International Journal of Science and Research (IJSR)
ISSN (Online): 2319-7064
Index Copernicus Value (2015): 78.96 | Impact Factor (2015): 6.391

Consumer Perceived Risk of Internet Banking in Kenya: A Survey of Three Selected Banks in Nairobi County

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Abstract: ***The purpose of this study was to examine consumer perceived risk of internet banking and adoption in Kenya with reference to three selected banks and suggest possible solutions to enhance customer satisfaction. Objectives of this study were to; examine factors that influence adoption of internet banking in the three selected commercial financial institutions, determine the extent of use of internet banking services by customers in the three selected banks, find out challenges facing use of internet banking by customers in the selected banks and find out solutions to the challenges that hinder consumers in the use of internet banking services in the selected banks. This was a quantitative and descriptive survey of the three selected banking institutions. Data was collected using questionnaires that were distributed using lead people in the respective banks. The questionnaires were structured with both open ended and closed ended type of questions. Data was analyzed using Microsoft excel and presented using charts and tables. A total number of 150 respondents were used for this study. The study established that young adults are mostly involved in the use of internet banking services. The study established the extent of use of internet banking by customers with the majority using internet banking services for inquiries, withdrawals and deposits. The study found out challenges hindering use of internet banking services by customers as slow network connection, network failure, poorly designed websites and unavailability of services during website maintenance. In order to promote use of internet banking services, there is need for banking organizations to launch awareness campaigns to customers by alleviating fear to issues such as lack of privacy and security of customer's information through advertisements as well as promotions could be held at bank branches to offer prizes to customers who sign and use internet banking services. The rapid development of internet banking has created a competitive environment for financial institutions offering internet banking. Internet banking enables customers to perform financial transactions via the internet at any time and from anywhere and thus saving time. Banks also benefit from reduced operational cost by adopting internet banking.***

Keywords: Internet banking

1. Internet Banking

Process of using banks website that is connected to the internet to conduct financial transactions and activities such as opening an account, transfer of funds, paying bills and checking for statements.

2. Introduction

Internet connectivity has traversed every aspect of our society and has propagated tremendous improvements in efficiency and customer service (Sullivan & Wang, 2014). Public as well as private sectors have now turned to the use of information technology and internet as one of the means to service delivery (Pourkiaei&Ardestani, 2014). Banking organizations are shifting from traditional ways of service delivery where a bank customer needs to personally visit a banking hall to access services, to new innovative platforms such as the use of internet banking. Sullivan and Wang (2014) refer internet banking as a bank that provides a website which allows customers to execute transactions on their accounts. This implies that internet banking is the use of internet as a delivery channel to communicate instructions to and receive information from a financial institution where an account is held in order to carry out banking services such as opening account, transfer of money, balance inquiry, printing of statements and paying of bills via a banks website.

Due to the rapid growth of banking organizations, banks are searching for new solutions that will help them offer better services to existing customers as well as attract new markets. Internet technology is being utilized as a marketing tool to enhance service delivery. This implies that banks can now offer many opportunities to both customers as well as banking institutions. Internet banking offer convenience to bank customers, allowing them to use services from banks in distance and avoid hassles to go to the bank branches as well as it generates substantial cost savings to banks (Sullivan & Wang, 2014).Financial institutions in Kenya cannot ignore technological information systems since they play an important role in their operations. This is so because customers are aware of technological advancements and thus demand higher quality services. About late 2007, some Kenyan banks started implementing Internet banking as a new online service channel. As elsewhere, these banks expect that Internet banking can offer customers a variety of online services with more convenient access to information and transactions.

3. Statement of the Problem

The 21st century has witnessed the use of information technology increase rapidly in various countries around the globe. Advanced telecommunication and computer technology has enabled the internet to become the leading medium and innovative distribution channel for businesses (Mitchell et al., 2011).Internet banking enables customers to perform financial transactions via the internet through the website of a bank at any time, from anywhere where internet connectivity is available (Hu & Liao, 2011). Banks also benefit from reduced operational cost by adopting internet banking. As a result, financial institutions have invested large amounts of money to improve internet banking services. Banks have sought to remain up to date by resorting to provide internet banking in order to satisfy customer's needs and desires by moving financial services from a face-to-face to a self-service driven technology (Wessels&Drennan, 2010).

