An Empirical Investigation on Customer Attitude and Intention towards Internet Banking: A Case of Licensed Commercial Banks in Colombo District, Sri Lanka

R. D. Priyangika *(rdinesha.priya@gmail.com)*
M. S. S. Perera* *(sumudu@sjp.ac.lk)*
D. P. Rajapakshe *(dilan.r@sjp.ac.lk)*
University of Sri Jayewardenepura, Sri Lanka

Abstract

Internet banking has become one of the most important and modern applications that has witnessed a substantial expansion during the last decade. This study investigates customer attitude towards Internet banking of six Licensed Commercial Banks (LCBs) in the Colombo district selecting 20 customers from each based on convenient sampling technique. Literature review suggests that there are four major factors that determine the attitude towards Internet banking, namely; (i) perceived ease of use, (ii) perceived usefulness, (iii) perceived risk and (iv) subjective norms. The research follows quantitative approach to investigate the impact of customer attitude on Internet banking. A survey has been undertaken by administering a self-structured questionnaire for a sample of 120 customers from the branches of the six largest LCBs in Sri Lanka which are located in the Colombo district. The results indicate that there is a strong positive influence from perceived ease of use and perceived usefulness factors on attitude towards Internet banking, and this reveals that customers search for easiness and usefulness when using Internet banking. In contrast, perceived risk and subjective norms have become unimportant factors in determining attitude towards Internet banking. This study also tests the association between attitude and intention to use Internet banking. The findings suggest an insignificant negative relationship between customer attitude and intention. This indicates that the majority of the customers depend on traditional channels to carry out their banking operations despite positive attitude towards Internet banking.

Keywords: Internet Banking, Customer Attitude, Customer Intention, Licensed Commercial Banks

INTRODUCTION

Today's business world has been dramatically changed since the beginning of the last century, especially in the areas of information technology and communication. These changes have affected many economic sectors, including banking which has been led to new concepts such as e-finance, e-money, and e-banking. Internet technology has an effect on these transformations to destroy old models of how banking services are developed and delivered. By using Internet banking (IB)[1], financial service providers, especially banks attempt to change the mixture of financial services produced and the manner in which they deliver these services.

For any market economy, it is essential to have an efficient and effective commercial banking and financial system for well-functioning, to maintain financial stability and ultimately to encourage economic growth. Therefore, information and technological revolution motivated banks to spend more on technology to maximize return and to attract more customers. Subsequently, banks attempted to keep in touch with technological changes. These changes included computer and communication technology to replace manual and paper operations to electronic operations. In this regard IB plays an important role in recent periods in the banking sector.

IB refers to systems that enable bank customers to get access to their accounts and general information on bank products and services through the use of bank's website, without the intervention or inconvenience of sending letters, faxes, original signatures and telephone confirmations (Thulani et al., 2009). IB offers significant benefits for both banks and customers. It provides banks additional channels to deliver products and services to customers at a lower cost while expanding the customer base and thereby IB has become a strategic resource for achieving higher efficiency. It is also noticed that IB brings additional risks to the banks such as unauthorized access to the systems.

Central Bank of Sri Lanka (2014) has revealed that the computer literacy in Sri Lanka has increased during the period of 2001-2014 along with expanded Internet connections.

[1] The term of Internet banking differ from the term of E-Banking. Internet banking is one of the dimensions of E-banking. E-banking is defined as the automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels. Internet banking is defined as the systems that enable bank customers to get access to their accounts and general information on bank products and services through the use of bank's website, without the intervention or inconvenience of sending letters, faxes, original signatures (Thulani et al. 2009)

Therefore, it is clear that the ability of customers to access Internet has developed which might have an impact on the expansion of IB.

The turnover of the banking, insurance and finance sector was the highest compared to other 19 business sectors in Sri Lanka which was 31.71 per cent of the total turnover of all business sectors. The net profit of the banking sector has increased by 17.9 per cent in 2014 in comparison to 9.8 per cent in 2013. Additionally the net loans and advances portfolio has increased by 13.7 per cent in 2014, whereas the same was of 8.8 per cent in 2013, reflecting increased business activities during the year 2014 (Central Bank of Sri Lanka, 2014).

