

UNDERPINNING DETERMINANTS OF CONSUMER'S INTENTION TO ADOPT ELECTRONIC BANKING: A DEVELOPING COUNTRY'S PERSPECTIVE

Gaone Marunyane, PhD Student School of Management Huazhong University of Science and Technology, China gayone782000@yahoo.com

Professor, He Yuanqiong School of Management Huazhong University of Science and Technology, China Email Address: heyuanqiong@mail.hust.edu.cn

Abstract

The objective of this research is to elucidate the relation, role and effect of determinants of electronic banking adoption and human behaviour. This paper seeks to endorse the determinants; counter-conformity motivation, website social feature, ease of use and e-customer service, in relation to the Social Cognitive Theory, which accounts for the behaviour of humans. The model is tested on 267 valid participants, comprising of bank customers in Botswana using a structured questionnaire. A confirmatory factor analysis, structural equation modelling were employed in this analysis. Findings suggest that mainly counter-conformity has positive significant impact on the intention to adopt e-banking services, shadowed by e-customer service and website social feature respectively. Ease of use revealed non signifi-

cance to intentions to adopt e-banking. In this study the significance, suggestions on theory recommendations and future research direction was reflected.

Key Words – Finance, Banking, Electronic Banking, Social Cognitive Theory, Counter-Conformity Motivation, Social Feature, Consumer Behaviour

This article is not funded by any organization.

Introduction

Banks have found the necessity to explore and have come up with ways to increase the selection of services presented to the customers and escalate their dependence on technology (Al-Smadi & Al-Wabel, 2011). According to the researchers' awareness, few studies have explored the inference of counter-conformity motivation and website social feature in understanding customers' intention to adopt electronic banking. The theory of SCT has also been minimally used to reconnoitre the adoption of electronic banking services. A simple instruction of SCT suggests that behaviour is controlled by the individual through the cognitive progressions, and by external social circumstances in the environment (Cooper & Lu, 2016). The objective of this study is to offer an unconventional model that authenticates the robustness state of the behaviour of humans linked with electronic banking adoption intentions. The structure of the research entails the literature review relating to SCT and all variables and hypothesis contracted. Secondly the explanation on methodology, then analysis and results. Following is the research implication and discussion and finally the limitations and recommendations of the research. The hypothetical model of this research is based on the SCT model which according to (Bandura, 1989) is amongst paramount theories for understanding human behaviour. This research pursues to examine the conceptual model in Figure 1.

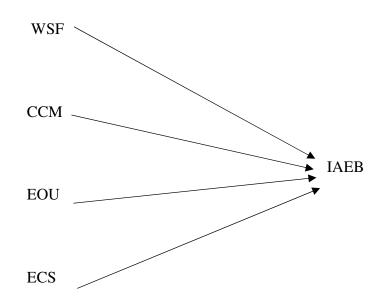


Figure 1. Conceptual Model

Note: WSF: Website social feature; CCM: Counter-conformity motivation; EOU: Ease of use; ECS: electronic customer service; IAEB: Intention to adopt electronic banking

Literature Review and Hypothesis Development

Website social feature (WSF)

A website should be visually luring, elegant, and have a professional interface so as to appropriately represent the company, products, and services (Gao & Bai, 2014). Websites directly provides hedonic experiences through audio-visual content or economic motivations as observed in the assessment of loyalty market (Huotari & Hamari, 2017; Rodrigues, Oliveira & Costa, 2016). Certain discoveries have suggested that website sociability have prospects of escalating a pool on a website and edifying to the experience a customer has in a shopping environment (Sorooshian, Salami, Salehi, Nia & Asfaranjan, 2013). We hypothesize that;

H1: Website social variable has a positive relationship with consumers' intention to adopt electronic banking

Counter-Conformity Motivation (CCM)

CCM indicates the consumption and adoption of an inventive, unusual and unique, services, products and styles with the quest for social status and ensure dissimilarity to others (Tian, Bearden and Hunter, 2001). Decisions made to purchase on the internet is linked to their longing to be unique, posits (Parsons, Ballantine, Ali & Grey, 2014). An individual is motivated by the desire to be exceptional from the crowd and have an extraordinary identity throughout the decision making process (Arbore et al., 2014). Hence the hypothesis;

H2: Counter-conformity motivation has a positive relationship with customer's intention to adopt electronic banking

Ease of Use (EOU)

Ease of use is explained as the extent to which a consumer believes that using an information system ought to be effortless (Davis, 1989). A meta-analysis conducted by Dwivedi, Rana, Chen and Williams (2011) on the UTAUT discovered potent evidence suggesting ease of use to be an underpinning factor in the adoption of technology. In accordance, Riffai, Grant and Edgar (2012), EOU envisages the intention to adopt electronic banking; in the perspective of developing nations, we suppose that the simpler the tasks to be executed are, the more it would motivate the clients to easily adopt to electronic banking. We then hypothesise that:

H3: Ease of use has a positive relationship with customer's intention to adopt electronic banking.

