



Factors Affecting the Customer Perception on Adoption of Internet Banking System; with Special Reference to the Government Sector Licensed Commercial Banks in Kegalle

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ABSTRACT

Internet banking is the platform which enables an efficient banking transaction to the customers with the objective of overcoming issues arise with alternative methods of banking such as ATM banking and branch banking. This study was done to find out the impact of four variables which are accessibility, ease of use, awareness, and security towards customer's perception on internet banking adoption with special reference to government sector licensed commercial banks in Kegalle, Sri Lanka. Accordingly, the research aimed to explore the impact of each independent variable towards the dependent variable which is the customer's perception on internet banking. In doing so it intended to identify overall impact of the independent variables to the dependent variable and the most influential factor effect on customer perception on internet banking adoption. Positivist approach along with deductive logical reasoning laid philosophical foundation to carry out the research using quantitative approach. Data was collected by administering structured questionnaires utilizing Google forms. Researcher selected 115 individual banking customers using convenience sampling method which represent the population characteristics. Data were analyzed using IBM SPSS version 23. According to the key findings of the study, results provide sufficient evidence to conclude that accessibility, awareness, and security factors have significant impact on customer's perception on internet banking. However, it was found that the ease-of-use factor is not creating significant impact towards the dependent variable.

Keywords: Adoption of internet banking, Customer perception, Licensed Commercial banks, Accessibility, Ease of use, awareness, security

1. Introduction

To attain the sustainability of market, commercial bank system needs to function well in efficient and effective way, and it will ultimately lead to the economic growth of a country. (Priyangika, Perera, & Rajapakshe, 2019). According to Central Bank of Sri Lanka (2019), banking sector support financial intermediation continuously by expanding financial services and financial network to a greater extent and by promoting financial inclusion. In early stage of banking industry there was not any banking services did through online platform. All the transactions were done by the bank staff and customers had to visit bank physically to do each transaction which today have replaced with internet technology. In today's context, internet banking has introduced to improve customer satisfaction by providing more efficient and comfortable services and it is considered as one of the major services introduced by the banking sector. (Perera & Priyanath, 2018). Banks have started to provide wide variety of services to customers with the implementation of internet banking. The way of providing banking services have changed to a greater extent with application of ICT based transformation in the financial sector. (Pratheesh & Pretheeba, 2019). Also, with the introduction of internet technology, banking sector has become more revolutionized than earlier, and it is one of the main reasons to success of organizations.

2. Objectives of the study

1. To examine the influence of accessibility, on customer perception on adoption of internet banking facility in government sector licensed commercial banks in Kegalle.

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2. To examine the influence of perceived ease of use, on customer perception on adoption of internet banking facility in government sector licensed commercial banks in Kegalle.
3. To examine the influence of awareness, on customer perception on adoption of internet banking facility in government sector licensed commercial banks in Kegalle.
4. To examine the influence of security, on customer perception on adoption of internet banking facility in government sector licensed commercial banks in Kegalle.
5. To investigate the overall impact of accessibility, ease of use, awareness and security on adoption of internet banking.
6. To identify the most influential factor that effect on customer's perception on internet banking adoption.
7. To provide recommendations to increase the amount of internet banking adopters in government sector licensed commercial banks in Kegalle.

3. Literature review

3.1. Internet banking

Internet banking performs delivery of information and services to its customers by a bank via different delivery platforms such as internet banking, PC banking, managed network banking and TV based banking (Daniel, 1999). Internet banking is the most recently used electronic network which can be successfully perform both business to business (B2B) and Business to customers (B2C) transactions. (Sundara& Perera,2018). According to Yibin (2003, as cited in Shantha, 2019, p.269) there are three types of internet banking such as informational, transactional, and communicative based on the functions and transactional internet banking is the most popular type from those three. It consists of deposits, withdrawals, transfer, online payments, and updates which cover customer accounts

3.2. Comparison of internet banking with other banking channels

According to Mobarek (2007, as cited in Aydin, 2014, p.23) the most popular distribution channel among customers is ATM and second most popular one is internet banking. Traditional branch banking falls to the last in the preference order. Internet banking and banking through mobile phones have become more popular due to its advantages over other delivery channels according to his investigation done in Botswana. Even though he has examined and ranked the preferences of banking delivery channels as such relating to customers in Botswana, when it comes to Sri Lankan context researchers have identified that adoption to internet banking is very slow. (Shantha,2019). Still majority of customers engage with branch banking and that's a major problem in Sri Lankan banking industry. So, it's clear that the popularity ranking done in Botswana by the previous researcher can't be applied to rank Sri Lankan banking customers.

