34.

Leech, N. L., Barrett, K. C., & Morgan, G. G. (2005). SPSS for intermediate statistics: Use and interpretation. Mahwah, NJ: Lawrence Erlbaum Associates.

Lennon, S. J., Kim, M., Johnson, K. P., Jolly, L. D., Damhorst, M., & Jasper, C. R. (2007). A longitudinal look at rural consumer adoption of online shopping. Psychology & Marketing, 24(4), 375-401.

Lertwongsatien, C., & Wongpinunwatana, N. (2003). E-commerce adoption in Thailand: An empirical study of Small and Medium Enterprises (SMEs). Journal of Global Information Technology Management, 6(3), 67 - 83.

Levy, M., & Powell, P. (2003). Exploring SME Internet adoption: towards a contingent model. Electronic Markets, 13(2), 173-181.

Li, X. (2008). An empirical examination of factors affecting adoption of an online direct sales channel by small and medium-sized enterprises. Unpublished Ph.D. dissertation, Kent State University, United States.

Li, X., Hess, T., McNab, A., & Yu, Y. (2009). Culture and Acceptance of Global Web Sites: A Cross-Country Study of the Effects of National Cultural Values on Acceptance of a Personal Web Portal. Database for Advances in Information Systems, 40(4), 62-87.

Lim, J. (2004). The Role of Power Distance and Explanation Facility in Online Bargaining Utilizing Software Agents, Journal of Global Information Management, 12(2), 27-43.

Lim, K.H., Leung, K., Sia, C.L. and Lee, M.K.O. (2004). Is eCommerce Boundary-Less? Effects of Individualism-Collectivism and Uncertainty Avoidance on Internet Shopping, Journal of International Business Studies, 35 (6), 545-59.

Lin, F. H., & Wu, J. H. (2004). An empirical study of end-user computing acceptance factors in small and medium enterprises in Taiwan: Analyzed by structural equation modeling. Journal of Computer Information Systems, 44(3), 98-108.

Linden, C. (2003). How has information technology changed the dynamics of competition within industries? In D. R. Laube & R. F. Zammuto (Eds.), Business driven information technology: Answers to 100 critical questions for every manager (7-10). Stanford, CA: Stanford University Press.

Linder, J.C., Jarvenpaa, S. & Davenport, T.H. (2003). Towards an innovation sourcing strategy. MIT Sloan Management Review, 44(4), 43-49.

Loch, K. D., Straub, D. W., & Kamel, S. (2003). Diffusing the Internet in the Arab World: The Role of Social Norms and Technological Culturation. IEEE Transactions on Engineering Management, 50(1), 45.

Lohrke, F. T., Franklin, G. M., & Frownfelter-Lohrke, C. (2006). The Internet as an Information conduit. International Small Business Journal, 24(2), 159-178.

Looi, H. C. (2005). E-commerce adoption in Brunei Darussalam: A quantitative analysis of factors influencing its adoption. Communications of AIS, 15, 61-81.

Looney, R. (2004). Development Strategies for Saudi Arabia: Escaping the Rentier State Syndrome, Strategic Insights, Retrieved October 13, 2009 from <http://www.nps.edu/Academics/centers/ccc/publications/OnlineJournal/2004/mar/looneyMar04.pdf>

Lubbe, S. & Heerden M.V.J. (2003). The Economic and Social Impacts of E-Commerce. Idea Group Inc (IGI).

