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**INTENTION TO USE E-GOVERNMENT SERVICES
AMONG THE ACADEMIC STAFF IN SAUDI
UNIVERSITIES**



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UUM
Universiti Utara Malaysia

**DOCTOR OF BUSINESS ADMINISTRATION
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By



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**Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
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ABSTRACT

E-government diffusion and usage is a global topic that concerns many countries worldwide. E-government is a way for providing services of government over online channels of communication to its citizens. Saudi Arabia has implemented a program of e-government in 2005 to encourage performance of public sectors through acquiring the benefits of Information Communication Technology (ICT) advances. This study focuses on the factors that influence intention to use e-government among the academic staff in Saudi Arabia. In addition, this study is to identify the mediating role of e-government awareness on the relationships between social influence, trust of internet and trust in intermediaries and intention to use e-government and the mediating role of perceived risk on the relationships between trust of internet and trust in intermediaries and intention to use e-government. Based on the Theory of Planned Behaviour (TPB), this study integrated these factors to examine their influences on intention to use e-government. This study utilized a quantitative approach using a survey to reflect consumers' perspectives towards e-government usage. To examine the hypothesized model, the data were collected from the academic staff working in Saudi public universities. This study employed Partial Least Squares techniques to confirm the validity and reliability of the measurement model and to examine the structural relationships. The findings of the study confirmed the influences of social influence, e-government awareness, trust in intermediary and perceived risk on intention to use e-government. Further, awareness of e-government is influenced by social influence, trust in Internet and trust in intermediary and mediates the relationship between these factors and intention to use e-government. Trust in Internet factor emerged as significant predictor of consumers' risk perceptions and mediates the relationship between this factor and intention to use e-government. This study has important implications for e-government practitioners, researchers and policy decision makers interested in the implementation of e-government.

Keywords: electronic government, usage intention, perceived risk, awareness, social influence.

ABSTRAK

Penyebaran dan penggunaan e-kerajaan adalah satu topik global yang melibatkan banyak negara di seluruh dunia. E-kerajaan adalah satu kaedah menyediakan perkhidmatan kerajaan melalui saluran komunikasi kepada rakyat. Dalam usaha bertindakbalas kepada perubahan ini, kerajaan Arab Saudi telah melaksanakan program e-kerajaan pada tahun 2005 untuk menggalakkan prestasi sektor awam melalui perolehan pelbagai faedah daripada kemajuan teknologi inovatif dalam ICT. Kajian ini memberi tumpuan kepada faktor-faktor yang mempengaruhi niat untuk menggunakan e-kerajaan di kalangan staf akademik di Arab Saudi. Di samping itu, kajian ini adalah untuk mengenalpasti peranan pencelah kesedaran terhadap e-kerajaan dan tanggapan risiko terhadap hubungan diantara pengaruh sosial, kepercayaan terhadap internet dan kepercayaan terhadap orang tengah dengan niat untuk menggunakan e-kerajaan. Berdasarkan Teori Tingkahlaku Dirancang (TPB), kajian ini menggabungkan faktor-faktor ini untuk mengkaji pengaruh mereka ke atas niat untuk menggunakan e-kerajaan. Kajian ini menggunakan pendekatan kuantitatif melalui kaedah tinjauan untuk mencerminkan perspektif pengguna terhadap penggunaan e-kerajaan. Untuk mengkaji model hipotesis, data telah diperolehi daripada kakitangan akademik yang bertugas di universiti awam di Arab Saudi. Kajian ini menggunakan teknik *Partial Least Squares* untuk mengesahkan kesahihan dan kebolehpercayaan model pengukuran dan untuk memeriksa hubungan struktur. Hasil kajian itu mendapati pengaruh sosial, kesedaran terhadap e-kerajaan, kepercayaan terhadap orang tengah dan tanggapan risiko mempunyai hubungan dengan niat untuk menggunakan e-kerajaan. Di samping itu, kesedaran terhadap e-kerajaan adalah dipengaruhi oleh pengaruh sosial, kepercayaan terhadap internet dan kepercayaan terhadap orang tengah. Kepercayaan terhadap internet muncul sebagai faktor peramal penting kepada tanggapan risiko pengguna. Juga didapati bahawa tanggapan risiko menjadi faktor pencelah hubungan diantara kepercayaan terhadap internet and niat untuk menggunakan e-kerajaan. Kajian ini mempunyai implikasi yang penting bagi pengamal e-kerajaan, penyelidik dan pembuat keputusan yang berminat dengan pelaksanaan e-kerajaan.

Kata kunci: kerajaan elektronik, niat penggunaan, tanggapan risiko, kesedaran, pengaruh sosial.

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TABLE OF CONTENTS

CERTIFICATION OF DISSERTATION WORK	ii
PERMISSION TO USE	iv
ABSTRACT	v
ABSTRAK	vi
ACKNOWLEDGEMENTS	vii
TABLE OF CONTENTS	viii
LIST OF TABLES	xi
LIST OF FIGURES	xii
LIST OF ABBREVIATIONS	xiii
CHAPTER ONE: INTRODUCTION	1
1.1 Introduction	1
1.2 Background of the Study	1
1.3 Problem Statement	6
1.4 Research Objectives	13
1.5 Research Questions	14
1.6 Significance of the Study	14
1.7 Scope of the Study	19
1.8 Definition of Key Terms	20
1.9 Organization of Remaining Chapters	21
CHAPTER TWO: LITERATURE REVIEW	23
2.1 Introduction	23
2.2 Citizens' Usage Behavior and Intention to Use e-Government Services	23
2.3 Antecedent Factors Influencing the Citizens' Intention to Use e-Government	26
2.3.1 Factors Influencing Intention to Use e-Government Services	31
2.3.2 Factors Influencing e-Government Services Awareness	54
2.3.3 Factors Influencing Perceived Risk	61
2.3.4 The Mediating Effects of e-Government Services Awareness	66

2.3.5 The Mediating Effects of Perceived Risk	69
2.4 Theoretical Framework	74
2.5 Hypotheses	82
CHAPTER THREE: METHODOLOGY	104
3.1 Introduction	104
3.2 Research Design	104
3.3 Operationalization of Variables	105
3.4 Measurement	106
3.5 Study Population	111
3.6 Study Sample	112
3.6.1 Sampling Frame	113
3.6.2 Sample Size	114
3.7 The Survey Questionnaire	117
3.8 Pilot Study	118
3.9 Data Collection Procedures	120
3.10 Data Analysis	121
3.10.1 Descriptive Statistics	122
3.10.2 Inferential Statistics	122
3.10.3 Partial Least Squares-Structural Equation Modeling (PLS-SEM)	122
3.10.4 Validity and Reliability	126
3.11 Ethical Considerations	126
CHAPTER FOUR: DATA ANALYSIS AND RESULTS	128
4.1 Introduction	128
4.2 Response Rate	129
4.3 Demographic Profile of Respondents	129
4.4 Testing of Non-Response Bias	133
4.5 Descriptive Statistics Analysis	134
4.6 Multicollinearity Test	135
4.6.1 Assumption of Normality	136
4.6.2 Test of Linearity	137
4.7 Testing the Measurement Model	137
4.7.1 Construct Validity	139
4.7.2 Convergent Validity	142

4.7.3 Discriminant Validity.....	143
4.8 The Model Goodness of Fit (GoF).....	144
4.9 Prediction Relevance of the Model.....	145
4.10 Assessing the Inner Model and Procedures of Hypotheses Testing	146
4.10.1 Analysis of Mediation Effect	149
4.10.2 Testing the Mediation Hypotheses.....	152
4.11 Summary of the Findings.....	153
CHAPTER FIVE: DISCUSSION AND CONCLUSION	156
5.1 Introduction.....	156
5.2 Recapitulation of the Study Findings.....	156
5.3 Discussion	159
5.3.1 The Effects of Antecedent Factors on Intention to Use e-Government.....	159
5.3.2 The Factors Influencing e-Government Services Awareness	168
5.3.3 The Factors Influencing Perceived Risk	174
5.3.4 The Mediating Effects of e-government Services Awareness	177
5.3.5 The Mediating Effects of Perceived Risk	185
5.4 Contributions of the Research.....	188
5.4.1 Theoretical Contribution	188
5.4.2 Managerial Contribution.....	191
5.5 Limitations and Future Research Directions.....	195
5.6 Conclusion	197
REFERENCES.....	200
APPENDIX A	248
APPENDIX B	252
APPENDIX C	256
APPENDIX D	258
APPENDIX E	262

LIST OF TABLES

Table	Page
3.1 Intention to Use e-Government Services Measure.....	107
3.2 Awareness about e-Government Services Measure.....	108
3.3 Perceived Risk to Using e-Government Services Measure	108
3.4 Social Influence to Use e-Government Services Measure	109
3.5 Trust in Internet to Use e-Government Services Measure	109
3.6 Trust in Intermediary to Use e-Government Measure	110
3.7 Measure of Variables Reliability Coefficient from Previous Studies	110
3.8 List of public universities in Saudi Arabia by Region	114
3.9 Determining Sample Size of a Given Population	115
3.10 The Probability Sampling of Academic Staff for Each University.....	116
3.11 Reliability Coefficient Values for Items of Constructs in Pilot Study.....	120
4.1 Response Rate of Study Sample	129
4.2 Universities of the Respondents.....	130
4.3 Respondents' Demographic Information	131
4.4 Respondents' e-Government Usage.....	132
4.5 Group Statistics of Independent Sample t-test	133
4.6 Independent Sample t-test Results for Non-Response Bias.....	134
4.7 Descriptive Statistics of the Constructs.....	135
4.8 Multicollinearity Test.....	136
4.9 Results of Skweness and Kurtosis for Normality Test.....	137
4.10 Factor Analysis and Cross-Loading.....	141
4.11 Significance Level of Factor Loadings	142
4.12 Analysis of Convergent Validity.....	143
4.13 Analysis of Discriminant Validity	144
4.14 Goodness of Fit of the Model.....	145
4.15 Predictive Quality of the Model.....	145
4.16 Results of the Inner Structural Model	149
4.17 Testing the Mediation Hypothesis	153
4.18 Summary of the Findings	154

