



EXPANSION OF INTERNET BANKING - OVERCOMING THE BARRIERS

Kasun Wijyaratne
Assistant Relationship Manager
DFCC Bank PLC

1. Introduction

The world is changing very fast. The big will not beat the small anymore. It will be the fast beating the slow; says Rupert Murdoch. In that sense, being slow and being closed for innovation is asking for death in the contemporary business context.

To be honest, the world has already understood the importance of innovation. Every organization, entrepreneur and professional tries to grasp the market edge by introducing a new concept or a new technology which will soon be followed by the rest of the market.

Does innovation always yield an organization or an industry the expected results? If an innovation is to generate positive outcomes for an organization, it needs to be accepted by the market. If not, it would create negative outcomes for the entity rather than the expected competitive edge.

Thus, it is essential to ensure that any innovation is accepted by the stakeholder parties in view of future gains from such innovation.

Internet banking is one such promising innovation in the contemporary banking industry and this article would focus on overcoming the barriers that stand in the way of embedding internet banking in the day to day lives of banking customers in Sri Lanka.

2. Background

“Today Internet is not only a networking medium in the world, but it also functions as a transaction medium for consumers at a global market, and has become a dominant retailer in the future. Internet use has grown and spread during the last decade and become a common way for delivering and trading goods, services and information” (Abbas Nathier Albarq, 2006).

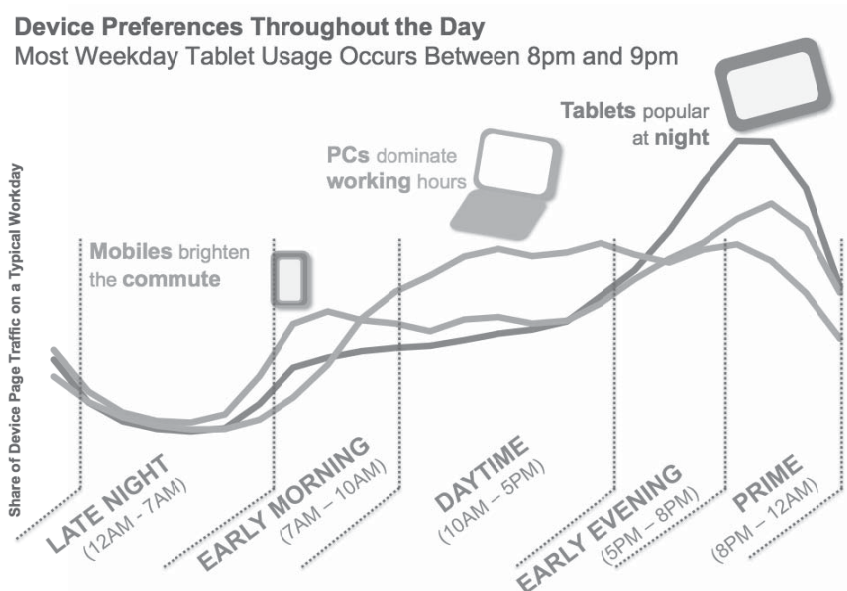


Figure 1: Device Preferences Throughout the Day
Source: European Journal of Marketing (2014)

With the increased competition in the banking industry, banks tend to introduce internet banking services to their customers as a tool of retaining the current web-based customers who continue using banking services from any location and also to attract a new customer base from the existing Internet users. It is widely agreed that internet banking provides banks with a competitive advantage by improving the quality of customer service and reducing the operational costs (Jourdan and Katz, 1999; Furst et al., 2000a cited by Jenkins, 2014).

“Internet banking” refers to systems that enable bank customers to access accounts and general information on bank products and services through a personal computer (PC) or other electronic, internet-enabled devices such as mobile phones. In other words, it allows customers to have direct access to their financial transactions without going to the bank. As such internet banking offers convenience, speed and instant access to their financial information for the banking customers. A number of banks in Sri Lanka are now offering this service to their customers. However, although both customers and banks benefit from internet banking, adoption of internet banking is low in Sri Lanka and thus banks are unable to gain the real advantage of launching this service.



3. An overview of today's banking

3.1 Present day banking services

Today, banking around the clock is no longer a dream but an expectation, and banks do not have to keep their branches open 24 hours a day to provide this service (Peterson, 2009). Today, banks and customers are moving towards virtual banking environments. Therefore, one does not have to go to the local branch to request a financial statement. The customer can easily view up-to-the-minute updated figures of his online bank account from the comfort of his or her own home.

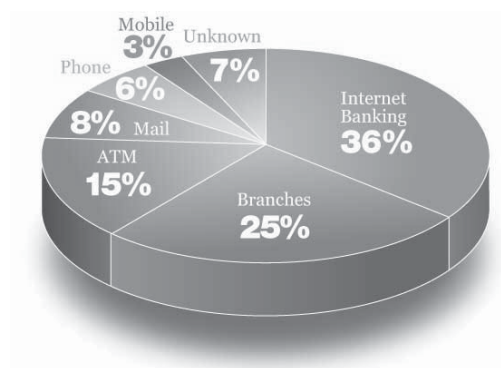


Figure 2: Client's Preferences on Banking Channels
Source: Survey Data

With this new trend, thousands of customers can be dealt with at once. There is no need to have many clerks and cashiers. The administrative work gets reduced drastically with internet banking. Even expenditure on paper slips, forms and bank stationery is reduced. All of this helps raise the profit margin of the bank by a surprisingly large number.

3.2 Different banking channels for customers

Today, the business interactions between the bank and the customer takes place through different channels. Customers often simultaneously use multiple banking channels. According to Hadden & Whalley (2002), finding ways to connect with customers and providing financial services to them through the right channels at the right time and in the right way is the challenge faced by today's banks. As Hiltunen et al. (2002) stated the interaction between the bank and customer can be described as a continuum (Arunachalam and Sivasubramanian, 2007:02).

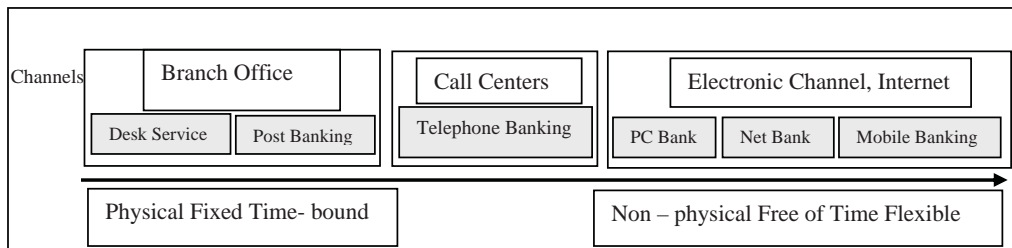


Figure 2: Different Banking Channels
 Source: Theoretical Framework to Measure the User Satisfaction in Internet Banking by Hiltunen, et al, (2002) cited by Arunachalam and M.Sivasubramanian, 2007:3.

