

Factors Determining Effective Utilization of Internet Banking

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Abstract

Banks services are regarded as one of the most important services. Banks provide financial services to the customers. Internet banking is banking services facilitated with information and communication technology. The objective of this study is to identify factors responsible for the effective use of internet banking. In order to get an insight into this study, socioeconomic factors such as age, gender, marital status, educational qualification, income, employment, area of residence, and ethnic background were identified. Other factors include technology and perceived security of information at the disposal of the banks. It was concluded that if these factors are properly harnessed by the banking industry, it will give them a competitive advantage and better serve their customers.

Introduction

The internet has turned out to be a tool of worldwide communication and has become an extremely important modern day technology for business (Sellito and Merlin, 2003). The increasing use of internet assisted producers and entrepreneurs to sell their products online. This encouraged many banking and finance organisations to come up with the idea of internet banking or online banking. Foon and Fah (2011) claim that one of the major developments in the financial sector services over the last five years has been the launch of Internet banking. The growth of electronic banking in Nigeria dates back to 1986 when the banking sector was deregulated (Stamoulis, 2002).

The result of this deregulation brought far reaching transformation through computerization and improved bank service delivery. The internet and new technologies in general reduce the time and cost of communicating information, allowed small and medium scale enterprises to compete effectively and efficiently in both domestic and international markets (Schmid et al 2001). Internet Banking offered by the financial institutions provides services which are prompt, convenient, economical and user friendly. This is expected to increase the efficiency of the banking system. With internet banking, products and services are delivered without visiting the bank branch physically. Transactions are done electronically by logging into the banks' website (Mann and Sahni, 2012). In the last 20 years, the rise of internet and mobile technologies has affected the entire banking value chain and resulted in new opportunities and business models.

Banking in Nigeria has come a long way from the time of ledger cards and other manual filling systems. Most banks today have electronic systems to handle their daily voluminous tasks of information retrieval, storage and processing. The transformation of financial institutions which involves internal and external relationships through Information and Communication Technology (ICT) to optimize service delivery is the most important

element in the development of Nigeria as a nation (Imiefoh, 2012). In the past few years, banking activities in Nigeria have increasingly depended on the development of ICT. Customers' insatiable appetite for efficient services has compelled financial institutions to fast forward to a more radical transformation of their business systems and models by embracing e-banking (Ovia, 2001).

Despite the attractions of internet banking to the Nigerian economy, there are many individuals who still find the usage of internet banking difficult or almost impossible. In Malaysia, a study conducted by Suganthi and Balachandran (2001) focused on the factors of accessibility, reluctance to changes, costs, trust in one's bank, security concerns, convenience, ease of use through online survey that potentially influence internet banking adoption. The results revealed that there were positive significant relationships between accessibility, reluctance to changes and awareness with internet banking adoption. Iacovou, Benbasat and Dexter (1995) found that the owner's lack of awareness of the technology, the current level of technology usage within the organization and perceived benefits are the major factors to adopt Internet and e-commerce. Hinson (2005) identified power failures as a macro factor and general lack of knowledge about usage of the technologies as a micro factor that affect Ghanaian Small Medium Enterprises Non-traditional exporters' inability to adopt Internet and E-commerce for their export businesses. This study seeks to explore the factors that determine internet banking usage in Nigeria and demographic and technological factors that influence its use.

Internet banking is defined as the automated delivery of new and traditional banking products and services directly to customers through electronic interactive communication channels (Anthony, 2011). According to Khan (2007), internet banking includes the system that enables financial institution customers, individuals or businesses access account, transact business or obtain information on financial products and services on public or private network. Basel Committee Report on Banking Supervision (1998) confirms that electronic banking is the provision of retail and small value banking products and services through electronic channels. Such products and services can include deposit taking, lending, account management, provision of financial advice, electronic bill payment and the provision of other electronic payment products and services such as electronic money. Banks have used electronic channels for years to communicate and transact business with both domestic and international corporate customers (Auta, 2011). Internet banking sometimes called online banking, electronic, virtual, cyber, net, interactive or web banking is an outgrowth of personal computing.