LIST OF FIGURES

Figure	Page
2.1 Theoretical Framework	75
4.1 Research Framework and Hypotheses	138
4.2 Research Framework and the Items Deleted.....	140
4.3 Path Model Results	146
4.4 Path Model Significance Results	147
4.5 Mediation Effect of Perceived Risk	150
4.6 Mediation Effect of E-government Awareness.....	151



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LIST OF ABBREVIATIONS

IS	Information System
IT	Information Technology
E-government	Electronic Government
E-commerce	Electronic Commerce
E-services	Electronic Service
E-intermediary	Electronic Intermediary
E-office	Electronic Office
G to G	Government to Government
G to B	Government to Business
G to C	Government to Citizen
ICT	Information System Technology
IU	Intention Usage
TRA	Theory of Reasoned Action
TAM	Technology of Acceptance Model
TPB	Theory of Planned Behaviour
C-TAM-TPM	Model Combined between TAM and TPM
DOI	Diffusion of Innovation
MPCU	Model of PC Utilisation
UTAUT	Unified Theory of Acceptance and use of Technology
PR	Perceived Risk
AW	E-government Awareness
SI	Social Influence
TI	Trust in Internet
TEI	Trust in E-government Intermediary



CHAPTER ONE

INTRODUCTION

1.1 Introduction

The current chapter offers an overview of the background of study, problem statement, the study objectives, research questions and the definition of key terms used in the current study. Then, this chapter provides discussion on the study's contribution. Lastly, the chapter includes a discussion on the organization of the remaining chapters.

1.2 Background of the Study

Continued globalisation and the Internet growth have prompted many countries to move towards increased use of the information and communication technologies (ICT). The transition to using digital systems is very evident, which in turn, has led to governments succeeding in achieving competitive benefit (Deakins & Dillon, 2002; Whitson & Davis, 2001).

In this context, governments have made huge investments to fully utilize cost-effective operational applications of ICT. This has been done to satisfy their stakeholders with improved, effective and transparent ways to interact with their government services using the advantages of online services (Brannen, 2001). E-government is a way for providing government services using online channels of communication for its citizens (Sharifi & Zarei, 2004).

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REFERENCES

- Ablon, L., & Libicki, M. (2015). Hackers' Bazaar: The Markets for Cybercrime Tools and Stolen Data. *Defense Counsel Journal*, 82(2), 143-152.
- Accenture. (2005). The Government Executive Series e-Government Leadership: Leadership in Customer Service: New Expectations. Available online at: [http://www.accenture.com/Global/Research and Insights/By Industry/Government/EGovernmentVision.htm](http://www.accenture.com/Global/Research_and_Insights/By_Industry/Government/EGovernmentVision.htm)
- Accenture. (2010). Digital government pathways to delivering public services for the future a comparative study of digital government performance across 10 countries. Available online at: http://nstore.accenture.com/acn_com/Accenture-Digital-Government-Pathways-to-Delivering-Public-Services-for-the-Future.pdf
- Ackfeldt, A. L., & Coote, L. V. (2005). A study of organizational citizenship behaviors in a retail setting. *Journal of Business Research*, 58(2), 151-159.
- Adams, A., & Blandford, A. (2006). The developing roles of digital library intermediaries. UCLIC working paper. Available online at: http://www.researchgate.net/profile/The_developing_roles_of_digital_library_intermediaries/links/.pdf
- Adulwahab, L., & Dahalin, Z. M. (2011). Effectiveness of Telecentre using a Model of Unified Theory of Acceptance and Use of Technology (UTAUT): Structural Equation Modeling Approach. *Emerging Trends in Computing and Information Sciences*, 2(9), 402-406.

- Ahmad, M. O., Markkula, J., & Oivo, M. (2013). Factors affecting e-government adoption in Pakistan: a citizen's perspective. *Transforming Government: People, Process and Policy*, 7(2), 225–239. doi:10.1108/17506161311325378
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.), *Action control: From cognition to behavior* (pp.11-39). Heidelberg: Springer.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Ajzen, I., & Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behavior*. New Jersey, USA: Prentice-Hall.
- Akhter, M.S., Onishi, T. and Kidokoro, T. (2007). E-government in a developing country: citizen-centric approach for success, *International Journal of Electronic Governance*, 1(1), 38-51.
- Akkaya, C., Obermeier, M., Wolf, P., & Krcmar, H. (2011). Components of trust influencing egovernment adoption in Germany. In *Electronic Government* (pp. 88-99). Springer Berlin Heidelberg.
- Akkaya, C., Wolf, D., & Krcmar, H. (2010). The role of trust in e-government adoption: A literature review. In *Proceedings of the 16th Americas Conference on Information Systems (AMCIS)* (pp. 297). Lima, Peru.

Akkaya, C., Wolf, P., & Krcmar, H. (2012). Factors influencing citizen adoption of e-government services: A cross-cultural comparison (research in progress). In *System Science (HICSS), 2012 45th Hawaii International Conference on System Science* (pp. 2531-2540). IEEE.

Akkaya, C., Wolf, P., & Krcmar, H. (2013). A Comprehensive analysis of e-government adoption in the german household. In *11th International Conference on Wirtschaftsinformatik* (pp. 1525–1539).. Available online at:

<http://aisel.aisnet.org/cgi/viewcontent.cgi?article=1094&context=wi2013>

Akter, S., D'Ambra, J., & Ray, P. (2011). An evaluation of PLS based complex models: the roles of power analysis, predictive relevance and GoF index. *AMCIS 2011 Proceedings-All Submissions*.

Al Alhareth, Y., Al Dighrir, I., & Al Alhareth, Y. (2015). Review of women's higher education in Saudi Arabia. *American Journal of Educational Research*, 3(1), 10-15.

Al-Adawi, Z., Yousafzai, S., & Pallister, J. (2005). Conceptual model of citizen adoption of e-government. In *The Second International Conference on Innovations in Information Technology (IIT'05)*, 1-10.

Alateyah, S. A., Crowder, R. M., & Wills, G. B. (2014). Identified factors affecting the intention of Saudi Arabian citizens to adopt e-government services. *International Journal of Innovation, Management and Technology*, 5(4), 280.

Al-Athmay, A. R. (2013). E-Governance in Arab countries: status and challenges. *Global Journal of Business Research*, 7(5), 79-98.

- AlAwadhi, S., & Morris, A. (2008). The use of the UTAUT model in the adoption of e-government services in Kuwait. *Proceedings of the 41st Annual Hawaii International Conference on System Sciences*, 219–219.
- Alenezi, H., & Amin, S. (2013). Issues associated with citizens in developing countries trusting the security of online services. *International Conference on Computer Applications Technology 2013, (ICCAT)*, 1–4. doi: 10.1109/iccat.2013.6522012
- Al-Fakhri, O., Cropf, R. A., Higgs, G. & Kelly, P. (2008). E-government in Saudi Arabia: between promise and reality. *International Journal of Electronic Government Research*, 4(2), 59-85.
- Alfarraj, O., Alhussain, T., & Abugabah, a. (2013). Identifying the Factors Influencing the Development of eGovernment in Saudi Arabia: The Employment of Grounded Theory Techniques. *International Journal of Information and Education Technology*, 3(3), 319–324. doi:10.7763/IJiet.2013.V3.289
- AlFawwaz, B. M. (2012). *Evaluation of eGovernment websites usability in Jordan* (Doctoral dissertation, Brunel University School of Engineering and Design PhD Theses).
- Al-Fulih, K. (2002). *Attributes of the Internet perceived by Saudi Arabian faculty as predictors of their Internet adoption for academic purposes* (pp. 1-212).
- Al-Gahtani, S. S., Hubona, G. S., & Wang, J. (2007). Information technology (IT) in Saudi Arabia: Culture and the acceptance and use of IT. *Information & Management*, 44(8), 681–691.

- Al-Ghaith, W.A., Sanzogni, L. and Sandhu, K. (2010). Factors influencing the adoption and usage of online services in Saudi Arabia. *Electronic Journal on Information Systems in Developing Countries*, 40(1), 1-32.
- AlGhamdi, I. a., Goodwin, R., & Rampersad, G. (2014). Organizational e-government readiness: An investigation in Saudi Arabia. *International Journal of Business and Management*, 9(5), 14–24. doi:10.5539/ijbm.v9n5p14
- AlGhamdi, R., Nguyen, A. T., & Jones, V. (2013). Wheel of B2C e-commerce development in Saudi Arabia. In *Robot Intelligence Technology and Applications 2012* (pp. 1047-1055). Springer Berlin Heidelberg.
- Alghamdi, S., & Beloff, N. (2014). Towards a comprehensive model for e-Government adoption and utilisation analysis: The case of Saudi Arabia. In *Computer Science and Information Systems (FedCSIS), Federated Conference on 2014* (pp. 1217-1225). IEEE.
- Alhujran, O. & Chatfield, A. (2008) "Toward a Model for EGovernment Services Adoption: The Case of Jordan", in Proceedings of the 8th European Conference on eGovernment, Ecole Polytechnique, Lausanne, Switzerland, 2008, 13-22.
- Al-Hujran, O., Al-dalahmeh, M., & Aloudat, A. (2011). The role of national culture on citizen adoption of eGovernment services: An empirical study. *Electronic Journal of E-government*, 9(2), 93-106.

