E-SATISFACTION AND E-BANKING ADOPTION: EXPLORING THE MEDIATION MECHANISM IN A CONCEPTUAL MODEL

¹ Ahmad Faisal Bin Abdul Hamid, Ph.D., ² Nurul Aini Binti Mohd Yusof, M.B.A. and ² Mohammad Rafiq Bin Zakaria, Ph.D.

¹School of Business Management, College of Business, Universiti Utara Malaysia,

²School of Business Management, College of Business, University Utara Malaysia, Kedah, Malaysia.

²School of Business Management, College of Business, University Utara Malaysia.

Abstract: In today's rapidly evolving business landscape, the internet has emerged as an essential technology tool for organizations across various sectors, particularly within the service industry. This ubiquity is attributed to the far-reaching impact of the World Wide Web on virtually all facets of human activity, including governance, commerce, education, communication, and finance (Odumeru, 2012; Ranjbarian, Fathi, & Rezaei, 2012; Zhou, 2011). This study delves into the profound influence of the internet on contemporary business operations and strategies, shedding light on the transformative power it holds.

Keywords: Internet, Business Environment, Service Sector, World Wide Web, Technology Tools

Introduction

In the recent business environment especially with substantial contribution of the service sector to the development of world economy, internet has become one of the indispensable technology tools being used by various business organizations. The reason for this is not farfetched since almost all aspects of human endeavours such as dating, governance, buying and selling, learning, communication, banking and so on, are been touched by the proliferation of the World Wide Web (Odumeru, 2012; Ranjbarian, Fathi, & Rezaei, 2012; Zhou, 2011). Particularly, the technological breakthrough in the fields of computing, communication engineering and electronic has helped many banking organizations to further embrace electronic banking (e-banking) as a way of serving their customers better than traditional banking system (Chong, Ooi, Lin, & Tan, 2010; Özkan, Bindusara, & Hackney, 2010).

Furthermore, the recent revolutions in the banking industry with new participants and other actors coming into the banking conventional business arena and especially with the globalization of business activities and service innovations, have made competition to be high and consequently forced banks to start providing more choices to their customers (Adesina & Ayo, 2010; Al-Majali, 2011). These developments have further provided enormous opportunities for different service providers to become flexible in terms of service provision since consumers of the contemporary are equally demanding for better services and facilities (Al-Majali & Mat, 2011). E-banking is therefore one of the flexible services being provided by the banks in the recent time.

E-banking has been defined by different authors as a system of banking that enables customers of banks to transfer funds, make enquiries on their accounts, settle bills and manage stocks online and perform other transactions through electronic communication channels without interacting with the officials of the banks directly (Liébana-Cabanillas, Muñoz-Leiva, & Rejón-Guardia, 2013; Yap, Wong, Loh, & Bak, 2010). Generally, e-banking channels include Mobile banking, Internet banking, Automated Teller Machines, PC Banking, electronic cheque clearing system and so on (Abushanab, Pearson, & Setterstrom, 2010; Daniel, 1999; Özkan et al., 2010; Salhieh, Abu-Doleh, & Hijazi, 2011). These banking alternative channels are highly evolving and have brought significant paradigm shifts in the banking sector and e-commerce industry.

The paradigm shift of e-banking includes enormous benefits that accrue to both the customers and the banks. On the part of the customers, e-banking has led to a large reduction in the transfer of physical cash from one destination to another, help customers to transact at any time and at their convenience, help reduce risk and cases of robbery, better value for money, access to more information and availability of better tools to manage their businesses at a very fast pace (Juwaheer, Pudaruth, & Ramdin, 2012; Odumeru, 2012; Yap et al., 2010).