Surprisingly there are many customers who have refused to use internet banking services (Koenig-Lewis et al., 2010). Security of information on the internet is the primary factor, which determines the adoption of internet banking technology (Pourkiaei&Ardestani, 2014).Several studies have examined the factors that hinder customers from utilizing internet banking as a relevant financial delivery channel in many developed countries around the world (Alsajjan& Dennis, 2010). For example in India, Pourkiaei and Ardestani (2014) conducted a research on internet banking with a view to study the satisfaction level of customers. The research report indicates that customers were not using all the services provided by banks because of different reasons such as lack of know-how regarding the method of using services, doubt about the safety and security related issues which brings fear regarding transmission of private data (Pourkiaei&Ardestani, 2014). Commercial banks in Kenya are trying to introduce internet banking systems to improve their operations and to reduce costs. Internet banking adoption in Kenya is very low despite high levels of internet access (Njuguna et al., 2012). In Kenya, little research has been conducted on the adoption and usage of internet banking and thus adoption and usage trends are unclear (Njuguna et al., 2012). Adoption of Internet banking services in developing countries is slower than anticipated (Ajam&Nor 2013). This study is anchored on the basis of slow adoption and use of internet banking by bank customers despite high levels of internet access (Internet Freedom East Africa, 2014).

Objectives of the Study

Specific objectives of the study were to:

a) Examine factors that influence adoption of internet banking in the three selected banks
b) Determine the extent of use of internet banking services by customers in the three selected banks
c) Find out challenges facing use of internet banking by customers in the three selected banks
d) Find out solutions to the challenges that hinder adoption of internet banking services by customers in the three selected banks

4. Literature Review

Adoption of Internet Banking in the Global Banking Environment

Internet banking has experienced sporadic growth in many countries and transformed traditional banking practices. Internet banking (2015) reveals that internet banking was gaining considerable adoption in developed countries than in developing countries. Banks have considered the adoption of internet banking as a platform for improving customer experience, achieving competitive advantage and reducing operational costs. Today, all banks in USA and most of the banks in Europe and around the world offer Internet banking (Al-Khatib, 2012). They have continually endeavoured to improve customer experience in the banking services offered through online and offline channels. In order to provide enhanced banking experience for both retail and corporate customers, banks have committed to upgrade their core banking platforms (Banking Industry, 2013). A research from CAC Bank (2010) reveals that Yemen banks have committed huge amount of money to upgrade their internet technology services. Since the introduction of internet banking in Yemen in 2002, only four banks provide internet banking services (Budde, 2011). The slow pace at which Yemen banks are taking to adopt internet banking suggests that internet banking service is still very low in Yemen (Zolait, 2011).

Indonesia and South Korea has the highest internet penetration (The International Monetary Fund, 2011). In his research, Nguyen (2011) reveals that South Korea has many online banking users than Indonesia even though Indonesia has the highest growth rate of online banking users in Southeast Asia. In Bahrain there is competitive pressure from foreign banks, which has forced local banks to reconsider the way they conduct their business. Being one of the highest levels of internet users amongst the Gulf Cooperation Council (GCC), Bahrain locals are reluctant to adopt themselves to internet banking services (Economic Development Board, 2011). In order to retain existing customers, banks will be required to evaluate carefully issues that affect customers because it will be costly to attract new customers. Internet banking is one avenue that banks can use to retain customers and attract high profits (Economic Development Board, 2011). It is thus becoming increasingly important for marketers to understand new trends in technology which can attract new as well as retain existing customers.

Organizations such as banking sector have always been in the forefront to using information technology in order to add value to its products, services and efficiency. Use of advanced technology has led to the shift from traditional banking to modern banking methods such as electronic banking (e-Banking) which started in 1990's (Kumar, 2014) and electronic commerce (e-Commerce).E-Banking started with the introduction of computers and automatic teller machines (ATMs). ATMs were introduced by Luther Simjian in 1939 and introduced in New York in 1960. However these machines were not commercially successful as according to Luther, only prostitutes and gamblers used them to avoid face-to-face dealings with bank tellers.