- Al-Hujran, O., Aloudat, A., & Altarawneh, I. (2013). Factors influencing citizen adoption of e-government in developing countries: The case of Jordan. *International Journal of Technology and Human Interaction*, 9(2), 1-19.
- Al-Jabri, I. M., & Sohail, M. S. (2012). Mobile banking adoption: Application of diffusion of innovation theory. *Journal of Electronic Commerce Research*, 13(4), 379-391.
- Al-Jasser, S. (2014). The 2015 - 2020 KSA Science Technology and Innovation Plan. *The Advanced Technologies Forum*, KACST Headquarters - Conference Hall, King Abdullah Road Riyadh, Saudi Arabia.
- Alkhunaizan, A., & Love, S. (2012). What drives mobile commerce? An empirical evaluation of the revised UTAUT model. *International Journal of Management and Marketing Academy*, 2(1), 82-99.
- Al-Majali, M. M. (2011). *The antecedents of internet banking service adoption in Jordan: using decomposed theory of planned behavior* (Doctoral dissertation, Universiti Utara Malaysia).
- Alsaghier, H. M., Ford, M., Nguyen, A., & Hexel, R. (2010). Factors Affecting the Citizens' Trust in E-Government. *Handbook of Research on E-Services in the Public Sector: E-Government Strategies and Advancements: E-Government Strategies and Advancements*, 118.

- Alsaghier, H., Ford, M., Nguyen, A., & Hexel, R. (2009). Conceptualising Citizen's Trust in e-Government: Application of Q Methodology. *Electronic Journal of e-Government*, 7(4), 295-310.
- Al-Shafi, S. & Weerakkody, V. (2007). Implementing and managing e-government in the State of Qatar: a citizens' perspective. *Electronic Government, an International Journal*, 4(4), 436-450.
- Al-Shafi, S. (2007). Free Wireless Internet Park Services: An Investigation of Technology Adoption in Qatar from a Citizens' Perspective. *Journal of Cases on Information Technology*, 10(3), 21-34.
- Al-Shafi, S., & Weerakkody, V. (2008). The use of wireless Internet parks to facilitate adoption and diffusion of e-government services: An empirical study in Qatar. *AMCIS 2008 Proceedings*, 322.
- Al-Shafi, S., & Weerakkody, V. (2010). Factors affecting e-government adoption in the state of Qatar. In: European and Mediterranean Conference on Information Systems (Emcis), 2010, Abu Dhabi, UAE,
- Alshawi, S. & Alalwany, H. (2009). E-government evaluation: citizen's perspective in developing countries. *Information Technology for Development*, 15(3), 193-208.
- Alshaya, S. S. (2002). *Culture's Consequences: The Relationship Between Saudi National Culture and the Roles of School Leaders in Saudi Public Schools* (Doctoral dissertation, Michigan State University).

- Alshehri, M., & Drew, S. (2010). Challenges of e-government services adoption in Saudi Arabia from an e-ready citizen perspective. *Education*, 29(5.1).
- Alshehri, M., Drew, S., & Alfarraj, O. (2012). A Comprehensive Analysis of E-government services adoption in Saudi Arabia: Obstacles and Challenges. *Higher education*, 6(1), 8-2.
- Alshehri, M., Drew, S., & AlGhamdi, R. (2013). Analysis of citizens acceptance for e-government services: applying the UTAUT model. *arXiv preprint arXiv:1304.3157*.
- AlShihi, H. (2005). E-government development and adoption dilemma: Oman case study. In *6th International We-B (Working for e-Business) Conference*. Victoria University, Melbourne.
- AlShihi, H. (2006). *Critical Factors in the Adoption and Diffusion of E-government Initiatives in Oman* (Doctoral dissertation, Victoria University).
- Al-Smadi, M. O. (2012). Factors affecting adoption of electronic banking: An analysis of the perspectives of banks' customers. *International Journal of Business and Social Science*, 3(17), 294-309.
- Al-Sobhi, F. (2011). *The roles of intermediaries in the adoption of e-government services in Saudi Arabia* (Doctoral dissertation, Brunel University, School of Information Systems, Computing and Mathematics).

- Al-Sobhi, F., Weerakkody, V. & Shafi Al-Shafi. (2010). The role of intermediaries in facilitating e-government diffusion in Saudi Arabia. *European and Mediterranean Conference on Information Systems (EMCIS)* July 12-13 2010, Abu Dhabi, UAE.
- Al-Sobhi, F., Kamal, M. & Weerakkody, V. (2009) Current State Of E-Services in Saudi Arabia: The Case Of Intermediaries In Facilitating Government Services In Madinah City. *European and Mediterranean Conference on Information Systems (EMCIS)* July 13-14 2009, Izmir.
- Al-Sobhi, F., Weerakkody, V., & El-Haddadeh, R. (2011). The relative importance of intermediaries in e-government adoption: A study of Saudi Arabia. In *Electronic Government* (pp. 62-74). Springer Berlin Heidelberg.
- Al-Sobhi, F., Weerakkody, V., & El-Haddadeh, R. (2011). The relative importance of intermediaries in e-government adoption: A study of Saudi Arabia. In *Electronic Government* (pp. 62-74). Springer Berlin Heidelberg.
- Al-Suwail, M. (2007). E-government Program. Proceedings of the national e-transactions conference, Al-Riyadh, Saudi Arabia.
- Alzahrani, M. E., & Goodwin, R. D. (2012). Towards a UTAUT-based model for the study of e- government citizen acceptance in Saudi Arabia. *International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering*, 6(4) 376–382.

- Amescua, B. S. (2007). Adult instructors' perceptions on ICT and diffusion practices: implications for equity of access. *Canadian Journal of Learning and Technology/La revue canadienne de l'apprentissage et de la technologie*, 33(2).
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, 103(3), 411.
- Anvar, M., & Venter, M. (2014). Attitudes and Purchase Behaviour of Green Products among Generation Y Consumers in South Africa. *Mediterranean Journal of Social Sciences*, 5(21), 183. Available online at: <http://mcser.org/journal/index.php/mjss/article/viewFile/4191/4101>
- Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal of marketing research*, 396-402.
- Attewell, P. (1992). Technology diffusion and organizational learning: The case of business computing. *Organization Science*, 3(1), 1-19.
- Aydoğan, R., Sharpanskykh, A., & Lo, J. (2015). A Trust-Based Situation Awareness Model. In *Multi-Agent Systems* (pp. 19-34). Springer International Publishing.
- Baabdullah, A., Dwivedi, Y. K., & Williams, M. D. (2013). IS/IT Adoption Research in The Saudi Arabian Context: Analyzing Past and Outlining Future Research Directions. In *European, Mediterranean and Middle Eastern Conference on Information Systems* (pp. 17-18).

- Bagozzi, R., Davis, F. D., & Warshaw, P. R. (1992). Development and test of a theory of technological learning and usage. *Human Relations*, 45(7), 660-686.
- Bailey, A. (2009). Issues affecting the social sustainability of telecentres in developing contexts: A field study of sixteen telecentres in Jamaica. *Electronic Journal of Information Systems in Developing Countries*, 36(4), 1-18.
- Bailey, J., & Bakos, Y. (1997). An exploratory study of the emerging role of electronic Intermediaries. *International Journal of Electronic Commerce*, 1(3), 7–20.
- Barclay, D., Higgins, C., & Thompson, R. (1995). The partial least square (PLS) approach to casual modeling: Personal computer adoption and use as an illustration. *Technology*, 2(2), 285-309.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51(6): 1173-1182.
- Basamh, S. S., Qudaih, H. A., & Suhaimi, M. A. (2014). E-Government Implementation in the Kingdom of Saudi Arabia: An Exploratory Study on Current Practices, Obstacles & Challenges. *International Journal of Humanities and Social Science*, 4(2), 296-300.
- Bates, K., Malakoff, L., Kane, S., & Pulidini, J. (2012). Closing the digital divide: promoting broadband adoption among underserved populations. Available online at:

[http://www.nlc.org/Documents/Find%20City%20Solutions/Research%20Innovation/Infrastructure/Closing Digital Divide Promoting Broadband Adoption Underserved Populations.pdf](http://www.nlc.org/Documents/Find%20City%20Solutions/Research%20Innovation/Infrastructure/Closing%20Digital%20Divide%20Promoting%20Broadband%20Adoption%20Underserved%20Populations.pdf).

Baumgartner, H., & Homburg, C. (1996). Applications of structural equation modeling in marketing and consumer research: A review. *International Journal of Research in Marketing*, 13(2), 139-161.

Belanger, F. & Carter, L. (2012). Digitizing government interactions with constituents: an historical review of e-government research in information systems. *Journal of the Association for Information Systems*, 13(5), 363–394.

Belanger, F., & Carter, L. (2006). The Effects of the Digital Divide on E-Government: An Empirical Evaluation. In *System Sciences, 2006. In Proceedings of the 39th Hawaii International Conference on System Sciences, Kauai, Hawaii*, (4), 81-81c.

Belanger, F., & Carter, L. (2008). Trust and risk in e-government adoption. *The Journal of Strategic Information Systems*, 17(2), 165–176. doi:10.1016/j.jsis.2007.12.002

Belanger, F., & Carter, L. (2009). The impact of the digital divide on e-government use. *Communications of the ACM*, 52(4), 132-135.