Sri Lankan banking sector includes both Licensed Commercial Banks (LCBs) and Licensed Specialized Banks (LSBs). The total banking network includes 25 LCBs, and 9 LSBs (Central Bank of Sri Lanka, 2014). LCBs have the highest industry share on both assets, and gross loans and advances which were 84.6 per cent and 89 per cent, respectively in 2014. In contrast, LSBs have assets, and gross loans and advances only 15.4 per cent and 11.2 per cent, respectively in 2014 (Central Bank of Sri Lanka, 2014). This shows that LCBs play an important role in the banking sector of Sri Lanka.

Since there were no special reporting requirements, it was found that gathering complete information on IB activities is a challenging task. Therefore, an attempt has been made to explore the present situation of IB offered by LCBs by accessing their websites. It revealed that all LCBs provide IB facility to their customers which suits to today's competitive market environment.

Research Problem

According to Annual Report of Central Bank of Sri Lanka 2014, the adoption of IB by LCBs has increased during past years (see Figure 1). This can be attributed to the motives to achieve a competitive position and respond to the customer needs at a faster speed and lower cost.

According to Figure 1, it was clear that the number and the value of LCB transactions undertook through IB have dramatically increased over the period from 2005 to 2014. There might be several factors that have caused to this increasing trend in IB usage in LCBs. The existing literature shows attitude towards IB can be one of the major factors that influences the customer behaviour towards the use of IB.

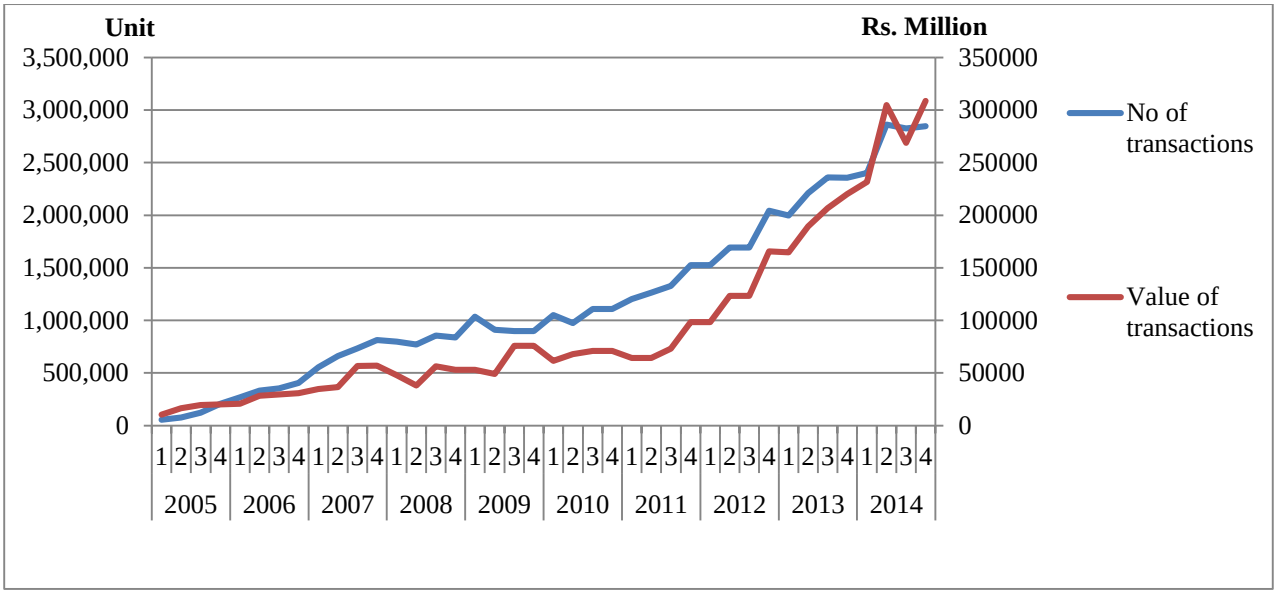

Figure 1: Number of IB Transactions and Value of IB Transactions – Quarterly Data from 2005 to 2014

Source: Compiled by the author using the data from Payment Bulletin (2005-2014)

On contrary, Jayasiri and Weerathunga (2008) has stated that although the majority of Sri Lankan customers was aware of e-banking facilities, most of them have not made much effort on those facilities and pay their attention on traditional ways of doing transactions at bank counters to a large extent.