E-Customer Service (ECS)

E-customer service tends to be a crucial part for organization's success in doing business online therefore, extension of service to customers online could serve as a competitive edge. Asdullah & Yazdifar, (2016) and Khaitbaeva, Al-Subaiey, & Enyinda, (2014) asserts that myriad past research have showed "convenience" as the paramount factor that may lead customers to adopt electronic banking services, where the bank services can be ac-

4

cessible 24/7. Avkiran (1999) contends that an electronic banking platform where clientele is welcomed and offered assistance by staff to perform transactions has a possibility of impacting electronic banking adoption and essentially provoke a loyalty in a relationship. Hence we hypothesize that:

H4: E-customer service has a positive relationship with customers' intention to adopt electronic banking

Methodology

Participants were bank customers from selected main banks in Botswana. 267 valid participants were used in concluding the final analysis based on a cross sectional survey. Persons in the city were recognized suitable as they were believed to be tech know-how, and was centred on bank young customers which is consistent with related studies conducted by Hernandez, Jimenez and Martín (2011). More female participants with (54%), and males (46%), mostly participants were ranging 20-30 years while (36%) was of 31-40 years range. The ones 41-50 years were only (18%). Majority (54%) have been in banking from 1-9 years while (33%) for 10-19 years and over 20 years were (13%).

Measures

The measuring instruments for the hypothesis were adapted from prior research. The objects of their origins are CCM which used scale of Arbore et al. (2014), WSF derived from Park and Kim, (2014) while EOU was adapted from Martins et al, (2014), and finally ECS adapted scale of Avkiran, (1999).The objects were measured using a 5 Linkert scale that is; from strongly disagree (1) to strongly agree (5). In accordance with Bandura (1989) concerning SCT model, personal and environmental and behaviour elements are main constituents in figuring out human behaviour.

Analysis and Results

Reliability and Validity measures

| Construct | Estimate | t-value | Source | |
|--|----------|---------|----------------------------|--|
| Website Social Feature | | | | |
| Overall social feature | | Fixed | Park and Kim, (2014) | |
| Social aspects important | .827 | 16.552 | | |
| Chatting enrich ebanking | .926 | 19.838 | | |
| Increase participation | .437 | 23.538 | | |
| Counter-Conformity motivation | | | | |
| Interesting products for distinctive image | | Fixed | Arbore et al, (2014), | |
| Special products for uniqueness | 1.082 | 17.576 | | |
| New brands to add to uniqueness | 1.039 | 15.496 | | |
| Unusual personal image | .519 | 13.800 | | |
| Ease of Use | | | | |
| It will not be time consuming | | Fixed | Martins et al, (2014), | |
| Information found easy | .799 | 18.099 | | |
| Easy to learn to use ebanking | .680 | 15.649 | | |
| Interaction clean and understandable | .790 | 19.144 | | |
| E-Customer Service | | | | |
| Would like online service | | Fixed | Avkiran, (1999). | |
| Easy access to staff online | .813 | 18.484 | | |
| Staff service online | .708 | 16.743 | | |
| Welcome in the website | .819 | 20.641 | | |
| Intention to Adopt E-banking | | | | |
| I plan to use e-banking | | Fixed | Hanafizadeth et al. (2014) | |
| I predict to use e-banking | .659 | 18.473 | | |
| | | | | |

Table 1. Confirmatory Factor Analysis for Hypothesized Model

The International Journal of Organizational Innovation Vol 11 Num 1 July 2018

6

| Construct | Estimate | t-value | Source |
|---------------------------|----------|---------|--------|
| Website Social Feature | | | |
| I intend to use e-banking | .848 | 21.483 | |