- Maghrabi, S., Jefery, A., & Bin, A. (2009). The market competition of Saudi smal-sized manufacturing firms: an exploratory study. International Journal of Commerce & Management, 19(4), 309-320.
- Mahmood, M., A., Bagchi, K., & Ford, T. C. (2004). On-line shopping behavior: Crosscountry empirical research. International Journal of Electronic Commerce, 9(1), 9-30.
- Maitland, C. (1999). Global diffusion of interactive networks. The Impact of Culture AI & Society, 13, 341-35.
- Mallah, A. T. (2003). Barriers to Electronic Commerce Adoption by Small & Medium-sized Enterprises (SMEs) in Saudi Arabia. Unpublished Doctoral dissertation, University of George Washington.
- Malone T.W., Yates J. & Benjamin R.I. (1987). Electronic Markets and Electronic Hierarchies. Communications of the ACM, 30, 6 (1987), 484-497
- Mahrokian, S., Chan, P., Mangkornkanok, P., & Hee, B. (2010).Corporate culture: a lasting competitive advantage. Review of Business Research, 10(1), 14-23.
- Marino, L., Strandholm, K., Steensma, H., & Weaver, K. (2002). The Moderating Effect of National Culture on the Relationship Between Entrepreneurial Orientation and Strategic Alliance Portfolio Extensiveness. Entrepreneurship: Theory & Practice, 26(4), 145.
- Marino, M. K. Weaver and P. H. Dickson. (2000). The influence of national culture on the formation of technology alliances by entrepreneurial firms. Academy of Management Journal, 43(5), 951-973.
- McClure, C. (1997). Software Reuse Techniques. New Jersey: Prentice-Hall, Inc.
- Mehrtens, J., Cragg, P. B., & Mills, A. M. (2001). A model of Internet adoption by SMEs. Information & Management, 39(3), 165-176.
- Mirchandani, A.A., & Motwani, J. (2001). Understanding small business electronic commerce adoption: an empirical analysis. Journal of Computer Information Systems, 41(3), 70-73.

Mole, K. F., Ghobadian, A., O'Regan, N., & Liu, J. (2004). The use and deployment of soft process technologies within UK manufacturing SMEs: An empirical assessment using logit models. Journal of Small Business anagement, 42(3), 303-324.

Molla, A., & Licker, P. S. (2005). Perceived E-Readiness Facors in E-Commerce Adoption: An Empirical Investigation in a Developing Country. International Journal of Electronic Commerce, 10(1), 83-110.

Morris, M. G., Venkatesh, V., & Ackermann, P. L.(2005). Gender and age differences in employee decisions about new technology: An extension to the theory of planned behavior. IEEE Transactions on Engineering Management, 52(1), 69-84.

Mulpuru, S., Johnson, C., McGowan, B., and Wright, S. (2008). US eCommerce Forecast, 2008 To 2012. Retrieved May 14 , 2009, from [http://www.forrester.com/rb/Research/us\\_ecommerce\\_forecast\\_2008\\_to\\_2012/q/id/41592/t/2](http://www.forrester.com/rb/Research/us_ecommerce_forecast_2008_to_2012/q/id/41592/t/2)

Nasco, S., Toledo, E., & Mykytyn, P. (2008). Predicting electronic commerce adoption in Chilean SMEs. Journal of Business Research, 61(6), 697.

Ndubisi, N. (2010). The impact of personal culture on sophisticated succession planning by owner-managers of SMEs in Malaysia. Academy of Entrepreneurship Journal, 16(2), 41-54.

Noudoostbeni, A., Ismail, N., Jenatabadi, H., & Yasin, N. (2010). An Effective End-User Knowledge Concern Training Method in Enterprise Resource Planning (ERP) Based on Critical Factors (CFs) in Malaysian SMEs. International Journal of Business & Management, 5(7), 63-76.

O'Brien, E. (1998). The DTI marketing initiative: the experience of 35 young Scottish companies. Journal of Small Business and Enterprise Development, 5 (3), 219-27.

OECD. (2005), SME and entrepreneurship outlook. Paris, France: Organisation for Economic Co-operation and Development Publishing.

Okazaki, S. (2004). Do multinationals standardize or localize? The cross-cultural dimensionality of products-based websites. Internet Research, 14(1), 81-94.

Olson, J. R., & Boyer, K. K. (2003). Factors influencing the utilization of Internet purchasing in small organizations. Journal of Operations Management, 21(2), 225-245.