Belanger, F., Hiller, J. S., & Smith, W. J. (2002). Trustworthiness in electronic commerce: the role of privacy, security, and site attributes. *The Journal of Strategic Information Systems*, 11(3), 245-270.

- Beldad, A., van der Geest, T., de Jong, M., & Steehouder, M. (2012). A cue or two and I'll trust you: Determinants of trust in government organizations in terms of their processing and usage of citizens' personal information disclosed online. *Government information quarterly*, 29(1), 41-49.
- Bhatnagar, S. (2004). *E-government: From vision to implementation-A practical guide with case studies*. Sage.
- Bjerke, B., & Al-Meer, A. (1993). Culture's consequences: Management in Saudi Arabia. *Leadership & Organization Development Journal*, 14(2), 30.
- Blackstone, E. A., Bognanno, M., & Hakim, S. (Eds.). (2005). *Innovations in E-government: the Thoughts of Governors and Mayors*. Rowman & Littlefield.
- Blakemore, M., & Wilson, F. (2009). MC-eGov Study on Multi-channel Delivery Strategies and Sustainable Business Models for Public Services addressing Socially Disadvantaged Groups. Available online at:
www.mcegov.eu/media/452/think%20paper%201%20final.pdf
- Bollen, K. A. (1989). A new incremental fit index for general structural equation models. *Sociological Methods & Research*, 17(3), 303-316.
- Borzekowski, D. L., & Poussaint, A. F. (1999). Public service announcement perceptions: A quantitative examination of anti-violence messages. *American journal of preventive medicine*, 17(3), 181-188.

- Brannen, A. (2001). E-government in California: Providing services to citizens through the Internet. *Spectrum Lexington*, 74(2), 6-10.
- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of cross-cultural psychology*, 1(3), 185-216.
- Brown, S. A., A. P. Massey, M. M. Montoya-Weiss, and J. R. Burkman (2002). Do I really have to? User acceptance of mandated technology. *European Journal of Information Systems* 11(4), 283-295.
- Bush, A. J., Martin, C. A. & Clark, P. W. (2001). The effect of role model influence on adolescents' materialism and marketplace knowledge. *Journal of Marketing Theory and Practice*, 9(4), 27-36.
- Bwalya, K. J., & Healy, M. (2010). Harnessing e-government adoption in the SADC region: a conceptual underpinning. *Electronic journal of e-government*, 8(1), 23-32.
- Carter, L., & Belanger, F. (2004). Citizen adoption of electronic government initiatives. In *System Sciences, 2004. Proceedings of the 37th Annual Hawaii International Conference on* (pp-10). IEEE.
- Carter, L., & Belanger, F. (2005). The utilization of e-government services: citizen trust, innovation and acceptance factors. *Information systems journal*, 15(1), 5-25.
- Carter, L., Weerakkody, V. (2008) E-Government Adoption: A Cultural Comparison. *Information Systems Frontiers*, 10(4), 473-482.

- Centeno, C., van Bavel, R., & Burgelman, J. C. (2005). A prospective view of e-government in the European Union. *The Electronic Journal of e-Government*, 3(2), 59-66.
- Chabrow, E. (2004). Survey says citizens want more than e-government. *InformationWeek*. Available online at:
<http://www.informationweek.com/story/showArticle.jhtml?articleID=21100103/>
- Chan, F. K., Thong, J. Y., Venkatesh, V., Brown, S. A., Hu, P. J., & Tam, K. Y. (2010). Modeling citizen satisfaction with mandatory adoption of an e-government technology. *Journal of the Association for Information Systems*, 11(10), 519-549.
- Chang, H. H., & Chen, S. W. (2008). The impact of online store environment cues on purchase intention: Trust and perceived risk as a mediator. *Online Information Review*, 32(6), 818-841. <http://dx.doi.org/10.1108/14684520810923953>
- Charbaji, A., & Mikdashi, T. (2003). A path analytic study of the attitude toward e-government in Lebanon. *Corporate Governance*, 3(1), 76–82.
- Chau, P. Y. K., & Hu, P. J. H. (2001). Information technology acceptance by individual professionals: A model comparison approach. *Decision Sciences*, 32(4), 699–719.
- Chen, C. D., Fan, Y. W. & Farn, C. K. (2007) Predicting electronic toll collection service adoption: An integration of the technology acceptance model and the theory of planned behavior. *Transportation Research Part C: Emerging Technologies*, 15 (5), 300-311.

- Chen, Y. S., & Chang, C. H. (2012). Enhance green purchase intentions: The roles of green perceived value, green perceived risk, and green trust. *Management Decision*, 50(3), 502-520.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336.
- Chin, W. W., Marcolin, B. L., & Newsted, P. R. (2003). A partial least squares latent variable modeling approach for measuring interaction effects: Results from a Monte Carlo simulation study and an electronic-mail emotion/adoption study. *Information systems research*, 14(2), 189-217.
- Chircu, A. M., & Kauffman, R. J. (1999). Strategies for Internet middlemen in the intermediation/disintermediation/reintermediation cycle. *Electronic Markets*, 9(1), 109-117.
- Chircu, A. M., Davis, G. B., & Kauffman, R. J. (2000). The role of trust and expertise in the adoption of electronic commerce intermediaries. *Management Information Systems Research Center Working Paper 00-07*.
- Choudrie, J., & Dwivedi, Y. (2005). A survey of citizens adoption and awareness of e-government initiatives, the government gateway: a united kingdom perspective. In *E-Government Workshop. Brunel University, West London*.
- Chow, W.S., & Chan, L.S. (2008), Social network, social trust and shared goals in organizational knowledge sharing. *Information & Management*, 45(7): 458-465.

Christianson, J., Maeng, D., Abraham, J., Scanlon, D. P., Alexander, J., Mittler, J., & Finch, M. (2014). What Influences the Awareness of Physician Quality Information? Implications for Medicare. *Medicare & medicaid research review*, 4(2).

Coakes, S. J., & Steed, L. (2009). *SPSS: Analysis without anguish using SPSS version 14.0 for Windows*. John Wiley & Sons, Australia, Ltd.

Davidson, W. B., & Cotter, P. R. (1991). The relationship between sense of community and subjective well-being: A first look. *Journal of community psychology*, 19(3), 246-253.

Cohen, J. (2000). *Statistical power analysis for the behavioral sciences*. Academic press.

Compeau, D., Higgins, C.A., & Huff, S. (1999), Social cognitive theory and individual reactions to computing technology - A Longitudinal-Study. *MIS quarterly*, 23(2): 145-158.

Cooper, D. R., Schindler, P. S., & Sun, J. (2008). *Business research methods* (Vol. 9). New York: McGraw-hill.

Corritore, C. L., Kracher, B., Wiedenbeck, S., (2003). On-line trust: concepts, evolving themes, a model. *International Journal of Human- Computer Studies*, 58 (6), 737-758.

- Daassi, M., Jawadi, N., Favier, M., & Kalika, M. (2006). An empirical investigation of trust's impact on collective awareness development in virtual teams. *International journal of networking and virtual organisations*, 3(4), 378-394.
- Datta, P & Chatterjee, S . (2008). The economics and psychology of consumer trust in intermediaries in electronic markets: the EM-Trust Framework. *European Journal of Information Systems*, 17(1), 12–28.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.
- De Vaus, D. A. (2002). *Surveys in social research*. Psychology Press. 5th edition, Allen & Unwin, Crows Nest, Australia, 379.
- Deakins, E. & Dillon, S. (2002). E-government in New Zealand: the local authority perspective. *The International Journal of Public Sector Management*, 15(5), 375-398.
- DeVellis, R. F. (1991). *Scale Development: theory and applications (Applied Social Research Methods Series, Vol. 26)*. Newbury Park: Sage.
- Dillon, S., Deakins, E., & Chen, W. J. (2006). E-local government in New Zealand: The shifting policymaker view. *The Electronic Journal of e-Government*, 4(1), 9-18.
- Dombrowski, L., Hayes, G. R., Mazmanian, M., & Volda, A. (2014). E-government intermediaries and the challenges of access and trust. *ACM Transactions on Computer Human Interaction*, 21(2), 13.

- Dwivedi, Y. K., & Weerakkody, V. (2007). Examining the factors affecting the adoption of broadband in the Kingdom of Saudi Arabia. *Electronic Government International*, 4(1), 43–58.
- Ebbers, W. E., Pieterse, W. J., & Noordman, H. N. (2008). Electronic government: Rethinking channel management strategies. *Government Information Quarterly*, 25(2), 181-201.
- El-Haddadeh, R., Weerakkody, V., & Al-Shafi, S. (2013). Understanding the challenges and complexities influencing the implementation and institutionalisation of electronic services in the public sector. *Journal of Information and Management*, 50(4), 135–143.
- El-Sofany, H. F., Al-Tourki, T., Al-Sadoon, A., & Al-Howimel, H. (2012). E-government in Saudi Arabia: barriers, challenges and its role of development. *E-government*, 48(5).
- Erumban, A. A., & De Jong, S. B. (2006). Cross-country differences in ICT adoption: A consequence of Culture?. *Journal of World Business*, 41(4), 302-314.
- Eynon, R., & Dutton, W. H. (2007). Barriers to networked governments: evidence from Europe 1. *Prometheus*, 25(3), 225-242.
- Faaeq, Munadil K. (2014). *Factors affecting continued usage intention of electronic government among public servants in Iraq* (PhD thesis, Universiti Utara Malaysia).