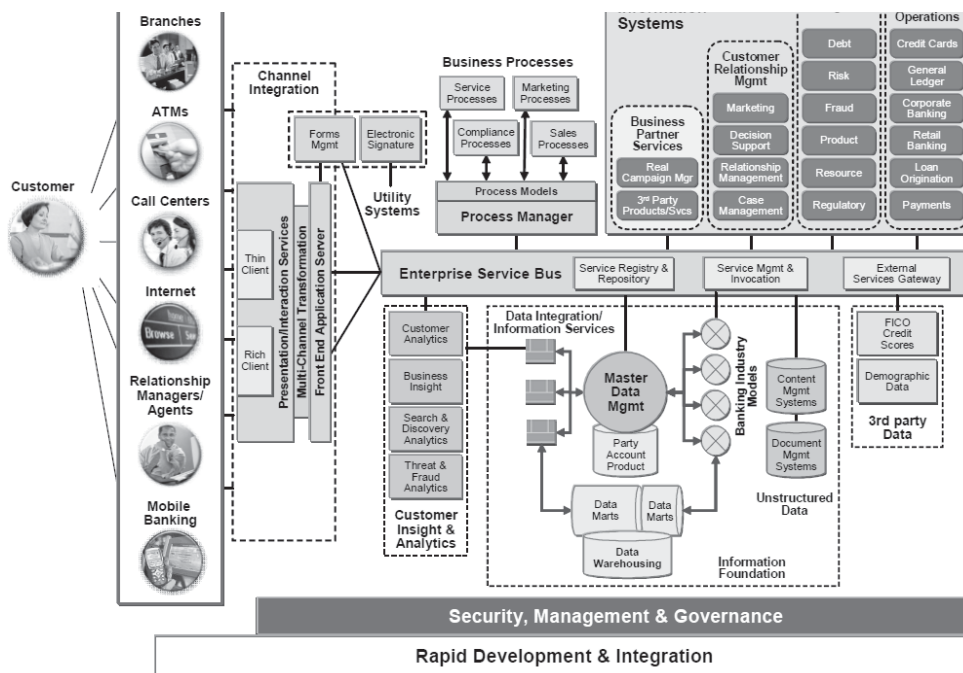


Figure 3: Contemporary Operational Cycle of Banking
 Source: Journal of Internet Banking and Commerce (2015)



4. Barriers of Internet Banking

A review conducted by the author, referring secondary data, suggested that the low adoption of Internet Banking could be caused by various factors. Those are listed below.

i. Lack of awareness - Previous studies (Gerrard et.al. 2006; Sathye, 1999) have found that the lack of awareness of the internet banking services and their benefits is a major factor discouraging customers from using internet banking. According to Gerrard et.al. (2006:166), consumers' lack of knowledge about internet banking can be looked at from three aspects: (1) not knowing how to become an internet banking customer; (2) not knowing what services are offered; and (3) perceiving that they do not have the level of "technical skills" that are required. In this article, lack of awareness refers to not knowing the internet banking service and its benefits.

ii. Usage barrier - Usage barrier is mostly related to the usability, including complexity and perceived ease-of-use of an innovation. Complexity is defined as the degree to which a system is perceived as relatively difficult to understand and use (Thompson et al. 1991 cited by Venkatesh et.al., 2003:451) and perceived ease of use refers to the degree to which a person believes that using a system would be free of effort (Davis 1989; Davis et. al, 1989 cited by Venkatesh et.al., 2003:451). Previous studies (Ndubisi and Sinti, 2006; Ram & Sheth 1989; Sathye 1999; Laukkanen et al., 2008; Venkatesh et.al., 2003) on technology adoption suggest that complexity and perceived ease-of-use of the service in general inhibits the adoption of internet banking. Therefore usage barrier inhibits the internet banking adoption.

iii. Value barrier - According to Ram and Sheth (1989), the value barrier refers to the lack of monetary and performance value of an innovation. The lack of relative advantage and perceived usefulness may paralyse non-adopters' desire to adopt internet banking. Indeed, consumers use internet banking for the benefits it provides relative to other banking delivery channels (Pikkarainen et al., 2004). According to Davis 1989; Davis et al, (1989) cited by Venkatesh et.al., (2003), perceived usefulness is the degree to which a person believes that using a particular system would enhance his or her job performance whereas relative advantage is the degree to which using an innovation is perceived as being better than using its precursor (Moore and Benbasat, 1991 cited by (Venkatesh et.al., 2003). Performance value can be related to relative advantage and perceived usefulness. However, both these variables carry more or less the same definition. Therefore, in the model stated in this article, the value barrier refers to the lack of perceived usefulness and monetary value.

iv. Risk barrier - The risk barrier refers to the degree of risks an innovation entails. Here the author concentrate on the level of confidence that the consumer has towards online banking. According to Sathye (1999:326), the level of risk in the context of internet banking refers to the security and the reliability of transactions over the internet. Gerrard et al. (2006) state that some consumers are concerned about connection breaks and their potential to cause major risks in their banking actions. As Laukkanen et al (2008:444) extracted from Poon (2008), report



that some bank customers fear that hackers may gain access to their bank account via PIN numbers and unsecured Internet lines. Reliability is also noted as an important risk-related factor in Internet Banking referring to the degree to which a person believes a new technology will perform a job consistently and accurately (Lee et al., 2003; cited by Laukkanen et al, 2008:444). Further, Gerrard et al. (2006) identified that privacy and the concern that Internet -delivered instructions might not be acted upon were among the reasons mentioned by respondents. As such, the level of security, privacy and the reliability of the service are considered as the risk related factors in the context of internet banking in this article. According to the previous studies reviewed, (Gerrard et al. 2006; Laukkanen et al, 2008; Rotchanakitumnuai, S., and Speece, M., 2003; Sathye 1999) there is a direct relationship between risk perceptions and adoption of internet banking.

v. Tradition barrier - The tradition barrier involves the changes an innovation may cause in daily routines of the customer. Ram and Sheth (1989) state that when the deviation is greater, the resistance is also greater. Additionally, behaviour that is contrary to consumer's societal and family values and social norms add to the barrier. The studies (Gerrard et al., 2006; Mattila et al., 2003) done in the past state that the lack of human interaction in internet banking is a main cause for customer dissatisfaction in the service. Therefore, in this article, tradition barrier is defined as the resistance to change in traditional banking behaviour that online services will bring about. The earlier literature (Gerrard et al., 2006; Laukkanen et al, 2008; Mattila et al., 2003; Ram and Sheth 1989) has identified tradition barrier also to be an important inhibitor to the adoption of internet banking.

vi. Image barrier - In electronic banking the image barrier may arise from the negative "hard-to-use" image of computers in general and the internet in particular (Fain and Roberts, 1997 cited by Laukkanen et. al., 2008:422). Kuisma et al. (2007) cited by Laukkanen et. al. (2008:445), note that some non-users may have a markedly negative image regarding new technology and be opposed to the trend of moving services onto the internet. These findings suggest that when consumers have negative perceptions about the internet banking services, they will resist using it.