- O'Rourke, M. (2010). The End of the Internet. *Risk Management*, 57(7), 48.
- Owens, I., & Beynon-Davies, P. (2001). A Survey of Electronic Commerce Utilization in Small and Medium Sized Enterprises in South Wales. Proceedings of the 9th European conference on Information systems, Bled, Slovenia, 461-467
- Oxley, J.E. & Yeung, B. (2001). E-commerce readiness: Institutional environment and international competitiveness. *Journal of International Business Studies*, 32(4), 705-723.
- Pak, H. S. (2000). Relationships among attitudes and subjective norms: testing the theory of reasoned action across cultures. *Communication Studies*, 51(2), 162- 175.
- Pallant, J. (2005). SPSS survival manual (2nd ed.). Buckingham: Open University Press.
- Parker, C. M. & Castleman, T. (2007). New directions for research on SME-eBusiness: insights from an analysis of journal articles from 2003 to 2006. *Journal of Information Systems and Small Business*, 1(1-2), 21-40.
- Patel, C., & Cardon, S. (2010). Adopting HRM practices and their effectiveness in small firms facing product-market competition. *Human Resource Management*, 49(2), 265-290.
- Pavic, S.C.L Koh, M. Simpson, & J. Padmore. (2007). Could e-business create a competitive advantage in UK SMEs? *Benchmarking*, 14(3), 320-351.
- Pavlou, P., & Fygenson, M. (2006). Understanding and predicting electronic commerce adoption: *MIS Quarterly*, 30(1), 115-143.
- Phan, T. A., & Oddou, G. R. (2002, May). A test of Hofstede's Cultural Framework to Predict IT Adoption and Use: A case of Vietnam. Paper presented at the 12th International Conference on Comparative Management, Kaohsiung, Taiwan.
- Pons, A., Aljifri, H. & Fourati, K. (2003). E-commerce and Arab intra-trade. *Information Technology & People*, 16(1), 34.
- Pons, A., Aljifri, H. & Fourati, K. (2003). E-commerce and Arab intra-trade. *Information Technology & People*, Vol 16 No.1, pp. 34 – 48.
- Porter, M. (2001). Strategy and the Internet. *Harvard Business Review*, 62-78.

Porter, M. (2008). The five competitive forces that shape strategy. Harvard Business Review, 86(1), 78-93.

Porter, M.E., & Stern, S. (1999). The New Challenge to America's Prosperity: Findings from the Innovation Index, Council on Competitiveness, Washington, DC.

Power, D. J. & Sohal, A. S. (2002) Implementation and usage of electronic commerce in managing the supply chain: A comparative study of ten Australian Companies. Benchmarking: An International Journal, 9(2), 190–208.

Quayle, M. (2003). A Study of supply chain management practice in UK industrial SMEs. Supply Chain Management: An International Journal, 8(1), 79–86.

Rajabion, L. (2008). Impact of E-commerce on export development for small and medium-sized enterprises in developing countries evidence from Iran. Unpublished PhD dissertation, Lawrence Technological University, United States.

Ramadan,G. (2002). SAGIA explores opportunities to attract investors. Arab News Staf. Retrieved October 10, 2009 from [www.arabnews.com/?page=6&section=0&article=19601&d=22&m=10&y=2002](http://www.arabnews.com/?page=6&section=0&article=19601&d=22&m=10&y=2002).

Rao, S.S., Metts, G. & Monge, C.M. (2003). Electronic commerce development in small and medium sized enterprises. Business Process Management Journal, 9(1), 11-32.

Rayport, J., & Jaworski, B. (2004). Best Face Forward. Harvard Business Review, 82(12), 47-58.

Rayport, J., Jaworski, B., & Kyung, E. (2005). Best face forward: Improving companies' service interfaces with customers. Journal of Interactive Marketing, 19(4), 67-80.

Reijonen, H., & Komppula, R. (2010). The adoptin of market orientation in SMEs: required capabilities and relation to success. Journal of Strategic Marketing, 18(1), 19-37.

Rhee, E. (2010). Multi-channel management in direct marketing retailing: Traditional call center versus Internet channel. Journal of Database Marketing & Customer Strategy Management, 17(2), 70-77.

Riemenschneider, C. K., Harrison, D. A., & Mykytyn P. P. Jr. (2003). Understanding IT adoption decisions in small business: Integrating current theories. Information & Management, 40(4), 269-285.

Riemenschneider, C., & McKinney, V. (2001). Assessing belief differences in small business adopters and non-adopters of web-based e-commerce. Journal of Computer Information Systems, 42(2), 101-107.

Rmesh, H., Salarzahi, H., Yaghoobi, N., heydari, A., & Nikbin, D. (2010). Impact of Online/Internet Marketing on Computer Industry in Malaysia in Enhancing Consumer Experience. International Journal of Marketing Studies, 2(2), 75-86.

Rodgers, J.A., Yen, D.C., & Chou, D.C. (2002). Developing e-business: a strategic approach. Information Management & Computer Security, 10(4), 184- 92.

Rock, W., Hira, K., & Loibl, C. (2010). The Use of the Internet as a Source of Financial Information by Households in the United States: A National Survey. International Journal of Management, 27754-769.