Suraweera et al. (2011) has stated that although at present IB is changing its position from desktop PC to mobile phone, Sri Lankan customers still resistance to use IB as the majority of them is not technology savvy. The study also reveals that by 2010, only 1% of bank customers use online banking, telephone banking, mobile banking and Internet payment gateway which was not a satisfactory level. This further shows that attitude and intention seem to be critical factors that can influence the customers to use IB. Therefore it is important to undertake a detailed analysis to understand the customer attitude towards and intention to use IB in LCBs in Sri Lanka.

Research Objectives

Statistics have revealed that the usage of IB has increased in LCBs over the period from 2005 to 2014. However, the former studies have indicated a resistive attitude of customers towards IB. In this backdrop, it is important to identify the factors influencing the customers' attitude towards IB and to understand the relationships between those factors and attitude. Therefore, the primary objective of the study is to investigate the factors that influence the attitude towards IB and their relationships.

As a secondary objective the study will investigate to what extent attitude is associated with the intention to use IB. Finally the study will provide policy recommendations to the decision makers in LCBs to promote IB in Sri Lanka. Consequently, the findings will be useful for professionals and all the stakeholders in LCBs, especially for developers of such information systems, to enhance the IB facility to motivate customers to increase the usage of IB.

LITERATURE REVIEW

The purpose of the literature review is to identify the factors that determine the customer attitude and intention to use IB. There exist a number of theories and models that explain the determinants of customer attitude. Attitude is one of the fundamental factors influencing consumers buying behaviour and, therefore can attract considerable attention from researchers probing the behaviour of bank customers and their relationship with the banks. According to Venkatesh and Davis (2000) attitude towards IB has defined as an individual's overall affective reaction to use the internet for his/her banking activities.

Theoretical background section is devoted to understand how theoretical models explain the factors that determine customer attitude. This section explores two main theories that can be used to understand the attitude and intention to use IB. Later, empirical review section undertakes an investigation of the factors that determine customer attitude and intention to use IB. Finally the conceptual framework will be presented.

Theoretical Background

Theory of Reasoned Action (TRA): Bogozzi (2001) has argued that the most basic attitude theory, which has been widely considered to have a significant theoretical and practical approach was the Theory of Reasoned Action (TRA) (proposed by Ajzen & Fishbein (1977)). This theory has been built on three guidelines; Behavioural Intention (BI), Attitude (A) and Subjective Norms (SN). This theory recommends that a person's behavioural intention (this is not defined) is subjective by the person's attitude (i.e., the person's valuation of a positive or negative result from implementation of the behaviour) and subjective norms (such as the perceived social coercion to perform or not to perform the behaviour) [BI = A + SN].

Technology Acceptance Model (TAM): Davis et al. (1989) established the TAM and it forecasts the acceptability of an innovation and identifies the adjustments if necessary which are needed to be done to make the product acceptable to the prospective users.

TAM identifies the perceived usefulness and the perceived ease of use of a technology as determining user behaviour (Davis et al., 1989).TAM uses the TRA as a theoretical basis for specifying the causal linkages between two key factors; perceived usefulness and perceived ease of use (Davis et al., 1989). TAM is one of the most utilized models in studying IB acceptance (Al-Gahtani, 2001; Venkatesh & Davis, 2000; Davis et al., 1989).

Notwithstanding its wide spread favouritism, TAM had faced some criticism by other researchers. One of the criticisms levied against was its inability in applying to a larger spectrum of users (Al-Sukkar & Hasan, 2005). It overlooks the factors that were seen as external and situational especially at a given condition.

Empirical Review

Ajzen and Fishbein (1977) have defined attitude as an individual's positive and negative feelings (evaluative affect) about performing the target behaviour. The Attitude Theory suggests that the more favourable attitude a person has towards a given product or service, the more likely that the person is to buy or use the product or service (Ajzen & Fishbein, 1977). Attitudes are said to develop over time through a learning process affected by reference group influences, past experience and personality (Assael, 1981). Several former studies have used TRA and TAM models to understand the factors that determine customer attitude and intention to use IB.

TAM explains the impact of *Perceived Ease of Use* (PEU) on attitude. Davis et al. (1989) and Mathieson (1991) have defined PEU as the effortlessness in using the product. Venkatesh and Davis (2000) have stated that PEU as a construct tied to an individual's assessment of an effort involved in the process of using the system. Al-Sukkar and Hasan (2005), Kolodinsky et al. (2004), Ravi et al. (2007) and Vatanasombut et al. (2008) have supported the effect of PEU on the adoption of, and intention to continue retail banking services. The study of Al-Somali et al. (2009) has found that PEU has a positive effect on PU.