Based on the above, the model below can be developed to demonstrate the barriers of Internet Banking.

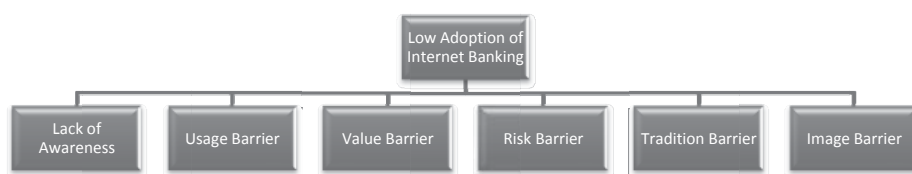


Figure 4: Barriers to Adoption of Internet Banking
Source: Author



5. Factors affecting the low adoption of internet banking

As described above, this article tries to analyse the factors affecting the low adoption of internet banking in Sri Lanka. The article identifies six barriers to internet banking adoption based on the theory of resistance to innovations and past literature on the adoption of internet banking. Those barriers are lack of awareness, usage barrier, value barrier, risk barrier, tradition barrier and image barrier.

Both quantitative and qualitative techniques were used in order to validate the above mentioned parameters and to relate those to the Sri Lankan context. As such, a survey methodology was carried out by the author followed by few interviews with corporate management personnel of several banks.

The results indicate a significant difference between adopters and non-adopters of internet banking in terms of the barriers to internet banking adoption. The results of the correlation analysis performed together with scatter diagrams, support all six hypotheses formulated. However, the results of the correlation analysis conducted on the six independent variables indicate that a greater variability in adoption of internet banking can be explained by usage and value barrier.

5.1 Lack of awareness of internet banking service

According to results derived from the correlation analysis, there is a significant correlation between lack of awareness and adoption of internet banking. In other words, it indicates that as lack of awareness increases, the adoption of internet banking drops consistently. This finding is in line with the other studies (Eg. Gerrard et al (2006); Sathye, 1999) conducted on internet banking adoption.

As shown in Table 13, at present many banks facilitate almost all day-to-day bank transactions through the internet banking service. However, the closer examination of data indicates that non-adopters of internet banking are not fully aware about the internet banking service and its benefits. As revealed at the interviews, banks have already taken steps to improve the awareness of internet banking and its benefits and they are satisfied with the awareness level of internet banking among their customers. However, according to the interviews held with bankers, only a few banks actively engage in improving the awareness level of internet banking among their customers. The majority carry out some basic activities such as educating the customers about internet banking when they open a new account with the bank, distribute brochures and keep brochures at the bank counters, send messages with bank statements, letters etc. and train frontline staff to educate customers about the service. This fact is further supported by the data gathered through in-depth interviews held with senior bank personnel. At the interviews many bankers mentioned that they have not started to actively promote the internet banking service yet. One interviewee said that “we have some internal issues. Once we sort out those we will actively promote this service to customers.” and another interviewee



of a different bank said that “awareness level of the customers is to be improved by the User department. The difficulty is meeting our customers. They can use mobile banking units to reach customers, but this is not practical. To certain level we are doing marketing campaign. But it is not to the level it should be.” These statements made by senior personnel of banks support the fact that many banks haven’t taken any significant measures yet other than the traditional ways of improving awareness levels of internet banking among the customers. As customers are educated about the service at bank branches and via brochures and letters, the management strongly believes that the majority is well aware about the service and its benefits. But to what extent are customers aware about the service and its benefits is a question as no bank has set any measure to gauge the effectiveness of these traditional promotional activities. The analysis of survey data indicates a mean value of 2.97 from five point Likert scale for awareness level of non-adopters of internet banking. This reflects that awareness levels of internet banking service among non-adopters is at a moderate level. However, the Independent Samples T-test performed to measure the significance of mean value difference of awareness indicates that there is a significant difference between adopters and non-adopters in terms of their level of awareness of the service. Further, survey data reflects those who are aware but, are not using the service. This may be because they are not very clear of its benefits. This reveals that awareness levels of non-adopters of internet banking are yet to be improved to make them use the service.

5.2 Usage barrier to internet banking adoption

Usage barrier is mostly related to the usability, including complexity and perceived ease-of-use of an innovation. Usage barrier to internet banking adoption was measured on a five point Likert scale. Correlation analysis performed on the survey data indicates that there is a significant correlation between usage barrier and the adoption of internet banking. In other words, it says that as usage barrier increases, the adoption of internet banking drops consistently. Further, the results of the correlation analysis indicate that a 13 percent variation in adoption of internet banking can be explained by usage barrier. With this statistical information, it is apparent that usage barrier has a greater influence on the adoption of internet banking compared to the other barriers. This supports the findings of the previous studies of Laukkanen et al, (2008) and Liao and Cheung, (2002) on the adoption of internet banking.

The earlier literature has suggested that perceived user-friendliness is a significant determinant of willingness to use internet banking (Liao and Cheung, 2002 cited by Laukkanen et al, (2008)). Therefore it is vital for banks to improve the user-friendliness of the systems in order to expedite the adoption of internet banking. However, close examination of the survey data reveals that non-adopters have a negative attitude regarding the five resistance statements. Such as internet banking services are easy to use; learning to use internet banking is easy for me; I find it easy to do what I want to do in internet banking; My interaction with internet banking is clear and understandable and I find internet banking to be flexible to interact with. This suggests that banks have to work a lot in changing this attitude to convert these non-adopters to internet banking adopters.



As revealed at the in-depth interviews, all banks considered for the sample believe that they have a very user-friendly system as they had carried out a very comprehensive quality check before launching the system. Availability of a demonstration on the website and maintaining a customer care unit is given as the measures to improve the user-friendliness of the system. Only one bank actually conducts a customer survey to gauge the user-friendliness of the system. Another bank mentioned that they use international standards such as number of clicks to complete a transaction and access speed etc to check the user-friendliness of the system. Other than these two banks, the majority's view is if there is anything wrong in the system, customers will complain. They simply assume the fact that no complaints reflect an excellent service. But the question is how many will bother to complain. Moreover, out of the seven banks considered for the sample, only one bank provides the internet banking service in all three languages whereas the other banks facilitate the service only in English. This can also be cited as another factor that inhibits the user-friendliness of the service. Looking at the cost saving offered by this service, it is important for banks to reconsider the usability of the system to improve the adoption of internet banking.