Table 2. Summary of Average Variance Extracted, Composite Reliability and Correlation

| Va | riables | AVE | CR | α | Correl | ations | | | | | | |
|----|---------|------|------|------|--------|--------|------|------|------|-----|--------|--------|
| | | | | | 1 | 2 | 3 | 4 | 5 | 6 | М | SD |
| 1 | WSF | .218 | .935 | .889 | (1) | | | | | | 2.6948 | .91355 |
| 2 | CCM | .313 | .897 | .882 | .176 | (1) | | | | | 1.9167 | .76847 |
| 3 | EOU | .285 | .909 | .906 | 028 | .074 | (1) | | | | 2.6470 | .91596 |
| 4 | ECS | .262 | .918 | .915 | 004 | 038 | 111 | (1) | | | 2.6470 | .91596 |
| 6 | IAEB | .211 | .918 | .907 | .175 | .277 | .016 | .168 | .063 | (1) | 2.7878 | .93831 |

Note: α = Cronbach Alpha, M = Mean; SD = Standard Deviation

A confirmatory factor analysis was conducted to measure sufficiency of these items for the purpose of assessing validity and reliability using Amos 23. The indices showed a very good outcome and a model fit according to (Bagozzi & Yi, 2012), the results adequately showed fit; x2/df (346.029/215) = 1.609, p < .001 GFI = .901, TLI = .967, CFI = .972, IFI = .972, RMSEA = .048.). Model-fit indices for the CFA model also apply to the measurement model.

All indicator loadings as shown in Table 2, were all above threshold of 0.7, as suggested by (Bagozzi et al, 2012; Hair, Black, Babin, Anderson & Tatham, (2009); Kline, (2006). They are all statistically significant. Table 3 also shows the correlation matrix of constructs, indicating discriminant validity. Thus, it presented

that all factors were dissimilar from one another. The outcome supported that the research instrument had acceptable construct validity Chin, (1998).

The initial structural model was confirmed adequate as all model-fit indices satisfied the set criteria; x2/df (231.637/143) = 1.620, p < .001, GFI = .919, TLI = .972, CFI = .977, IFI = .977, RMSEA = .048. The second model as shown in Figure 2 is the final structural model with all significant latent variable with the exception of ease of use. Website social feature described significantly the

Table 3. Path Coefficients for Predictor Variables in Structural Model 1.

| H# | Structural Path | | β | S.E. | t-value | p-value | |
|----|-----------------|---|-----|------|---------|---------|------|
| H4 | IAE | < | ECS | .185 | .065 | 2.864 | .004 |
| H3 | IAE | < | EOU | .022 | .066 | .328 | .743 |
| H2 | IAE | < | CCM | .348 | .088 | 3.968 | *** |
| H1 | IAE | < | WSF | .128 | .061 | 2.103 | .035 |

Note: ***p < .001, Significance p < .05

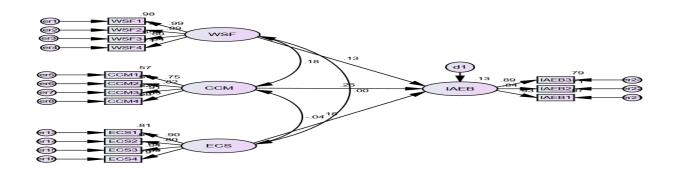
deviation in the intention to adopt electronic banking (β = .128, p < .05) ascertaining hypothesis (H1) is supported. Counter-conformity motivation relationship with electronic banking adoption intentions was also significant (β = .348, p < .001) (see Table3). Hypothesis (H2) was supported herewith. Contradictory, ease of use' relationship with intentions to adopt electronic banking was not significant (β = 0.22, p = .743) and hypothesis (H3) was not supported. Relationship between ecustomer service and intention to adopt electronic banking was significant (β = .185, p < 0.001), this outcome backed up hypothesis (H4). (See Table2). The initial structural model was revised by removing the non-significant path, EOU<-->IAEB. Model-fit indices for the revised structural

model was confirmed adequate at; $\chi 2/df$ (170.022/85) = 2, GFI = .925, TLI = .966, CFI = .972, IFI = .973, RMSEA = .061) and R2 .13. (See Figure 2).

Discussion

It was stated previously that, to examine the relationship hypotheses, SEM was employed. Abbasi et al., (2011) and Martins et al., (2014) confirm the finding that website social feature to have a positive significance with electronic banking intention to adopt. Due to its interactivity landscape the electronic banking platform has the ability to facilitate dialogues between customers. A customer is therefore highly likely to adopt electronic banking when that social aspect is enhanced through technological innovation.

