EFFECT OF ELECTRONIC BANKING ON CUSTOMER SATISFACTION IN SELECTED COMMERCIAL BANKS, KENYA

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ABSTRACT

In the bid to catch up with global developments and improve the quality of service delivery, it is in no doubt that banks have invested much on technology, and have widely adopted electronic and telecommunication networks for delivering a wide range of value added products and services. However, the integration of customers into electronic banking is far from been realized. The general aim of the study was to determine the effect of electronic banking and customer satisfaction among first tier bank in Nairobi Town. The study was hinged on diffusion innovation theory and contrast theory. The study adopted a descriptive survey research design. The target population was 262511 customers drawn from 5 first tier banks within Nairobi CBD. Stratified sampling technique was used to select a sample size 225 respondents. Primary data was collected using structured questionnaires addressed to the participants. The researcher conducted initial data analysis using descriptive statistical measures. The study also conducted a regression analysis to establish the relationship between the study variables. From the findings, the study concluded that flexibility of internet banking influence customer satisfaction to a great extent. In addition, many customers use internet banking because it is easy to use while personalized internet banking also affects customer satisfaction to a great extent. The study further concludes that usefulness of internet banking and friendliness of internet banking has relatively low effect on customer satisfaction. The study also concludes that convenience of mobile banking affects customer satisfaction to a great. Further, the study concluded that user friendly ATMs, ease of access of ATMs and privacy of ATMs affects customer satisfaction to a great extent. In addition, using ATM cards in supermarket and affordability of ATM charges have moderate effect on customer satisfaction. In relation to point of sale system, the study concludes that, effectiveness of point of sale system affects customer satisfaction to a great extent. Finally, it was clear that mobile banking has the highest effect on Customer satisfaction followed by automated teller machines, then point of sale system while internet banking had the least effect on customer satisfaction. Banking institutions should enhance their internet banking to make it flexible, fast and easy to use. Management of banking institutions should enhance application of mobile banking to increase satisfaction of their customers. Mobile service providers in conjunction with banks should develop more friendly and easy to use and efficient applications for bank customers. Finally, the banking institutions should work hand in hand with major retail outlets and other organizations that use point of sale systems so as to ensure the cards issued to customers and point of sale systems are useful, reliable and can work with speed.

Key Words: *E-banking, customer satisfaction, internet banking, automated teller machines, mobile banking, point of sale service*

INTRODUCTION

Electronic banking is considered as a new revolution of the traditional banking services which offers customers the greatest expediency for performing banking transactions via electronic. All banks, especially the large banks and mutual banks, have gradually increased their number of Internet banking services available to customers over the past decades (Momeni, 2013). Advances in electronic banking technology have created new ways of handling banking transactions, especially via the online banking channel. A feature of the banking industry across the globe has been that it is increasingly becoming turbulent and competitive, characterized by an increasing trend towards internationalization, mergers, takeovers and consolidation of the banking industry(Muhammad, Akin & Abdul, 2015). In light of the recent financial crisis and global economic recession, leaders of financial institutions are under additional pressure not only to maintain customer satisfaction while sustaining lower costs, but also to maintain market leadership. To lower costs and maintain market leadership, bank leaders have capitalized on superior service quality and information technology infrastructures.

To convey with this customer' desire the banks need to change towards the modern banking. Information and Communication Technology (ICT) have changed means of business and methods of operations in various businesses. Virtual banking includes all non- traditional and electronic means of banking such as ATM, Phone Banking, Internet Banking (IB), Credit Cards and Debit Cards etc. A special feature of virtual banking is the physical absence of the person seeking banking services at the premises and out of premises even abroad. The sophisticated and developed E-banking services were introduced to enhance service delivery and customer satisfaction and then customer loyalty toward the organization. According to the Al-Madi (2010), the availability of Automated Teller Machines (ATM), cards, telephone banking, personal computer banking and internet banking has been existed nowadays in banking system (Narteh, 2014).

Electronic banking (E-banking) has improved as well as changed the aspect of commercial banking through linking and connecting geographical, industrial and regulatory gaps and creating innovative products as well as services for both banks and customers (Khan & Karim, 2010). In other words, Internet technology holds the potential to fundamentally change banks and the banking industry. An understanding of the extent of the customers' adoption or utilization of internet banking services has become critical. Sarlak and Hastiani (2011) recommended that 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.

Africa and in other developing countries, e-commerce adoption has been inhibited by the quality, availability and the cost of accessing telecommunication infrastructures (Jalal, Marzooq & Nabi, 2011). Other issues include lack of skilled staff; low internet penetration, low bank account, and

lack of timely delivery of physical goods also hinder the growth of e-banking. The banking sector in the African region has benefited from the rapid penetration of mobile technology in recent years across the continent – a very good example being the success of mobile payments in Kenya. Such technological advancements are not just shaping how people interact with one another; they are also changing the behaviour and expectation of bank customers who are increasingly becoming used to the immediacy offered by technology.