3.3. Internet banking in Sri Lanka

When it comes to the Sri Lankan context, internet banking has introduced by Sampath bank for the first time in 1989. (Jayasiri& Weerathunga,2008). According to Jayasiri (2008, as cited in Shantha,k2019, p.271) has stated that initial adoption of e - banking facilitated networking of branches across the country of all accounts of customers at any branch, anytime. Sri Lankan banking industry is developing at increasing rate and online banking has become an important tool which generate value for customers. (Priyangika, Perera,&Rajapakshe, 2019).

3.4. Customer perception on internet banking

Perception of a customer determines upon consumer's attitude towards e-banking. When it comes to the attitude towards change, early adopters of technology had positive attitude towards it than the later adopters. (Shiraj, 2015). So, the target behaviour of adoption to internet banking facility determines based on customers negative and positive feelings about performance of internet banking. If the customer has positive feelings on performance of internet banking, that person is satisfied with internet banking facility and vice versa.

3.5. Accessibility

Accessibility in banking system allows bank customers to access information easily and it's one of major driver in the commercial web use. (Rotchanakitumnuai&Speece, 2004 as cited in Gunaratnamat el., p.4). Accessibility has defined as ability of customers to get information and service through website. (Ahmad & Al-Zu'bi, 2011 as cited in Gunaratnam at el., p.4). According to Wasserman and Abbot (2005, as cited in Shantha, 2019, p.272) there are several factors that help customers to get access to the internet. Those factors are comprised with "a home computer", "access to a computer", "financial strength buy monthly access to an internet service provider", and "having require ed knowledge to use website through computer. In addition, banks should invest more on IT infrastructure to create attractive layout of the website to make simple the access to the information by the customers. (Lederer, Mirchandani, & Sims, 2001, as cited in Gunaratnam at el.p.4).

3.6. Perceived ease of use

Venkatesh and Davis (2000, as cited in Priyangika, Perera& Rajapakshe,2019, p.131) has stated Perceived ease of use as constructing tied to an individual's assessment of an effort involved in the process of using a particular system. The research conducted by Priyangika et al (2019), has proved that attitude towards IB has strong positive relationship with perceived ease of use.

Also, the research conducted by Sundaraand Perera (2018), has found that perceived ease of use factor influences on customer adoption of internet banking by 45.3%and it has moderate positive impact of perceived ease of use factor on internet banking adoption. They have conducted the research on the factors influencing on the customer adoption of internet banking system considering customers of the Sampath bank in Colombo district. Another research by Madana(2016), has identified perceived ease of use as the factor which create highest impact for adoption of M-banking technology. She has conducted her research taking commercial bank's e- banking adopters in Kurunegala district as the population. Both of above research, have conducted taking customers with high computer literacy rate which it is 44.1% in Colombo and 39.1% in Kurunegala. (Computer literacy statistics, 2019). Accordingly in a situation where customers with high computer literacy also consider ease of use when adopting e-technology, there is a higher probability that customers in other districts with low level of computer literacy consider that factor when taking their decision to adopt e-banking.

3.7. Awareness

Awareness is defined as customer's knowledge needed to use internet banking service. (Shantha, 2019). The research done by Hettiarachchi (2013) on factors affecting to customer adoption of internet banking has identified awareness of internet banking as a factor that affect for the usage of internet banking. Also, the experiences that previously had with computers and other technologies, and attitude on computers have impact on both customers' attitude towards online banking and their actual behavior. (Kajaluoto, Mattila,&Pento, 2002). As per the research done by ThrowfeekandMizran (2017), they have proven that awareness influences the customers' decision towards the adoption of internet banking by conducting research on factors influencing customers' decision to adopt internet banking in Sri Lanka. In the research done by Krauter(2008, as cited in Omar, 2011, p.7) has examined the role that different types of online trust play in the adoption of internet banking. He has focused concept of internet trust and analyzed the distinct type of trust that influences the consumer's perceived risk associated with internet banking and the consumer's attitude towards the usage of internet banking. The findings suggest that perceived usefulness and information on online banking on the Web site are the most influential factors on acceptance of online banking.