5.3 Value barrier to internet banking adoption

According to Ram and Sheth (1989) the value barrier refers to the lack of monetary and performance value of an innovation. Correlation analysis indicates that there is a significant correlation between value barrier and the adoption of internet banking. As the Pearson correlation coefficient shows a negative value, it can be said that as value barrier increases the adoption of internet banking drops consistently. Therefore, this finding is in line with the previous studies done by Pikkarainen et al., (2004) and Laukkanen et al, (2008). Further, results of the analysis reveal that value barrier is the second most influential factor for adoption of internet banking by recording a 0.107 coefficient of determination.

Taking the cost saving aspect into consideration most of the banks offer the registration for internet banking service free of charge. Further banks waive off the fee or offer discounted rates for the transactions done via internet banking. For an example one state bank mentioned at the interview that customers are charged a fee for paying utility bills over the counters. However, this fee is not applicable for on-line utility bill payments done by their internet banking customers. Though there are many monetary and performance benefits offered through the internet banking service, many customers still believe using internet banking service costs them. A few respondents of the survey commented on why they do not use internet banking and said that the cost of internet banking service is what discourages them.

A closer look at the survey data reveals that non-adopters of internet banking are in doubt whether using internet banking is ideal for their type of banking transactions. Some non-adopters do not believe that internet banking is economical or offer any advantage compared to handling their financial matters in other ways. However, internet banking adopters believe that internet banking offers value over the other ways of handling their financial matters. Further, a detailed look at the data shows that non-adopters of internet banking do not believe that the use of this service increases their ability to control their financial matters by themselves.



5.4 Risk barrier to internet banking adoption

Based on the literature reviewed, this article refers the level of security, privacy and the reliability of the service as the risk related factors in the context of internet banking. With the support of correlation analysis performed, it can be substantiated that there is a significant correlation between risk barrier and the adoption of internet banking. The negative correlation coefficient confirms that as value barrier increases, the adoption of internet banking drops consistently. The comparison of mean values between the two groups of internet banking adopters and non-adopters shows that the mean value of risk barrier is the highest in both groups; which means that even adopters of internet banking have some doubt regarding the risk aspects of the internet banking service. However, mean value of risk barrier in internet banking non-adopter group is higher than that of adopter group. Moreover, Independent Samples T test confirmed that there is a significant difference of mean values between these two groups. The highest mean value received for risk barrier implies that risk barrier seems to be the most intense barrier to internet banking adoption.

As revealed at the interviews, there are two aspects to be looked at when talking about security of internet banking. Such as technicality which represents the security measures adopted by banks like password protection, digital certifications and the efficiency of backend processes of the bank. Security measures alone will not strengthen the security level of internet banking, banks should have a secure business process as well.

By looking at the qualitative data gathered, it can be concluded that all banks have taken necessary steps to strengthen the security of on-line transactions. Two banks in the sample have introduced two-factor authentication, which is treated as the most advanced measure in strengthening the security of online transactions. Some interviewees of the banks which have not implemented the two factor authentication, have the opinion that they also should implement this measure and suggested to have this as further improvement to the security of online banking. As per their view, customers perceive using internet banking as more secure when two-factor authentication is implemented. Though banks have taken many powerful measures in strengthening the security and privacy of online transactions, the survey data reflects that still security of internet banking is a major concern among customers. The scrutiny of data reveals that internet banking adopters are concerned about the security of internet banking and they fear that the list of PIN codes may be lost and end up in wrong hands. Further the risk that third parties would be able to use bank customers' accounts, or see their account information while using internet banking services is considered relatively high among internet banking non-adopters. Moreover, data indicates that non-adopters attach the greatest concern on facing problems while performing the transactions on-line and they are not certain about the bank's action with errors occurring during on-line transactions. The fear of loss of connection in the middle of the transaction is also a major concern among internet banking non-adopters. Though, risk barrier is the most intense barrier among non-adopters of internet banking, no bank in the sample has got a major complaint regarding the security aspect of internet banking.



5.5 Tradition barrier to internet banking adoption

The tradition barrier mainly implies the change an innovation may cause in daily routines (Laukkanen et al., 2008:445). The analysis indicates that as tradition barrier increases internet banking adoption drops consistently. This finding further supports the previous studies done by Laukkanen et al., (2008).

A detailed look at the survey data shows that non-adopters do not like to give up the personal dealings with their bank. As revealed at the interviews, this is largely because Sri Lankan customers are willing to have a human interaction when they perform their financial transactions. The comment made by one interviewee further supports this fact. "In Western countries people prefer to use systems. However, here the attitude is different. People prefer to do their banking transactions in traditional way. In managing investments people like to have human involvement." Further, data indicates that non-adopters do not find self-service alternatives more pleasant than personal customer service. This is because Sri Lankan customers are used to traditional banking methods.

From the bank's side, many banks have implemented 24/7 hours customer service to assist customers at any time. As revealed at the interviews, this has helped banks to give a human touch to electronic banking services as customers can call customer care centre as and when they are faced with an issue. No other measures have been taken by banks to improve the human interaction in internet banking service.

5.6 Image barrier to internet banking adoption

In electronic banking the image barrier may arise from the negative "hard-to-use" image of computers in general and the internet in particular (Fain and Roberts, 1997; cited by Laukkanen et al., 2008). The correlation analysis performed for the data indicates that there is a significant correlation between image barrier and the adoption of internet banking. In other words, as image barrier increases the adoption of internet banking drops consistently. When I further scrutinise the data, it is found out that non-adopters do not have a positive image of internet banking service. Hence, they think that using the Internet banking service is not wise.

6. The effect of demographic variables on internet banking adoption

The effect of demographic variables on internet banking adoption is measured in terms of gender, age and education level and job category. According to the results of Chi Square test, gender, age and job category have a significant association with internet banking adoption. internet banking non-adopters were further analysed based on the demographic factors to identify the most significant barrier of each demographic group. The results of the analysis indicate that risk barrier is the most intense barrier among both male and female non-



adopter groups. Moreover, further analysis done on different age groups of internet banking non-adopters also reveals that risk is the most intense barrier to internet banking.

6.1 Internet banking adoption

All relevant descriptive statistical analysis were performed using Excel spreadsheets in order to get an idea about the nature of respondents. Figure 5 shows the level of internet banking adoption of the sample.

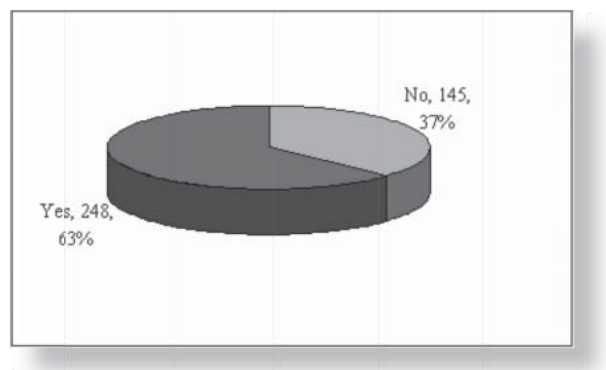


Figure 5: The Level of Internet banking Adoption of the Sample
Source: Survey data

As the above figure depicts, 248 (63%) respondents out of 393 respondents already have internet banking account whereas 145 (37%) respondents do not have internet banking account. As more than one third of responses were received from non-adopters of internet banking, the researcher considered that the sample sufficiently represents the population.