For banks, overhead is significantly reduced, business processes are reengineered, abundant opportunities to sell across border are made available, profit pool is augmented, customers are well managed, different innovative products are made available, and efficient payment and settlement systems are been introduced (Abushanab et al., 2010; Juwaheer et al., 2012; Odumeru, 2012; Salhieh et al., 2011). For instance, Abushanab et al., observed that banks spend an average of \$.01 per transaction through e-banking while the cost of similar transaction through branch banking costs an average of \$1.07. This is an enormous cost saving in overhead that can translate to profit. Despite the wide acknowledgments of the benefits of e-banking however, these alternative channels of services are grossly faced with many difficulties as the rate of its adoption is dropping globally. Recent cases in this respect have revealed that using technology to provide financial services is not living up to expectation and promises (Chiou & Shen, 2012; Liébana-Cabanillas et al., 2013; Sohrabi Maryam, 2013). For instance, Chiou & Shen, assert that there are cases of e-banking abandonment as one out of every six users of e-banking in America is not ready to return to e-banking usage either because the operation of the channel is perceived to be too ambiguous or not user friendly thereby leading to dissatisfaction. The same trend has been observed in developing countries (Ndubisi & Sinti, 2006; Safeena, Hundewale, & Kamani, 2011) and in particular, Nigeria (Adesina & Ayo, 2010; Auta, 2010; Odumeru, 2012) where half of those who used the channels are not ready to become active users (Safeena, Kammani, & Date, 2013). For instance, Adesina & Ayo, assert that not all customers of banks in Nigeria have fully embraced e-banking because the channels are perceived not to be too useful and interactive.

Conceptual Background and Hypotheses

Perceived Usefulness

Perceived usefulness describes the extent in which e-banking users believe that using e-banking service is beneficial and will enhance their daily transactions than traditional banking (Salhieh et al., 2011). E-banking is perceived to be useful when the users can gain convenience, reduce cost of operation, and can access the services anytime and anywhere of the day in order to achieve their daily objectives (Chandio, Irani, Abbasi, & Nizamani, 2013; Safeena, Date, & Kammani, 2011).

Satisfaction with electronic banking services has to do with an aggregate of outcome of feeling, evaluation and reaction towards the experience which a customer has after enjoying the electronic banking product/service (Musiime & Ramadhan, 2011; Yap, Ramayah, & Shahidan, 2012). Concept of satisfaction in essence helps the customer to compare his pre and post consumption experience with the actual product performance (Al-Kasasbeh, Dasgupta, & AL-Faouri, 2011). A customer is satisfied if the product performance meets his expectation and get

dissatisfied if otherwise. In the context of e-banking services, the ability of the bank to maintain useful website and other e-banking channels will determine whether customer will be satisfied and adopt e-banking or not (Al-Majali & Mat, 2011; Chandio et al., 2013; Eid, 2011).

In view of this, previous literature has established positive relationship between perceived usefulness, estatisfaction and e-banking adoption (Al-hawari & Mouakket, 2010; Chong et al., 2010; Juwaheer et al., 2012; Pikkarainen, Pikkarainen, Karjaluoto, & Pahnila, 2004; Yuan, Liu, Yao, & Liu, 2014).

In operationalizing perceived usefulness as a major determinant of esatisfaction and e-banking adoption therefore, this paper uses five adapted items from different sources. The adapted items have complied with alpha coefficients standard as proposed by Nunnally (1978).

Perceived Usefulness Measurement items and Sources

Description of Items	Sources
Using e-banking helps me to achieve my banking transaction objectives quickly than traditional banking.	AbuShanab et al (2010); Cheng et al. (2006), Pikkarainen et al. (2004), and Joaquin et al. (2009)
Using e-banking improves my effectiveness while transacting online	
I find the website of my bank useful	
Carrying out transactions on the website of banks is advantageous.	

Based on the discussion and item measurement shown above, we therefore hypothesize that:

H1: There is positive relationship between PU and e- satisfaction

H2: There is positive relationship between PU and e-banking adoption

Perceived Ease of Use

Perceived ease of use is also one of the constructs of technology acceptance model (Davis, 1989). The fact that users perceived information technology to be useful does not automatically result to adoption if such a system requires extra physical effort and tedious mental exercise (Davis, 1989). Most users want a system that gives them less physical stress and little mental exercise while using it as this will determine their level of satisfaction with the usage (Odumeru, 2012; Safeena, Date, et al., 2011).

Extant scholars on information system have empirically found perceived ease of use as a significant predictor of satisfaction and a major determinant of information technology adoption (Davis, 1989; Liébana-Cabanillas et al., 2013; Pikkarainen et al., 2004; Tan, Chong, Ooi, & Chong, 2010).

In order to operationalize perceived ease of use as a major determinant of esatisfaction and e-banking adoption therefore, this paper uses four items adapted from various authorities. The adapted items have complied with alpha coefficients standard as proposed by Nunnally (1978).