Currently, the most common and useful technology based banking methods are online or internet banking, mobile banking, video banking, telephone banking, ATM, and plastic money (Vijayaragavan, 2014).Internet has become one of the indispensable technology tools being used by various business organizations in the twenty-first century (Maruf et al., 2014). Significantly internet banking enables customers to conduct financial banking transactions on a secure website which can be operated by a retail, virtual bank, credit union or building society. It makes banking faster and easy. Video banking is used for conducting banking transactions or consultations through a remote video connection. This technology was called videotext technology and provided voice response and handprint processing. It can be performed over purpose built banking transaction machines similar to Automated Teller Machines (ATM) or through bank branches enabled with video conferencing (Aldrich, 1982). Telephone banking is a bank service provided by financial institutions allowing its customers to conduct banking transactions over the telephone. Institutions which provide banking services exclusively over telephone are called Phone Banks. They use special technology to modernize the customer by providing bank and account related information over a telephone. Automatic teller machine ATMs are electronic machines, which are operated by a customer himself to deposit or to withdraw cash from bank. For using an ATM, a customer has to obtain an ATM card from his bank. The ATM card is a plastic card, which is magnetically coded. It can be easily read by the machine. Plastic money is a must need of our busy life. Today plastic money is the best alternative of the cash. It is also safer to travelling with a plastic money card than cash. Today it is very easy to carry money without having a lot of cash or gold. This is a new idea of present life-style which has made money transition so easy that anybody can carry it with him or her in a pocket (Vijayaragavan, 2014).

Adoption of Internet Banking in Developing Countries

According to Ajam and Nor (2013), Internet banking in developing countries has been slower than anticipated and that it has not been used as much as they could or should have been. In Malaysia, the rapid technological advancement and increasing consumer demands for more efficient delivery of services has provoked banks to continually make transitions towards internet banking platforms (Central Bank of Malaysia, 2011).With high number of internet subscribers, internet banking adoption rate is still low in Malaysia (Mozie et al., 2012).

There are many advantages of using internet banking as a delivery channel. Despite the benefits that come with this form of technology, many banks and consumers in some least developed and developing countries are yet to adopt and implement internet banking services (Fonchamnyo, 2013). Nigeria is one of the developing countries in Africa which has fully recognized the benefits of information technology. But reasons such as low-level trust in the security measures of internet banking is attributed to the reluctance and low adoption of internet banking in Nigeria (Adesina& Ayo, 2010). Trust is therefore a main contributing factor in electronic commerce growth (Eastlick&Lotz, 2011). In India, financial products and services have become available over the internet which has consequently become an important distribution channel for a number of banks. A study on internet users conducted by internet and mobile association of India (IAMAI, 2014) revealed that 23% of online users prefer internet banking channel compared to 53% who prefer Automatic Teller Machines (ATMs) in India. This indicates that a significant number of online users do not use internet banking.There is increasing development in the financial sector for the last 35 years in order to remain in the state of the art of information technology. Internet has traversed all sectors of our economy to especially banks and has enhanced internet banking with tremendous success in terms of service delivery channels. Despite the fact that the internet has an ever-growing importance in the banking sector, not all financial institutions (banks) that have adopted internet banking have been successful. Musiime and Ramadhan (2011) pointed out that in Uganda, where the concept of internet banking was introduced in early 2006, adoption and implementation has either been slow in banks or among customers. In developing countries, internet banking is still in its early stages. Musiime and Ramadhan (2011) highlights that in Zimbabwe, commercial banks introduced internet banking in the past seven years. Since then, the adoption of the technology among individual customers is still very slow in these commercial banks.