In the banking industry, the terms "mobile banking" and "internet banking typically refers to specific channels offered to clients to interact with their banks. They complement the bank's channel portfolio from branch-based personal attention by clerks via personal attention in call-centres and impersonal direct mailings (Bon, Alt, Lee and Weber, 2012).

Electronic banking uses the internet as the delivery channel to conduct banking activity which includes transferring funds, paying bills, viewing and checking savings account balances, paying mortgages and purchasing financial instruments and certificates of deposit. Internet banking is the use of internet as a delivery channel in which to perform the banking activity for example transferring money, bills payment, balance inquiry, transaction history, loan applications and insurance services (Imiefoh, 2012; Bankers Online, 2010). It means that banking services such as production of information, balance or account inquiry, loan application, transfer of money and many more are provided by the bank through the Internet (Yasir and Nasif, 2012). The advent of the internet has transformed the business environment in no small measure and has influenced the ways and manner businesses are transacted (Ayo, Adebisi, Fatudimu and Uyinomen, 2008). Internet banking is comprehensive and has a strong influence on changes in technology, deregulation of many

parts of finance, the appearance of new banking institutions and economic reformation. The environmental changes motivate banking industry to re-establish the banking structure which is more profitable and reducing expenditure cost and implements good command of control (You, Grant and Edgar 2007). Nowadays, internet banking sites can process customer service enquiries, allow transactions from one account to another, take loan applications and open new accounts.

Various studies have been carried out suggesting the likely factors that may be responsible for internet banking usage. Such factors include demographic and social factors such as gender, age, education, customer perception and occupation of the users (Yoon *et al.*, 2007). Economic factors such as income of the users and technological factors such as independent usage of Automated Teller Machine (ATM), navigation structure, information content, website interface and perceived security risk. Mann (2011) opines that the ultimate success of internet banking depends upon understanding the way in which customers' interaction with a website interface inculcates positive perception and behaviour for an internet bank. Yang and Fang (2004) suggest that well organised user interfaces allow customers to locate their desired information easily on the web.

Demographic and Social Variables

Demographic and socio-economic characteristics are attributes pertaining to a population. Perceptions relating to demographic variables consist of age, gender, marital status, educational qualification, income, employment, area of residence, and ethnic background. Demographic and socio-economic variables result in differences among individuals, and these differences account for the varying choices that are made by these persons on whether to use internet banking or not. Prior studies have identified that demographic characteristics are significantly associated with adoption of internet banking. It has established that demographic and socio-economic characteristics have a significant impact on customers' attitudes and behaviour regarding banking on the internet (Karjaluoto *et al.*, 2002; Kolodinsky *et al.*, 2000; Sathye, 1999). (Sathye, 1999; Jayawardhena and Foley, 2000; Mattila, 2001; Karjaluoto, 2002; Mattila *et al.*, 2003; Akinci *et al.*, 2004). Yasir and Asif, (2001) posits that socio economic factors include age, gender, level of education and income. According to Centeno (2003), other socio-economic factors likely to influence personal computing or Internet penetration levels, the degree of usage of banking services in general and the adoption of Internet banking in particular include: a low degree of trust in institutions which can increase privacy concerns when using Internet banking services; low household income levels could be a barrier to personal computing or Internet penetration at home; high inflation rate levels could reduce the degree of use of banking services (savings); and the existence of a grey economy may reduce the potential of financial services.

