

An investigation of factors affecting initial trust in Internet Banking Services in Jordan

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By

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CERTIFICATE OF ORIGINAL AUTHORSHIP

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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Abstract

Despite the rapid growth in technology and the research effort given on investigating the adoption of Internet banking services (IBS), both banks and academic researchers in developing countries perceive the problem of low-level adoption of IBS. The vast majority of studies which have investigated the adoption, acceptance, or intention to use IBS, have agreed that customers' trust is one of the most important impediments that have frustrated the success of the adoption process. Therefore, in developed countries, customers' trust became the pivot of research studies that investigated the electronic dealings between customers and new IT/IS innovations. Recently, a few researchers have started investigating online trust in developing countries.

However, existing research studies on online trust lacks a comprehensive view that addresses the issue from multiple perspectives (technical, psychological, and cultural) and offers more knowledge and understanding of the problem. To fill this gap, this study has conducted an intensive review of the literature (on online trust and on the adoption of new technological innovation). Consequently, building and examining a comprehensive unified model of initial trust in IBS adoption has been the main aim of this study. The model constructs are developed using trust antecedents, national culture, and the diffusion of innovation theory.

The study model was then verified and examined using a rigorous research design that employed a sequential mixed approach that consist of: (i) a quantitative method that involved both a pilot study and a large-scale survey, and (ii) a qualitative method that

adopted semi-structured interviews to collect data from nine academic and industry experts. Teachers were surveyed and 540 questionnaires were identified as valid. The obtained quantitative data of the study was analysed using manifold statistical techniques including: Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA, measurement model), and the Structural Equation Modeling (SEM) using the AMOS software. Moreover, a content analysis was used to analyse the qualitative data in order to confirm the quantitative results, validate the initial trust model in IBS, and provide recommendations for future research.

The results of this study show that organizational structural assurance, banks' reputation, perceived relative advantages, and uncertainty avoidance are the most important determinants of customers' initial trust in IBS in Jordan. In addition, the results indicate that initial trust in IBS positively influences intention to use IBS. The obtained results underpin the claim that national culture has a significant role in forming customers' initial trust in IBS, particularly in developing context.

The current study provides a cornerstone for the intention to use new technological innovations in developing countries, especially IBS. Furthermore, the study provides a set of academic and practical implications, and discusses the research limitations and future directions.

List of Publications

Journal publications:

1. **Aljaafreh, A.**, Al-Ani, A., Aladaileh, R. & Aljaafreh, R. 2015, 'Initial Trust in Internet Banking Service in Jordan: Modeling and Instrument Validation', *Journal of Theoretical & Applied Information Technology*, vol. 74, no. 1, pp. 68-81.
2. Alshamayleh, H., Aljaafreh, R., **Aljaafreh, A.** & Albadayneh, D. 2015, 'Measuring the Quality of e-Services and its Impact on Students Satisfaction at Jordanian Universities ', *Journal of Theoretical and Applied Information Technology*, vol. 74, no. 3, pp. 274-85.
3. **Aljaafreh, A.**, Gill, A., Al-Ani, A. & Al-adaileh, R. 2014, 'A Review of Literature of Initial Trust in E-Services: The Case of Internet Banking Services in the Jordanian Context', *Journal of Electronic Banking Systems*, vol. 2014, no. 1, pp. 1-10.

Conference papers:

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and Society through Information Systems (ISD2014 Proceedings), Varaždin, Croatia: Faculty of Organization and Informatics, September 2-4, 2014.

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List of Abbreviations

ABJ	Association Of Banks In Jordan
ADF	Asymptotically Distribution Free
AGFI	Adjusted-Goodness-Of-Fit
AMOS	Analysis Of Moment Structure
AVE	Average Variance Extracted
CBJ	Central Bank Of Jordan
CFA	Confirmatory Factor Analysis
CFI	Comparative-Fit-Index
CFI	Comparative Fit Index
CFIP	Concern For Information Privacy Model
CISE	Computer And Internet Self-Efficacy
CPT	Compatibility
CPX	Complexity
CR	Critical Ratio
DF	Degree Of Freedom
DOI	Diffusion Of Innovation Theory
DOS	Department Of Statistics
DT	Disposition To Trust
EFA	Exploratory Factor Analysis
EFT	Electronic Funds Transfer
EXP	Expert
FFIEC	Federal Financial Institutions Examination Council
FM	Femininity Vs. Masculinity
GFI	Goodness-Of-Fit Index
GLOBE	Global Leadership And Organizational Behaviour Effectiveness Research Program
GLS	Generalised Least Square

HREC	Human Research Ethics Committee
IBM	International Business Machines
IBS	Internet Banking Services
IC	Individualism Vs. Collectivism
ICT	Information And Communications Technology
IDT	Innovation Diffusion Theory
IFI	Incremental-Fit-Index
IFI	Incremental Fit Index
INT	Initial Trust
INU	Intention To Use
IS	Information Systems
IT	Information Technology
KMO	Kaiser-Meyer-Olkin
LC	Latent Change Model
LISREL	Linear Structural Relations
LSO	Long Term Orientation Vs. Short Term Orientation
MIS	Management Information Systems
ML	Maximum Likelihood
MOE	Ministry Of Education
MOHE	Ministry Of Higher Education And Scientific Research
MOICT	Ministry Of Information And Communication Technology
MOICT	Ministry Of Information And Communication Technology
NFI	Normed-Fit-Index
NFI	Normed Fit Index
OLS	Ordinary Least Square
OSA	Organisational Structural Assurance
PCFI	Parsimony Comparative Fit Index
PD	Power Distance
PGFI	Parsimony Goodness-Of-Fit Index
PL	Path Analytic Model
PLS	Partial Least Square

PNFI	Parsimony Normed Fit Index
RA	Relative Advantages
REP	Reputation
RMR	Root Mean Square Residual
RMSEA	Root Mean Square Error Of Approximation
SEM	Structural Equation Modeling
SMC	Squared Multiple Correlation
SPSS	Statistical Package For The Social Sciences
SR	Structural Regression Model
TAM	Technology Acceptance Model
TLI	Tucker-Lewis-Index
TPB	Theory Of Planned Behaviour
TRA	Theory Of Reasoned Action
TRC	Telecommunication And Regulation Committee
TSA	Technical Structural Assurance
UA	Uncertainty Avoidance
ULS	Unweighted Least Square
UNESCO	United Nations Education, Scientific, And Cultural Organization
USA	United States Of America
UTAUT	Unified Theory Of Acceptance And Use Of Technology
UTS	University Of Technology Sydney
WLS	Weighted Least Square
WWW	World Wide Web
X ²	Chi-Square