Impact of Internet Banking

Customers are expected to enjoy several benefits as a result of the implementation of Internet banking. According Intana and Chansa-ngavej (2014), bank customers, can do almost all their personal banking transactions online 24 hours a day from anywhere. All of those activities offered to customer due to timesaving and convenience is the main influence served on Internet banking. Internet banking would be beneficial in reducing transaction costs (Intana&Chansa-ngavej 2014, pp. 126). New technology helps in time saving and enables financial service providers to launch new products and services with efficiency that make it fast and convenient for customers to conduct various banking transactions (Intana&Chansa-ngavej 2014, pp. 126). Financial institutions will greatly benefit by adopting techniques that will attract more customers to adopt internet banking. Consumers will enjoy the privilege of access to far more providers of financial services (Birch & Young, 1997). As a result of a wider choice of internet bank service providers, the costs searching, negotiating and concluding deals will be lower as the comparison of products and services would be made easier over the internet (Bakos, 1991; Malone et al., 1989, Peters, 1998). Information on pricing and returns is far easier to gather (Birch & Young, 1997). Customers will also save traveling costs to bank branches and also avoid the heavy traffic jams and long queues (Chan, 2001). Customers will enjoy the benefits of conducting their banking transactions at ease because they would not be subjected to high-pressure sales tactics (Birch & Young, 1997).

Besides opportunities of internet banking, banks and financial institutions across the world face new challenges to the ways they operate, deliver services and compete with each other in the financial sector. Driven by these challenges, banks and financial institutions have implemented services delivery using internet banking (Chan & Lu, 2004). The objectives of launching internet banking include cost reduction, performance improvement, wider coverage, revenue growth, and customer convenience (Bradley & Stewart, 2002; Chau & Lai, 2003). From the customer’s perspective, internet banking facilitates a convenient and effective approach to manage personal finances, as it is accessible 24 hours a day and 365 days in a year without visiting the bank and from any locations (Rotchanakitumunai&Speece, 2003).

With the continuous growth of competition in the marketplace, understanding customers has become more and more an important issue of marketing. According to the Chartered Institute of Marketing, marketing is defined as the process of management to identify, anticipate and satisfy customer requirements profitably. It shows that today's companies have moved their focuses from products and sales to customer oriented marketing (Lin, 2003). According to Hanson (2000), customer service is an organization's ability to supply their customers' wants and needs. He further explains improving customer service involves both learning what customers' needs and wants are, and developing action plans and process to give customers what they really want and need. Nowadays, customer service has been emerging as a competitive weapon for business firms to obtain competitive advantage. In addition, customer service has gained specific importance for the survival of companies. With this increased importance of customer service, it is obviously that service quality became an increased concern (Eppinette& Inman, 1997). However, due to services' four distinctive characters namely: intangibility, inseparability, heterogeneity and perish ability, service quality becomes difficult to measure and evaluate. Therefore, customers' perceptions of service quality draw major concern by both business managers and researchers (Hoffman & Bateson, 2002).

The incredible growth of the internet is changing the way corporations conduct business. The advantages of the Internet, offer a wide range of opportunities for companies to find new ways of conducting their business in order to cope with increased competition more efficiently and effectively. As a result, business practices through the internet are increasingly becoming the subject of studies evaluating the impact of internet on economic growth and business performance (Venkatraman, 2000). Most online service providers, however, have encountered substantial problems and challenges in conducting online service quality. The primary reasons for these difficulties are due to service providers' lack of experience in operations of this recent challenge and their limited understanding of online customers' usage behaviors (Mols, 2000). As a critical measure of organizational performance, service quality remains at the forefront of both the marketing literature generally and the services marketing literature specifically (Johnston, 1997). Practitioners and academics alike are keen on accurately measuring service quality in order to better understand its essential antecedents and consequences, and, ultimately, establish methods for improving quality to achieve competitive advantage and build customer satisfaction (Palmer, 1995). Since customer expectation and perception of internet service will change over time, quality will become an increasingly important issue. Therefore, understanding service quality within the delivery channel of internet becomes more and more important (Mols, 2000). The banking industry is no exception. The introduction and customer acceptance of internet-based home banking may bring a dramatic change in the way retail banks build and maintain close relationship with their customers (Jun and Cai, 2001).