Figure 2. - Final Significant Structural Model



CCM has the ability to positively and significantly impact relationship with consumers' intentions to adopt e-banking. Simply, persons with the quest for uniqueness and are driven by persuasion to stand out from the rest tend to believe the online system more. This outcome is in line with similar studies conducted by Arbore, Soscia and Bagozzi (2014). The prominence of ease of use as a vital determinant

to the intention to adopt electronic banking has been denoted by some researchers (Chau & Ngai, 2010; Giovanis et al., 2012). Conflicting discovery is that no significance existed between electronic banking adoption intentions and ease of use. Likewise, this outcome confirms with the discoveries of Erickson et al. (2005) who posited that no significance exists between adoption intentions of electronic banking and easiness of use. This result could be for the reason that the participants are technologically savvy about the usage of internet hence do not have the perception that there is too much of a distinction in electronic banking.

Analysis, also showed that ecustomer service signifies a pronounced part in the intentions of customers to adopt electronic banking ($\beta = .185$, p < 0.001). Bank customers have discovered ecustomer service to be imperative in luring customers' intentions to electronic banking adoption. Allen (2000) established a discovery suggesting that a significant number of internet traders neglect transactions due to frustrations for unavailability of back up support provision by internet retailers.

It is therefore suggested internet social environment as persuading to a customers' behaviour 'intention (Raza & Standing, 2010). Several scholars contend that usage of mobile phone in youth through which they connect with one another is common and it enhances their individual confidence (Ruleman, 2012; Xie, Zhao, Xie & Lei, 2016). Majority of emerging countries like Botswana access internet mostly by mobile phones. Indicating the importance of banks, corporate web designers and e-commerce organizations to propose an integration as they transact business on the internet. In circumstances where the chat variables are present there are restrictions to collaborate between consumers and the one that offers service. Banks ought to ponder on offering consumers service on the internet the same way it is done in real time. This research has some restrictions, nevertheless, does not suggest the findings to be invalid. Contrariwise, it is the authentic way to use that can season the effectiveness of banks.

This research didn't consider the moderating and or mediating functions on the determinants impacting a consumers' intention to adopt e-banking and suggests the latter on future research.

References

- Abbasi, P., Bigham, B. S., & Sarencheh S. (2011). Good's history and trust in electronic commerce. Procedia Computer Science, 3, 827-832.
- Allen, J. (2000) "The influence of selected antecedents on frontline staff's perceptions of service recovery performance", International Journal of Service Industry Management, 11(1), 63-90.
- Asdullah, M. A., & Yazdifar, H. (2016).
 Evaluation of factors influencing youth towards Islamic banking in Pakistan.
 ICTAT Journal on Management Studies, 2(1), 217-223. http://dx.doi.org/10.21917/ijms.2016.0030
- Al-Smadi, M. O., & Al-Wabel, S. A. (2011). The Impact of E-Banking on

the Performance of Jordanian Banks. Journal of Internet Banking and Commerce, 16(2), 1-10.

- Arbore, A., Soscia, I., & Bagozzi, R.P. (2014). The role of signaling identity in the adoption of personal technologies. Journal Association Information Systems, 15(2), 86–110.
- Avkiran, K. (1999) "Quality customer service demands human contact", Internal Journal of Bank Marketing, 17(2), 61-74.
- Bagozzi, R. P., & Yi, Y. (2012). Specification, evaluation, and interpretation of structural equation models. Journal of the academy of marketing science, 40(1), 8-34.
- Bandura, A. (1989). Human Agency in Social Cognitive Theory. The American Psychologist, 44(9), 1175-1184.
- Chau, V. S., & Ngai, W. L. C. (2010) "The youth market for internet banking services: perceptions, attitude and behav-

11

iour", Journal of Services Marketing, 24(1), 42-60.

- Chin, W. W., (1998). Issues and Opinion on Structural Equation Modeling. Management Information Systems Quarterly, 22 (1), 7–15.
- Cooper, C. L., & Lu, L. (2016). Presentism as a global phenomenon: Unraveling the psychosocial mechanisms from the perspective of social cognitive theory.
 Cross Cultural & Strategic Management, 23(2), 216-231.
- Davis, F.D. (1989). Perceived Usefulness,Perceived Ease of Use, and User Acceptance of Information Technology.MIS Quarterly, 13(3), 319-340.
- Dwivedi Y. K., Rana N. P., Chen H., &
 Williams, M. D. (2011). A Metaanalysis of the Unified Theory of Acceptance and Use of Technology (UTAUT). In M. Nüttgens, A.
 Gadatsch, K. Kautz, I. Schirmer, & N.
 Blinn (Eds.) IFIP Advances in Information and Communication Technology,

Vol. 366. Governance and Sustainability in Information Systems. Managing the Transfer and Diffusion of IT (155-170). Berlin, Heidelberg: Springer.