3.8. Security

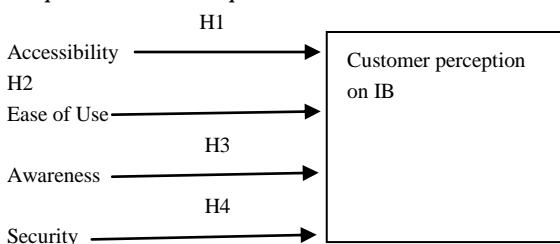
Security perception is a subjective probability that extent to which customer believe that their personal data are secured without viewed by others. (Somali & Roya,2009,as cited in Fahim,2013,p.25).According to the qualitative study conducted by Fahim (2013),on factors affecting to internet banking adoption among post graduate students in Malaysia, he found that , security and lack of trust have become a concern to non-adopters.Accordingly, when it comes to the Sri Lankan context, research conducted by Shantha, (2019), in has identified bank functions as influential factor on customer perception towards internet banking usage. He has included service quality and security provided by bank under the variable of bank functions. Another research done on factors influencing the perception of internet banking among the customers on the commercial banks in Batticaloa district, also has found that usefulness, security, and ease of use has exhibited higher level of perception and concern towards internet banking usage. (Maheswaranathan, 2016)

4. Conceptual framework

In line with the conceptual framework illustrated in Figure 4.1 the hypothesis has developed to prove the relationship between independent variables and the dependent variable.

Figure 4.1. Conceptual Framework

Independent Variables **Dependent variable**



5. Methodology

When it comes to the type of this research, it comes under the descriptive category, since the research describes customer perception towards internet banking adoption which is a characteristic of variable of interest. Moreover, the researcher is well known about the situation and there is information available on how similar problems have been solved in the past relating to both Sri Lankan and global contexts. Further a survey strategy has used to elicit the impact of four factors that have considered against the customer perception on internet banking usage. In addition, the research has carried out under deductive reasoning approach which is also known as top-down approach which starts from general perspective and narrow it down to specific perspective. Then the unit of analysis is individual banking customers already use online banking in government sector licensed commercial banks in Kegalle area. In this study population comprise of individual banking customers involve in internet banking since this research has explored the perception of banking customers towards e-banking system. Also, researcher has considered Sri Lankan context, and further it has narrowed down to the Kegalle area. In this study researcher has administered questionnaires to 115 individual banking customers who has adapted to internet banking in government sector licensed commercial banks, Kegalle. Sampling technique is convenience sampling and data collection technique is self-completed online questionnaire.

Inferential statistics have utilized by the researcher to test hypothesis to address research questions and it helps to arrive at conclusions about the population based on selected sample. (Sekaran & Bougie, 2016). In this study researcher has developed four hypotheses to test impact of accessibility, perceived ease of use, awareness, and security to customers' perception on internet banking adoption. Therefore, the most suitable approach is regression analysis. Regression analysis is assessing of coefficient of determination and regression function. (Saunders et al, 2016). Since in this research there is more than one independent variable, it comes under multiple regression analysis. To analysis of data researcher has used SPSS (Statistical package for social sciences).

6. Findings

The first research question is to what extent accessibility affect to customer perception on adoption of internet banking facility in government sector licensed commercial banks in Kegalle.

H1: There is a significant impact from accessibility to the customers' perception on adoption of internet banking.

Since the P value (0.000) of accessibility variable is less than level of significance (0.05) the alternative hypothesis one can be accepted. The meaning of acceptance is that the impact of accessibility factor on customer's perception on internet banking adoption is statistically significant. Beta value related to the hypothesis one is positive and it gives the meaning that the significant impact occurs to the positive direction. Also, the accessibility variable has highest beta value (0.977) among all independent variables, and it indicates that it creates the highest impact on the internet banking usage than other variables considered in the research.

