Full Length Research Paper

A study on the relationship between Internet banking service, customer adoption and customer satisfaction

*Milton Brazillo Moa, Richard Obote and Norbet Yoweri

Department of Marketing, Makerere University Business School, Kampala, Uganda.

Despite the importance of Internet banking in many financial institutions, fewer studies have focused on consumer adoption and customer satisfaction especially in the African setting. With technology implementation, a new phenomenon in Uganda's banking sector and many customers has not yet embraced it, this study was conducted to determine the factors that influence consumer adoption of Internet banking service as well as examine the relationship between Internet banking service, customer adoption and customer satisfaction. The major instrument for the data collection was a questionnaire that was designed on a 5-point Likert scale to be able to collect good quantitative data. The study established that there was a significantly positive relationship between Internet banking and customer satisfaction which is consistent with the findings of Al-hawari and Ward (2005). The study recommended that more emphasis and efforts be laid on targeting individual clients. In addition, Internet banking service providers ought to look out for indicators of innovative ways of creating awareness about the service through participation in trade organizations, exhibitions as well as adoption of new technologies of Internet banking.

Key words: Internet banking, customer satisfaction.

INTRODUCTION

According to Arunachalam and Sivasubramanian (2007), Internet banking is where a customer can access his or her bank account via the Internet using personal computer (PC) or mobile phone and web-browser. In addition, Ongkasuwan and Tantichattanon (2002) further defines Internet banking service as banking service that allows customers to access and perform financial transactions on their bank accounts from their web-enabled computers with Internet connection to banks' web sites any time they wish. Internet banking service also enables bank customers to perform transactions such as transfer and payments, access of latest balance, statement viewing, account detail viewing, customization, print, downloading of statements and obtaining of a

history statement on all accounts linked to the bank's customers' AutoBank (ATMs). According to Khan (2007), Internet banking includes the system that enables financial institution customers, individuals or businesses, access accounts, transact business, or obtain information on financial products and services on public or private network including Internet. Internet banking is the act of conducting financial intermediation on the Internet (Kim et al., 2006). It is that process whereby the customer is able to access, control and use his/her account over the Internet. Since the mid-1990s, there has been a fundamental shift in banking delivery channels toward using self-service channels such as electronic banking, mainly the use of automated teller machines (ATMs) and internet banking. According to Qureshi et al. (2008), clients shifted from traditional banking to online banking system. The core reason of this transfer is perceived usefulness, perceived ease of use, security and privacy provided by online banking. Despite the fact that the

---

*Corresponding author. E-mail: milton.moa2019@gmail.com

internet has an ever-growing importance in the banking sector because of the advantages it brings to both the entities and their customers, not all the financial entities that have adopted e-banking have been successful, often because of an inadequate website design and other factors as well (Ortega et al., 2007). This can be evident in the case of Uganda in which the concept of internet banking came way back in the year 2006 and the adoption has implementation has either been slow in banks or the adoption has been less among the users. The concept aimed at reducing the cost of banking services and eventually eliminating long queues at the commercial banks (TMonitor-AllAfrica.com, 2006).

According to Wungwanitchakorn (2002), in most developing countries, Internet banking is still in its early stages. Only a few banks are developing such services while others merely use the web to provide information about products and services. Thus, it can be concluded that bank customers are still not accustomed to using electronic channels to manage their financial affairs. This low adoption rate is an indication of the hazards of introducing new products and services into the marketplace; the vast majority of product and service innovations fail, at considerable cost to the companies introducing them. Moreover, those services perceived as necessary by such adopters must also be identified. The identification of personal characteristics related to the adoption of Internet banking is critical for market targeting and the identification of innovative features can help banks in product design and in formulating campaigns that will encourage the adoption of the service. Consumer adoption of a good or a service refers to the acceptance and continued use of a product, service or idea. According to Baraghani (2007), consumers go through "a process of knowledge, persuasion, decision, implementation and confirmation" before they are ready to adopt a product or service. Thus, consumer adoption is the adoption process that describes the steps consumers follow in deciding whether or not to use a new product or services. These stages in the adoption process are awareness, interest, evaluation, trial and adoption. Awareness is to communicate the availability of the new product or service. Interest is to communicate benefits of new product or service to gain consumer interest. Evaluation emphasizes the advantages of new product over alternatives currently on the market. Usage refers to how the customer is able to use the Internet banking services in any transaction (Bearden et al., 2001). In the case of Uganda, DUCONT, a Dubai-based information technology service provider had teamed up with Uganda's solutions for business to support financial institutions in the process of introducing Internet banking services in Uganda, but a few banks have fully integrated such services in their operations. Though some banking institutions has implemented internet banking services; the adoption has been slow and perhaps many users