- Fairchild, A. J., & MacKinnon, D. P. (2009). A general model for testing mediation and moderation effects. *Prevention Science, 10*(2), 87-99.
- Featherman, M. S., & Pavlou, P. A. (2003). Predicting e-services adoption: a perceived risk facets perspective. *International journal of human-computer studies, 59*(4), 451-474.
- Fink, A. (2003). *How to sample in surveys*. Sage Publications. 2nd ed. The Survey Kit, volume 7. Thousand Oaks: Sage Publications.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Addison-Wesley.
- Floropoulos, J., Spathis, C., Halvatzis, D., & Tspiridou, M. (2010). Measuring the success of the Greek taxation information system. *International Journal of Information Management, 30*(1), 47-56.
- Foley, J., & Gallery, K. (2012). An investigative study of promoting awareness and increasing registration of PAYE anytime in the Border Midlands West Region in Ireland. In *Proceedings of the 12th European Conference on e-Government* (227). Academic Conferences Limited.
- Foon, Y. S., & Fah, B. C. Y. (2011). Internet banking adoption in Kuala Lumpur: an application of Utaut model. *International Journal of Business and Management, 6*(4), 161.

- Fornell, C., & Bookstein, F. L. (1982). Two structural equation models: LISREL and PLS applied to consumer exit-voice theory. *Journal of Marketing research*, 440-452.
- Forno, R., & Feinbloom, W. (2001). Inside risks: a question of trust and value. *Communications of the ACM*, 44(6), 120.
- Fu, J., Farn, C., & Chao, W., (2006). Acceptance of electronic tax filing: A study of tax payer intentions. *Information and Management*, 43 (1), 109 – 126.
- Fulk, J., & Boyd, B. (1991). Emerging theories of communication and organizations. *Journal of Management*, 17(2), 407–446.
- Fulk, J., Steinfield, C. W., Schmitz, J., & Power, J. G. (1987). A social information processing model of media use in organizations. *Communication Research*, 14(5), 529–552.
- Gallant, L. M., Culnan, M. J., & McLoughlin, P. (2007). Why People e-File (or Don't e-File) Their income taxes. In *System Sciences, 2007. HICSS 2007. 40th Annual Hawaii International Conference on* (pp. 107-107). IEEE.
- Ganesan, S. (1994). Determinants of long-term orientation in buyer-seller relationships. *Journal of Marketing*, 58 (2), 1-19.
- Garland, R. (1991). The mid-point on a rating scale: Is it desirable. *Marketing bulletin*, 2(1), 66-70.

- Gay, L. R., Mills, G. E. & Airasian, P. (2009). *Educational research: Competencies for analysis and applications* (9th ed.). Upper Saddle River, NJ: Pearson.
- Geetika, P. (2007). Strategic Marketing of E-Government for Technology Adoption Facilitation. Available online at: www.csisigegov.org/critical_pdf/6_51-60.pdf .
[Accessed on 22/05/2010.](#)
- Gefen, D. (2002). Reflections on the dimensions of trust and trustworthiness among online consumers. *ACM Sigmis Database*, 33(3), 38-53.
- Gefen, D., & Heart, T. H. (2006). On the need to include national culture as a central issue in e-commerce trust beliefs. *Journal of Global Information Management (JGIM)*, 14(4), 1-30.
- Gefen, D., & Pavlou, P. A. (2012). The boundaries of trust and risk: The quadratic moderating role of institutional structures. *Information Systems Research*, 23(3-2), 940-959.
- Gefen, D., & Straub, D. W. (2003). Managing user trust in B2C e-services. *E-service Journal*, 2(2), 7-24.
- Gefen, D., Rao, V. S., & Tractinsky, N. (2003). The conceptualization of trust, risk, and their relationships in e-commerce. In *Proc. 36th Hawaii Int. Conf. on System science (HICSS)*.

- Gefen, D., Warkentin, M., Pavlou, P., & Rose, G. (2002). E-government adoption. In: Americas Conference on Information Systems, *AMCIS 2002 Proceedings*, 83, Dallas, Texas.
- Giaglis, G. M., Klein, S., & O'Keefe, R. M. (2002). The role of intermediaries in electronic marketplaces: developing a contingency model. *Information Systems Journal*, 12(3), 231-246.
- Gilbert, D., & Balestrini, P. (2004). Barriers and Benefits in the Adoption of E-Government. *The International Journal of Public Sector Management*, 17(4), 286-301.
- Gilbert, D., Balestrini, P. & Littleboy, D. (2004). Barriers and benefits in the adoption of e-government. *The International Journal of Public Sector Management*, 17(4), 286-301. doi:10.1108/09513550410539794
- Global Information Technology Report (2015). Available online at: <http://reports.weforum.org/global-information-technology-report-2015/>
- Golubeva, A. & Merkurjeva, I. (2006). Demand for online government services: case studies from St. Petersburg. *Information Polity*, 11(4), 241.
- Graafland-Essers, I., & Etedgui, E. (2003). *Benchmarking e-Government in Europe and the US* (No. 1733). Rand Corporation.
- Griffin, D., & Halpin, E. (2002). Local government: A digital intermediary for the information age?. *Information Polity*, 7(4), 217-230.

- Grob, A. (1995). A structural model of environmental attitudes and behaviour. *Journal of Environmental Psychology*, 15(3), 209-220.
- Gupta, B., Dasgupta, S. & Gupta, A. (2008). Adoption of ICT in a government organization in a developing country: an empirical study. *Journal of Strategic Information Systems*, 17(2), 140-154.
- Ha, S., & Stoel, L. (2009). Consumer e-shopping acceptance: Antecedents in a technology acceptance model. *Journal of Business Research*, 62(5), 565-571.
- Hair, J. F., & Black, W. C. Babin. BJ, & Anderson, RE (2010). *Multivariate Data Analysis*. (Seventh ed.). New Jersey: Pearson Prentice Hall.
- Hair, J. F., Money, A. H., Samouel, P., & Page, M. (2007). Research methods for business. *Education & Training*, 49(4), 336-337.
- Hair, J. J., Hult, G. T., Ringle, C. M., & Sarstedt, M. (2014). *A primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. London: SAGE Publications Ltd.
- Hair, J., Hult, G., Ringle, C., & Sarstedt, M. (2013). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications.
- Harby, F. A., Qahwaji, R., & Kamala, M. (2012). End-Users' Acceptance of Biometrics Authentication to Secure E-Commerce within the Context of Saudi Culture: Applying the UTAUT Model. *Globalization, Technology Diffusion and Gender Disparity: Social Impacts of ICTs: Social Impacts of ICTs*, 225-246.

- Heeks, R. (2002). Information systems and developing countries: Failure, success, and local improvisations. *The information society*, 18(2), 101-112.
- Heeks, R. (2003). *Most e-government-for-development projects fail: how can risks be reduced?*. Manchester: Institute for Development Policy and Management, University of Manchester. Available online at:
<http://idpm.man.ac.uk/publications/wp/igov/index.shtml>.
- Heeks, R. (2005). E-government as a Carrier of Context. *Journal of Public Policy*, 25(1), 51-74.
- Heeks, R., & Bailur, S. (2007). Analyzing e-government research: Perspectives, philosophies, theories, methods, and practice. *Government information quarterly*, 24(2), 243-265.
- Heeks, R., & Stanforth, C. (2007). Understanding e-Government project trajectories from an actor-network perspective. *European Journal of Information Systems*, 16(2), 165-177.
- Hejazi, S. R., Zarei, B., & Mozaffari, M. M. (2013). Factors affecting the acceptance of Internet and e-business technologies (IEBT): case of technology-based spin-offs. *International Review*, 1(3), 9-28.
- Hill, S., & Troshani, I. (2010). Factors influencing the adoption of personalisation mobile services: empirical evidence from young Australians. *International Journal of Mobile Communications*, 8(2), 150-168.

- Hofstede, G. (1980). *Culture's Consequences: International Differences in Work Related Values*. Beverly Hills: Sage Publications.
- Hofstede, G. (2001). *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations* (2nd ed.). Thousand Oaks, Calif: Sage Publications.
- Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: software of the mind: intercultural cooperation and its importance for survival*: McGraw-Hill Professional.
- Hong, I. B., & Cha, H. S. (2013). The mediating role of consumer trust in an online merchant in predicting purchase intention. *International Journal of Information Management*, 33(6), 927–939. doi:10.1016/j.ijinfomgt.2013.08.007
- Horst, M., Kuttschreuter, M., & Gutteling, J. (2007). Perceived usefulness, personal experiences, risk perception and trust as determinants of adoption of e-government services in the Netherlands. *Computers in Human Behavior* 23(4),1838-1852.
- Horton, R. P., Buck, T., Waterson, P. E., & Clegg, C. W. (2001). Explaining intranet use with the technology acceptance model. *Journal of information technology*, 16(4), 237-249.
- Howells, J. (2006). Intermediation and the role of intermediaries in innovation. *Research policy*, 35(5), 715-728.