H2: There is a significant impact from Perceived ease of use to the customers' perception on adoption of internet banking.

Since the P value (0.671) of ease-of-use variable is greater than level of significance (0.05) the alternative hypothesis two can't be accepted. The meaning of rejection is that the impact of accessibility factor on customer's perception on internet banking adoption isn't statistically significant. Even though the impact isn't significant the beta value (0.003) related to the hypothesis two is positive. It gives the meaning that when level of ease-of-use increases, the perception towards internet banking too increases even though that increase doesn't satisfy customers.

H3: There is a significant impact from awareness to the customers' perception on adoption of internet banking.

Since the P value (0.027) of awareness variable is less than level of significance (0.05) the alternative hypothesis three can be accepted. The meaning of acceptance is that the impact of awareness factor on customer's perception on internet banking adoption is statistically significant. Beta value (0.016) related to the hypothesis three is positive and it gives the meaning that the significant impact occurs to the positive direction.

H4: There is a significant impact from security to the customers' perception on adoption of internet banking

Since the P value (0.003) of security variable is less than level of significance (0.05) the alternative hypothesis four can be accepted. The meaning of acceptance is that the impact of security factor on customer's perception on internet banking adoption is statistically significant. Beta value (0.020) related to the hypothesis four is positive and it gives the meaning that the significant impact occurs to the positive direction. Accordingly, when level of security increases, the perception towards internet banking too increases and that amount of increase satisfy the customers.

The fifth research question address the overall impact of accessibility, ease of use, awareness, and security on customer perception of internet banking adoption. To answer this research question researcher utilized multiple regression analysis technique. As per the results of multiple regression analysis except the ease-of-use variable all other variables showed significant impact to the dependent variable. Also obtaining R^2 value of 99.6% it proves that the overall impact of the independent variables towards the dependent variable is significant.

Then sixth research question is to identify the most influential factor that effect on customer's perception of internet banking adoption. From the

variables which showed statistical impact the highest impact is from accessibility variable and the beta value of that variable is 0.97. Then security variable creates moderate positive significant impact towards the dependent variable and the beta value of it is 0.020. The lowest significant impact is created from awareness variable towards the internet banking adoption, and it has obtained beta value of 0.016.

7. Conclusion

Due to the emergent of the information technology, banks provide facilities to customers to perform their transactions in a virtual platform. Even though the E-banking concept has evolved over the world when it comes to Sri Lankan context it has less adaptation rate. Even though the E-banking concept has evolved over the world when it comes to Sri Lankan context it has less adaptation rate. The fast expansion of internet banking concept occurs due to its benefits such as cost effective, time saving, etc. So, internet banking is very important concept in contemporary banking industry. With the arrival of COVID 19 pandemic the value of internet banking went up because it's very useful for customers to do their banking functions without visiting the bank. There are several factors that create influence on customer's decision whether to adapt internet banking system or not. In this study researcher explored the impact of accessibility, ease of use, awareness, and security on customer's perception on adoption of internet banking system. Then by utilizing the multiple regression analysis it has proved that the overall impact from the accessibility, ease of use, awareness, and security variables to the dependent variable also significant. Achieving the next research objective, researcher identified that the most influential factor to the customer perception on internet banking is accessibility from the four variables that explored in this study.

8. Area for further research

Since this research is about four variables (accessibility, ease of use, awareness, and security) and its influence on customer's perception to the adoption of internet banking system, further a researcher can do a study with many other factors such as cost, level of trust, system quality, social influence etc. Also, if there is any interest can conduct research considering the impact of demographic variables like age, gender, education level etc. on the internet banking usage.

A researcher also can study about service quality of the internet banking system or satisfaction of customers from this service. This research is limited to government sector licensed commercial banks in Kegalle and that scope can expand to whole Sri Lanka and conduct research. If have interest a researcher can take both public and private banks and conduct a comparison on their internet banking platforms and factors affect for those.

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