6.2 Gender distribution

One hundred and thirty seven respondents of the sample were females and 256 respondents were males. Adopters and non-adopters of internet banking were further analyzed gender wise and shown in Figure 6. As the figure shows, the percentage of adoption is higher among males compared to the same of females.

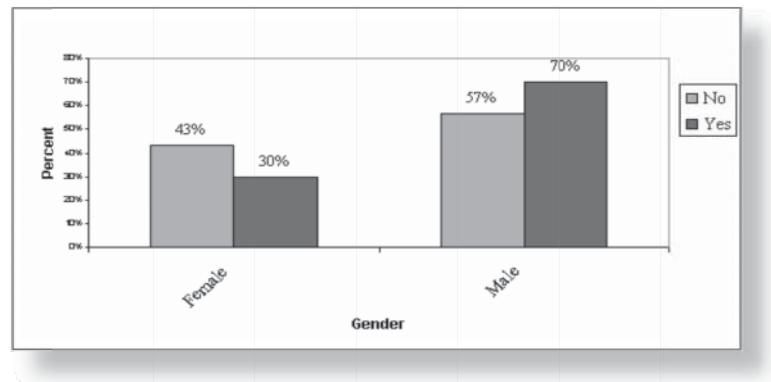


Figure 6: Internet banking Adoption - Gender wise
Source: Survey data

6.3 Age distribution

The majority of responses was received from the age categories of 21 to 30 years and 31 to 40 years. Adopters and non-adopters of internet banking were further analysed with respect to their age categories as shown in Figure 7.

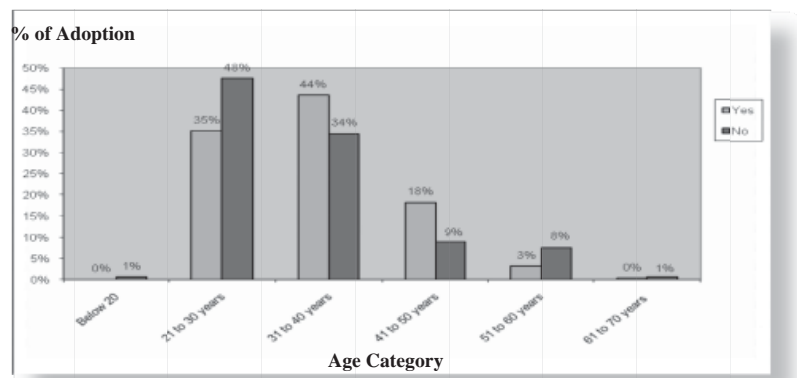


Figure 7: Internet banking Adoption - Agewise
Source: Survey data



6.4 Level of education

According to the survey carried out, the majority of the respondents have a degree, postgraduate qualification or professional qualification. Only two PhD holders were in the sample. Adopters and non-adopters of internet banking were further analysed according to their level of education which is shown in Figure 8.

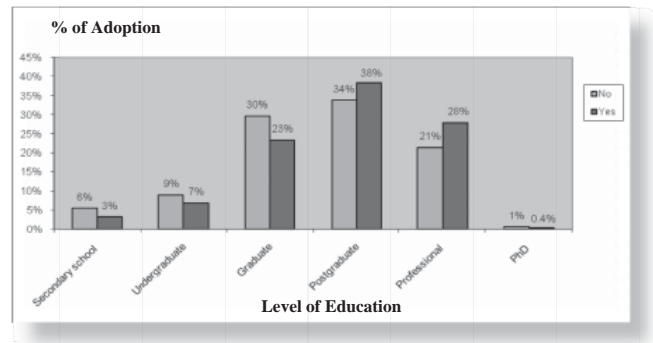


Figure 8: Internet banking Adoption - Educationwise
Source: Survey data

6.5 Job category

The highest number of responses was received from managers followed by executives. Figure 8 shows further analysis of the adopters and non-adopters of internet banking with respect to their job category. As per Figure 9 managers show the highest percentage in adoption as well as non-adoption of internet banking. Within the job category, the highest percentage of adoption is recorded by professionals.

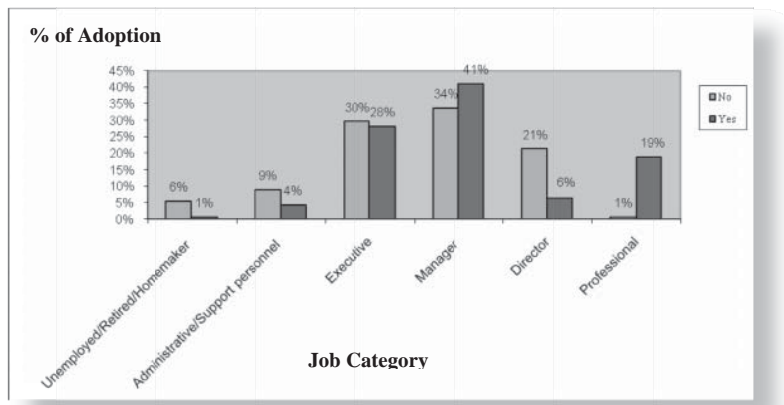


Figure 9: Internet banking Adoption - Job Categorywise
Source: Survey data



7. Analysis of the internet banking adopters

Respondents who have an internet banking account were further analysed separately in relation to the source of information about internet banking, place of accessing their internet banking account and the different services used via internet banking account.

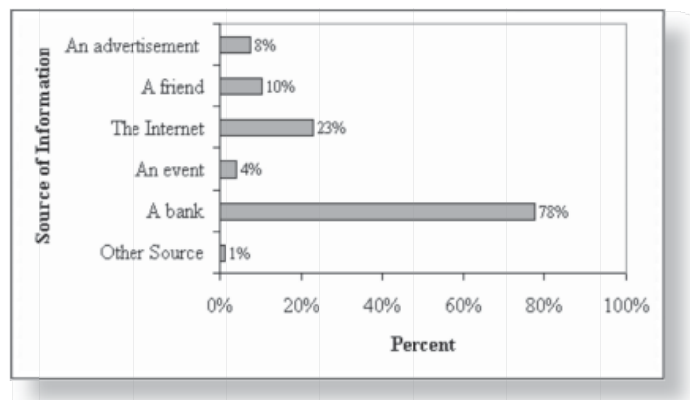


Figure 10: Sources of information of internet banking service
Source: Survey data

According to the above Figure, it is clear that bank acts as a good source of information about internet banking. Twenty three percent of respondents have got information about internet banking through the internet and their friends.