- Erickson, J., John., Siau, K. (2008). Web Services, Service-Oriented Computing, and Service-Oriented Architecture: Separating Hype from Reality. Journal of Database Management; Hershey, 19(3), 42-54.
- Gao, L., & Bai, X. (2014). Insights into online travel agencies in China. Journal of Retailing and Consumer Services
 Online consumer behaviour and its relationship to website atmospheric induced flow, 21(4), 653-665. Gefen, D., Karahanna, E., & Straub, D. W. (2003).
 Trust and TAM in Online Shopping: An Integrated Model. Management information systems quarterly, 27(1), 51-90.
- Giovanis, A. N., Binioris, S., & Polychronopoulos, G. (2012). An extension of TAM model with IDT and security/privacy risk in the adoption of internet banking services in Greece. Eu-

12

roMed. Journal of Business, 7(1), 24-53.

- Hair, J. F., Black, W. C., Babin, B. J.,
 Anderson, R. E., & Tatham, R. L.
 (2009). Multivariate data analysis vol.
 6. Upper Saddle River, NJ: Pearson
 Prentice Hall.
- Hernandez, B., Jimenez, J., & Martín, M. J. (2011). Age, gender and income: Do they really moderate online shopping behavior? Online Information Review, 35(1), 113-133.
- Huotari, K., & Hamari, J. (2017). A definition for gamification: anchoring gamification in the service marketing literature. Electronic Markets, 27(1), 21-31.
- Kline, R. B. (2006). Structural EquationModeling. New York: The GuilfordPress. Personality (Psychology Revivals): Measurement and Theory pp 9-21
- Khaitbaeva, S., Al-Subaiey, A. A., & Eyinda, C. I. (2014). An empirical analysis of attributes influencing bank selection

choices by customers in the UAE: The Dubai context. Proceedings of the First Middle East Conference on Global Business, Economics, Finance and Banking (pp. 1-16). Retrieved from http://globalbizresearch.org/Dubai_Con ference/pdf/pdf/D4115.pdf

- Martins, C., Oliveira, T., Popovič, A. (2014). Understanding the Internet Banking Adoption: A Unified Theory of Acceptance and Use of Technology and Perceived Risk Application. International Journal Information Management, 34(1), 1–13.
- Park, H., & Kim, Y. K. (2014). The role of social network websites in the consumer e-brand relationship. Journal of Retailing and Consumer Services, 21(4), 460-467.
- Parsons, A. G., Ballantine, P. W., Ali, A., & Grey, H. (2014). Deal is on! Why people buy from daily deal websites. Journal of Retailing and Consumer Services 21(1), 37-42.

- Raza, S., & Standing, C. (2010). Towards a systemic model on information systems' adoption using critical systems think-ing. Journal of Systems and Information Technology, 12(3), 196-209.
- Riffai, M. M. M. A., Grant, K., & Edgar, D. (2012). Big TAM in Oman: Exploring the promise of online banking, its adoption by customers and the challenges of banking in Oman. International Journal of Information Management, 32(3), 239–250.
- Rodrigues, L. F., Oliveira, A., & Costa, C.
 J. (2016). Playing seriously How
 gamification and social cues influence
 bank customers to use gamified ebusiness applications. Computers in
 Human Behavior, vol. 63, 392-407.
- Ruleman, A. B. (2012). Social media at the university: A demographic comparison. New Library World, 113(7/8), 316-332.
- Sorooshian, S., Salimi, M., Salehi, M., Nia, N. B., & Asfaranjan, Y. S. (2013). Customer experience about service quality

in online environment: A case of Iran. Procedia-Social and Behavioral Sciences, 93, 1681-1695.

- Tian, K. T., Bearden, W. O., & Hunter, G. L. (2001). Consumers' need for uniqueness: scale development and validation. Journal of Consumer Research, 28(1), 50–66.
- Xie, X., Zhao, F., Xie, J., & Lei, L. (2016). Symbolization of mobile phone and life satisfaction among adolescents in rural areas of China: Mediating of school related relationships. Computers in Human Behavior, 64, 694-702.