either they are not aware of it or not adopting it at all (Stanbic Bank, 2009). Though Wungwanitchakorn (2002) contends that if banks are to reap the benefits of Internet banking they must identify how the service is perceived by potential adopters and the characteristics of consumers who will tend to adopt it and identify whether there is demand for such services, based on concerns about levels of computer ownership and usage, Internet usage, and consumer acceptance; this indicates and points to issues to do with customer satisfaction.

Customer satisfaction is defined as a collection of outcome of perception, evaluation and psychological reactions to the consumption experience with a product/service by Saha and Zhao (2005). In other words, it is a result of a cognitive and affective evaluation where some comparison standard is compared to the actually perceived performance. If the performance perceived is less than expected, customers will be dissatisfied. On the other hand, if the perceived performance exceeds expectations, customer will be satisfied and this would lead to retention (Saha and Zhao, 2005; Yau, 2007).

The research gap

Despite the growing interest and importance of Internet banking in many financial institutions in Uganda and the implementation of such innovations in some banks like Stanbic bank (U) Ltd, there has remained low adoption rates among clients and its usage has not brought significant outputs in the way clients become happy with the services offered, and indeed extant literature indicates that despite such growing interest, no significant studies that have focused on consumer adoption and more so, customer satisfaction (Katri, 2003; Gao and Owolabi, 2008).

LITERATURE REVIEW

Arunachalam and Sivasubramanian (2007) contents that Internet banking is where customer can access his or her bank account via the Internet using PC or mobile phone and web-browser; and Ongkasuwan and Tantichattanon (2002) defined Internet banking service as banking service that allows customers to access and perform financial transactions on their bank accounts from their computers with Internet connection. Kim et al. (2006) predicted that 87% of community banks would offer Internet banking in 2003 to meet consumers' needs, and asserted that, Internet banking has advantages for banks to maintain competition, to save costs, to enhance mass customization, marketing and communication activities, and to maintain and attract consumers. Katri (2003) stated that the Internet banks serve also as gateways

offering identification and authorization services to a number of third party service providers. Rationale for 'banks' to provide Internet banking services, Ongkasuwan and Tantichattanon (2002) indicate that internet banking helps banks in cost saving, increase customer base, enable mass customization for e-Business services, extend marketing and communication channel, search for new innovation services, and explore and development of non-core business. However, customers' ability to subscribe to the Internet-base banking services depend on several factors such as user-friendly interface, level of Internet experience, types of services provided, (for example e-mail, file transfer, news, online financial services, shopping and multimedia services), attitude and perception, access and delivery time and experience with the Internet.

Internet banking service and consumer adoption

Gao and Owolabi (2008) contend that the currently relevant factors determining the adoption of internet banking in Nigeria include the level of awareness or attention, the accessibility to computers and the Internet, convenience, privacy, costs, and the availability of knowledge and support concerning internet banking. The introduction of internet banking services is facilitated by the bank's reputation in terms of size, awareness and trust awareness of Service and its benefits in form of the amount of information a customer has about Internet banking and its benefit may have a critical impact on the adoption of Internet banking (Jaruwachirathanakul and Fink, 2005; Al-Somali et al., 2008). On the other hand, Al-Somali et al. (2008) noted that low awareness of Internet banking is a critical factor in causing customers not to adopt internet banking and Katri (2003) conquers that most important factors discouraging the use of Internet banking are lack of Internet access and not having a chance to try out Internet banking in a safe environment, thus not being in a position to access account. According to Gan et al. (2006), the previous studies have identified that user input factors are a function of control, enjoyment and intention to use. Control could be described as the amount of effort and involvement required by consumers in electronic banking. Enjoyment is the perceived playfulness and intrinsic value that consumers experience from the utilization of electronic banking and this would also influence the level of satisfaction; as Gan et al. (2006) indicate that when consumers are aware of the availability of electronic banking, they will use adopt, though some may not.