Perceived Ease of use Measurement Items and Sources

Description of Items	Sources
I find easy to transact online using e-bank	i AbuShanab et al (2010); Cheng et al. (2006), Pikkarainen et al. (2004), and Joaquin et al. (2009)
E-banking channels are more interactive and understandable.	
I find it easy to become more skilful using banks' website	
Generally, using e-banking to transact is easy for me	

Based on the discussion and item measurement shown above, we therefore hypothesize that:

H3: There is positive relationship between PEU and e-satisfaction

H4: There is positive relationship between PEU and e-banking adoption

E-Satisfaction

The trend of customer satisfaction has become a centre point in service setting and among the marketing scholars. It is often used to evaluate the process of buying, consuming and measuring the performance of a product or service either in the short or long run and it is therefore essential for the responses of consumers (Liébana-Cabanillas et al., 2013). The entire teams of marketing and management expert have displayed strong interest in the ability of organizations to go the extra miles of meeting and exceeding the needs of customers as this will determine future purchase behaviour and repeated patronage (Musiime & Ramadhan, 2011; Yap et al., 2012). Most importantly, the era of banking where the nature and feature of services being rendered can be difficult to measure has ushered in new ways of satisfying the customers.

This is especially important in the emergence of e-banking where customers do not interact directly with the official of the bank but the alternative channels such as website, mobile phone, Automated Teller machine and so on (Auta, 2010; Sadiq Sohail & Shanmugham, 2003; Wessels & Drennan, 2010).

E-banking users therefore become satisfied with the nature of service rendered if the e-channel is perceived useful to achieve daily objectives and if they can easily operate the channels with less stress (Eid, 2011; Liébana-Cabanillas et al., 2013).

In order to operationalize e-satisfaction as a determinant of e-banking adoption, this paper uses four items adapted from various authors. The adapted items have complied with alpha coefficients standard as proposed by Nunnally (1978).

E-Satisfaction

Description of Items Se	Sources
I am willing to repeat the usage of e-banking to pursue my daily banking transactions	

I will increase the frequency of usage of e-banking over traditional banking	
I will recommend e-banking channels to others	
I am satisfied with overall of e-banking channels	

Based on the foregoing discussion and construct operationalization above, we therefore hypothesize that:

H5: There is positive relationship between e-satisfaction and e-banking adoption

Conceptual Framework

Sequel to the preceded literature review, the conceptual framework shown in figure 1.0 below emerged. The framework as proposed theoretically explains the relationships that exist between perceived usefulness, perceived ease of use, esatisfaction and e-banking adoption.

Though previous studies have established direct relationship between perceived usefulness, perceived ease of and e-banking adoption (e.g., Aldás-Manzano, Lassala-Navarré, Ruiz-Mafé, & Sanz-Blas, 2009; Safeena et al., 2011; Tan et al., 2010;

Zhou, 2011), perceived usefulness and perceived ease of use and e-satisfaction (e.g., Liébana-Cabanillas et al., 2013), and between e-satisfaction and e-adoption (e.g., Kumar, Mukerji, Butt, & Persaud, 2007), no previous study has holistically established and tested the mediating effect of e-satisfaction on the relationship between e-banking adoption and its determinants. In this respect therefore, we are theoretically establishing this mediating effect based on Baron and Kenny (1986) concept of mediation. Baron and Kenny (1986) emphasized that if A=B, B=C, and A=C, then B can mediate the relationship between A and C.

In this sense therefore, e-satisfaction (B) mediates between perceived usefulness and perceived ease of use jointly regarded as (A) and e-banking adoption (C). From our findings, no existing literature has theoretically and empirically established the mediating effect. To fill the gap therefore, this study has conceptualized this relationship and shall empirically test the mediation effect in later articles.

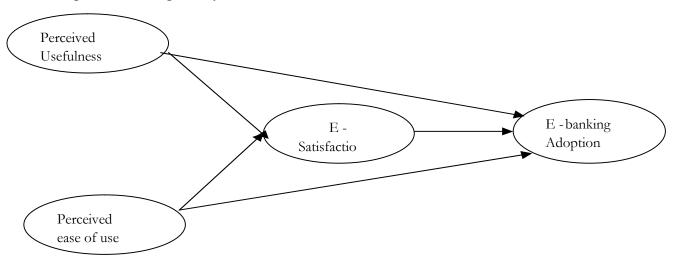


Figure 1: The Conceptual Framework for This Study Conclusion, Limitation and Suggestion for Future Studies

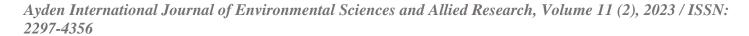
Based on the foregoing discussion, our study has revealed that though there are multiple studies that have empirically established relationships between perceived usefulness, perceived ease of use, e-satisfaction and e-banking adoption, no previous study has theoretically and empirically established the mediating effect of esatisfaction in e-banking literature. Therefore, the main contribution of this conceptual paper is that it may be the first attempt to theoretically establish this relationship. The major limitation of this study however, is that its framework needs to be empirically tested and this has opened a field of research for other researchers who may be interested in using the proposed framework of this study.