Rondeau, P. J., Ragu-Nathan, S., & Voderembse, A. (2010). The Impact of IS Planning Effectiveness on IS Responsiveness, User Training, and User Skill Development within Manufacturing Firms. International Management Review, 6(1), 42-57.

Rogers E.M., (1983). Diffusion of Innovations, New York: Free Press.

Rogers, E. M. (2003). Diffusion of innovations (1st Ed.). New York: Free Press.

Rogers, E.M. (1995). Diffusion of Innovations. 4th ed. New York: The Free Press.

Rose, G., & Straub, D. (1998). Predicting general IT use: Applying TAM to the Arabic world. Journal of Global Information Management, 6(3), 39.

Sadiq M. Sait Al-Tawil KA, Hussain SA(2004). E-Commerce in Saudi Arabia: Adoption and Perspectives. Australian Journal of Information (AJIS) Systems, 12 (1), 54-74.

Sanchez, R. J. (2002). Using technology to preserve a culture: how implementing an e-business affects a small, rural art business in New Mexico. Unpublished Doctoral dissertation, Northern New Mexico College.

Sandy, C., & Graham, P. (2007). Factors Influencing the Extent of Deployment of Electronic Commerce for Small-and Medium-Sized Enterprises. Journal of Electronic Commerce in Organizations, 5(1), 1-29.

Santarelli, E., & D'Altri, S. (2003). The diffusion of E-commerce among SMEs: Theoretical implications and empirical evidence. Small Business Economics, 21(3), 273-283.

Sarkar, A. (2009, October). E-Commerce Adoption and Implementation in Automobile Industry: A Case Study. Paper presented at the World Academy of Science, Engineering and Technology, Venice, Italy.

Sathye, M & Beal, D. (2001). Adoption of Electronic Commerce by SMEs: Australian Evidence. Journal of EBusiness, 1(1).

Saunders, M., Lewis, P., & Thornhill, A. (2007). Research methods for business students (4th ed.). Essex, England: Pearson Education.

Schlemmer, F., & Webb, B. (2009). The Internet as a Complementary Resource for MEs: The Interaction Effect of Strategic Assets and the Internet. International Journal of E-Business Research, 5(1), 1-24.

Scupola, A. (2003). The Adoption of Internet Commerce by SMEs in the South of Italy: An Environmental, Technological and Organisational Perspective. Journal of Global Information Technology Management, 6(1), 52-71.

Scupola, A. (2009). SMEs' e-commerce adoption: perspectives from Denmark and Australia. Journal of Enterprise Information Management, 22(1/2), 152-166.

Sekaran, U. (2003). Research methods for business: A skill building approach (4<sup>th</sup> ed). New York: John Wiley.

Sekaran, U. (2006). Research methods for business: A skill building approach (4<sup>th</sup> ed). New Delhi: Wiley India.

Seyal, A. H., & Rahman, M. N. A. (2003). A preliminary investigation of E-commerce adoption in small & medium enterprises in Brunei. small business management. Journal of Global Information Technology Management, 6 (6), 6-26.

Seyal, A. H., Awais, M. M., Shamail, S., & Abbas, A. (2004). Determinants of electronic commerce in Pakistan: Preliminary evidence from small and medium enterprises. Electronic Markets, 14(4), 372-387.

Shim, S., Mary Ann, E., Lotz, S., & Warrington, P. (2001). An online prepurchase intentions model: The role of intention to search. Journal of Retailing, 77(3), 397.

Shoib, G. and Jones, M. (2003). Focusing on the invisible: the representation of IS in Egypt. Information Technology & People, 16( 4), 440-60.

Shore, B., & Venkatasachalam, A. (1996). The role of national culture in systems analysis and design. Journal of Global Information Management, 3(3), 5-14.

Siddiqui, H. (2008). Investigation of intention to use e-commerce in the Arab countries: A comparison of self-efficacy, usefulness, culture, gender, and socioeconomic status in Saudi Arabia and the United Arab Emirates. Unpublished Ph.D. dissertation, Nova South eastern University, United States.

Simon, LD& Corrales, J (2002), Democracy and the Internet: Allies or Adversaries? Wilson Forum, Washington: Woodrow Wilson Center Press.

Simon, S. (2001). The impact of culture and gender on websites: An empirical study. The Database for Advances in Information Systems,5(2), 18-37.

Singh, N. Zhao, H. & Hu, X. (2005). Analyzing the Cultural Content of Web Sites. International Marketing Review, 22 (2), 129-142.