Influences on consumer adoption of internet banking

Lichtenstein and Williamson (2006) noted that several

converging reference domains and theories suggest numerous potential influences on consumer adoption of internet banking including theories of consumer behavior in mass media choice and use, gratification theories, innovation diffusion, technology acceptance, online consumer behavior, online service adoption, service switching costs and the adoption of internet banking. Davis (2003) proposed that customers' intentions to use internet banking can be affected by customers' attitudes toward using internet banking. When customers have positive attitudes, they are more likely to adopt internet banking and vice versa (Lichtenstein and Williamson, 2006). Eriksson et al. (2005) found that customers' attitude are significant factor affecting customer behaviors in accepting or rejecting technology. It was found that the relationship between attitude towards using and usage was significant. Customers' attitudes are a significant factor affecting customer behaviors in accepting or rejecting technology (Davis et al., 1989).

Internet banking services and customer satisfaction

According to Saha and Zhao (2005), customer satisfaction is defined as a collection of outcome of perception, evaluation and psychological reactions to the consumption experience with a product/service. In other words, Saha and Zhao further defined customer satisfaction as a result of a cognitive and affective evaluation where some comparison standard is compared to the actually perceived performance. If the performance perceived is less than expected, customers will be dissatisfied. On the other hand, if the perceived performance exceeds expectations, customer will be satisfied. Boateng and Molla (2006) contend that operational constraints related to customer location, the need to maintain customer satisfaction and the capabilities of the Bank's main software are influential factors in motivating the decision to enter electronic banking services and consequently influencing the usage experience and thus affecting the level of satisfaction. Raman et al. (2008) said that service as an intangible good appeal differently to each customer and certain extent of service should be achieved in order to satisfy the customer and that the resulting commitment, loyalty and retention are critical indicators of customer satisfaction. Customer commitment; Power and Associates (2009) note that on average, highly committed customers use more products or services, give more referrals and are much less likely to switch to another bank, compared with customers who have lower commitment levels. Indeed, this view is supported by Casaló et al. (2008) who contends that higher levels of website usability might lead to higher levels of consumer's affective commitment to the website as well a direct, positive and significant relationship between
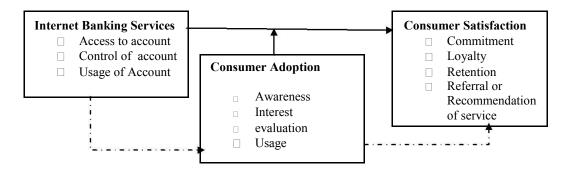
Figure 1. Conceptual framework. Source: Qureshi et al. (2008), Mohamed and Pearson (2007), Ndubisi and Sinti (2006) and Raman et al. (2008).

satisfaction in previous interactions and the consumer's commitment to a financial services website. Customer loyalty; Power and Associates (2009) defines customer loyalty as a deeply held commitment to frequently rebuy or repatronize the same product or service, and though multidimensional in nature, it includes rebuy, repurchasing and resistance towards price increase (Wangenheim and Bayòn, 2004). Michael (2007) notes that loyalty equates to a willingness to sacrifice on the part of the customer: a loyal customer may forgo a lower-cost solution from a competitor or give you time to improve capabilities because they value other aspects of doing business with you. According to Tomiuk and Pinsonneault (2001), it was found that electronic banking usage had a considerable effect on customer loyalty among the electronic banking users, while it had a negative impact on non-users. It was concluded that customer care and customer retention should be taken into consideration, because the convenient, easy and fast banking services is associated with the human and technology based delivery processes so that they are linked with the customers' perceptions of how these bank services are delivered to them.

Customer retention; Power and Associates (2009) note that retention is defined as the degree to which a customer exhibits repeat purchasing and price tolerance behavior to a service provider, and possesses a positive attitudinal and cognitive disposition, and Keiningham (2007) said that customer retention is defined as customers' stated continuation of a business relationship with the firm. Al-hawari and Ward (2005) indicate that internet banking is positively related to customer retention.

RESEARCH QUESTIONS, HYPOTHESIS AND MODEL

Based on the gap and the literature review earlier mentioned, the following objectives and hypothesis were

designed for this study; to determine factors that influence Internet banking adoption; to examine the relationship between Internet banking and customer satisfaction and to establish the relationship between customer adoption and customer satisfaction. The Hypotheses of the study are:

Ho_1: There is no significant relationship between Internet banking service and customer satisfaction.

Ho_2: There is no significant relationship between customer adoption and customer satisfactions. The major purpose of the study was to determine factors that influence customer adoption of Internet banking services as well as examined the relationship between Internet banking, customer adoption and satisfaction, hence the conceptual framework (Figure 1) as designed to guide this study.