According to TAM *Perceived Usefulness* (PU) is one of the major factors that affect on attitude towards IB. According to Davis et al. (1989) and Mathieson (1991) TAM views PU as a level by which a person relies on the possibility of the use of a system that will add to his or her activity. Many empirical studies have identified the significant impact of PU on customers' attitude towards IB (Chen & Barnes, 2007; Gao et al., 2012; Venkatesh et al., 2002). When customers observe obvious benefits presented by IB, they tend more to have a

positive attitude towards IB. If a customer believes that a certain application will help him to perform the work better, there will a motivation to adopt IB (Davis et al., 1989). Venkatesh and Davis (2000) have recognized the same strong influence of PU over the customer's usage of an application.

Researchers have identified *Perceived Risk* (PR) as a variable that exerts influence on adoption of IB which was not addressed in TRA or TAM models. The use of IB involves many types of risks. These include financial risk, performance risk, physical risk, social risk, psychological risk, and time risk (Gan et al., 2006). Bauer (1960) has defined risk in terms of uncertainty and consequences associated with consumer's actions. PR increases with uncertainty and/or the magnitude of associated negative consequences (Hsi-Peng et al., 2005). Recent studies such as Bhatnagar et al. (2000), Featherman and Pavlou (2003), Jarvenpaa et al. (1999), Kolsaker et al. (2004), Liao and Cheung (2001), Park et al. (2004), Pavlou (2003) and Ruyter et al. (2001) have deemed consumer risk perceptions to be a primary obstacle to the future growth of online commerce and e-services. The study of Chan and Te Lu (2004) has identified that the degrees of risk that consumers perceived and their own tolerance of risk taking are factors that influence their purchase strategies. It should be stressed that consumers are influenced by risks that they perceive.

In TRA, *Subjective Norms* (SN) have been explained as a factor that determines the attitude. Lee (2009) has noted that customers' behaviour can be influenced by various social entities including friends, family, neighbours, colleagues, superiors, etc. According to Ravi et al. (2007) SN describes the social influences that may affect a person's intention to use IB services. It denotes customers' belief about how the people whom they esteem in their personal frame of reference will perceive their acceptance of IB. Davis et al. (1989) has emphasized the significance of SN in user acceptance of information technology when they examine that people in certain circumstances use technology to comply with others' mandates or expectations contrary to their own feelings and beliefs. Moreover, customers may have a positive or negative attitude towards IB because of the perception of friends, family members, peers or superiors. Therefore, it is noted that social pressure to conduct IB will have a positive significant impact on customer's attitude towards IB.

Conceptual Framework

Figure 2 shows the conceptual framework developed for the study. Variables for analysing the customer attitude towards IB were identified base on TAM model, TRA model and

previous studies and they were Perceived Ease of Use, Perceived Usefulness, Perceived Risk and Subjective Norms. The influence of those factors on customer attitude towards IB will be studied firstly and secondly the association between attitude and intention towards IB will be the focus.

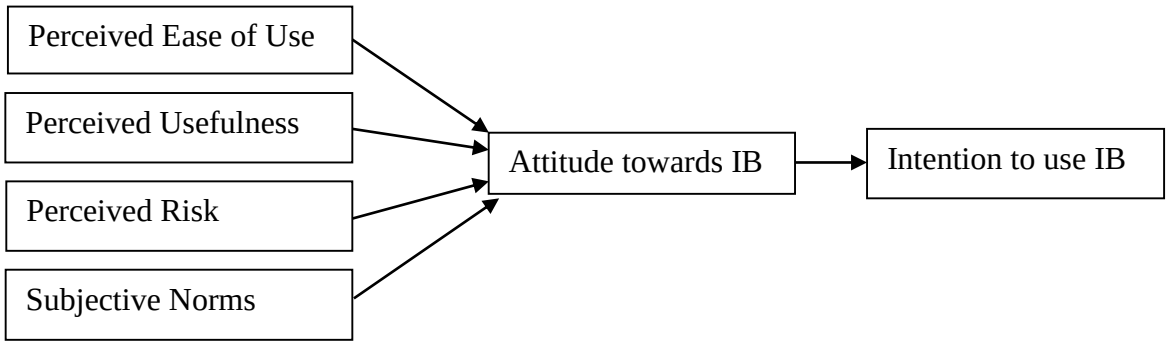

Figure 2: Conceptual Framework

Source: Compiled by Authors based on TRA, TAM and Literature

METHODOLOGY

This methodology section will illustrate the research design, means of sample selection, method of data collection and techniques used in analysis.