Internet Banking and Age

According to Polatoglu and Ekin (2001) and Howcroft (2002) demographic factors that describe typical electronic banking customers include young, affluent and highly educated. In an empirical study conducted between Korea and China, it was discovered that the young find it easier to access new things compared to the old. Atkins (1998) and Lin's (1998) results showed that young people were more adventuresome when it came to trying new types of purchases on the internet. This study also emphasized that internet items such as games, internet education, and internet chatting will increase the consumption with the growth of ages but internet entertainment will decrease with ages increasing. The internet items increasing with age growth are internet banking, internet news, internet purchasing

email and information searching. Instituto Nacional de Estadística (INE, 2012), states that regarding age, older adults present a lower use of computers and internet compared with younger segments of the population. McCloskey, (2006) identifies key variables proposing a model in which age, trust, ease of use, and usefulness explain the level of participation in e-commerce. Some authors have studied the drivers of internet use by the elderly by analysing variables such as attitude, innovation, demographics (Eastman and Iyer, 2004), nostalgia proneness, innovativeness and risk aversion (Reisenwitz, Iyer, Kuhlmeier, and Eastman, 2007), health, leisure, recreation participation and leadership, and well-being (Koopman-Boyden and Reid, 2009). A survey was conducted in four cities of Amritsar, Chandigarh, Jalandhar and Ludhiana in India with 80-95 respondents selected from each city. The sample represented a cross section of Internet banking users in terms of age, gender, education, occupation and income. Maximum users (58.6 per cent) belonged to age group of 18-30 years, 23.7 per cent were from 31-40 years age group, and 14.3 per cent belonged to 41-50 years age group and 3.4 per cent constituted respondents above 51 years of age. In earlier Finnish study's findings of the typical Internet banking user were somewhat similar and in some respect contradictory. A Finnish study (Mattila 2001) states that Internet banking user is middle aged, relative wealthy and highly educated. Interestingly, results from this study indicate that the average mobile banking user's socio-economic factors differ from that of Internet banking user.

Internet Banking and Gender

Gender is the range of physical, mental, and behavioural characteristics pertaining to, and differentiating between, masculinity and femininity. Zhang (2009) analyses the influence of gender on the two key variables of Technology Acceptance Model (usefulness and ease of use) and ratifies the greater effect of these variables considering gender differences. He noted that men tend to be more task-oriented (Minton and Schneider, 1980), systems-oriented (Baron-Cohen, 2004) and willing to take risks more than women (Powell and Ansic, 1997). In a study conducted by Devins (2008), it was stated that when considering use of the internet to undertake commercial activities like online banking, online shopping or to use online booking services, certain socio-economic factors are statistically significant. It was discovered that statistically, gender was the most important factor followed by average wage of the residential area and ethnicity. This was reinforced by (Akhter, 2003) that those most likely to use the internet to undertake commercial activities are male, white and relatively affluent. In a comparison made between Korean and Chinese men and women, it was stated that there are obvious differences in internet consumptions between men and women of the two countries. Korean men like internet games, information search, education and banking while Chinese men prefer internet chat, email and internet news in all age groups. Korean women prefer internet games, internet shopping and banking while Chinese women prefer internet chatting, email and internet news. Rodgers and Harris (2003) have found men to be more satisfied with online shopping than women and McCloskey (2006) proposes that there may be differences in the motivation, duration and enjoyment of electronic consumers across genders.

Internet Banking and Technology

Mere deployment of web-technologies as a new platform to serve the needs of customers by the banking organization cannot lead to the part of business success unless and until services delivered over internet are enriched with high quality. Service quality has been identified as an important contributing factor to the ability of an organisation to attract and

retain customers in electronic marketplace (Mahajan *et al*, 2002; Reichheld and Schefter, 2000; Santos, 2003; Shankar, *et al*, 2003). The ultimate success of internet banking depends upon understanding the way in which customers' interaction with a web site interface inculcates positive perception and behaviour for an internet bank. Researchers examined the impact of technology and quality of e-banking services on customer satisfaction (Joseph *et al*, 1999; Casalo *et al*, 2008; Wong *et al*, 2008; Rod *et al*, 2009). Traditional service quality was found to play a major role in building trust in e-banking (Yap *et al*, 2010).