The conceptual framework of the study

The conceptual framework (Figure 1) was used to examine the factors influencing Stanbic Bank customers' acceptance and satisfaction of Internet banking services. The framework had Internet banking as an independent variable and consumer satisfaction as a dependent variable and adoption as an intervening variable.

METHODOLOGY

Research design

Descriptive and factor analyses were used before the multiple regression analysis was done. The research focused on the general population of Bank X using Internet banking services in Kampala city, and this is because this was the headquarter area of the bank and there were other five branches and the total population of this study was 3,752 customers as expressed in Table 1. From the aforementioned population, a sample size was determined using the Morgan and Krejcie 1970 approach (Amin, 2005: 454) and the

Table 1. Target population of internet banking service customers.

Types of customers	Population	Percentage (%)
Individual clients	3,240	86
Corporate clients	512	14
Total population	3,752	100

sample of 351 was determined. Sample selection was based on stratified proportionate sampling technique to ensure representation of the different strata of the population. Questionnaires were used to collect primary data through a survey based on self-administered approach in which the researcher with the help of trained research assistants distributed and collected the questionnaires from the respondents. This questionnaire administration approach was chosen because it is less expensive to administer and allows respondents time to reflect on the questions thus increasing on the collection of quality data. The collected data was edited and cleaned before it was coded and processed for analysis using SPSS version 16.

Measurement, validity and reliability

To ensure the measurement, variables are operationalized in this research as follows: Internet Banking consist of three components: access to account, control of account, and usage of account as adapted from Qureshi et al. (2008) and measured using a 5-point Likert scale as adapted from strongly agree to strongly disagree; consumer adoption is comprised of four items namely: awareness, interest, evaluation and usage as adapted from Mohamed and Pearson (2007) and 'customer satisfaction' was measured on items of commitment, loyalty, retention and referral or recommendation of service (Ndubisi and Sinti, 2006; Raman et al., 2008).

Validity

Hair et al. (2007: 8) defined the validity as "the degree to which a measure accurately represents what it is supposed to", and thus validity is concerned with how well the concept is defined by the measure(s). Fujun et al. (2007) mentioned about three types of validity: content validity, predictive validity and construct validity. Duggirala et al. (2008) defined the content validity as the assessment of the correspondence between the individual items and concept. This study addresses content validity through the review of literature and adapting instruments used in previous research as indicated by the different researchers depicted in the conceptual framework.

Reliability

Reliability indicates the extent to which a variable or set of variables is consistent in what it is intended to measure (Hair et al., 2007). It differs from validity in that it relates not to what should be measured, but instead to how it is measured. The current study uses multiple items in all constructs and so the internal consistency method is applied in the current study. Hair et al. (2007) mentioned that the rationale for internal consistency is that the individual items or indicators of the scale should all be measuring the same construct and thus be highly intercorrelated and as it is the items in this study are. Fujun et al. (2007) pointed out that the Cronbach

alpha with acceptable cutoff point 0.70 demonstrates that all attributes are internally consistent, and as a rule of thumb for describing internal consistency using Cronbach's alpha is acceptable among many researchers (Cronbach, 1951; Zinbarg et al., 2006). The measurement scale for the variables in this study was based on a 5-point Likert scale ranging from "strongly agree" to "Strongly disagree". Reliability statistics indicate that the 'alpha value' of all items exceeded Nunnally and Bernstein (1994) recommended criterion of 0.70 for scale reliability and thus the tool was reliable enough to collect the right data as indicated in the Table 7.

FINDINGS AND DISCUSSION

Table 2 shows that out of the 351 questionnaires distributed to the respondents to both individual and corporate clients, only a total of 77% was received and this is a good and acceptable response rate and thus indicating that the data is representative enough.

Descriptive statistics

The results (Table 3) reveal that all the variables had a higher mean; internet banking (4.2032), consumer adoption (4.1800) and customer satisfaction (4.3596) and since all these were above average, it indicates that the variable items were good enough.