Research Design

The research approach was quantitative and was aimed to get an in-depth understanding of how the identified four factors influence on attitudes towards IB. Additionally, the first secondary objective i.e., to study how attitude is associated with intention to use IB, also was addressed using a quantitative approach.

Population and Sample Selection

LCB customers in Colombo district is considered as the population. In selecting customers to the sample, all LCBs were ranked in ascending order based on the turnover for the year ending on 31st March 2014. Only 6 LCBs were selected which earned nearly 75% per cent of the total turnover of LCBs in Sri Lanka (see Table 1).

Table 1: LCBs considered in the Study

Sample	Turnover (Rs. Millions)
Bank of Ceylon	13,574
Commercial Bank of Ceylon PLC	11,180
Hatton National Bank PLC	9,005
People's Bank	14,219

Sampath Bank	4,914
Seylan Bank	3,078
Total	**55,970**
Total Market Turnover	**75,175**
Market Share %	**75**

Source: Compiled by the author using the data from annual reports of LCBs

For the survey, one branch from each LCB was selected based on convenient sampling method. From each bank 20 customers were interviewed on the basis of convenient sampling totalling 120 respondents. There were only 42 per cent of IB users and the majority i.e., 58 per cent of respondents had not still adapted IB.

Data Collection Method

A structured questionnaire was used to collect data. The first section of the questionnaire was to collect basic information such as age, sex, experience, professional status, marital status and position while the second section contained questions regarding the ability of accessing internet. The third section attempted to collect information which is related to customer attitude towards IB under the four factors of PEU, PU, PR and SN.

Variables

The factors; PEU, PU, PR and SN have been considered as independent variables and customer attitude towards IB has been considered as the dependent variable for factor analysis done to address the primary objective.

Behavioral intention was incorporated to study the association between intention and attitude under the first secondary objective.

Data Analysing Procedure

The Cronbach's coefficient alpha was used to test the reliability of the variables. Then, data was analysed using the Microsoft Excel software employing factor analysis technique.

ANALYSIS AND RESULTS

Reliability Test

Reliability of the instruments was ascertained using the Cronbach's coefficient alpha (Cronbach, 1946) to test for the internal consistency of the scales used to measure the variables. Alpha coefficient of above 0.5 for individual test variables was accepted (Nunnally, 1978). The analysis of the consumer attitudes towards IB consisted of 25 items and Cronbach's alphas for the IB items were 0.787 which is an acceptable level (see Table 2).

Table 2: Reliability Test

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.787	0.806	25

Source: Compiled by Author using Survey Data

Analysis of the Customer Attitude towards Internet Banking

As the primary objective, the study examines the relationship between the four factors and customer attitude towards IB. To build a relationship between independent and dependent variables, the study has conducted a factor analysis. Before conducting the factor analysis, the suitability for the factor analysis was checked. Kaiser-Mayer-Olkin measure of sample adequacy (KMO value) was 0.659 which exceeded the minimum value of 0.6. Therefore, sample adequacy was at a satisfactory level. Bartlett's test which is significant at 5 per cent significant level (0.000 < 0.05) reveals the suitability of sample for the application of factor analysis.

Table 3: Kaiser-Meyer-Olkin and Bartlett's Tests

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.659
Bartlett's Test of Sphericity	Approx. Chi-Square	145.774
	Df	10
	Sig.	.000

Source Compiled by Author using Survey Data

According to the correlation matrix (see Table 4) there were 0.203, 0.396, 0.216 and 0.729 correlations between PEU, PU, PR and SN, respectively with customer attitude towards IB (A).

Table 4: Correlation Matrix

		PEU	PU	PR	SN	A
Correlation	PEU	1.000	.269	-.080	.361	.203
	PE	.269	1.000	.116	.465	.396
	PR	-.080	.116	1.000	.218	.216
	SN	.361	.465	.218	1.000	.729
	A	.203	.396	.216	.729	1.000

Source: Compiled by Author using Survey Data

Table 5: Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.317	46.346	46.346	2.317	46.346	46.346
2	1.091	21.818	68.164	1.091	21.818	68.164
3	.695	13.903	82.067			
4	.648	12.962	95.029			
5	.249	4.971	100.000			
Extraction Method: Principal Component Analysis						

Source: Compiled by Author using Survey Data

Moreover, the factor analysis using the extraction method of principal component analysis with Varimax rotation identified two factors with the eigen value which is higher than 1.0 and the cumulative total variance explained 68.16%. According to the initial eigen values, the association between PEU, PU and customer attitudes towards IB have strong associations than the other two factors; PR and SN (see Table 5).