Kenyan banks have exponentially embraced the use of information and communication technologies in their service provision. They have invested huge amounts of money in implementing the self and virtual banking services with the objective of improving the quality of customer service. Common embodiments of e-banking include the following: Mobile/SMS Banking, Telephone Banking, Electronic funds transfers, Self Service (PC) Banking, POS Banking (Credit and Debit cards), ATMs, Interactive TV and Branchless Banking. In Kenya, for example, we have M-Shwari, which is offered by Commercial Bank of Africa in conjunction with Safaricom Kenya Limited. Another form of E-Banking in Kenya is Eazzy 247 offered by Equity Bank of Kenya. There is also Straight to Bank (S2B) offered by Standard Chartered Bank of Kenya which allows one-stop online Banking and Cash management solution. In Kenya, there is also the Hello Money offered by Barclays Bank of Kenya among other forms of electronic banking offered by commercial banks in Kenya (CBK annual report, 2012). For customers, the potential benefits are: more choice; greater competition and better value for money; more information; better tools to manage and compare information; and faster service. E-banking creates opportunities for banks by promoting product development and delivery, lower barriers to entry, significant cost reduction, capacity to re-engineer different business processes, greater opportunities to sell cross border and marketing via the Internet.

STATEMENT OF THE PROBLEM

Customer satisfaction is a much sought after phenomenon in today's highly competitive and globalized market place. Today's customers seek more than price bargains and want useful, dependable and reliable technologies. Many Kenyan banks have exponentially embraced the use of information and communication technologies in their service provision. Huge amounts of money have invested in implementing the self and virtual banking services with the objective of improving the quality of customer service. However, the adoption of e-commerce has been inhibited by the quality, availability and the cost of accessing telecommunication infrastructures, lack of skilled staff, low internet penetration, low bank account, and lack of timely delivery of physical goods (Jalal, Marzooq & Nabi, 2011). In the bid to catch up with global developments and improve the quality of their service delivery, Kenyan banks have invested much on technology; and have widely adopted electronic and telecommunication networks for delivering a wide range of value added products and services (GoK, 2010). Unlike before when ledger-cards were used, today banking has been connected to computer networks, thereby facilitating

the practice of inter-bank/inter-branch banking transactions (CBK, 2011). Developments at home, such as the introduction of mobile telephone in 2001 and improved access to personal computers and Internet service facilities have also added to the growth of electronic banking in the country.

However, whereas local banks most commonly practice real time online intranet banking, the integration of customers into the process is far from been realized. Many of the reasons are attributed to the high prevalence of internet fraud and lack of an adequate regulatory framework to protect the banks from the volatility of risks associated with Internet banking, especially at the levels of communication and transaction. In Kenya, most of bank customers have raised complaints on improving service delivery, an issues banks have overlooked, especially when using modern technologies (Aker, 2010). The high level of commercial bank customer dissatisfaction with the services has been previously identified (Aker, 2010; Bichanga & Wario, 2014; Kombo, Paulík & Kwarteng, 2016). Key challenges of electronic banking are: getting the balance between convenience, speed and security. The problem is designing products that offer a balance between competitive pricing and functionality, keeping abreast with dynamism of customer needs and innovation and lack of proper legislative framework to support the growth of e-banking. Statistics obtained on the number of over the counter transactions in these banks in the past indicated that indeed, over the counter transactions are still preferred by many clients. The question that is raised then is why? One problem associated with this financial innovation is card fraud, particularly on counterfeit cards. Fraudulently authorized EFTs and RTGSs are the other avenues through which financial losses occur as customers utilize these avenues of service delivery. Frequent system failure especially on ATM machines has also been of concern and affects quality customer service delivery especially during end month and during festive seasons when the service is most needed by customers. In addition, complaints have also been raised on failures at Point of Sale terminals in stores whenever access to the host bank fails, thus causing inconveniences to customers, sometimes leading to litigations.