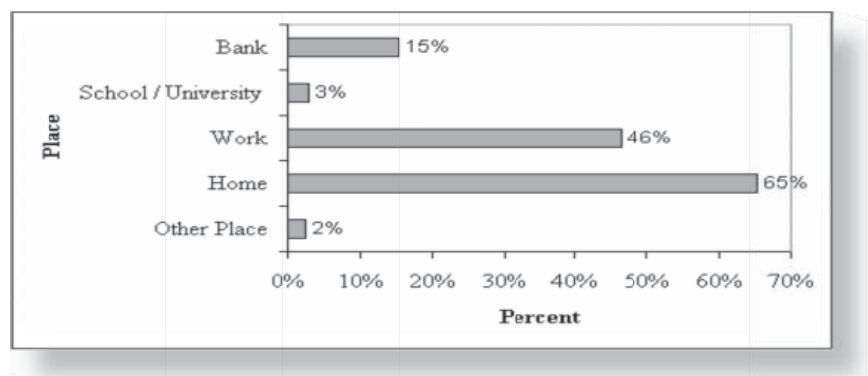


Figure 11: The Places of Accessing Internet banking Account
Source: Survey data



Figure 11 shows the different places from which internet banking accounts are accessed. The majority of respondents access their internet banking accounts while at home or at work.

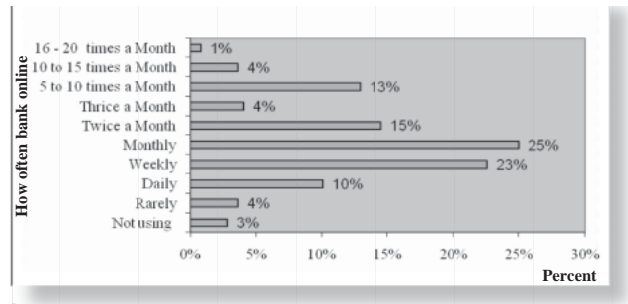


Figure 12: The Frequency of Using Internet banking
Source: Survey data

Figure 12 shows how often the respondents who have an internet banking account bank online. According to this survey, 25 percent of respondents who have an online banking account bank online monthly and 23 percent of them claim to bank online weekly. The survey shows that 10 percent of the respondents who have an internet banking account, bank online as often as daily and also that nearly seven percent of the respondents who have an Internet banking account do not use the service at all or bank online rarely but less than once a month.

Figure 13 presents the frequency of the use of different internet banking services by the respondents who have an internet banking account. According to the survey, 23 percent of respondents check the account balance almost always via online and 38 percent check the account balance always. The second mostly used service is the bill payment with 35 percent using it always and eight percent using it almost always.

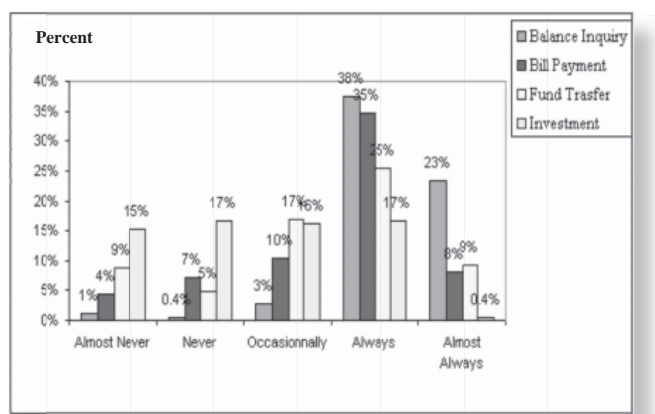


Figure 13: The Frequency of Use of Different Internet banking Services
Source: Survey data



8. Bank's Effort to promote internet banking

The preliminary data gathered to establish the problem leads us to think that higher the banker's efforts on promoting the internet banking to its customers, higher the internet banking adoption rate. Further to this, a study done by Kerem (2003) shows that the continuous and aggressive marketing efforts made to promote internet banking via different media channels and in bank branches have a positive impact on the adoption rate. Gerrard et al., 2006 in his qualitative study on "Why consumers are not using Internet Banking" state that banks might have to be more proactive by spelling out what customers need to do to become an internet banking customer, providing information about the available range of services and explaining the requisite skills, supplying the relevant details through channels other than the internet. He further states that customer inertia, or laziness, was found to be reasonably significant in explaining non-usage. Bank marketers could consider overcoming such inertia by using sales promotion techniques, such as offering new users a large enough incentive to switch at least some of their banking activity to online mode.

In line with the findings of these studies, the analysis of data also indicates that there is a significant difference in bank wise internet banking adoption rates. According to the analysis done, Bank D and E show the highest rate of adoption of internet banking whereas Bank A shows the lowest adoption rate of internet banking. As revealed at the interviews and the secondary data gathered, Bank D and E actively promote internet banking among its customers. It is compulsory for all employees of the bank to use internet banking in these two banks. Moreover, these banks conduct promotional programs to reward customers those who introduce new registration to internet banking service. They also launch marketing campaigns and offer incentives to users of internet banking. According to the interviews held, the bank which records the lowest internet banking adoption rate doesn't carry out any marketing campaigns to promote the service. Therefore, I suggest that a bank's efforts to promote internet banking among its customers have a major impact on the internet banking adoption rate.

9. Conclusions

This article has attempted to describe and analyse the factors that affect the internet banking adoption of retail banking customers in Sri Lanka. The article confirms the fact that internet banking adoption of retail banking customers is at a low level in Sri Lanka. The conceptual framework was based on the theory of resistance to innovations which describes why people resist innovations together with an added variable derived from the literature reviewed. The hypotheses were tested against the use of internet banking. The survey responses were collected from both internet banking adopters and non-adopters. The results indicate that adopters and non-adopters of internet banking differ significantly in terms of their attitude towards the six barriers.

All six independent variables i.e. lack of awareness, usage, value, risk, tradition and image barriers show a significant negative relationship with the dependent variable of adoption



of internet banking. Thus, all six hypotheses were accepted. The correlation analysis conducted confirms that usage barrier is the most influential barrier to adoption of internet banking followed by the value barrier and then the image barrier. The tradition barrier is the least influential barrier to internet banking adoption. The article reveals that gender, age and job category have a significant impact on the adoption of internet banking. Further analysis of Internet banking non-adopters based on different demographic factors reflects that the risk barrier is the most intense among the non-adopters of internet banking.

Moreover the article reveals that aggressive marketing efforts made by banks to promote internet banking have a positive impact on its adoption. However, it is found that currently only a very few banks actively promote the internet banking service. At present, banks do not monitor the adoption of Internet banking. Many banks have offered the internet banking service in order to keep pace with the competition rather than offering another banking channel. As such most of the banks didn't have objectively set targets for improving Internet banking adoption. Thus, it can be concluded that at present the bank's effort to improve the adoption of Internet banking is at a very low level. At the interviews many bankers said that they will start to promote internet banking actively in future as internet banking is not given priority as yet.