Factors that influence the adoption of internet banking service

The first objective of this research was to determine factors that influence consumers to adopt Internet banking service and results are presented (Table 4). Table 2, shows that more that the factors such as accessing account (4.03), usage (4.02), advantages accruing from the usage (4.08) and use account (4.02) were very significant in influencing customers in adoption. And for corporate customers control of the account was more significant than the rest. These findings do agree with some of the factors revealed in the findings of Gao and Owolabi (2008) that the currently relevant factors determining the adoption of internet banking in Nigeria include the level of awareness or attention, the accessibility to computers and the Internet, convenience,

Table 2. Indicating the category of respondents and response rate.

Category of respondents				
Category of respondents	Distributed questionnaires	Received questionnaires	Received percentage (%)	Questionnaires not r
Individual clients	302	230	76	72
Corporate clients	49	40	82	9
Total	351	270	77	81

Source: Primary data.

Table 3. Descriptive statistics.

	N	Minimum	Maximum	Mean	Std. deviation
Internet banking services	332	1.00	5.00	4.2032	0.95583
Consumer adoption	332	1.00	5.00	4.1800	0.90765
Customer satisfaction	332	1.00	5.00	4.3596	1.16120
Valid N (list wise)	332				

Source: Primary data.

Table 4. Factors influencing adoption.

	Mean	Std. deviation
Access account	4.03	0.218
Control account	3.98	0.344
Use account	4.02	0.333
Informed about IBS existence (awareness)	4.10	0.367
Advantages and good features of IBS (interest)	4.08	0.274
Cost and time effectiveness (evaluation)	3.99	0.192
Useful and easy to use (usage)	4.02	0.135

Source: Primary data.

privacy, costs, and the availability of knowledge and support concerning internet banking. More so, Al-Somali et al. (2008) revealed that awareness of Service and its benefits in form of the amount of information a customer has about Internet banking and its benefit may have a critical impact on the adoption of inter from these fin (2006) view that

Table 5. Correlations.

		Internet banking services	Consumer adoption	Customer satisfaction
Internet banking services	Pearson correlation	1	0.964**	0.947**
	Sig. (2-tailed)		0.000	0.000
	N	332	332	332
Consumer adoption	Pearson Correlation	0.964**	1	0.913**
	Sig. (2-tailed)	0.000		0.000
	N	332	332	332
Customer satisfaction	Pearson Correlation	0.947**	0.913**	1
	Sig. (2-tailed)	0.000	0.000	
	N	332	332	332

**Correlation is significant at the 0.01 level (2-tailed). Source: Primary data.

Table 6. Prediction.

Coefficients(a)	Unstadardized coefficient		Standardized coefficient	T	Sig.
Model	B	Std. error	Beta		
Constant	0.656	0.210		3.077	0.002
Consumer adoption	0.254	0.033	0.384	6.1656	0.000
Internet banking services	0.308	0.037	0.416	6.5030	0.000

Dependent variable: Customer satisfaction. R square = 0.692; F change = 60.555; adjusted R square = 0.688; Sig. F change = 0.000. Source: primary data.

the adoption of Internet banking are security and inadequate operational facilities including proper telecommunications and power, the results agree with the bi part of the literature (Al-Somali et al., 2008; Gao and Owolabi, 2008; Al-Ghamdi, 2009; Eriksson et al., 2005; Kim et al., 2006).

Relationship between the study variables

The results indicate that there was a strong and positive relationship between internet banking and consumer adoption (0.964) and customer satisfaction (0.947) (Table 5), thus indicating that when internet banking services are implemented, many people will adopt them because of their benefits (Katri, 2003; Gan et al., 2006; Al-Somali et al., 2008). Also, that internet banking services positively influence customer satisfaction (0.947) indicating that a good service will increase customer satisfaction and thus a positive and strong relationship between internet banking and customer satisfaction, and this conquers with Casaló et al. (2008) that such an interaction will lead to consumer's affective commitment and consequently satisfaction.

Prediction framework

These results highlight the extent to which the predictors that is 'internet banking services' and 'consumer adoption' do explain the level of customer satisfaction. These results highlight that the predictors can explain up to 68.8% of the variance in 'customer satisfaction' (adjusted r square = 0.688). These results further reveal that the internet banking was the most powerful and significant in leading to customer satisfaction (Beta = 0.416, sig. = 0.000) and this was closely followed by customer adoption (Beta = 0.384, Sig. = 0.000). Overall, the regression model was significant (sig. F change = 0.000) as shown by the ability of internet banking to predict up to 69.2% of customer satisfaction (Table 6).