Technology in internet banking can be viewed in terms of web site interactivity, information content and perceived security risks. Montoya-Weiss *et al* (2003) defined navigation structure as the organisation and layout of the content and pages in a web site. Hoffman and Novak (1996) defined it as 'the process of self-directed movement through a computer-mediated environment. Jun and Cai (2001) assert that an easily navigable website is an important element for online banking to be successful. Richard and Chandra (2005) opine that navigational features are positively related to stimulate demand and create involvement of the surfers in the web site. Web site which has an easy to use navigation structure is likely to be used consistently by the users.

Sathaye (1999) in his study was to quantify the factors preventing adoption of Internet banking in Australia. The literature on Internet banking in Australia does identify lack of awareness and security concerns as the prime reasons for slow adoption thereof by consumers. However, no empirical evidence was available to support the theory that these factors are in fact responsible. The above analysis shows that security concerns and lack of awareness stand out as the reasons for non-adoption of innovation of Internet banking by Australian customers. Perceived security risk of the web site is vital in the virtual environment. Customer perceived security risk issues have assumed greater significance in recent times with the advent of internet based commercial transactions. Cox and Rich conceptualize perceived security risk as 'the nature and amount of risk perceived by a consumer in contemplating a particular purchase decision (Forsythe and Shi, 2003). In the virtual environment, perceived security risk is high as customers have no face to face interaction with the service provider. Banking raises a security risk concern as a third party can easily intercept the system and thus building trust is of utmost importance in developing and maintaining long-lasting relationship between them. Serious operational risks and potential liabilities are associated with security breaches in the transfer of funds or instructions and the actual theft of identification information over the internet (Furst, Glaessner and Kellerman, 2001). The 2002 US Computer Crime and Security Survey reports that 70% of respondents' sites suffered from vandalism attacks, where 12% included theft of transaction information and 6% financial fraud.

Bhatnagar *et al*, (2000) also support this contention and assert that dissemination of personal information may raise the likelihood of infringement of security. Prior studies have stressed the importance of security and protecting users from the risk of fraud and financial loss (Bert *et al*, Belanger *et al*, 2002). Security is a major influencing factor around the acceptance and use of new technologies (Tan and Teo, 2000). Risk was found as a major impediment to cell phone banking adoption in South Africa (Brown *et al*, 2003). In terms of the choice of an Internet access technology in the home, the need for security of consumers' personal details is very critical. As a result, the lower the perception of risk involved in using an Internet access technology, the more likely it will be chosen by consumers.

Conclusion and Recommendation

As internet banking is gradually gaining commercial momentum, it can be harnessed as an opportunity by the bank marketers to gain competitive advantage. Arming themselves

with potential users, their needs, demographics and perceptions will assist the marketing managers to have a thorough understanding of the target customers to offer their services. This will not only generate profitable gains for the marketers of Internet banking but simultaneously create a niche for them in the tough competitive arena. If banks take an initiative in improvising the web site by providing not only the physical attractiveness of the site but also accurate and timely information along with security measures.