Although there is a significant growth of internet users in Kenya, the number of financial transactions carried out over the internet remains very low. This trend however is the same globally and it has been observed that potential users either do not adopt internet banking or do not use it continually after adoption. Mearian (2001) indicated that huge number of customers in USA is accessing most of the banks' websites but only a minority of customers has made online financial transactions. Gartner expressed that out of 61% online users, only 20% of consumers carries out online banking in the USA (Brown, 2001). Several studies have reported not only low adoption rate but also disparity in adoption rates among European countries. ACNielsen (2002b) found that use of internet banking is increasing in Asian countries but it is still lower than the estimations. Due to these slow adoption rates, the transformation of banking services from the traditionally known physical branches commonly referred to 'bricks and mortar' to the modern way through information and communication technology systems better known as 'clicks and mortar' is yet to be realized to the extent it was predicted (Bradley & Stewart, 2002). Customers in some countries have ranked internet banking as less important than other channels such as ATM or telephone banking (Aladwani, 2001; Rotchanakitumunai&Speece, 2003; Suganthi& Balachandran, 2001).

An understanding of the extent of the customers' adoption or utilization of internet banking services has become critical. According to Courtier and Gilpatric (1999), banks and financial companies must survey customers' requirements on a regular basis in order to understand factors that can affect their adoption or usage of internet banking. Since the onset of internet banking in Kenya in early 2000, the number of online customers is still very low. However, there has been a notable increase asbanks continue to intensify marketing and the infrastructures continues to mature (Gikandi& Bloor, 2010).

Challenges facing adoption and use of internet banking services

Internet banking is now facing great technological revolution to incorporate technologies such as mobile banking (Gikandi& Bloor, 2010). Privacy and security are perceived to be the most important issues that inhibit customers from using internet banking in Kenya (Gikandi& Bloor, 2010). It is worth noting that internet banking has been accepted in specific line of services (Internet Banking, 2015). In developing countries such as Nigeria, benefits of internet banking have been recognized. However reasons such as low-level trust in the security measures of internet banking are attributed to the reluctance and low adoption of internet banking (Adesina& Ayo, 2010). The main contributing factor in electronic commerce growth therefore is trust (Eastlick&Lotz, 2011). In Africa and UAE, there are a number of constraints related to social and infrastructure that must be taken into account when evaluating the development of online banking in Kenya (Ndubisi et al., 2004). Many Kenyan banks have the capacity to offer online banking services. However, the telecommunications infrastructure remains deficient. Second, internet penetration in rural areas is still relatively low, which may not encourage the investment required to develop online banking (Gikandi& Bloor, 2010).

5. Research Methodology

Research Design

Quantitative research design and descriptive research design was used in this study. This is because the study used questionnaires to collect data from the respondents. Quantitative research design is an approach for testing objective theories by examining the relationship among variables (Creswell, 2014).These variables, in turn, can be measured typically on instruments, so that numbered data can be analyzed using statistical procedures. The study employed descriptive survey research design study because it provided numeric descriptions of the population and described events as they were (Oso &Onen, 2009).

Sampling and Sampling Techniques

Sampling is choosing which subjects to measure in a research project (Garson, 2012). According to Orodho and Kombo (2012), a sampling technique is defined as the procedure that a researcher uses to gather things, places or people to study. Purposive sampling was used in this study through a survey of Chase bank, I&M bank and Kenya commercial bank. This is because the three selected financial institutions are leading banks in Kenya and provide internet banking services. Purposive sampling is selecting a sample on the basis of a researcher's knowledge of the population, its elements, and the nature of the researcher's aims (Babbie, 1990). In purposive sampling, individual characteristics are selected to answer necessary questions about a certain matter or product (MacNealy, 1999). The researcher is then able to select participants based on internal knowledge of said characteristic. According to Babbie (1990), this method is useful if a researcher wants to study a small subset of a larger population in which many members of the subset are easily identified but the enumeration of all is nearly impossible.

Sample Size

A sample is a subset of a population (Lohr, 2010). A sample should be of the required size in order to have the required degree of accuracy in the results as well as to be able to identify any significant difference or association that may be present in the study population (Israel, 2009). In total 150 respondents were randomly selected from the three banks for purposes of data collection through the use of lead people. This is because quantitative and descriptive study needs hundreds of subjects to give acceptable confidence intervals (Hopkins, 2002).