Test of Association between Customer Attitude towards IB and Intention to use IB

Table 6: Correlation between Attitude and Intention to use IB

		A	BI
A	Pearson Correlation	1	-.085
	Sig. (2-tailed)		.385
	N	120	107
BI	Pearson Correlation	-.085	1
	Sig. (2-tailed)	.385	
	N	107	107

Source: Compiled by Author using Survey Data

As Table 6 shows that there is a negative relationship between customer attitude towards IB and intention to use IB. However, that relationship has been found to be insignificant. However, Al-Somali et al. (2009), Lee (2009), Karjaluoto et al. (2002), Pikkarainen et al. (2004) and Al-Sukkar (2005) have emphasised the central role of attitude in determining behavioural intention towards electronic banking services.

CONCLUSION AND RECOMMENDATIONS

The study mainly focuses on the analysis of customer attitude towards IB under four factors; PEU, PU, PR and SN. Attitude towards IB has strong positive relationships with PEU and PU while PR and the SN have weak positive relationships. Therefore, it can be concluded that LCB customers of Colombo district mainly search for easiness and usefulness when adopting IB.

The findings revealed that, PEU has been an important factor that influence on attitude towards IB. Findings of Kasheir and Alexandria (2009) also have revealed the same significant influence of PEU. Therefore, easiness of IB should be improved through user friendly and efficient bank websites.

The findings with regard to PU show a strong positive relationship with attitude towards IB. Many empirical studies have provided the same significant positive effect of PU (Chen and Barnes, 2007; Gao et al., 2012; Venkatesh et al., 2002). Hence, bank officers should monitor

and evaluate the usage of the implemented IB system. This can be done by identifying the number of customers using the IB and how often it is used. Information Technology Managers of banks need to obtain feedback on the technological aspects of IB and initiate steps to educate customers on the use this technology.

The results also indicate that PR is not a significant factor in determining customers' attitude towards IB. In contrast, the effect of PR on attitude was found significant by Eriksson et al. (2008), Jaruwachirathanakul and Fink (2005), Kolodinsky et al. (2004) and Vatanasombut et al. (2008). In order to enhance consumers' attitude, trust building among the customers would be a major concern for LCBs. In order to enhance trust in IB, trust-creating activities must be continuously pursued. LCBs should ensure security and privacy. LCBs should enhance the security features as customers expect that the information provided during the banking transactions is secure, and third parties will not have access to it.

Additionally, the study reveals a weak positive relationship between SN and attitude towards IB. The same relationship has been identified in several studies (Shih and Fang (2006); Wan et al. (2005). However, Ravi et al. (2007) has found a strong positive relationship. The influence from social groups can be concluded as insignificant on customers' attitude towards IB. Hence, the promotional programmes of IB should target individual customers rather than social groups.

In contrast, the negative and insignificant relationship between attitude and intention indicates that most of the customers are reluctant to use IB facility which is consistent with the existing literature (Suraweera et al., 2011). It is worth noted that, although LCBs have invested in IB facility, if customers do not have an intention to use IB, LCBs would not achieve expected returns.

REFERENCES

Ajzen, I. and Fishbein, M. (1977), "Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research", *Psychological Bulletin*, Vol. 84 No. 5, pp. 888.

Al-Gahtani, S. (2001), "The Applicability of TAM Outside North America: An Empirical Test in the United Kingdom", *Information Resources Management Journal*, Vol. 14, No. 3, pp. 37.

Al-Somali, S., Gholami, A.R. and Clegg, B. (2009), "An Investigation into the Acceptance of Online Banking in Saudi Arabia", *Technovation*, Vol. 29, pp.130–141.

Al-Sukkar, A.S. (2005), "The Application of Information Systems in the Jordanian Banking Sector: a Study of the Acceptance of the Internet", Published Doctoral Thesis, University of Wollongong, Wollongong.