References

- Abushanab, E., Pearson, J. M., & Setterstrom, A. J. (2010). Internet Banking and Customers 'Acceptance in Jordan: The Unified Model 's Perspective Internet Banking and Customers 'Acceptance in Jordan. Communications of the Association for Information Systems, 26(April 2010), 493–524.
- Adesina, A. A., & Ayo, C. K. (2010). An empirical Investigation of the Level of Users' acceptance of E-Banking in Nigeria. Journal of Internet Banking and Commerce, 15(1), 1–13.
- Aldás-Manzano, J., Lassala-Navarré, C., Ruiz-Mafé, C., & Sanz-Blas, S. (2009). Key drivers of internet banking services use. Online Information Review, 33(4), 672–695. doi:10.1108/14684520910985675
- Al-hawari, M. A., & Mouakket, S. (2010). The influence of technology acceptance model (TAM) factors on students' e-satisfaction and e-retention within the context of UAE e-learning. Education, Business and Society: Contemporary Middle Eastern Issues, 3(4), 299–314. doi:10.1108/17537981011089596
- Al-Kasasbeh, M., Dasgupta, S., & AL-Faouri, A. (2011). Factors Affecting E-Service Satisfaction. Communications of the IBIMA, 2011, 1–12. doi:10.5171/2011.547937
- Al-Majali, M. M. (2011). The Antecedents of Internet Banking Service Adoption in Jordan: Using Decomposed Theory of Planned Behaviour.
- Al-Majali, M., & Mat, N. K. N. (2011). Modeling the antecedents of internet banking service adoption (IBSA) in Jordan: A Structural Equation Modeling (SEM) approach. Journal of Internet Banking and Commerce, 16(1), 1–15.
- Auta, E. M. (2010). Applications of Quantitative Methods to e-Commerce E-BANKING IN DEVELOPING ECONOMY: EMPIRICAL EVIDENCE FROM NIGERIA Applications of Quantitative Methods to e-Commerce. Journal of Applied Quantitative Methods, 2(5), 212–223.
- Chandio, F. H., Irani, Z., Abbasi, M. S., & Nizamani, H. A. (2013). Acceptance of online banking information systems: an empirical case in a developing economy. Behaviour & Information Technology, 32(7), 668–680. doi:10.1080/0144929X.2013.806593

- Chiou, J.-S., & Shen, C.-C. (2012). The antecedents of online financial service adoption: the impact of physical banking services on Internet banking acceptance. Behaviour & Information Technology, 31(9), 859–871. doi:10.1080/0144929X.2010.549509
- Chong, A. Y.-L., Ooi, K.-B., Lin, B., & Tan, B.-I. (2010). Online banking adoption: an empirical analysis. International Journal of Bank Marketing, 28(4), 267–287. doi:10.1108/02652321011054963
- Daniel, E. (1999). Provision of electronic banking in the UK and the Republic of Ireland. International Journal of Bank Marketing, 17(2), 72–82. Retrieved from http://www.emeraldinsight.com/journals.htm?articleid=854975&show=abstract
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. MIS Quarterly, 13(3), 319–340.
- Eid, M. (2011). Determinants of e-commerce customer satisfaction, trust, and loyalty in Saudi Arabia. Journal of Electronic Commerce Research, 12(1), 78–93. Retrieved from http://www.jecr.org/sites/default/files/12_1_p05.pdf
- Juwaheer, T. D., Pudaruth, S., & Ramdin, P. (2012). Factors influencing the adoption of internet banking: a case study of commercial banks in Mauritius. World Journal of Science, Technology and Sustainable Development (Vol. 9, pp. 204–234). doi:10.1108/20425941211250552
- Kumar, V., Mukerji, B., Butt, I., & Persaud, A. (2007). Factors for Successful e-Government Adoption: a Conceptual Framework. Electronic Journal of E-Government, 5(1), 63–76.
- Liébana-Cabanillas, F., Muñoz-Leiva, F., & Rejón-Guardia, F. (2013). The determinants of satisfaction with ebanking. Industrial Management & Data Systems, 113(5), 750–767. doi:10.1108/02635571311324188
- Musiime, A., & Ramadhan, M. (2011). Internet banking, consumer adoption and customer satisfaction. African Journal of Marketing ..., 3(October), 261–269. Retrieved from http://docs.mak.ac.ug/sites/default/files/Musiime and Ramadhan.pdf
- Ndubisi, N. O., & Sinti, Q. (2006). Consumer attitudes, system's characteristics and internet banking adoption in Malaysia. Management Research News, 29(1/2), 16–27. doi:10.1108/01409170610645411
- Nunnally, J. C. (1978). Psychometric theory, 2nd ed. Newyork: McGraw Hill.
- Odumeru, J. A. (2012). The Acceptance of E-banking by Customers in Nigeria Odumeru. World Review of Business Research, 2(2), 62–74.
- Özkan, S., Bindusara, G., & Hackney, R. (2010). Facilitating the adoption of e-payment systems: theoretical constructs and empirical analysis. Journal of Enterprise
- Information Management, 23(3), 305–325. doi:10.1108/17410391011036085