Sirec, K., & Mocnik, D. (2010). How entrepreneurs' peronal characteristics affect SMES' growth. Our Economy Nase Gospodarstvo, 56(1/2), 3-12.

Soliman, K. S., & Janz, B. D. (2004). An exploratory study to identify the critical factors affecting the decision to establish Internet-based interorganizational information systems. Information & Management, 41(6), 697-706.

Song, J., & Kim, Y. J. (2006). Social influence process in the acceptance of a virtual community service. Information Systems Frontiers, 8(3), 241-252.

Srite, M., & Karahanna, E. (2006). The Role of Espoused National Cultural Values in Technology Acceptance. MIS Quarterly, 30(3), 679-704.

- Stockdale, R., & Standing, C. (2004). Benefits and barriers of electronic marketplace participation: An SME perspective. Journal of Enterprise Information Management, 17(4), 301.
- Straub, D. (1994). The effect of culture on IT diffusion: Email and fax in Japan and the US. Information Systems Research, 12(2), 23-47.
- Straub, D., Loch, K., & Hill, C. (2001). Transfer of information technology to the Arab world: A test of cultural influence modelling. Journal of Global Information Management, 9(4), 6-28.
- Tan, K. Chong, S. Lin, B. & Eze, U. (2009). Internet-based ICT adoption: evidence from Malaysian SMEs. Industrial Management and Data Systems, 109(2), 224-244.
- Tambunan, T. (2005). Promoting small and medium enterprises with a clustering approach: A policy experience from Indonesia. Journal of Small Business Management, 43(2), 138- 154.
- Taylor, S., & Todd, P.A. (1995). Understanding information technology usage: A test of competing models. Information Systems Research, 6(2), 144-176.
- Teng, K. L. (2000). Factors and their influence on determining the level of Internet Commerce adoption in small business: an empirical examination. Doctoral dissertation, University of Memphis.
- Teo, T., & Ranganathan, C. (2004). Adopters and non-adopters of business-to-business electronic commerce in Singapore. Information & Management, 42(1), 89-102.
- Teo, T. S. H., Tan, M. & Buk, W. K. (1997-98). A contingency model of Internet adoption in Singapore. International Journal of Electronic Commerce, 2, (2), 95-118.
- Thatcher, J.B., Srite, M., Stepina, L.P., & Liu, Y. (2003). Culture, overload and personal innovativeness with information technology: Extending the nomologicalnet. The Journal of Computer Information Systems, 44(1), 74-81.
- Thompson S H Teo, & Yujun Pian. (2003). A contingency perspective on Internet adoption and competitive advantage. European Journal of Information Systems, 12(2), 78-92.

Thong, J. Y. L., & Yap, C. S. (1995). CEO characteristics, Organisational characteristics and information technology adoption in small business. Implementation in Singaporean small businesses. Omega, 29(2), 143-156.

Thong, J. Y. L. (1999). An integrated model of information systems adoption in small businesses. Journal of Management Information Systems, 15(4), 187-214.

Tornatzky, L. & Fleischer, M. (1990). The Processes of Technological Innovation. New York: Lexington Books.

Tornatzky, Louis G., & Klein, Katherine J.. (1982). Innovation Characteristics and Innovation Adoption-Implementation: A Meta-Analysis of Findings. IEEE Transactions on Engineering Management, 29(1), 28.

Twati, J. M. & Gammack, J. G. (2006). The Impact of Organisational Culture Innovation on the Adoption of IS/IT: The Case of Libya. Journal of Enterprise Information Management, 19(2), 175-191.

UNCTAD, (2000). Building Confidence. In Electronic Commerce and Development. United Nations Conference on Trade and Development.

UNCTAD, (2002). Report of the Expert Meeting on Improving the Competitiveness of SMEs in Developing Countries: The Role of Finance, Including e-Finance to Enhance Enterprise Development, Trade and Development Board, Sixth Session, Commission on Enterprise, Business Facilitation and Development Geneva, 2002, p. 1.

UNCTAD, (2008). World Investment Report . Retrieved November 8, 2009, from [http://www.unctad.org/en/docs/wir2008\\_en.pdf](http://www.unctad.org/en/docs/wir2008_en.pdf).

US-Saudi Arabian Business Council , (2005). The Telecommunications and Information Technology Sectors in the Kingdom of Saudi Arabia. Retrieved November,11, 2009 from, [www.us-saudi-business.org](http://www.us-saudi-business.org).