Adoption of technology in the financial sector have been examined in several studies Anbalagan (2011) and Gikandi and Bloor (2010) observed that half of the people that have tried banking services through internet banking will not become active users. Berger (2013) claims that internet banking is not living up to the hype. Juma (2013) studied the influence of electronic banking services on customer service delivery in banking industry, in Bungoma County. Aduda and Kingoo (2012) also studied the Relationship between Electronic Banking and Financial Performance among Commercial Banks in Kenya. In addition, Kaburu (2010), evaluated E-banking in Kenya, Maitha (2010) analyzed the effects of E-banking in commercial banks in Kenya in promoting international business, Mchemi (2013), studied E-banking Technology In Kenyan Commercial Banks while, Munyoki and Ngigi (2012), investigated Challenges of e-banking adoption among the commercial banks in Kenya. Moreover, Mutunga (2013) analyzed

Operational Challenges In The Implementation Of E-banking At The National Bank Of Kenya, Nyabiosi (2010) also studied Taxing e-commerce in the banking industry: the case for financial transaction tax in Kenya while, Rono (2015) evaluated the determinants of electronic banking and operational performance of commercial banks in Kenya. However, none of the above researchers has studied the effect of electronic banking on customer satisfaction among commercial banks in Kenya. Thus this study sought to fill this research gap.

OBJECTIVES OF THE STUDY

The general objective of the study was to determine the effect of E-banking on customer satisfaction in selected commercial banks in Kenya.

SPECIFIC OBJECTIVES

1. To establish the effect of internet banking on customer satisfaction among commercial banks in Kenya.
2. To determine the effect of automated teller machines on customer satisfaction among commercial banks in Kenya.
3. To evaluate the effect of mobile banking on customer satisfaction among commercial banks in Kenya.
4. To assess the effect of Point of sale service on customer satisfaction among commercial banks in Kenya.

THEORETICAL REVIEW

Theory of Reasoned Action

Theory of Reasoned Action, (TRA) was developed to better understand relationships between attitudes, intentions and behaviors (Fishbein, 1967). This is one of the most important theories that are used to explain human behaviors (Poon 2008). Behavioral intention to use technology is explained by people's attitudes toward that behavior and subjective norms. Intensified competition and deregulation has led many services and retail businesses to seek profitable ways to differentiate them; one strategy that has been related to success in these businesses is the delivery of high service quality (Cheah, 2011). So service quality has become a significant research topic in past decade due to high revenues, increased cross sell ratios, higher customer retention, purchasing behaviors (Kaynak & Harcar, 2015) and expanded market share. The significance of customer service in the banking sector came to force to compete in a market driven environment. The service sector as a whole is very heterogeneous and what is heterogeneous may hold true for one service and may not hold for another service sector. Due to this differentiation, services in this industry could not be standardized, moreover these services

are intangible in nature which could not be compared or seen. The concept of customer satisfaction and service quality is interrelated with each other

As electronic banking is becoming more prevalent, so is the level of customer service delivery thus the level of customer satisfaction is also changing the scenario of technological environment (Hamisah, 2013). Informational technology in form of e-banking plays a significant role in providing better services at lower cost. Increase satisfaction in turn increases the mutual understanding, customer retention and a bond of trust between customer and bank. The banks which are providing these services at large extent to customers are more reputed in the eyes of customers. As the customer satisfaction is the function of customer expectation level and service quality level provided by the organization, e-banking plays a pivotal role in giving satisfaction to the customers because e-banking fills the gap between the expected and perceived service quality.

Innovation Diffusion Theory

This theory postulated by Roger (1983) explains individuals' intention to adopt a technology as a modality to perform a traditional activity. The critical factors that determine the adoption of an innovation at the general level are the following: relative advantage, compatibility, complexity, trialability and observability. Many banks have found it advantageous to adopt ICT in their operation in order to improve their efficiency. This is achieved through development of websites and mobile applications that suit the customer needs. Customers are therefore able to access their accounts anywhere as long as they are connected to the internet. This theory is concerned with the manner in which a new technological idea, artefact or technique, or a new use of an old one, migrates from creation to use. According to IDT, technological innovation is communicated through particular channels, over time, among the members of a social system.

The stages through which a technological innovation passes are: knowledge (exposure to its existence, and understanding of its functions); persuasion (the forming of a favourable attitude to it); decision (commitment to its adoption); implementation (putting it to use); and confirmation (reinforcement based on positive outcomes from it) (Arnaboldi & Claeys, 2008). In the same way internet banking has been enhanced due to cyber threats and fraud.Early users generally are more highly educated, have higher social status, are more open to both mass media and interpersonal channels of communication, and have more contact with change agents. Mass media channels are relatively more important at the knowledge stage, whereas interpersonal channels are relatively more important at the persuasion stage.

Innovation decisions may be optional (where the person or organization has a real opportunity to adopt or reject the idea), collective (where a decision is reached by consensus among the members of a system), or authority-based (where a decision is imposed by another person or organization which possesses requisite power, status or technical expertise). Barnes and Corbitt

(2013) advises that managers need to understand the capabilities of any particular technology and the benefits that ensue from its use in considering what technology to use with their operations, as well as understand associated costs and limitations of operating that technology. He advises the general issues to consider as the volume and variety of output that the technology can achieve, the fit with existing technology used with the organisation and the level of maturity of the technology. Internet banking heavily relies on the ICT since it is carried out on the internet. Customers are able to access their accounts remotely without having to physically visit the bank.