10. Recommendations to banks on how to improve the adoption of internet banking

An important objective of this article is to make recommendations to banks on how to improve the adoption rate of internet banking. The following recommendations can be made in order to increase the adoption of internet banking in Sri Lanka.

First, managers should consider internet banking as a part of multiple channels offered by the bank to better serve the customer and all banking channels should be managed strategically with the objective of reaching high customer satisfaction and retention.

Consumer inertia is the main issue which discourages the adoption of internet banking. Therefore, banks should lessen consumer inertia by properly establishing the problem. In order to establish the problem, banks should provide information about the internet banking service and its benefits and emphasise the implications of not having the service. At this stage marketers play a vital role. Marketers should emphasise the importance of having an internet banking service and should also create urgency among customers to adopt this facility. In order to do that, marketers should first tell the customers how they manage their finances now, the current situation and identify the problem, the unsatisfactory situation and then should highlight the benefits of having an internet banking account. In this way marketers can identify the gap and can relate the value that is offered by the internet banking service to customer's expectation.

While establishing the problem, banks should position the internet banking service correctly in the minds of the customers. When the consumer is exposed to an offering of any kind, the first question that the consumer raises in his/her mind is "What is it about?". By asking



this simple question, the consumer is attempting to locate the offering in a particular mental category (Liyanage, 2009). Therefore, it is vital to clearly identify and profile that consumer in whose mind the bank intends to position the internet banking service. Grouping customers in terms of demographic factors does not provide meaningful segmentation. Therefore, in positioning Internet banking, the customers can be grouped based on the identified six barriers to Internet banking adoption such as “value seekers”, “easy users” and “risk avoiders” etc. A comprehensive profile of target groups needs to be developed in this regard. This is the first step in positioning.

Next, the banks need to understand the mental category or the Frame of Reference of the consumer, in which bank do they wish to locate/position the internet banking service. When considering the internet banking, what it offers is a “convenient way of managing finance” to the customer. This can be treated as the larger mental category. As internet banking is another service delivery channel, “convenient banking” can be taken as a typical frame of reference. Thirdly banks should isolate key point(s) of difference, within the identified frame of reference, that is how internet banking service should stand out from other banking service channels. The key points of difference (POD) of internet banking can be described with the key words “fast”, “economical” and “hassle free”. Now banks can decide on the stand that internet banking ought to take by considering the opportunities that exist in the market. Once the stand is defined a bank should decide on the desired standing and necessary steps to achieve this. Fourth, banks should “provide evidence”. Proof must be provided to target consumer groups in order to make them accept the offering. The points of difference are distinctive (not commonplace), desirable (of value), defensible (sustainable) and deliverable (believable). If not, the proposition and the POD’s will not enter and remain in the minds of target consumers (Liyanage, 2009). Fifth, “Develop mental schema”. The proposition, fast, economical and hassle free must evoke in the minds of consumers by using readily and vividly recalled words/images. Figure 14 shows an illustration of a desirable mental schema of Internet banking.

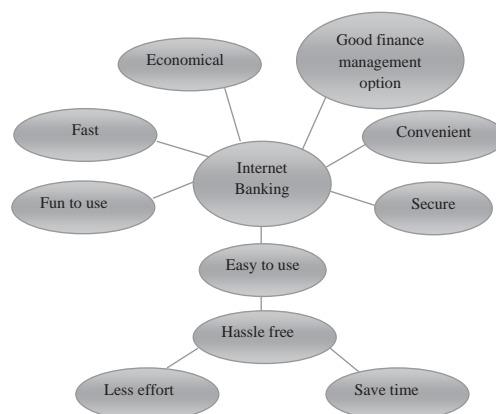


Figure 14: Mental Schema of Internet banking
Source: Author



The next big task for the bank is to prepare a strategically developed tactical plan to the positioning of internet banking. Banks have to convey the positioning message accurately and consistently to target customers. The marketing communication mix will play a vital role in communicating the positioning statement that has been developed. It is important for banks to provide what it communicates to the customer by having proper programs of actions that will lead to achieving the desired standing. The following are general steps a bank can practice.

- i. Banks should ensure the ease of use of the system by taking technology–customer interaction issues into consideration.
- ii. Banks should monitor customer attitudes towards the internet banking system on a regular basis.
- iii. Banks should closely monitor customer traffic and customer switching from traditional to web-based services.
- iv. Further banks should utilise the data collected about customer interactions as a basis to customise offers and to personalise messages to customers.
- v. Banks should make it compulsory for employees to use internet banking as this will open many opportunities to improve the service further.

By correctly positioning the internet banking service in the minds of customers, banks can eliminate the negative attitudes of customers towards internet banking in terms of the identified six barriers. The mean values derived for six barriers of internet banking non adopters were below three except the mean value of risk barrier and as five point Likert scales were used in measuring the attitudes towards these barriers to internet banking adoption, mean value between two to three can be treated as moderate. This indicates that attitudes of non-adopters in terms of these barriers to internet banking adoption are not that strong. However mean values were higher than that of internet banking adopters. This shows that though the barriers are not that strong those act as inhibitors to internet banking adoption.

As such it can be concluded that though customers have some knowledge about internet banking and its benefits they do not want to adopt as banks have not created the need to have internet banking and the urgency to adopt it yet. Qualitative data gathered through the interviews also supports the fact that bank effort on promoting internet banking is at a low level in Sri Lanka. Further, qualitative data collected about the two banks which record the highest rate of internet banking adoption confirm that the effort put in by banks in promoting the internet banking service has a major impact on the adoption of internet banking.

Therefore, if banks can take necessary measures to eliminate the consumer inertia by properly establishing the problem of not having internet banking service while positioning the service correctly in the minds of customers, the internet banking adoption rate can be increased.