References

1. Akhter, S. H. (2003). "Digital Divide and Purchase Intention: Why Demographic Psychology Matters. *Journal of Economic Psychology*, 24, 321-327.
2. Akinci, S., Aksoy, S. and Atilgan, E. (2004) 'Adoption of Internet Banking among Sophisticated Consumer Segments in an Advanced Developing Country,' *International Journal of Bank Marketing*, 22, 212-232.
3. Bankers Online (2010). What are the definition of e-banking. Available at http://www.bankersonline.com/technology/gurus_tech081803d.html. (Accessed 08 May 2010).
4. Baron-Cohen, S. (2004). "The Essential Difference: Men, Women and the Extreme Male Brain. London, England: Penguin.
5. Belanger, France, Hiller, Jannie, Smith and Wanda (2002). "Trustworthiness in Electronic Commerce: The Role of Privacy, Security and Site Attributes". *Journal of Strategic Information Systems*, 11 (3-4), 245-270.
6. Bhatnagar, A., Misra, S. and Rao, H. R. (2000). "On Risk, Convenience and Internet Shopping Behaviour. *Communications of the ACM*, 39 (6), 29-35.
7. Bikram J. S. M. and Sunpreet, K. S. (2011). "Inter-Relationship of Web Site Interactivity and Customer Outcomes: Building Trust in Internet Banking Web Site". *Global Business Review*, 12 (1) 99-115.
8. Bikram J. S. M. and Sunpreet, K. S. (2012). "Profiling Adopter Categories of Internet banking in India: An Empirical Study". *Vision* 16 (4) 283-295.
9. Bons, R. W. H., Alt, R., Lee, H. G., and Weber, B. (2012). "Banking in the Internet Era". *Journal of Electron Markets*, 22: 197-202.
10. Brown, I., Cajee, Z., Davies, D. and Stroebel, S. (2003) Cell Phone Banking: Predictors of Adoption in South Africa - An Exploratory Study, *International Journal of Information Management*, 23, 381-394.
11. Casalo, L. V., Flavion, C. and Guinalice, M. (2008). "The Role of Satisfaction and Website Usability in Developing Customer Loyalty and Positive Word-of-Mouth in E-Banking Services". *International Journal of Bank Marketing*. 53 (3), 55-68.
12. Centeno, C. (2003). "Adoption of Internet Services in the Enlarged European Union; Lessons from the Internet Banking Case". Institute for Prospective Technological Studies, European Commission Joint Research Centre.
13. Devins, D., Darlow, A. and Webber, D. (2008). "Beyond 'Access': Internet Use and Take-Up of Online Services by Adults Living in Disadvantaged Areas in England". *Local Economy* 23 (1) 47-57, 2008.
14. Eastman, J. K. and Iyer, R. (2004). "The Elderly's Uses and Attitudes Towards the Internet. *Journal of Consumer Marketing*, 21, 208-220.
15. Foon, S. K. and Fah, B. C. (2011). "Internet Banking in Kuala Lumpur: An Application of UTAUT Model". *International Journal of Business and Management*. 6 (4) 161-167, 2011.
16. Forsythe, Sandra, M., and Bo Shi (2003). "Consumer Patronage and Risk Perceptions in Internet Shopping. *Journal of Business Research*, 56 (1), 867-875.