- Hsin Chang, H., & Wen Chen, S. (2008). The impact of online store environment cues on purchase intention: Trust and perceived risk as a mediator. *Online information review*, 32(6), 818-841.
- Hsu, T-H., Wang, Y-S., & Wen, S-C. (2006). Using the decomposed theory of planned behavior to analyse consumer behavioral intention towards mobile text message coupons. *Journal of Targeting, Measurement & Analysis for Marketing*, 14(4), 309-324.
- Huang, Z. & Bwoma, P. O. (2003). An overview of critical issues of E-government. *Issues of Information Systems*, 4(1), 164-170.
- Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic management journal*, 20(2), 195-204.
- Hung, S.-Y., Chang, C.-M., & Kuo, S.-R. (2013). User acceptance of mobile e-government services: An empirical study. *Government Information Quarterly*, 30(1), 33–44.
- Hung, S.-Y., Chang, C.-M., & Yu, T.-J. (2006). Determinants of user acceptance of the e-Government services: The case of online tax filing and payment system. *Government Information Quarterly*, 23(1), 97–122.
- Iacobucci, D., Saldanha, N., & Deng, X. (2007). A meditation on mediation: Evidence that structural equations models perform better than regressions. *Journal of Consumer Psychology*, 17(2), 139-153.

Internet Crime Complaint Center (ICCC). (2014). Internet Crime Report. Available online at: http://www.ic3.gov/media/annualreport/2013_IC3Report.pdf.

Irani, Z., Dwivedi, Y. K., & Williams, M. D. (2009). Understanding consumer adoption of broadband: an extension of the technology acceptance model. *Journal of the Operational Research Society*, 60(10), 1322-1334.

Irani, Z., Love, P. E., & Jones, S. (2008). Learning lessons from evaluating eGovernment: Reflective case experiences that support transformational government. *The Journal of Strategic Information Systems*, 17(2), 155-164.

Internet World Sates (IWS). (2014). Internet Usage Statistics: The Internet Big Picture. Available online at: <http://www.Internetworldstats.com/stats.htm>.

Jaeger, P. T., & Thompson, K. M. (2003). E-government around the world: Lessons, challenges, and future directions. *Government Information Quarterly*, 20(4), 389-394.

James, J. (2003). Sustainable Internet Access for the Rural Poor? Elements of an Emerging Indian Model, *Futures*, 35(5), 461-472.

Janssen, M., & Klievink, B. (2009). The role of intermediaries in the multi-channel services delivery strategies. *International Journal of Electronic Government Research*, 5(3), 36-46.

Jarvenpaa, S.L., Tractinsky, N., & Vitale, M. (2000). Consumer trust in an Internet store. *Information Technology and Management*, 1(1), 45-71.

- Kannan, V. R., Tan, K. C., Handfield, R. B., & Ghosh, S. (1999). Tools and techniques of quality management: an empirical investigation of their impact on performance. *Quality Management Journal*, 6(3), 34.
- Karahanna, E., Straub, D. W., & Chervany, N. L. (1999). Information technology adoption across time: a cross-sectional comparison of pre-adoption and post-adoption beliefs. *MIS quarterly*, 183-213.
- Ke, W. & Wei, K. (2004). Successful e-government in Singapore. *Communications of the ACM*, 47(6), 95-99.
- Kenny, D. A., & Little, T. D. (2011). *Methodology in the Social Sciences* (3ed.). New York: The Guilford press.
- Kerlinger, F. N. (1973). *Foundations of behavioral research: Educational, psychological and sociological inquiry*. Holt Rinehart and Winston.
- Kesharwani, A., & Singh Bisht, S. (2012). The impact of trust and perceived risk on Internet banking adoption in India: An extension of technology acceptance model. *International Journal of Bank Marketing*, 30(4), 303-322.
- Khan, G. F., Moon, J., Rhee, C., & Rho, J. J. (2010). E-government skills identification and development: Toward a staged-based user-centric approach for developing countries. *Asia Pacific Journal of Information Systems*, 20(1), 1-31.

- Khan, G. F., Moon, J., Swar, B., Zo, H., & Rho, J.J.(2012). E-government service use intentions in Afghanistan: Technology adoption and the digital divide in a war-torn country. *Information Development*, 28(4), 281-299.
- Kharade, J. & Sharma , G. (2013). Study of Status of ICT Use and Awareness in E-Governance : A Case of Pune Division, *Indian Journal of Applied Research* 3(4), 243–245.
- Khasawneh, R., Rabayah, W., & Abu-Shanab, E. (2013). E-Government acceptance factors: trust and risk. In *The 6th International Conference on Information Technology (ICIT 2013)* (pp. 8-10).
- Kim, D. J., Ferrin, D. L., & Rao, H. R. (2008). A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. *Decision support systems*, 44(2), 544-564.
- Kim, K. K., & Prabhakar, B. (2004). Initial trust and the adoption of B2C e-commerce: The case of Internet banking. *ACM sigmis database*, 35(2), 50-64.
- Koller, M. (1988). Risk as a Determinant of Trust. *Basic and Applied Social Psychology*, 9(4), 265–76.
- Kransberg, M. & Davenport, W. (1972) *Technology and Culture: An Anthology*. New York: Meridian
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educ Psychol Meas.*

- Kuisma, T., Laukkanen, T., & Hiltunen, M. (2007). Mapping the reasons for resistance to Internet banking: A means-end approach. *International Journal of Information Management*, 27(2), 75-85.
- Kumar, R., & Best, M. L. (2006). Impact and sustainability of e-government services in developing countries: Lessons learned from Tamil Nadu, India. *The Information Society*, 22(1), 1-12.
- Kumar, V., Mukerji, B., Butt, I., & Persaud, A. (2007). Factors for successful e-government adoption: a conceptual framework. *The electronic journal of e-Government*, 5(1), 63-76.
- Lamblin, M. & Siweris, E. (2014). Thematic Programme Capitalisation: Analysis report on E-government services. Available online at: http://www.interreg4c.eu/fileadmin/User_Upload/PDFs/CAPITALISATION/Report/E-government_services.pdf
- Laudon, K., & Laudon, J. (2009). *Management Information System* (11th ed.). USA: Prentice Hall, New Jersey.
- Lee, J., Kim, H. J., & Ahn, M. J. (2011). The willingness of e-Government service adoption by business users: The role of offline service quality and trust in technology. *Government Information Quarterly*, 28(2), 222–230.
- Lee, M.K.O., & Turban, E. (2001). A trust model for consumer Internet shopping. *International Journal of Electronic Commerce*, 6 (1), 75–91.

- Littler, D., & Melanthiou, D. (2006). Consumer perceptions of risk and uncertainty and the implications for behavior towards innovative retail services: The case of Internet Banking. *Journal of Retailing and Consumer Services*, 13(6), 431-443.
- Loch K D, Straub D W & Kamel S. 2003. Diffusing the Internet in the Arab world: The role of social norms and technological cultururation. *Engineering Management, IEEE Transactions*, 50(1), 45-63.
- Lu, H. P., Hsu, C. L., & Hsu, H. Y. (2005). An empirical study of the effect of perceived risk upon intention to use online applications. *Information Management and Computer Security*, 13(2), 106-120.
- Luhmann, N. (2000). Familiarity, confidence, trust: Problems and alternatives. *Trust: Making and breaking cooperative relations*, 6(1), 94-107.
- Luo, X. (2002). Trust production and privacy concerns on the Internet: A framework based on relationship marketing and social exchange theory. *Industrial Marketing Management*, 31(2), 111-118.
- Mahadeo, J. D. (2009). Towards an understanding of the factors influencing the acceptance and diffusion of e-government services. *Electronic Journal of e-government*, 7(4), 391-402.
- Maibach, E. (1993). Social marketing for the environment: Using information campaigns to promote environmental awareness and behavior change. *Health Promotion International*, 8(3), 209–224.

- Masrom, M., & Hussein, R. (2008). User acceptance of information technology: Understanding theories and model. Venton Publishing, Kuala Lumpur, Malaysia.
- Mathieson, K. (1991). Predicting user intentions: comparing the technology acceptance model with the theory of planned behaviour. *Information Systems Research*, 2(3), 173-91.
- Mathieson, K., Peacock, E. & Chin, W. (2001). Extending the technology acceptance model: The influence of perceived user resources. *Database for Advances in Information Systems*, 32(3), 86.
- Mayer, R.C., Davis, J.H., & Schoorman, F.D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709–734.
- Meftah, M., Gharleghi, B., & Samadi, B. (2015). Adoption of E-Government among Bahraini Citizens. *Asian Social Science*, 11(4), 141.
- Mellor, N. (2006). E-citizen: Developing research-based marketing communications to increase awareness and take-up of local authority e-channels. In B. Gunter (Ed.), *Aslib proceedings* (Vol. 58, No. 5, pp. 436-446). Emerald Group Publishing Limited.
- Ministry of Information and Communication Technology, KSA. (MICT). (2015) Available online at: <http://www.mcit.gov.sa/en/Pages/default.aspx>
- Millard, J. (2007) European e-government 2005-2007. Available online at: <http://www.epractice.eu/files/download/awards/ResearchReport2007.pdf>.

- Mohammad, H., Almarabeh, T. & Abu Ali, A. (2009). E-government in Jordan. *European Journal of Scientific Research*, 35(2), 188-197
- Ministry of Higher Education (MOHE). (2014), *Higher Education Statistics Centre*, Saudi Arabia. Available online at: <http://www.mohe.gov.sa/ar/Ministry/Deputy-Ministry-for-Planning-and-Information-affairs/HESC/Ehsaat/Pages/default.aspx>
- Moon, J. W. & Kim, Y. G. (2001). Extending the TAM for a World-Wide-Web context. *Information and Management*, 38(4), 217-230.
- Morris, M. G. & Venkatesh, V. (2000) Age differences in technology adoption decisions: Implications for a changing work force. *Personnel Psychology*, 53(2) 375-403.
- Myers, M. D., & Tan, F. B. (2003). Beyond models of national culture in information systems research. *Advanced topics in global information management*, 2(1), 14-29.
- Myron, D. (2004). Stolen names, big numbers as companies battle fraudsters and identity thieves, consumers' trust is harder to earn. *American Demographics*, 26(7), 36-38.
- Nadi, I. A., & Drew, S. (2014). The Influence of Perceived Characteristics of eGovernment Transactions. In *The International Conference on Computing Technology and Information Management* (pp. 72-85). The Society of Digital Information and Wireless Communication.