Contrast Theory

Contrast theory was first introduced by Hovland, Harvey and Sherif (1987). Dawes et al (1972) define contrast theory as the tendency to magnify the discrepancy between one's own attitudes and the attitudes represented by opinion statements. Contrast theory presents an alternative view of the consumer post-usage evaluation process than was presented in assimilation theory in that post-usage evaluations lead to results in opposite predictions for the effects of expectations on satisfaction. Through the introduction of automated teller machines, customers are able to access funds in their accounts ore conveniently and at any one time as compared to the old system where money could only be withdrawn on the counter. A bank seeking to increase customer satisfaction must invest heavily in the ATM networks or join the existing local or international networks such as visa card or master card.

While assimilation theory posits that consumers will seek to minimize the discrepancy between expectation and performance, contrast theory holds that a surprise effect occurs leading to the discrepancy being magnified or exaggerated. According to the contrast theory, any discrepancy of experience from expectations was exaggerated in the direction of discrepancy. If the firm raises expectations in his advertising, and then a customer's experience is only slightly less than that promised, the product/service would be rejected as totally un-satisfactory. Conversely, under-promising in advertising and over-delivering will cause positive disconfirmation also to be exaggerated (Prathima 2003). In line with this theory, commercial banks must continue to bring in new products that increase customer satisfaction and at the same time keep up with market standards.

Assimilation-Contrast Theory

Assimilation-contrast theory was introduced by Anderson (1973) in the context of post-exposure product performance based on Sherif and Hovland's (1961) discussion of assimilation and contrast effect. Assimilation-contrast theory suggests that if performance is within a customer's latitude (range) of acceptance, even though it may fall short of expectation, the discrepancy was disregarded – assimilation will operate and the performance was deemed as acceptable. If performance falls within the latitude of rejection, contrast will prevail and the difference was

exaggerated, the produce/service deemed unacceptable. The assimilation-contrast theory has been proposed as yet another way to explain the relationships among the variables in the disconfirmation model. This theory is a combination of both the assimilation and the contrast theories. This paradigm posits that satisfaction is a function of the magnitude of the discrepancy between expected and perceived performance. As with assimilation theory, the consumers will tend to assimilate or adjust differences in perceptions about product performance to bring it in line with prior expectations but only if the discrepancy is relatively small (Frame & White, 2009).

Commercial banks should ensure that transfer of funds from one account to another should be as efficient as possible. This may be effected through electronic transfers either by the bank or by the customer through internet banking. Assimilation-contrast theory attempts illustrate that both the assimilation and the contrast theory paradigms have applicability in the study of customer satisfaction. Variables other than the magnitude of the discrepancy that might also influence whether the assimilation effect or the contrast effect would be observed, when product performance is difficult to judge, expectations may dominate and assimilation effects was observe, contrast effect would result in high involvement circumstances. The strength of the expectations may also affect whether assimilation or contrast effects are observed (Frame & White, 2009).

Commercial banks must also keep up to the expectations of the customers if they are to achieve the desired customer satisfaction. If they do not do this customers was dissatisfied and develop a negative attitude about them and this may lead to low customer loyalty. Assimilation-Contrast theory suggests that if performance is within a customer's latitude (range) of acceptance, even though it may fall short of expectation the discrepancy was disregarded – assimilation will operate and the performance was deemed as acceptable. If performance falls within the latitude of rejection no matter how close to expectation, contrast will prevail and the difference was exaggerated, the product deemed unacceptable (Bauer 2006).

Disconfirmation Theory

Disconfirmation theory argues that 'satisfaction is related to the size and direction of the disconfirmation experience that occurs as a result of comparing service performance against expectations. Szymanski and Henard found in the meta-analysis that the disconfirmation paradigm is the best predictor of customer satisfaction (Gardachew, 2010). Fang, Tian, and Tice (2010) cites Oliver's updated definition on the disconfirmation theory, which states Satisfaction is the guest's fulfillment response. It is a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under- or over-fulfillment.