References

- Abid, H. & Noreen, U. (2006). Ready To E-Bank: An Exploratory Research On Adoption Of E-Banking And E-Readiness In Customers Among Commercial Banks In Pakistan. Retrieved November 25, 2014, from <http://icbm.bangkok.googlepages.com/108.Hanniya.Abid.RP.pdf>
- Albarq, A.N. (2006). Intention to shop online among university students in Jordan. Master's thesis. Universiti Utara Malaysia.
- Arunachalam, L., & Sivasubramanian, M. (2007). Theoretical framework to measure the user Satisfaction in internet banking. *Academic Open Internet Journal*.
- Brancheau, J.C., & Wetherbe, J.C. (1990). The Adoption of Spreadsheet Software: Testing Innovation Diffusion Theory in the Context of End-User Computing. *Information Systems Research*, 01, 115-143.
- Gao, Y. (2005). Web systems design and online consumer behavior. Publisher Idea Group Inc (IGI), 330.
- Gerrard, P., Cunningham, J.B., & Devlin, J.F. (2006). Why consumers are not using internet banking: a qualitative study. *Journal of Services Marketing*, 20(3), 160-167.
- Gunawardene, N. (2007). *Ik Sri Lanka. Digital Review of Asia Pacific 2007-2008*. Retrieved January 05, 2015 from <http://english.people.com.cn>
- Herington, C. & Weaven, S. (2009). E-retailing by banks: e-service quality and its importance to customer satisfaction. *European Journal of Marketing*. Vol. 43 Iss: 9 pp. 1220 - 1231
- Ioannou, M. & Zolkiewski, J. (2009). Can retail bank-client relationships be developed online?. *EuroMed Journal of Business*. Vol. 4 Iss: 3 pp. 254 - 269
- Jenkins, H. (2007). Adopting internet banking services in a small island state: assurance of bank service quality. *Managing Service Quality*, 17(5), 523-537.
- João, F.P. & Rodrigues, M.A. (2011). A comparison of users and non-users of banking self-service technology in Portugal. *Managing Service Quality*. Vol. 21 Iss: 2 pp. 192 - 210
- Jourdan, J., & Katz, J. (1999). Banking in the age of information technology. *Regional Review*, 9(2).
- Kasheir, D.E., Ashour, A.S., & Yacout, O.M. (2009). Factors Affecting Continued Usage of Internet banking. *Communications of the IBIMA*, 09, 252-264.
- Kerem, K. (2003). Adoption of electronic banking: Underlying consumer behaviour and critical success factor, case of Estonia. Doctoral thesis, Tallinn Technical University.
- Kotler, P. (2000). *Marketing management*, 10th Ed. NJ: Prentice Hall.
- Laforet, S., & Li, X. (2005). Consumers' attitude towards online and mobile banking in China. *International Journal of Bank Marketing*, 23(5), 362-380.
- Lanka Business Online. (2008). Sri Lanka's Bank of Ceylon tightens internet banking security. On-line document available at URL: www.lankabusinessonline.com.
- Laukkanen, P., Sinkkonen, S., & Laukkanen, T. (2008). Consumer resistance to internet banking: postponers, opponents and rejectors. *International Journal of Bank Marketing*, 26(6), 440-455.
- Laukkanen, P., Sinkkonen, S., Kivijärvi, M., & Laukkanen, T. (2009 December 06). Consumer Resistance and Intention to use Internet Banking Service. www.ebric.fi/kuvat/EBRF2007_Laukkanen_et_al.pdf.
- Liyanage, L. (2009). Positioning Sri Lanka Tourism.
- Matthing, J., Kristensson, P., Gustafsson, A., & Parasuraman, A. (2006). Developing successful technology-based services: the issue of identifying and involving innovative users. *Journal of Services Marketing*, 20(5), 288-297.
- Mirza, A.P., Beheshji, M.T.H., Wallstrom, A., & Mirza, O.P. (2009). Adoption of Internet banking by Iranian Consumer: An Empirical Investigation. *Journal of Applied Science*, 9(14), 2567-2575.
- Mor. (2000). The Indian Internet Banking Journey Globally, The Banking Business Has. Retrieved November 09, 2009, from <http://www.scribd.com/doc/18643180/The-Indian-Internet-Banking-Journey-Globally-The-Banking-Business-Has>
- Ndubisi, N.O., & Sinti, Q. (2006). Consumer Attitudes, System's Characteristics and Internet Banking Adoption in Malaysia. *Management Research News*, 29(1/2), 16-27.
- Nielsen. (2007). Aussie consumers choose Internet banking over ATM, phone and branch. Retrieved December 16, 2014, from <http://au.nielsen.com/news/20070426.shtml>
- Parasuraman, A. (2000). Technology Readiness Index (Tri): A Multiple-Item Scale to Measure Readiness to Embrace New Technologies. *Journal of Service Research*, 2(4), 307-320.
- Parasuraman, A., & Colby, C.L. (2001). Techno-ready marketing: How and why your customers adopt technology. Retrieved December 09, 2014, from http://www.pinegars.com/PDF_Files/Techno-Ready%20Mktg.pdf
- Peterson, M. (2009). Advantages of Internet Banking. Retrieved November 10, 2014, from <http://ezinearticles.com/?Advantages-of-Internet-Banking&id=273438>
- Pikkarainen, T., Pikkarainen, K., Karjaluoto, H., & Pahnla, S. (2004). Consumer acceptance of online banking: an extension of the technology acceptance model. *Internet Research*, 14(3), 224-235.
- Prompattanakdee, S. (2009). The Adoption and Use of Personal Internet Banking Services in Thailand. *The Electronic Journal on Information Systems in Developing Countries*, 37(6), 1-31.



- Ram, S., & Sheth, J.N. (1989). Consumer resistance to innovations: the marketing problem and its solutions. *The Journal of Consumer Marketing*, 6(2), 514.
- Rogers, E.M., & Shoemaker, F. (1971). *Communications in innovation*, NY: Free Press.
- Rotchanakitumnuai, S., & Speece, M. (2003). Barriers to Internet banking adoption: a qualitative study among corporate customers in Thailand. *International Journal of Banking Marketing*, 21(6/7), 312-323.
- Sathye, M. (1999). Adoption of Internet banking by Australian consumers: an empirical investigation. *International Journal of Bank Marketing*, 17(7), 325-333.
- Sekaran, U. (2007). *Research methods for business: a skill building approach*, 4th Ed. NY: John Willy & Sons.
- Sinkkonen, S., Laukkanen, P., Kivijärvi, M., & Laukkanen, T. (2007). Modeling Factors of Consumer Resistance to Mobile Banking. Retrieved December 25, 2014, from <http://ibacnet.org/bai2007/proceedings/Papers/2007bai7605.doc>
- Stelk, W.J. (2006). Implementing Health-Care Innovations: In Search of a Theoretical Foundation for a Science of Implementation. *International Journal of Mental Health*, 35(2), 35-49.
- Suganthi, Balachandher, & Balachandran. (2001). Internet Banking Patronage: An Empirical Investigation of Malaysia. *Journal of Internet Banking and Commerce*, 6(1).
- Syed, M.R., & Rahman, S.M. (2008). *Multimedia Technologies: Concepts, Methodologies, Tools, and Applications*. Publisher Idea Group Inc (IGI). 3.
- Vaidya, S. (2007). Internet Banking - Scene of last decade and some learning. On-line document available at URL:<http://www.finextra.com/community/fullblog.aspx?id=802>
- Venkatesh, V., Morris, M.G., Davis, G.B., & Davis, F.D. (2003). User acceptance of information technology: toward a unified view. *Mis Quarterly*. 27(3). 425-478.