CONCLUSIONS AND RECOMMENDATIONS

Although the findings of this research revealed positive responses which were slightly above average, the bank should not be complacent; instead it should be creative and innovative creating new products or services and marketing strategies that can stimulate the demand to

Table 7. Scale reliability.

Variable/combined items	Anchor	Cronbach's α
Internet banking services	5	0.79
Consumer adoption	5	0.77
Customer satisfaction	5	0.75

use Internet banking services. Even if the new strategy is implemented generally, it should mainly emphasize its efforts on targeting individual clients. Internet banking service providers ought to look out for indicators of innovative ways of creating awareness about the service through participation in trade organizations, exhibitions as well as adoption of new technologies of Internet banking. In addition, it would be useful to study the corporate client's diverse satisfaction needs in order to respond to them precisely. This would provide some interesting trending information allowing us to see if the adoption and utilization of Internet banking service is influenced by other factors which were not included in the study are significant. This would allow Internet banking providers and consultants would tailor their service and products based on those new factors and would allow them a greater opportunity of increasing the level of the Internet banking service adoption. This research finding also shows that there was a significant relationship between Internet banking and customer satisfaction, whereby they were committed to using the service, as well as there was an evident that the bank was able to retain the majority of its Internet banking service users. Finally, further studies need to be carried out knowing that the Internet banking service is still new in most of the developing countries (Wungwanitchakorn, 2002), thus, new issues, needs and demands may arise as the banks continue to implement the strategy. Hence, it is through research that those issues, needs and demands can be discovered.

REFERENCES

Al-Ghamdi A (2009). Investigating Factors Affecting Customers of Using Internet Banking: A Comparison study between Saudi Arabia and the UK.

Al-Hajri S, Tatnall A (2008). Technological Innovation and the Adoption of Internet Banking in Oman.Retrieved on 13 Febuary, 2010 from the World. Wide Web:http://www.ejov.org/projects/264/Issues/eJOV%20Special%20Issue%20on%20Living%20Labs%202008/eJOV10_SPILL5_Tatnall_Al_Hajri_Technology%20Innovation_2.pdf.

Al-hawari MA, Ward T (2005). The Influence of Internet Banking and Teller Service Quality on Customer Retention: A Comparison Study.Retrieved on 01 July, 2010] from World Wide Web: http://www.emeraldinsight.com/Insight/viewContentItem.do?contentType=Article&hdAction=lnkhtml&contentId=1580841.

Al-Somali SA, Gholami R, Clegg B (2008). Internet Banking Acceptance in the Context of Developing Countries: An Extension of the Technology Acceptance Model.

Amin ME (2005). Social science Research: Conception, Methodology and Analysis. Kampala, Uganda: Makerere University Printery.

Baraghani SN (2007). Factors Influencing the Adoption of Internet Banking, A Master's Thesis presented to the Department of Business Administration and Social Sciences, Lulea University of Technology, Sweden.

Bearden WO, Ingram TN, LaForge RW (2001). Marketing: Principles & Perspectives(3rd ed.). New York: McGraw-Hill/Irwin.

Casaló L, Flavián C, Guinalíu M (2008). The role of usability and satisfaction in the consumer's commitment to a financial services website. Int. J. Electronic Financ., 2(1): 2008-2031.

Chiemeke SC, Evwiekpaefe AE, Chete FO (2006). The Adoption of Internet Banking in Nigeria: An Empirical Investigation.

Duggirala M, Rajendran C, Anantharaman RN (2008). Provider-perceived Dimensions of total quality management in healthcare. Benchmarking. 15(6): 693-722.

Gan C, Clemes M, Limsombunchai V, Weng A (2006). A Logit Analysis Of Electronic Banking in New Zealand: A discussion paper No. 108.

Gao P, Owolabi O (2008). Consumer adoption of internet banking in Nigeria. (provide page numbers).

Fujun L, Hutchinson J, Li D, Bai C (2007). An empirical assessment and application of SERVQUAL in mainland China'smobile communications industry. Int. J. Qual. Reliab. Manage., 24(3): 244-262.

Hair J, Black W, Babin B, Anderson R, Tatham R (2007). Multivariate Data Analysis. 6th ed. New Jersey: Pearson Education, Inc.

Jaruwachirathanakul B, Fink D (2005). Internet banking adoption

Katri K (2003). Adoption of electronic banking: underlying consumer behaviour and critical success factors. Case of Estonia. Retrieved on[March, 2010] from World Wide Web: http://www.lse.ac.uk/collections/EMTEL/Conference/papers/Kerem.pdf .