Karjaluoto, Mattila and Pento (2012) observes that amongst the most popular satisfaction theories is the disconfirmation theory, which argues that satisfaction is related to the size and direction of the disconfirmation experience that occurs as a result of comparing service performance against expectations. Basically, satisfaction is the result of direct experiences with products or services, and it occurs by comparing perceptions against a standard e.g. expectations. Research also indicates that how the service was delivered is more important than the outcome of the service process, and dissatisfaction towards the service often simply occurs when guest's perceptions do not meet their expectations. Commercial banks must at all times ensure that they have satisfied their customers if they are to expect any positive feedback from them. Customers may also be a major source of new business through referrals. Banks should therefore invest in the current technology; adopt new ways of doing business such as internet banking, mobile banking and electronic fund transfers. Automated teller machines should also be user friendly and be multifunctional such that a customer can withdraw or deposit cash through the same ATM.

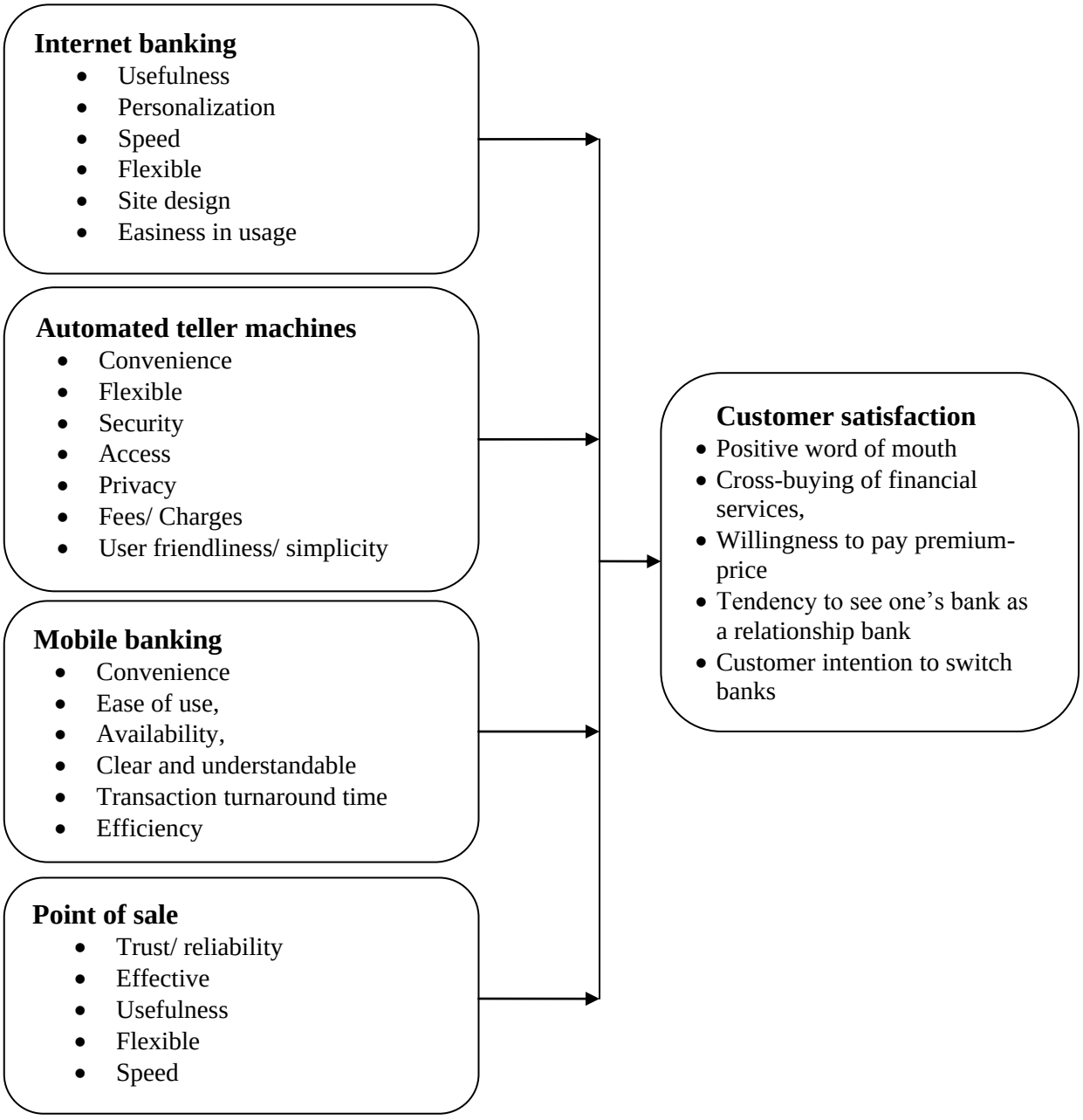
CONCEPTUAL FRAMEWORK

Internet banking (e-banking) is the use of internet and telecommunication networks to deliver a wide range of value added products and services to bank customers (Ovia, 2012) through the use of a system that allows individuals to perform banking activities at home or from their offices or over the internet. Some online banks are traditional banks which also offer online banking, while others are online only and have no physical presence. Online banking through traditional banks enables customers to perform all routine transactions, such as account transfers, balance inquiries, bill payments, and stop-payment requests, and some even offer online loan applications. Customers can access account information at any time, day or night, and this can be done from anywhere.