- Norris, D. F., & Moon, M. J. (2005). Advancing e- government at the grassroots: tortoise or hare?. *Public administration review*, 65(1), 64-75.
- O'Donovan, J., Jones, R. E., Marusich, L. R., Teng, Y., Gonzalez, C., & Höllerer, T. (2013). A Model-based Evaluation of Trust and Situation Awareness in the Diner's Dilemma Game. In *Proceedings of the 22th Behavior Representation in Modeling & Simulation (BRIMS) Conference* (pp. 11-14).
- Osborne, J. W. (2010). Correlation and other measures of association. In G. R. Hancock & R. O. Mueller (Eds.), *The Reviewer's Guide to Quantitative Methods in the Social Sciences* (pp. 55-70). New York, NY: Routledge
- Ovais Ahmad, M., Markkula, J., & Oivo, M. (2013). Factors affecting e-government adoption in Pakistan: a citizen's perspective. *Transforming Government: People, Process and Policy*, 7(2), 225-239.
- Paganini, P. (2014). "2015 Security Predictions: The Rise of Hacking Campaigns". InfoSec Institute. Available online at: <http://www.infosecinstitute.com/>
- Pallant, J. (2013). *SPSS survival manual*. McGraw-Hill International. (Version 21), Allen and Unwin, Crows Nest.
- Parasuraman, R., Sheridan, T. B., & Wickens, C. D. (2008). Situation awareness, mental workload, and trust in automation: Viable, empirically supported cognitive engineering constructs. *Journal of Cognitive Engineering and Decision Making*, 2(2), 140-160.

- Park, R. (2008). Measuring factors that influence the success of E-government initiatives. In *Hawaii International Conference on System Sciences, Proceedings of the 41st Annual* (pp. 218-218). IEEE.
- Pascual, A. & Miller, S. (2014). Identity Fraud Report: Card Data Breaches and Inadequate Consumer Password Habits Fuel Disturbing Fraud Trends. *Javelin Strategy & Research*. Available online at: <https://www.javelinstrategy.com>
- Patel, H., & Jacobson, D. (2008). Factors Influencing Citizen Adoption of E-Government: A Review and Critical Assessment. In *ECIS* (pp. 1058-1069).
- Pavlou, P. & Fygenson, M. (2006). Understanding and Predicting Electronic Commerce Adoption: An Extension of the Theory of Planned Behavior. *MIS Quarterly*, 30(1), 115- 142.
- Pavlou, P., & Gefen, D. (2004). Building effective online marketplaces with institution-based trust. *Information Systems Research* 15(1), 37–59.
- Pavlou, P., (2003). Consumer acceptance of electronic commerce: integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce*, 7(3), 69–103.
- Phang, C. W., Sutanto, J., Kankanhalli, a., Li, Y., Tan, B. Y., & Teo, H. (2006). Senior Citizens' Acceptance of Information Systems: A Study in the Context of e-Government Services. *Transactions on Engineering Management*, 53(4), 555–569.

- Pi, S. M., Liao, H. L., & Chen, H. M. (2012). Factors that affect consumers' trust and continuous adoption of online financial services. *International Journal of Business and Management*, 7(9), p108.
- Pickett-Baker, J., & Ozaki, R. (2008). Pro-environmental products: marketing influence on consumer purchase decision. *Journal of consumer marketing*, 25(5), 281-293.
- Pinto, J., & Mantel, S. (1990). The causes of project failure. *Transactions on Engineering Management*, 37(4), 269–276.
- Pósfai, M., & Féjer, A. (2008). The eHungary Programme 2.0. *Innovation: the European Journal of Social Science Research*, 21(4), 407-415.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior research methods*, 40(3), 879-891.
- Prima, S. & Ibrahim, R. (2011). Citizen awareness to e-government services for information personalization. *International Journal of Innovative Computing*, 1(1), 1-14.
- Rana, N. Dwivedi, Y. & Williams, M. (2014). A Review and Weight Analysis of the Predictors and Linkages in Electronic Government Adoption Research. *International Journal of Indian Culture and Business Management*, 8(2), 139-158.

- Rao, V. (2004). Symbolic Public Goods and the Coordination of Collective Action: A Comparison of Community Based Development in Indonesia and India. *World Bank, Development Research Group, Washington, DC Processed*.
- Reddick, C. G. (2005) Citizen interaction with e-government: From the streets to servers? *Government Information Quarterly*, 22(1), 38-57.
- Reddick, C. G., & Turner, M. (2012). Channel choice and public service delivery in Canada: Comparing e-government to traditional service delivery. *Government Information Quarterly*, 29(1), 1-11.
- Rehman, M., & Esichaikul, V. (2011). Factors influencing the adoption of e-government in Pakistan. In *E-Business and E-Government (ICEE), 2011 International Conference on* (pp. 1-4). IEEE.
- Rehman, M., Esichaikul, V., & Kamal, M. (2012). Factors influencing e-government adoption in Pakistan. *Transforming Government: People, Process and Policy*, 6(3), 258–282.
- Ringle, C. M., Sarstedt, M., & Straub, D. (2012). A critical look at the use of PLS-SEM in MIS Quarterly. *MIS Quarterly (MISQ)*, 36(1).
- Rogers, E.M. (1995), Diffusion of Innovations, 4th ed., *The Free Press*, New York, NY.
- Rotter, J. B. (1967). A new scale for the measurement of interpersonal trust. *Journal of personality*, 35(4), 651-665.

- Salam, a. F., Rao, H. R., & Pegels, C. C. (2003). Consumer-perceived risk in e-commerce transactions. *Communications of the ACM*, 46(12), 325.
- Sang, S., & Lee, J. (2009). E-government adoption in ASEAN: the case of Cambodia. *Internet Research*, 19(5), 517–534.
- Sarkar, M. B., Butler, B., & Steinfield, C. (1995). Intermediaries and Cybermediaries : A Continuing Role for Mediating Players in the Electronic Marketplace, *Journal of Business Research*, 1(3), 1–14.
- Sarkar, M. B., Butler, B., & Steinfield. C. (1996). Intermediaries and Cybermediaries:A Continuing Role for Mediating Players in the Electronic Marketplace. *Journal of computer Mediated communication*, 1(3), 1-14.
- Sarkar, M., Butler, B., & Steinfield, C. (1998). Cybermediaries in electronic marketplace: toward theory building. *Journal of Business Research*, 41(3), 215-221.
- Sathye, M. (1999). Adoption of Internet banking by Australian consumers: an empirical investigation. *International Journal of Bank Marketing*, 17(7), 324 - 334.
- Saudi Arabian General Investment Authority (SAGIA). (2016). Database. Kingdom of Saudi Arabia, Riyadh. Available online at:
<https://www.sagia.gov.sa/Investment-climate/Some-Things-You-Need-To-Know-/Investment-Incentives/>
- Saxena, K. B. C. (2005). Towards excellence in e-governance. *International Journal of Public Sector Management*, 18(6), 498-513.

- Schaupp, L. C., Carter, L., & Hobbs, J. (2010, January). Electronic tax filing: the impact of reputation and security on adoption. In *System Sciences (HICSS), 2010 43rd Hawaii International Conference on* (pp. 1-10). IEEE.
- Schaupp, L. C., & Carter, L. (2010). The impact of trust, risk and optimism bias on E-file adoption. *Information Systems Frontiers, 12*(3), 299-309.
- Schaupp, L. C., Carter, L., & McBride, M. E. (2010). E-file adoption: A study of US taxpayers' intentions. *Computers in Human Behavior, 26*(4), 636-644.
- Schlenker, B. R., Helm, B., & Tedeschi, J. T. (1973). The effects of personality and situational variables on behavioral trust. *Journal of Personality and Social Psychology, 25*(3), 419.
- Schlosser, A. E., White, T. B., & Lloyd, S. M. (2006). Converting web site visitors into buyers: how web site investment increases consumer trusting beliefs and online purchase intentions. *Journal of Marketing, 70*(2), 133-148.
- Schwartz, S. H. (2003). A proposal for measuring value orientations across nations. *Questionnaire Package of the European Social Survey, 259-290*.
- Sein, M. K. (2011). The "I" between G and C: e-Government intermediaries in developing countries. *The Electronic Journal of Information Systems in Developing Countries, 48*(1), 1-14.

- Sein, M. K., Ahmad, I. D., & Harindranath, G. (2008). Sustaining ICT for development projects: the case of Grameenphone CIC. *Emerging Markets in Telecommunications*. *Teletronikk*, 104(2).
- Sekaran, U. (2003). *Research Methods for Business: A Skill Building Approach*. John Willey and Sons, New York.
- Sekaran, U., & Bougie, R. (2011). *Research methods for business: A skill building approach*. (5th ed). New Delhi: John Wiley & Sons.
- Shajari, M., & Ismail, Z. (2011). Key factors influencing the adoption of e-government in Iran. In *Information and Computing (ICIC), 2011 Fourth International Conference on* (pp. 457-460). IEEE.
- Shannak, R. O. (2013). The Difficulties and Possibilities of E-Government: The Case of Jordan. *Journal of Management Research*, 5(2), 189–204.
- Shapiro, S.P. (1987). The social control of impersonal trust. *American Journal of Sociology*. 93(3), 623–658.
- Shareef, M. A., Kumar, V., Kumar, U., & Dwivedi, Y. K. (2011). e-Government Adoption Model (GAM): Differing service maturity levels. *Government Information Quarterly*, 28(1), 17–35.
- Sharifi, H., & Zarei, B. (2004). An adaptive approach for implementing e-government in IR Iran. *Journal of Government Information*, 30(5), 600-619.