Al-Sukkar, A.S. and Hasan, H. (2005), "Toward a Model of Acceptance of Internet Banking in Developing Countries", *Information Technology for Development*, Vol. 11, No. 4, pp. 381–398.

Assel, H. (1981), "Consumer Behavior and Executive Action", Boston: Kent.

Bhatnagar, A., Misra, S. and Rao, H. R. (2000), "Online Risk, Convenience, and Internet Shopping Behavior", *Communications of the ACM*, Vol. 43, No. 11, pp. 98-105.

Bogozzi, R.P. (2001), "Self-regulation of Attitudes, Intention and Behaviour", *Social Psychology Quarterly*, Vol. 55, No. 2, pp. 172–204.

Central Bank of Sri Lanka (2014), *Annual Report 2014*, Central Bank of Sri Lanka, Colombo.

Chan, S. and Ming-te L. (2004), "Understanding Internet Banking Adoption and Use Behavior: A Hong Kong Perspective", *Journal of Global Information Management*, Vol. 12, No. 3, pp. 21-43.

Chen, Y.H. and Barnes, S. (2007), "Initial Trust and Online Buyer Behaviour", *Industrial Management* & *Data Systems*, Vol. 107, No. 1, pp. 21–36.

Cronbach, L. J. (1946), "A Case Study of the Split-half Reliability Coefficient", *The Journal of Educational Psychology*, Vol. 37, pp. 473−480.

Davis, F.D., Bagozzi, R.P. and Warshaw, P.R. (1989), "User Acceptance of Computer Technology: A Comparison of Two Theoretical Models", *Management Science*, Vol. 35, No. 8, pp. 982-1003.

Eriksson, K., Kerem, K., and Nilsson, D. (2008), "The Adoption of Commercial Innovations in The Former Central and Eastern European Markets: The Case of Internet Banking", *The International Journal of Bank Marketing*, Vol. 26, No. 3, pp. 154- 169.

Featherman, M. S. and Pavlou, P. A. (2003), "Predicting E-services Adoption: A Perceived Risk Facets Perspective", *International Journal of Human–Computer Studies*, Vol. 59, pp. 451-474.

Gan, C., David, C., Mike, C. and Esther, C. (2006), "A Survey of Customer Retention in the New Zealand Banking Industry", *Banks and Bank System* , Vol. 1, No. 4, pp. 83-99.

Gao, T., Rohm, A.J., Sultan, F. and Huang, S. (2012), "Antecedents of Consumer Attitudes toward Mobile Marketing: a Comparative Study of Youth Markets in the United States and China", *Thunderbird International Business Review*, Vol. 54, pp. 211–224.

Jaruwachirathanakul, B. and Fink, D. (2005), "Internet Banking Adoption Strategies for a Developing Country: The Case of Thailand", *Internet Research* , Vol. 15, No. 3, pp. 295- 311.

Jarvenpaa, S. L., Tractinsky, N. and Vitale, M. (1999), "Consumer Trust in an Internet Store", *Information Technology and Management*, Vol. 1, No. 12, pp. 45-71.

Karjaluoto, H., Mattila, M. and Pento, T. (2002), "Electronic Banking in Finland: Consumer Beliefs and Reactions to a New Delivery Channel", *Journal of Financial Services Marketing*, Vol. 6, No. 4, pp. 346–361.

Kasheir, D.E. and Alexandria, C. (2009), "Factors Affecting Continued Usage of Internet Banking Among Egyptian Customers", *Communication of IBIMA*, Vol. 9, 252–263.

Kolodinsky, J. M., Hogarth, J. M., and Hilgert, M. (2004), "The Adoption of Electronic Banking Technologies by US Consumers", *The International Journal of Bank Marketing*, Vol. 22, No. 4, pp. 238- 259.

Kolsaker, A., Lee-Kelley, L. and Choy, P. C. (2004), "The Reluctant Hong Kong Consumer: Purchasing Travel Online", *International Journal of Consumer Studies*, Vol. 28, No. 3, pp. 295-304.

Liao, Z. and Cheung, M. T. (2001), "Internet-Based E-Shopping and Consumer Attitudes an Empirical Study", *Information & Management*, Vol. 38, No. 5, pp. 299-306.

Mathieson, K. (1991), "Predicting User Intentions; Comparing the Technology Acceptance Model with the Theory of Planned Behavior', *Information Systems Research* , Vol. 2, No. 3, pp. 173-191.