Recent literature has a narrow focus and ignores internet banking almost entirely; it equates internet money with the substitution of currency with internet gadget. For instance Nupur (2010) suggests that internet banking and internet money consists of three devices; access devices, stored value cards, and network money. Internet banking is simply the access to new devices and is therefore ignored. Internet money is the sum of stored value (smart cards) and network money (value stored on computer hard drives).

Review of the literature has attempted to address the aspects of adoption of mobile phone financial services. It has however, not adequately linked the adoption of mobile phone financial services on customer satisfaction. In addition, most of the previous studies (Dass and Pal, 2011), (Shin 2010), (Kumar and Ravindran, 2012), (Cheah, 2011), (Puschel et al (2010), (Kaynak and Harcar, 2015), (Poon 2008) and (Nupur 2010) Kotzab, 2009 are emanating from developed countries creating a dearth gap in the literature that address the effect of mobile money transfer

transaction on customer satisfaction. Moreover, few Kenyan scholars (Mutunga, 2013), (Munyoki, 2012) and (Muchemi, 2013) investigated the adoption of e-banking without linking their findings to customer satisfaction. It was maintained that satisfaction is not the only one important antecedent of long-term customer relationships and such antecedents as trust and commitment should be analyzed as well (Nupur, 2010).



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A lot of literature surrounds the area of electronic banking; much of what have been discussed is about answering the question of how electronic banking is adopted? In other words, what is level of adoption of electronic banking and factors that influence the adoption of electronic banking? However, few studies have demonstrated the relationship between electronic banking constructs and customer satisfaction. However previous studies have shied away from the effect of internet banking on customer satisfaction among commercial banks in Kenya. This study therefore sought to bridge this gap.

RESEARCH METHODOLOGY

Research Design

This study adopted a descriptive survey design. Descriptive research design was used as it had merits such a researcher having no control over the variables and only reported what was happening. Descriptive design was found appropriate because it involved collecting data in order to answer pertinent questions concerning the current status of subjects under study. The research design provides facts and suggestions on major connections between the variables. The primary purpose of this study was to determine the effect of E-banking on customer satisfaction in selected commercial banks in Kenya.

Population of the Study

The population of the study comprised of of 262511 regular customers drawn from five banks in tier one namely equity bank, Barclays bank, Kenya commercial banks, Standard Chartered Bank and Co-operative Bank(CBK, 2015). The banks were only five due to the huge number of e-banking registered customers and as such, the sample was generalized to represent the characteristics of the 43 banks.

Sample Size and Sampling Techniques

The sample was obtained using coefficient of variation. The study therefore used a coefficient variation of 30% and a standard error of 2%.The higher limit for coefficient of variation and standard error was selected so as to ensure low variability in the sample and minimize the degree or error. Using this formula a sample of 225 customers was selected. Kombo and Tromp (2009), gives the formula as follows:-

$$= {Nc^2}/{c^2 + (N-1)e^2} = {262511(0.3)^2}/{0.3^2 + (262511-1)0.02^2} = 225$$

Where, n=Sample size, N=Population, c=covariance, e= standard error

Using this formula a sample of 225 customers was selected.

Data Collection

Primary data was obtained from the respondents through a structured questionnaire comprising of both closed and open-ended questions. Prior to launching the full-scale study, the questionnaire was pre-tested to ten (10) questionnaires to other Banks in Thika town, which were not to be part of the Institutions to be studied to ensure its workability in terms of structure, content, flow, and duration. The research supervisor, experts and professionals who are experienced in research were also requested to examine the questionnaire to check whether there are any items that need to be changed or rephrased, as well as the appropriateness of the time set for. This process helped refine the questionnaire, enhance its legibility and minimize the chances of misinterpretation it.

Data Analysis and Presentation

The collected data was analyzed using quantitative data analysis methods. Descriptive analysis such as frequencies and percentages was used to present quantitative data in form of tables and graphs. Data from questionnaire was coded and entered into the computer using Statistical Package for Social Science (SPSS Version 21) for analysis. It gave means, standard deviations, correlations and frequency distribution of each independent and dependent variable. Customer satisfaction was regressed against the four independent variables using the regression model. The mean, median, percentage, mode and standard deviation are the most commonly used descriptive statistics. Measures of central tendency were used in this study to give a description of the data. Tables, graphs, bars and pie charts were used for further representation.