Keiningham TL, Cooil B, Aksoy L, Andreassen TW, Jay WJ (2007). The value of different customer satisfaction and loyalty metrics in predicting customer retention, recommendation, and share-of-wallet. Retrieved on July, 2010 from World WideWeb;http://www.emeraldinsight.com/Insight/ViewContentServlet?Filename=Published/EmeraldFullTextArticle/Articles/1080170401.html.

2. Khan SK (2007). Adoption Issues of Internet Banking in Pakistani's Firms, Lulea University of Technology, Sweden. epubl.ltu.se/1653-0187/2007/009/LTU-PB-EX-07009-SE.pdf

Kim BM, Widdows R, Yilmazer T (2006). The Determinants of Consumers' Adoption of Internet Banking: Factors Determining Consumer Adoption of Internet Banking. Retrieved on July, 2010 from World Wide Web:

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1021484.

Lichtenstein S, Williamson K (2006). Understanding Consumer Adoption of Internet Banking: An Interpretive Study in the Australian Banking Context. Retrieved on January, 2010 from World Wide Web:

http://www.csulb.edu/journals/jecr/issues/20062/paper1.pdf.

Michael N (2007). Customer loyalty: How to create advocacy. Retrieved on 01 July, 2010 from World Wide Web: http://www.ababj.com/management/customer-loyalty-how-to-create-advocates-feb.-07.html.

Ndubisi NO, Sinti Q (2006). Consumer attitudes, system's characteristics and internet banking adoption in Malaysia. Retrieved on [January, 2009] from World Wide Web:

http://www.emeraldinsight.com/Insight/viewContentItem.do?contentId=1541450&contentType=Article.

Ongkasuwan M, Tantichattanon W (2002). A Comparative Study of Internet Banking in Thailand. Retrieved on[May, 2010] from World Wide Web: http://www.ecommerce.or.th/nceb2002/paper/55-A_Comparative_Study.pdf .

Ortega BH, Martinez JJ, De Hoyos MJM (2007). An Analysis of Web Navigability in Spanish Internet Banking. Retrieved on [September, 2010] from World Wide Web:http://www.arraydev.com/commerce/jibc/2007-12/Blanca_Final.pdf.

Power JD, Associates R (2009). Customer Commitment to Retail Banks Continues Decline. Retrieved on May 20, 2009] from World Wide Web: http://bankmarketingnews.org/2009/05/20/customer-commitment-to-retail-banks-continues-decline.aspx

Qureshi TM, Zafar MK, Khan MB (2008). Customer Acceptance of Online Banking in Developing Economies. Retrieved on [January, 2010] from World Wide Web: http://www.arraydev.com/commerce/jibc/2008-04/Tahir%20Masood.pdf.

Raman SR, Alam N, Mphil MK (2008). Information Technology in Malaysia: E-service quality and Uptake of Internet banking. Retrieved on [January, 2010] from World Wide Web: http://www.arraydev.com/commerce/JIBC/2008-08/JIBCArticle_MuraliRaman.pdf.

Saha P, Zhao Y (2005). Relationship between online service quality and customer satisfaction, a study in Internet banking. Retrieved on[April, 2009] from World Wide Web:http://epubl.ltu.se/1404-5508/2005/083/LTU-SHU-EX-05083 SE.pdfhttp://epubl.ltu.se/1404-5508/2005/083/LTU-SHU-EX-05083-SE.pdf.

The Monitor-AllAfrica.com (2006). Uganda Gets SMS, Internet Banking. Uganda Gets SMS, Internet Banking. Retrieved on[June, 2009] from World Wide Web: Source: http://allafrica.com/stories/200610060841.htm http://www.nextbillion.net/news/uganda-gets-sms-internet-banking.

Wungwanitchakorn A (2002).Adoption Intention of Banks' Customers on Internet Banking Service. Retrieved on [13 Febuary, 2010] from World Wide Web: http://www.journal.au.edu/abac_journal/2002/sep02/abacjournal_article05_sep02.pdf*.

Yau SCE (2007). Factors Affecting Customer Retention in Internet Banking among Hong Kong Professionals and Business Practitioners. Retrieved on 15 April, 2010 from World Wide Web: http://nova.newcastle.edu.au/vital/access/manager/Repository/uon:2692?expert=creator%3a%22Yau%2c+Suk+Ching+Eppie%22.