17. Fulbag, S. and Davinder, K. (2011). "Customer Perception of Banking Services-A Comparative Study of Rural and Urban Branches". *Asia-Pacific Business Review*. 7 (2) 37-47 April-June, 2011.
18. Furst K., Lang D. WW, Center for Information Policy Research, Harvard University , "Internet Banking: Developments and prospects" April 2002.
19. Hoffman, Donna, Novak, Thomas (1996). "Marketing in Hypermedia Computer-Mediated Environments: Conceptual Foundations". *Journal of Marketing*. 60 (3), 50-68.
20. Howcroft, B., Hamilton, R. and Hewer, P. (2002). "Consumer Attitude and the Usage and Adoption of Home-Banking in the United Kingdom. *International Journal of Bank Marketing*. Vol. 20 (3), pp. 111-121.
21. Iacovou, C.L., Benbasat, I. and Dexter A.A., (1995) "Electronic Data Interchange and Small Organisations: Adoption and Impact of Technology". *MIS Quarterly*, Dec, Vol. 19, No. 4, pp. 465-485.
22. Imiefoh, P. (2012). "Towards Effective Implementation of Electronic Banking in Nigeria". *Journal of African Research Review*. Vol. 6 (2) 25. ISSN 1994-9057.
23. Instituto Nacional de Estadística (2012). "Encuesta Sobre Equipamiento Y uso de las Tecnologías de la Información en los Hogares. Retrieved from www.ine.es.
24. Jayawardhena, C. and Foley, P. (2000) "Changes in the Banking Sector – The Case of Internet Banking in the UK". *Internet Research of Electronic Networking Applications and Policy*, 10, 19-31.
25. Joseph, Mathew, MacClure, Cindy and Joseph Beatriz (1999). "Service Quality in the Banking Sector : The Impact of Technology on Service Quality. *International Journal of Bank Marketing*. 17 (4), 182-191.
26. Jun, Minjoon, Cai and Shaohan (2001). "The Key Determinants of Internet Banking Service Quality: A Content Analysis". *International Journal of Bank Marketing*, 19 (7), 276-291.
27. Karjaluoto, H. (2002). "Electronic Banking in Finland: Consumer Beliefs, Attitudes, Intentions and Behaviours". *Jyväskylä Studies in Business and Economics* 18, University of Jyväskylä, Jyväskylä, Finland.
28. Karjaluoto, H., Mattila, M. and Pentto, T. (2002). "Factor Underlying Attitude Formation Towards Online Banking in Finland. " *International Journal of Bank Marketing*, 20(6), 261-272.
29. Kolodinsky, J. M., Hogarth, J. M. and Hilgert, M. A. (2004). "The Adaptation of Electronic Banking Technologies by US Consumer". " *International Journal of Bank Marketing*, 22(4), 238-249.
30. Koopman-Boyden, P. and Reid, S. L. (2009). "Internet/Email Usage and Well Being among 65-84 Year Olds in New Zealand: Policy Implications. *Educational Gerontology*, 34, 709-735.
31. Lin, C. A. (1998). "Exploring Personal Computer Adoption Dynamics". *Journal of Broadcasting and Electronic Media*. 42, 1998.
32. Mahajan, V., Srinivasan, R. and Wind, J. (2002). "The Dot.Com Retail Failures of 2000: Were There Any Winners". *Journal of the Academy of the Marketing Science*, 30 (4), 474-486.
33. Mattila, M. (2001). "Essays on Customers in the Dawn of Interactive Banking". *Jyväskylä Studies in Business and Economics* 9, University of Jyväskylä, Jyväskylä Finland.
34. Mann, S. and Sahni, K. (2011). "Inter-Relationship of Web Site Interactivity and Customer Outcomes: Building Trust in Internet Banking Web Site. *Global Business Review*. 12 (1) 99-115, 2011.