FINDINGS AND DISCUSSIONS

Descriptive Findings and Analysis

The analysis was based on 194 out of the 225 questionnaires which were properly filled and returned. These accounted for 86.2% response rate. The study established that 62.4% of the customers used bank services several times per month in a typical month, 22.2% used bank services once in a typical month, 8.8% used bank services once a week in a typical month while 6.7% of the customers used bank services daily in a typical month. The respondents were asked to rate statements on a 5 point likert scale ranging from 1 to 5 with 1 being 'to no extent at all', 2 being 'to a small extent' 3 being 'to some extent', 4 being 'to a high extent' and 5 being 'to a very high extent'.

From the study, majority of the respondents indicated that flexibility of internet banking influenced customer satisfaction to a great extent as shown by a mean score of 4.6557, they use internet banking more frequently because it is fast as shown by a mean score of 4.1858, ease of use internet banking had a mean score of 4.1366, personalized internet banking 4.0820 while usefulness of internet banking and friendliness of internet banking were seen to have relatively low effect on customer satisfaction with a mean score of 3.5738 and 2.7978 respectively. The standard deviations of between 0.5 and 0.9 indicated that there was a small variation in the responses.

The results above reveal that convenience of mobile banking affected customer satisfaction to a great extent as shown by a mean score of 4.7934, understandability of mobile banking and reversal of transactions in mobile banking had moderate effect on customer satisfaction with a mean score of 4.2896 and 4.1038 respectively. Use of a mobile phone account, efficiency of mobile banking and availability of mobile banking had little effect on customer satisfaction with a mean score of 3.8197, 3.6678 and 3.5519 respectively.

The study findings revealed that user friendly ATMs easily access of, ATMs and privacy with use of ATMs affected customer satisfaction to a great extent as shown by a mean score of 4.3388, 4.1311 and 4.0437 respectively. Using ATM cards in supermarket, convenience of bank ATMS and affordability of ATM charges were shown to have moderate effect on customer satisfaction with a mean score of 3.9672, 3.9290 and 3.4481 respectively. Respondents indicated that use of ATM to deposit cash in bank account had little effect on customer satisfaction with a mean score of 2.4361. These findings imply that Customer-focused ATM delivery systems that fulfil their needs and maximize operational performance are essential dimensions for banks to achieve and sustain competitive advantage.

The study results above indicate that effectiveness of point of sale system affected customer satisfaction to a great extent as shown by a mean score of 4.4699. Usefulness of point of sale

system, reliability of point of sale system and speed of point of sale system had moderate effect on customer satisfaction as shown by a mean score of 4.3989, 4.2350 and 4.0246 respectively. Finally, purchase any good from supermarket using point of sale using from customers account had the least effect on customer satisfaction with a mean score of 3.2951. The variations in the responses were also minimum.

From the study findings, most of the customers have other accounts with other banks as shown by a mean score of 4.5326. The results showed that, respondents were satisfied with how the bank treats its customers with a mean score of 4.4973. In addition, respondents were happy being customers in their banks with a mean score of 4.2284. The study also found that most customers have stayed with this bank for more than five years as shown by a mean score of 4.1483, they do not have intentions to switch banks as shown by a mean score of 4.0694 and have recommended my friends to join the bank since i like their services as shown by a mean score of 4.0537. Further, the customers view their banks as relationship banks as shown by a mean score of 3.8905 and were contented with the banks e-banking services with a mean score of 3.7158. The customer also indicated that they were willing to pay premium-price for products and services at the bank as shown by a mean score of 3.7116. It was deduced that only a few customers have tendered several complains with the banks as shown by a mean score of 3.4272.

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.828	0.686	0.679	0.152

a. Predictors: (Constant), internet banking, mobile banking, ATMs and point of sale system.
b. Dependent Variable: Customer satisfaction

The adjusted R^2 was used to establish the predictive power of the study model and it was found to be 0.679 implying that 67.9% of the variations in customer satisfaction are explained by internet banking, mobile banking, ATMs and point of sale system, leaving 32.1% unexplained. The study findings in the table above indicate that all the independent variables are jointly positively correlated with customer satisfaction.

Table 2: Summary of One-Way ANOVA results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.197	4	2.299	97.282	.000[b]
	Residual	4.207	178	0.024		
	Total	13.404	182			

a. Predictors: (Constant), internet banking, mobile banking, ATMs and point of sale system.
b. Dependent Variable: Customer satisfaction

The probability (P) value of 0.000 shown in table 4.16 indicates that the regression relationship was highly significant in predicting how internet banking, mobile banking, ATMs and point of sale system affected customer satisfaction. The F calculated at 5% level of significance was 97.282 since F calculated is greater than the F critical (value = 2.14), this shows that the overall model was significant..