- Shih, Y., & Fang, K. (2004). The use of a decomposed theory of planned behavior to study Internet banking in Taiwan. *Internet Research, 14*(3), 213-223.
- Sipior, J. C., Ward, B. T., & Connolly, R. (2011). The digital divide and t-government in the United States: Using the technology acceptance model to understand usage. *European Journal of Information Systems, 20*(3), 308-328.
- Sorrentino, M., & Niehaves, B. (2010). Intermediaries in E-Inclusion: A literature review. In *System Sciences (HICSS), 2010 43rd Hawaii International Conference on* (pp. 1-10). IEEE. doi:10.1109/HICSS.2010.239
- Sproull, N. D. (2004). *Handbook of research methods: A guide for practitioners and Students in the social sciences* (3rd Ed.). New Jersey: The Scarecrow Press.
- Srite, M., Karahanna, E. (2006). The role of espoused national cultural values in technology acceptance. *MIS Quarterly, 30*, 679-704
- Straub, D., Boudreau, M. C., & Gefen, D. (2004). Validation guidelines for IS positivist research. *The Communications of the Association for Information Systems, 13*(1), 63.
- Succi, M. J., & Walter, Z. D. (1999). Theory of user acceptance of information technologies: an examination of health care professionals. In *Systems Sciences, 1999. HICSS-32. Proceedings of the 32nd Annual Hawaii International Conference on* (pp. 7-pp). IEEE.

- Sun, H., & Xiao, X. (2006). User acceptance of virtual technologies. *Encyclopedia of virtual communities and technologies*, 468-473.
- Suryaningsih, I. B., Hadiwidjojo, D., Rohman, F., & Sumiati, S. (2014). A Theoretical Framework: The Role of Trust and Perceived Risks in Purchased Decision. *Research in Business and Management*, 1(2), 103.
- Tabachnick, B. G., & Fidell, L. S. (2001). Using multivariate statistics (4th ed.). New York: Harper & Row.
- Tan, M., & Teo, T. S. (2000). Factors influencing the adoption of Internet banking. *Journal of the AIS*, 1(1), 5.
- Yao-Hua Tan, W. T. (2000). Toward a generic model of trust for electronic commerce. *International Journal of Electronic Commerce*, 5(2), 61-74.
- Taylor, S., & Todd, P. A. (1995). Understanding information technology usage: A test of competing models. *Information systems research*, 6(2), 144-176.
- Teece, D. J. (1980). The diffusion of an administrative innovation. *Management science*, 26(5), 464-470.
- Teng, Y., Jones, R., Marusich, L., O'Donovan, J., Gonzalez, C., & Hollerer, T. (2013). Trust and situation awareness in a 3-player diner's dilemma game. In *Cognitive Methods in Situation Awareness and Decision Support (CogSIMA), 2013 IEEE International Multi-Disciplinary Conference on* (pp. 9-15). IEEE.

- Teo, T. S., & Liu, J. (2007). Consumer trust in e-commerce in the United States, Singapore and China. *Omega*, 35(1), 22-38.
- Teo, T. S., Srivastava, S. C., & Jiang, L. (2008). Trust and electronic government success: An empirical study. *Journal of Management Information Systems*, 25(3), 99-132.
- Thomas, J.C. & Streib, G. (2003). The new face of government: citizen-initiated contacts in the era of e-government. *Journal of Public Administration Research & Theory*, 13(1), 83-102.
- Thompson S.H. Teo, T.S.H & Liu, J . (2007). Consumer trust in e-commerce in the United States, Singapore and China. *Omega*, 35(1), 22-38.
- Tolbert, C. J. & Mossberger, K. (2006). The Effects of E Government on Trust and Confidence in Government. *Public Administration Review*, 66(3), 354-369.
- Torres, L., Pina, V., & Royo, S. (2005). E-government and the transformation of public administrations in EU countries: Beyond NPM or just a second wave of reforms? *Online Information Review*, 29(5), 531-553.
- U.N. World Economic Situation and Prospects Report. (2015). World Economic Situation and Prospects 2015. Available online at: http://www.un.org/en/development/desa/policy/wesp/wesp_archive/2015wesp_full_en.pdf

- United Nations Department of Economic and Social Affairs (UNDESA). (2014). United Nations E-Government Survey 2014: E-Government for the People. New York: Department of Economic and Social Affairs. Available online at: <http://unpan1.un.org/intradoc/groups/public/documents/un/unpan048065.pdf>.
- Van der Kleij, R. (2007). Overcoming distance in virtual teams: effects of communication media, experience, and time pressure on distributed teamwork. (PhD thesis, Delft University of Technology).
- Van der Meer, A., & Van Winden, W. (2003). E-governance in cities: a comparison of urban information and communication technology policies. *Regional Studies*, 37(4), 407-419.
- Van Slyke, C., Belanger, F., & Comunale, C. L. (2004). Factors influencing the adoption of web-based shopping: the impact of trust. *ACM Sigmis Database*, 35(2), 32-49.
- 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. (2000). Why don't men ever stop to ask for directions? Gender, social influence, and their role in technology acceptance and usage behavior. *MIS Quarterly*, 24, 115–139.
- Venkatesh, V. & Bala, H. (2008). Technology Acceptance Model 3 and a Research Agenda on Interventions. *Decision Science*, 39(2), 273-312.

- Venkatesh, V., & Brown, S. A. (2001). A longitudinal investigation of personal computers in homes: adoption determinants and emerging challenges. *MIS quarterly*, 71-102.
- Venkatesh, V., Brown, S.A., Maruping, L.M. & Bala, H. (2008). Predicting Different Conceptualizations of System Use: The Competing Roles of Behavioral Intention, Facilitating Conditions, and Behavioral Expectation. *MIS Quarterly*, 32(3), 483-502.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS quarterly*, 425-478.
- Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS quarterly*, 36(1), 157-178.
- Verdegem, P., & Verleye, G. (2009). User-centered E-Government in practice: A comprehensive model for measuring user satisfaction. *Government Information Quarterly*, 26(3), 487-497.
- Wahid, F., Sein, M.K. & Furuholt, B. (2011). Religious Organizations as Intermediaries in the Indonesian Context. In the *Proceedings of the 11th Conference on Social Implications of Computing in Developing Countries*. Kathmandu, Nepal, May.
- Wang, F., & Chen, Y. (2012). From potential users to actual users: Use of e-government service by Chinese migrant farmer workers. *Government Information Quarterly*, 29(1), 98-111.

- Wang, H. I., & Yang, H. L. (2005). The role of personality traits in UTAUT model under online stocking. *Contemporary Management Research*, 1(1), 69-82.
- Wang, Y.-S. (2003). The Adoption of Electronic Tax Filing Systems: An Empirical Study. *Government Information Quarterly*, 20(4), 333-352.
- Wangpipatwong, S., Chutimaskul, W., & Papisatorn, B. (2008). Understanding citizen's continuance intention to use e-government website: A composite view of technology acceptance model and computer self-efficacy. *The electronic journal of e-government*, 6(1), 55-64.
- Ward, B. T., Connolly, R., & Hackney, R. (2011). E-Government awareness among the techno-disadvantaged in the United States. European, *Mediterranean & Middle Eastern Conference on Information Systems*, 2011 (EMCIS 2011), Athens, Greece.
- Warkentin, M., Gefen, D., Pavlou, P. a., & Rose, G. M. (2002). Encouraging Citizen Adoption of e-Government by Building Trust. *Electronic Markets*, 12(3), 157-162.
- Weerakkody, V., El-Haddadeh, R., Al-Sobhi, F., Shareef, M. A., & Dwivedi, Y. K. (2013). Examining the influence of intermediaries in facilitating e-government adoption: An empirical investigation. *International Journal of Information Management*, 33(5), 716-725.
- Weerakkody, V., Jones, S., & Olsen, E. (2007). E-government: a comparison of strategies in local authorities in the UK and Norway. *International Journal of Electronic Business*, 5(2), 141-159.

- Welch, E.W., Hinnant, C.C., & Moon, M.J. (2005). Linking citizen satisfaction with e-government and trust in government. *Journal of Public Administration Research and Theory, 15*(3), 371–391.
- Wetzels, M., Odekerken-Schroder, G., & Van Oppen, C. (2009), Using PLS path modeling for assessing hierarchical construct models: *Guidelines and empirical illustration. Mis Quarterly, 33*(1), 177.
- Whitson, T. L., & Davis, L. (2001). Best practices in electronic government: comprehensive electronic information dissemination for science and technology. *Government Information Quarterly, 18*(2), 79-91.
- Wu, Y. L., Tao, Y. H., & Yang, P. C. (2007). Using UTAUT to explore the behavior of 3G mobile communication users. In *Industrial Engineering and Engineering Management, 2007 IEEE International Conference on* (pp. 199-203). IEEE.
- Yildiz, M. (2007). E-government research: Reviewing the literature, limitations, and ways forward. *Government Information Quarterly, 24*(3), 646-665.
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of consumer research, 37*(2), 197-206.
Available online at:
<http://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/4143/279443600001.pdf?sequence=1>
- Zikmund, W., Babin, B., Carr, J., & Griffin, M. (2012). *Business research methods*. Cengage Learning.