35. Mann, S. and Sahni, K. (2011). "Profiling Adopter Categories of Internet Banking in India: An Empirical Study". SAGE Publications 16 (4) 283-295, 2012.
36. McCloskey, D. W. (2006). "The Importance of Ease of Use, Usefulness and Trust to online Consumers: An examination of the Technology Acceptance Model with Older Consumers. *Journal of Organisational and End User Computing*, 18, 47-65.
37. Minton, H. L. and Schneider, F. W. (1980). "Differential Psychology. Prospects Heights, IL: Waveland Press.
38. Montoya-Weiss, Mitzi, Voss, Glen and Grewal, D. (2003). Determinants of Online Channel use and Overall satisfaction with a Relational, Multi-Channel Service Provider. *Journal of the Academy of Marketing Science*, 31(4), 448-458.
39. Polatoglu, V. N. and Ekin, S. (2001). "An Empirical Investigation of the Turkish Consumers' Acceptance of Internet Banking Services. *International Journal of Bank Marketing*. Vol. 19(4), pp. 156-165.
40. Powell, M. and Ansic, D. (1997). "Gender Differences in Risk Behaviour in Financial Decision-Making: An Experimental Analysis. *Journal of Economic Psychology*, 18 605.
41. Ramon-Jeronimo, M. A., Peral-Peral, B. and Arenas-Gaitan, J. (2013). *Social Science Computer Review*. 31 (4) 389-403.
42. Reichheld, F. F. and Schefter, P. (2000). E-Loyalty: Your Secret weapon on the Web. *Harvard Business Review*: July-August, 105-113.
43. Reisenwitz, T., Iyer, R., Kuhlmeier, D. B. and Eastman, J. K. (2007). "The Elderly's Internet Usage : An Updated Look. *Journal of Consumer Marketing*, 24, 406-418.
44. Richard, Marie-Odlie, Chandra and Ramdas (2005). "A Model of Consumer Web Navigational Behaviour: Conceptual Development and Application. *Journal of Business Research*. 58 (8), 1019-1029.
45. Robinson, J. and Moore, W. (). "Attitudes and Preferences in Relation to Internet Banking in the Carribean". First Carribean International Bank.
46. Rod, M., Ashil, N. J., Shao, J. and Carrethers, J. (2009). "An Examination of Relationship between Service Quality Dimensions, Overall Internet Banking Service Quality and Customer satisfaction: A New Zealand Study". *Marketing Intelligence and Planning*. 27 (1), 103-126.
47. Rodgers, S. and Harris, M. A. (2003). "Gender and E-commerce : An Exploratory Study. *Journal of Advertising Research*, 43, 322-329.
48. Santos, J. (2003). "E-Service Quality: A Model of Virtual Service Quality Dimensions. *Managing Service Quality*. 13 (3), 233-246.
49. Sathye, M. (1999). "Adoption of Internet Banking by Australian Consumers: An Empirical Investigation". *Internal Journal of Bank Marketing*, 17, 324-334.
50. Schmid, B., Stanoevska-Slabeva, K. andTschammer, V. (2001). "Towards the E-Society: E-Commerce, E-Business, E-Government, Zurich, Switzerland, 13 October
51. Sellitto, C. and Martin, B. (2003). "Web Site Adoption: A Study of 107 Victorian SME Wineries. Proceedings of the 9th Ninth Australian World Wide Web (AusWeb) Conference: 5-9 July 2003. Sanctuary Cove, Queensland. pp. 23-32.
52. Shankar, V., Smith, A. K. and Rangaswamy, A. (2003). "Customer Service and Loyalty in Online and Offline Environment". *International Journal of Research in Marketing*, 20 (2), 153-175.
53. Stamoulis, D. (2002). "How Banks Fit in an Internet Commerce Business Activities Model". *Journal of Internet Banking and Commerce*, Vol. 5 (1).
54. Suganthi, B., and Balachandran, G. (2001). "Internet Banking Patronage: An Investigation of Malaysia". *Journal of Internet Banking and Commerce*. [Online] Available: www.arraydev.com/commerce/jibc/0103_01.htm

55. Susanto, A., Lee, H., Zo, H. and Ciganek, A. P. (2012). "User Acceptance of Internet Banking in Indonesia: Initial Trust Formation". *Information Development*. 00 (0) 1-14, 2012.
56. Tan, M. and Teo, T.S.H. (2000) Factors Influencing the Adoption of Internet Banking. *Journal of the Association for Information Systems*, 1, 5, 1-44. Taylor Nelson Sofres Interactive, "Global eCommerce Report 2002"
57. Vinayek, R. and Jindal, P. (2011). "An Empirical Investigation of Key Antecedents of Customer Preference of Internet Banking in Indian Context". *Asia-Pacific Business Review*. 7 (3), 63-71.
58. Wong, D. H., Rexha, N. and Phau, I. (2008). "Re-examining Traditional Service Quality in an E-Banking Era". *International Journal of Bank Marketing*. 26 (7), 526-545.
59. Yap, K. B., Wong, D. H., Loh, C. and 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.
60. Yasir, A. and Asif, N. (2010). "The Delicate Balance of Internet Banking and Bricks and Mortar services: A Study on Bank Services offered in Visby". Master Thesis in Business Administration, Gotland University.
61. Yoon, K. K., Chuanshi, W., Shukun, T., Wen, C. and Chundan, J. (2007). "Comparison Analysis of Internet Consumptions between Korea and China". *International Area Review*. 10 (2).
62. You, C.S., Grant, K. and Edgar, D. (2007). "Factors Affecting the Adoption of Internet Banking in Hong Kong--Implications for the Banking Sector". *International Journal of Information Management*, 27(5), pp. 336-351.
63. Zhang, H. J. (2009). "Exploring Drivers in the Adoption of Mobile Commerce in China. The Journal of American Academy of Business, Cambridge. Retrieved from <http://www.jaabc.com/jaabev15n1preview.html>