Table 3.1: Sample Size (Researcher, 2016)

Bank	Sample Size
Chase bank	50
I&M bank	50
Kenya Commercial bank	50
TOTAL	150
%	100

Data Collection Methods

Questionnaires were used to collect data in this study. Primary data was obtained from the questionnaires. Nordin (2009) recommends use of questionnaires because of time saving and confidentiality.The study used both closed-ended and open-ended type of questions. Questionnaires were also used because the study was quantitative whose main purpose was to get detailed information from the respondents.

Research Instruments

According to Creswell (2011) research instruments are the means by which primary data are collected. Research measurements are tools designed to obtain data on a topic of interest from research subjects. The researcher used questionnaires to conduct the study. The questionnaires contained both open-ended and closed-ended type of questions. The questionnaire was validated by avoiding inconsistencies that may occur through wording mistakes, and ambiguities. The questionnaire was pre-tested by two native English speakers. Sekaran and Bougie (2010) highlights that a pre-test is essential because wording problems significantly influence accuracy and that if there are errors in the questionnaire they are corrected before the actual study is carried out.

Pilot Study

Pilot test was conducted to test validity and reliability of research instruments using Standard chartered Bank and Bank of Africa which were randomly selected. In the pilot study the respondents answered the questionnaire quite well and where there were issues, the questionnaire was corrected. The pilot study helped to redefine the questionnaire for data collection purposes.

Validity

Validity is the accuracy and meaningfulness of inferences, which are based on the research. It is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study (Bryman, 2008). In order to ascertain content and face validity, the questionnaires were presented to experts for test and measurement who matched all the items of the questionnaire with the research questions to ascertain whether the instrument actually measured what was captured on the research questions. The advice from the experts was used to construct the questionnaires to ensure that all research questions were covered.

Reliability

Reliability describes the repeatability and consistency of a test (Venkatesh et al., 2013). To ensure reliability of the instruments the researcher conducted a pilot study in Standard Chartered bank and Bank of Africa in Nairobi city before the actual study. The main purpose of the pilot study was to check suitability and the clarity of the questions on the questionnaires, relevance of the information that was being sought, the language used and the content validity from the responses that were given.

Data Collection Procedures

The researcher personally visited the sampled banks and made prior arrangements with the bank managers on an appropriate day and time for the distribution of questionnaires to the relationship officers. The researcher then identified five relationship officers in each of the selected banks and requested them to distribute questionnaires to their clients on his behalf. Each relationship officer was given ten questionnaires to distribute to respondents. Respondents were requested to fill in the questionnaires. The researcher kept contact with the relationship officers and once the questionnaires were returned, the researcher picked them for data analysis.

Data Analysis

According to Kombo and Tromp (2011), data analysis procedure includes the process of packaging the collected information, putting in order and structuring its main components in a way that the findings can be easily and effectively communicated.

Questions from the questionnaires were analyzed using Microsoft Excel 2007 and presented the findings in tables and figures. Finally data was analyzed using research objectives and research questions of the study and highlighting various thematic areas.

Ethical Considerations

Ethical concern in the academic community is an extensive, complicated, and controversial topic that warrants deep and thoughtful discussion (Wet, 2010). To ensure that the researcher adheres to ethical considerations, the researcher undertook various measures to prevent any harm to the respondents by ensuring that the research did not have a negative effect on the respondents. Therefore the researcher asked only professional questions. The researcher used the supplied information for only study purposes. The researcher never named any respondents during the research and the subsequent report. The respondents were requested to fill the questionnaires and were not threatened or coerced to fill them. The researcher sought permission for research study from the bank management before conducting the research initiative. The researcher cited all reference that was used. Finally the researcher will avail the information at request incase a copy is needed.

6. Findings and Recommendations

6.1 Adoption and Use of Internet Banking

From this study, the factors that influence adoption and use of internet banking services are discussed in this section. Findings on education level indicate that most respondents were qualified with a diploma or degree which represented 36% and 39% respectively. Secondly, findings on gender indicated that both male and female use internet banking with majority being male with 56% and female 44%. Findings on age indicated that age is an influential factor in the use of internet banking with early to mid-aged customers being the majority who used internet banking services. A possible conclusion may be that most internet banking users are educated young to mid-aged people who find it easy to carry out banking transactions over the internet than going to the banking halls.