Table 3: Coefficients of regression equation

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.578	0.737		3.498	.0005
	Internet Banking	0.426	0.134	0.361	3.179	.0017
	Mobile Banking	0.782	0.169	0.514	4.627	.0000
	Automated Teller Machines	0.612	0.125	0.426	4.896	.0000
	Point Of Sale	0.486	0.156	0.381	3.115	.0021

The results above indicate that all other factors (internet banking, mobile banking, ATMs and point of sale system) being constant at zero, the level of customer satisfaction will be 2.578.. Furthermore, the results indicate that taking all other independent variables at zero, a unit increase in internet banking would lead to a 0.426 increase in customer satisfaction and a unit increase in mobile banking would lead to a 0.782 increase in the customer satisfaction. Further, the findings shows that a unit increase in automated teller machines would lead to a 0.612 increase in customer satisfaction while a unit increase in point of sale system would lead to a 0.486 increase in the customer satisfaction. In terms of magnitude, the findings indicated that mobile banking have the highest effect on customer satisfaction followed by automated teller machines, then point of sale system while internet banking had the least effect on customer satisfaction. All the variables were significant as their P-values were less than 0.05.

CONCLUSIONS

Through existing marketing literature, empirical evidence and multiple regression analysis, the study concludes that commercial bank customers are satisfied with most of the e-banking services. From the findings, the study concludes that internet banking flexibility, speed influence customer satisfaction to a great extent. In addition, many customers use internet banking because it is easy to use and the services are personalized. The study further concludes that usefulness and friendliness of internet banking has relatively low effect on customer satisfaction.

The study also concludes that, convenience of mobile banking affects customer satisfaction to a great extent. It was clear that understandability and reversal of transactions in mobile banking

had a moderate effect on customer satisfaction while use of a mobile phone account, efficiency of mobile banking and availability of mobile banking has little effect on customer satisfaction.

On the effect of ATMs on customer satisfaction among commercial banks, the study concluded that user friendly ATMs, ease of access of ATMs and privacy of ATMs affects customer satisfaction to a great extent. In addition, using ATM cards in supermarket, convenience of bank ATMS and affordability of ATM charges have moderate effect on customer satisfaction. Further, the study concludes that, the use of ATM to deposit cash in bank account has little effect on customer satisfaction.

In relation to point of sale system, the study concludes that, effectiveness of point of sale system affects customer satisfaction to a great extent. Usefulness of point of sale system, reliability of point of sale system and speed of point of sale system had moderate effect on customer satisfaction while purchase of good from supermarket using point from customers account has little effect on customer satisfaction.

Finally, the study infers that mobile banking has the highest effect on customer satisfaction followed by automated teller machines, then point of sale system while internet banking had the least effect on customer satisfaction

RECOMMENDATIONS

The study established that internet banking affects customer satisfaction to a great extent to a great extent. This study therefore recommends that banking intuitions should enhance their internet banking to make it flexible, fast and easy to use. Usefulness, friendliness and personalized internet banking had relatively low effect on customer satisfaction. This study therefore recommends that the management of commercial banks should justify investment in internet banking as far as Usefulness, friendliness and personalized internet banking are concerned. The study also recommends that, the government and its agencies should formulate policies that enhance application of internet banking across all financial institutions in Kenya. This may include legislations on how to curb cyber-crime.

This study also established that, understandability of mobile banking and reversal of transactions in mobile banking has moderate effect on customer satisfaction while use of a mobile phone account, efficiency of mobile banking and availability of mobile banking has little effect on customer satisfaction. In this regard, the study recommends that, management of banking institutions should enhance application of mobile banking to increase satisfaction of their customers. Mobile service providers in conjunction with banks should develop more friendly and easy to use and efficient applications for bank customers.

The study established that user friendly ATMs, ease of access of ATMs and privacy of ATMs affects customer satisfaction to a great extent. Using ATM cards in supermarket, convenience of bank ATMS and affordability of ATM charges have moderate effect on customer satisfaction while use of ATM to deposit cash in bank account has little effect on customer satisfaction. This study therefore recommends that banks should invest in ATMs that are easy to use, guarantees privacy, affordable charges and once that allow customers to make deposits.

In relation to point of sale system, the study concludes that, effectiveness of point of sale system affects customer satisfaction to a great extent. Usefulness of point of sale system, reliability of point of sale system and speed of point of sale system had moderate effect on customer satisfaction while purchase of good from supermarket using point from customers account has little effect on customer satisfaction. This study therefore recommends that banking institutions should work hand in hand with major retail outlets and other organizations that use point of sale systems so as to ensure the cards issued to customers and point of sale systems are useful, reliable and can work with speed.

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