Nunnally, J. C. (1978), *Psychometric Theory*, (2 ed.), McGraw-Hill, New York.

Park, J., Lee, D. and Ahn, J. (2004), "Risk-Focused E-Commerce Adoption Model: a Cross-Country Study", *Journal of Global Information Management*, Vol. 7, pp. 6-30.

Pavlou, P.A. (2003), "Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk with the Technology Acceptance Model", *International Journal of Electronic Commerce*, Vol. 7, No. 3, pp. 69-103.

Pikkarainen, T., Pikkarainen, K., Karjaluoto, H., and Pahnila, S. (2004), "Consumer Acceptance of Online Banking: An Extension of the Technology Acceptance Model", *Internet Research*, Vol. 14, No. 3, pp. 224–235.

Ravi, V., Carr, M. and Sagar, N. V. (2007), "Profiling of Internet Banking Users in India Using Intelligent Techniques", *Journal of Services Research*, Vol. 7, No. 1, pp. 61-73.

Ruyter, K., Wetzels, M. and Kleijnen, M. (2001), "Customer Adoption of E-Service: An Experimental Study", *International Journal of Service Industry Management*, No. 12, No. 2, pp. 184-208.

Shih, Y. and Fang, K. (2006), "Effects of Network Quality Attributes on Consumer Adoption Intentions of Internet Banking", *Total Quality Management and Business Excellence*, Vol. 17, No. 1, pp. 61-77.

Suraweera, T., Kahingala, S., Batepola, A., Punchihewa, M.G., Senevirathne, K. and Kahandawaarachchi, C. (2011), "IT Driven Banking Services in Sri Lanka: Customer Acceptance and Service Quality", http://www.kln.ac.lk/uokr/ICBI2011/ICT%20203.pdf.

Thulani, D., Tofara, C. and Langton, R. (2009), "Adoption and Use of Internet Banking in Zimbabwe: An Exploratory Study", *Journal of Internet Banking and Commerce* , Vol. 14. No. 1, pp. 1.

Vatanasombut, B., Lgbaria, M., Stylianou, A., and Rodgers, W. (2008), "Information System Continuance Intention of Web-based Applications Customers: The Case of Online Banking", *Information and Management*, Vol. 45, No. 7, pp. 419- 428.

Venkatesh, V. and Davis, F. D. (2000), "Theoretical Extension of the Technoloty Acceptance Model: Four Longitudinal Field Studies", *Management Science*, Vol. 46, No. 2, pp. 186-204.

Venkatesh, V., Speier, C. & Morris, M.G. (2002), "User Acceptance enablers in Individual Decision Making about Technology: toward an Integrated Model", *Decision Sciences*, Vol. 33, pp. 297–316.

Wan, W. W., Luk, C. and Chow, C. W. (2005), "Customers' Adoption of Banking Channels in Hong Kong", *International Journal of Bank Marketing*, Vol. 23, No. 3, pp. 255- 272.

Appendices

Cronbachs' alpha- Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q_3.1	61.18	76.610	.823	.	.752
Q_3.2	61.02	77.307	.657	.	.759
Q_3.3	60.42	103.071	-.676	.	.826
Q_3.4	60.98	75.307	.846	.	.749
Q_3.5	60.40	105.528	-.716	.	.833
Q_3.6	60.50	75.128	.701	.	.754
Q_3.7	60.80	77.703	.747	.	.756
Q_3.8	60.85	78.182	.770	.	.757
Q_3.9	60.78	77.563	.808	.	.755
Q_3.10	60.80	76.472	.883	.	.750
Q_3.11	60.18	106.353	-.634	.	.840
Q_3.12	60.65	85.105	.289	.	.782
Q_3.13	61.15	82.285	.685	.	.767
Q_3.14	60.95	99.690	-.613	.	.815
Q_3.15	61.12	79.958	.744	.	.761
Q_3.16	60.68	103.815	-.660	.	.829
Q_3.17	61.00	77.231	.754	.	.755
Q_3.18	61.30	81.651	.892	.	.763
Q_3.19	60.85	93.926	-.237	.	.800
Q_3.20	60.32	102.020	-.650	.	.823
Q_3.21	61.10	82.144	.758	.	.765
Q_3.22	60.48	77.435	.759	.	.756
Q_3.23	60.42	77.225	.789	.	.754
Q_3.24	61.32	76.071	.828	.	.751
Q_3.25	60.75	75.577	.834	.	.750