The findings on the usefulness of internet banking indicate that generally majority of the respondents found internet banking to be useful. Findings on ease of use of internet banking indicate that use of internet banking services is easy to use. On the attitudes towards the use of internet banking, a possible conclusion arrived is that using internet banking is a good idea. Findings on intention to use internet banking indicate that existing bank customers who use internet banking strongly agree that they would continue using internet banking for their banking needs and for handling their banking transactions. Bank customers who did not use internet banking also expressed an interest that they would love to use internet banking in the future. A possible conclusion is that existing internet banking users as well as those who do not use internet banking services intends to use internet banking services. The findings on information security indicate majority disagrees that sending sensitive information across internet banking is secure. Thus a possible conclusion is that sending personal sensitive information over internet banking is unsecure.

6.2 Challenges facing the use of Internet Banking

Challenges encountered when using internet banking include: slow network connection, network failure, poorly designed websites, no service during website maintenance, and forgotten password. Findings in table 4.7 below indicated that 43 of the respondents cited that slow network connection was a major problem. Other problems mentioned were; unavailability of services during website maintenance with a response mode of 13 representing 17.5%, network failure recorded a mode of 11 representing 15% and another 7 respondent's representing10% cited poorly designed websites. Thus a possible conclusion is that the greatest problem for internet banking users is slow network connection followed by unavailability of services over internet banking during website maintenance.

Table 4.7: Challenges of Using Internet Banking (Researcher, 2016)

Challenges	Responses	%
Slow network connection	43	57.5
Network failure	11	15
Poorly designed websites	7	10
Unavailability of services during website maintenance	13	17.5
TOTAL	74	100

Possible Solutions to the Challenges that hinder Internet Banking

Slow network connection can frustrate consumers while using internet banking. Internet service providers should adopt and use up-to-date internet infrastructure mechanisms to ensure that internet connection and network failure is reduced significantly. This can be achieved through the adoption of current optic fiber network technology. Banks should ensure that they develop quality websites. A website should always be as simple as possible to allow fast and easy interaction with the customers. Banks should offer alternative solutions to internet banking users during website maintenance.

6.3 Recommendations

Complexity of internet banking is a key factor that influences the adoption of internet banking. Easy to use internet banking is important for all customers. Banks should aim to make their internet banking as simple and easy to use as possible so that customers do not perceive it as being complicated or difficult to use. It provides insights for developers to design an internet banking system interface, websites, processes, and programs and for banks to formulate strategies in offering services. Websites should be user-friendly with clear instructions for users. The use of illustrations is advised and will be embraced by all levels of users. Banks should install security features such as encryption devices, which safeguard sensitive information. Risk perceptions by potential adopters are negatively related to the adoption of internet banking. Therefore, banks providing internet banking should actively address these negative perceptions. To boost confidence and enhance the efficacy of using internet banking services, demonstrations via video presentations could be made at bank branches to showcase the user-friendliness of such services. In order to overcome consumers' negative perceptions about internet banking safety, banks should promote the positives of the service, such as convenience and cost-effectiveness, and should begin a marketing campaign that makes internet banking the new buzz word. These initiatives will help customers familiarize themselves with the bank and its internet banking services. New technology, like all things that are unfamiliar, requires initiation. This is an important criterion in helping Customers select bank that offers internet banking. There can be substantial marketing advantages for banks offering internet banking services.

Consumer fears of information security risks transacting over the internet is one of the major inhibitors to the successful implementation of internet banking. Banking institutions should ensure that their internet banking systems have an uncompromised level of security features built-in, by way of back office systems security, operational and procedural security, and transactional security. Such precautions are important in affirming consumer confidence in using the internet for internet banking activities.

Wider Study

This study was conducted to assess consumer perceived risk of internet banking in Kenya. As such, there is still room for further investigation into the adoption and use of internet banking services. Following are some recommendations for future studies. Future studies should be carried out on non-internet users to investigate their intentions of using internet banking. In this way, a more comprehensive investigation of internet banking intentions and usage behavior can be conducted. The study on consumer perceived risk and adoption of internet banking services in Kenya can be extended to corporate customers. Comparison can then be made between individual customers and corporate customers in terms of their adoption decisions, the criteria for selecting an internet banking service, and the types of products and services perceived to be useful.

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