Valentino, N. A. & Hutchings, V. Banks, J., & Davis, K (2008). Is a worried citizen a good citizen? Emotions, Political Information Seeking, and Learning via the Internet. Political Psychology, 29(2), 247-273.

Vanderslice, S. (2000). Listening to Everett Rogers: Diffusion of Innovations and WAC. Language and Learning Across the Disciplines , 4.(1), 22-9.

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. Management Science, 46(2), 186-204.

Venkatesh, V., Morris, M.G., Sykes, T.A., & Ackerman, P.L. (2004). Individual Reactions to New Technologies in the Workplace: The Role of Gender as a Psychological Construct. Journal of Applied Social Psychology, 34 (3), 445-467.

Wei, D. (2010). The Impact of Emerging Technologies on Small and Medium Enterprises (SMEs). Journal of Business Systems, Governance & Ethics, 4(4), 53-60.

Weiting, Z. (2008). The contingent value of political ties in evolving environments: exit of domestic firms following competitive foreign entry. Academy of Management Annual Meeting Proceedings, 1-6.

Wilson, M. (1999). The development of the internet in South Africa, Telematics and Informatics, 16, 99-111.

Wooley, D., & Eining, M. (2006). Software piracy among accounting students: A longitudinal comparison of chance and sensitivity. Journal of Information Systems, 20(1), 49-63.

Wu, J., & Liu, D. (2007). The effects of trust and enjoyment on intention to play online games. Journal of Electronic Commerce Research, 8(2), 128-140.

Wu, R, Mahajan, V., & Balasubramanian, S. (2003). An analysis of e-business adoption and its impact on business performance. Academy of Marketing Science Journal, 31(4), 425-447.

Wymer, S. A., & Regan, E. A. (2005). Factors influencing e-commerce adoption and use by small and medium businesses. Electronic Markets, 15(4), 438-453.

Xuan, Z., Atkins, D., & Yong, L. (2009). Effects of distribution channel structure in markets with vertically differentiated products. Quantitative Marketing & Economics, 7(4), 377-397.

Yang, X., Yiyun, Q., & Zafar, U. (2007). The Impact of Firm Resources on Subsidiary's Competitiveness in Emerging Markets: An Empirical Study of Singaporean SMEs' Performance in China. Multinational Business Review, 15(2), 13-40.



Yasin, M. (1996). Entrepreneurial Effectiveness and Achievement in Arab Culture: New Evidence to Rekindle Interest in an Old Predictor. Journal of Business Research, 35(1), 69-77.

Yasin, M. & Yavas, Y. (2007). An analysis of E-business practices in the Arab culture: Current inhibitors and future strategies. Cross Cultural Management, 14(1), 68-73.

Yoo, C. (2010). The Changing Patterns of Internet Usage. Federal Communications Law Journal, 63(1), 67-89.

Yoh, E., Damhorst, M., Sapp, S., & Laczniak, R. (2003). Consumer adoption of the Internet: the case of apparel shopping. Psychology & Marketing, 20(12), 1095-1118.

Yoon, C. (2009). The effects of national culture values on consumer acceptance of e-commerce: Online shoppers in China. Information & Management, 46(5), 294.

Zach, Z., & Zhu, K. (2010). The Effects of Information Transparency on Suppliers, Manufacturers, and Consumers in Online Markets. Marketing Science, 29(6), 1125-1137.

Zahedi, F., Van Pelt, W., & Srite, M. (2006). Web Documents' Cultural Masculinity and Femininity. Journal of Management Information Systems, 23(1), 87-128. Retrieved from Business Source Complete database.

Zakour, A.B. (2004). Cultural differences and information technology acceptance. Proceedings of the 7th Annual conference of the Southern association for information systems. Savannah, GA, USA.

Zank, G. M. & Vokurka, R. J. (2003). The Internet: motivations, deterrents, and impact on supply chain relationships. SAM Advanced Management Journal, 68(2), 33-40.

Zeng, S.X., Xie, X.M., Tam, C.M. & Wan, T.W. (2008). Competitive priorities of manufacturing firms for internationalization: an empirical research. Measuring Business Excellence, 12(3), 44-55.

Zhang, S., & Fjermestad, J. (2008). Instant messaging: observations from two small e-commerce businesses. Journal of Enterprise Information Management, 21(2), 179-197.