- Pikkarainen, T., Pikkarainen, K., Karjaluoto, H., & Pahnila, S. (2004). Consumer acceptance of online banking: an extension of the technology acceptance model. Internet Research, 14(3), 224–235. doi:10.1108/10662240410542652
- Ranjbarian, B., Fathi, S., & Rezaei, Z. (2012). Factors Influencing on Customers' Esatisfaction: A case Study from Iran. Interdisciplinary Journal of Comtemporary Researt in Business, 3(9), 1496–1511.
- Sadiq Sohail, M., & Shanmugham, B. (2003). E-banking and customer preferences in Malaysia: An empirical investigation. Information Sciences, 150(3-4), 207–217. doi:10.1016/S0020-0255(02)00378-X
- Safeena, R., Date, H., & Kammani, A. (2011). Internet Banking Adoption in an Emerging Economy: Indian Consumer's Perspective. International Arab Journal of ETechnology, 2(1), 56–64.
- Safeena, R., Hundewale, N., & Kamani, A. (2011). Customer 's Adoption of MobileCommerce A Study on Emerging Economy. International Journal of E-Education, E-Business, E-Management and E-Learning, 1(3), 228–233.
- Safeena, R., Kammani, A., & Date, H. (2013). Assessment of Internet Banking Adoption: An Empirical Analysis. Arabian Journal for Science and Engineering, 39(2), 837–849. doi:10.1007/s13369-013-0707-x
- Salhieh, L., Abu-Doleh, J., & Hijazi, N. (2011). The assessment of e-banking readiness in Jordan. International Journal of Islamic and Middle Eastern Finance and Management, 4(4), 325–342. doi:10.1108/17538391111186564
- Sohrabi Maryam, Y. J. M. (2013). Critical Success Factors for the Adoption of e-Banking in Malaysia.
- Tan, G. W.-H., Chong, C.-K., Ooi, K.-B., & Chong, A. Y.-L. (2010). The Adoption of Online Banking in Malaysia: An Empirical Analysis ♣. International Journal of Business and Management Science, 3(2), 169–193.
- Wessels, L., & Drennan, J. (2010). An investigation of consumer acceptance of M-banking. International Journal of Bank Marketing, 28(7), 547–568. doi:10.1108/02652321011085194
- Yap, B. W., Ramayah, T., & Shahidan, W. N. W. (2012). Satisfaction and trust on customer loyalty: a PLS approach. Business Strategy Series, 13(4), 154–167. doi:10.1108/17515631211246221
- Yap, K. B., Wong, D. H., Loh, C., & Bak, R. (2010). Offline and online banking where to draw the line when building trust in e-banking? International Journal of Bank Marketing, 28(1), 27–46. doi:10.1108/02652321011013571
- Yuan, S., Liu, Y., Yao, R., & Liu, J. (2014). An investigation of users' continuance intention towards mobile banking in China. Information Development, 1–15. doi:10.1177/0266666914522140





Zhou, T. (2011). An empirical examination of initial trust in mobile banking. Internet Research, 21(5), 527–540. doi:10.1108/10662241111176353