DIGITAL BANKING AND CUSTOMER RELATIONSHIP IN BANKING INDUSTRY IN KENYA

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ABSTRACT

Adoption of digital banking as a platform for banking services has continued to rise globally as consumers become more and more comfortable with using mobile and Internet channels for banking. Banks on the other hand are continuously breaking away from the traditional branch banking by embracing digital banking mainly to cut cost and win the young tech-savvy customers. In Kenya this has been seen with the rise of mobile banking, internet banking and other digital platforms employed by various commercial banks in Kenya. Nevertheless, there's a gap about how these digitization of banking have affected customer relationship among commercial banks in Kenya. This prompted the research to find out the effects of digital banking on customer relationship in banking industry in Kenya. The specific objectives of this study were to determine the effect of digital banking perceived benefits like convenience of online transactions, decision support systems, online customer care support systems and interactivity on bank-customer relationship in banking industry in Kenya. The research investigated 120 customers randomly selected from 6 commercial banks based in Nairobi with two banks randomly selected from each tier. The 6 banks acted as a sample of the 43 registered commercial banks in Kenya.To achieves this, the study employed the theory of disruptive innovation and Technology Acceptance Model. Semi structured questionnaires will be used to collect data and a descriptive statistics analysis was used to analyze the data. The collected data was then analyzed using descriptive statistics and the results presented using frequency tables, charts and graphs. A linear regression model was also be used to determine the effect that the independent variables has on the dependent variable. From the presented information, conclusions on whether and how these digital banking affects customer relationship among commercial banks in Kenya were be drawn and recommendations made from there. In conclusion it was observed that the commercial banks locally and globally are immensely implementing digital banking to minimize the costs related to the traditional brick and motor banks and also to stay competitive and retain market share in the digital oriented market. The banks are constantly investing in information technologies that aim to put them above their rivals. The bank's main assets are the customers and therefore these customers are meant to be treated well and a profitable relationship sustained.

Key Words: *digital banking, customer relationship, banking industry, Kenya*

INTRODUCTION

Digital banking has become an irresistible business trend. McKinsey (2014) research in personal financial services shows that Asian consumers are becoming more and more comfortable with using mobile and Internet channels for banking services, with their use increasing on average more than 35 percent in the past three years. In Kenya and world over, banks are continuously

embracing digital banking mainly to win the young tech-savvy customers who are fully embracing digital communication and are the customer group with whom banks need to establish customer primacy relationships (McKinsey & Company, 2014).

This trend is not only in Kenyan market or Asia, in the US the research done by Netbanker, (2012) shows that more than 60 million households in the US alone use online or mobile banking. The research further estimated that by 2016 it's expected that 107 million consumers (55 percent of U.S. adults) will use mobile banking, Smartphone and Tablet for their banking and financial management both personal and for business.

According to Ngugi (2013), banking over the Internet an example of digital banking has attracted increasing attention from bankers and other financial services industry participants, the business press, regulators, and law makers. Among the reasons for adoption of digital banking are the notion that electronic banking and payments will cut banks 'costs, increase banks 'revenue growth, and make banking more convenient for customers and improve bank-customer relationship (Ngugi, 2013).

In Kenya, a PWC (2015) report on Retail Banking in 2020 shows that, most banks are adopting digital platforms to meet the increasing demand for convenient banking mostly by their retail customers. These include the utilization of social media notifications, mobile banking, and e-wallet to provide basic banking services to their clients without necessarily visiting the branch. This has been influenced by advances in mobile devices and networks, enhanced digital security and the ability to access the Internet from anywhere. These new channel integration technologies, has enabled a more seamless end-to-end experience for customers with their bank. This basically cut off bank-customer face-to-face interaction, a key component in building customer relationship, hence creating a new challenge on how to manage the digital customer relationship.

Digital Banking

Digital banking commonly referred to as Electronic banking or simply e-banking is the use of electronic and telecommunication networks to deliver a wide range of value added products and services to bank customers (Steven, 2002). The use of information technology in banking operations is called electronic banking. The Commercial Bank of Africa (2006) defines e-banking as the use of electronic means to deliver banking services, mainly through the Internet and mobile phones. The term is also used to refer to ATMs, mobile banking, use of plastic money, and electronic funds transfers.

Digital banking is the use of the internet, mobile phones, and other electronic mediums as a delivery channel for banking services, which includes all traditional services such as balance enquiry, printing statement, fund transfer to other accounts, bills payment and new banking services such as electronic bill presentment and payment (Frust, Lang, &Nolle, 2000) without

necessarily visiting a bank (Mukherjee &Nath, 2003). Mobile banking allows individuals to check their account balances and make fund transfers using their mobile phones. Since the innovation of mobile banking, banks has perfected by interlinking customers' accounts with mobile money wallets to enable customers transact seamlessly.

Customer Relationship

Customer Relationship is defined as how a business interact, gather information about customers and use it to better meet the needs of both existing and new customers. This involves identifying new customers and offering better channels for customers to choose from, with the goal of improving customer experience and customer service delivery (Kotler, 2005). Chen and Popovich (2003) refers to customer relationship as a combination of people, processes, and technology that seeks to understand a business customers and enhance service delivery. Key elements of bank customer relationship are convenience of transaction processing, customer interactivity, accessibility to information for decision making, ease of use of bank's alternate channels and customer service delivery.

Building long-term relationships with customers has become a critical strategy for most financial institutions in today's competitive financial markets. The banking industry must develop profitable, long-term relationships with its customers in order to survive in the competitive retail banking environment. Several studies reveal that a bank's profitability is closely associated with customer loyalty and retention (Clemes et al., 2010) which is based on customer relationship. One of the major reasons cited by most banks on adoption of digital banking has been to improve customer relationship

According to Chen and Popovich (2003), the elements of customer relationship in banks revolves around convenience of transaction process, accessibility to customer service interactivity and information provision. The customer's experience on these key elements of customer relationship may be a deal maker or breaker in any bank customer relationship (Chen & Popovich, 2003).

RESEARCH PROBLEM

Today's most banks have adopted digital platforms to meet the increasing demand for convenient and flexible banking mostly by their retail customers (PWC 2015), and also to cut cost and respond to competition. Additionally, as most people now own mobile phones, banks have introduced mobile banking to cater for customers who are always on the move. It has always been held by banks that this is objectively to ease transaction processing and enhance customer experience by bringing the customer closer to their banks. On the contrast, many people think that digital banking unlike traditional banking distance customers from their banks hence weakening bank-customer relationship and transactional ability. This held believe is supported by a research conducted by Cisco (2014) on 7,200 retail banking consumers in 12

countries in Europe, the research finding showed that despite the massive adoption of digital banking among commercial banks, customer expectations for financial services are not being met and many customers feel disconnected from their financial services institutions (Cisco, 2014). They argue that digital banking to a large scale has minimized bank-customer interactivity which is largely associated with the traditional banking. This creates a need to establish how online interactivity associated with digital banking affects customer relationship. At first glance, it may seem like; customer stands to gain more than the commercial banks for utilizing digital banking platforms. Supporters of digital banking have argued that aspects of digital banking like online decision support, online customer care, online transactions and interactivity creates more convenience and flexibility to customers as they can easily access their account information and initiate transactions at the comfort of their office/homes 24 hours 7 days a week thus improving customer experience which leads to a good bank-customer relationship (CBA, 2014). However, in the year 2014, Cisco established that every traditional bank that deals with financial transactions is grappling with the myriad new ways that new technologies are changing their relationship with their customers to the worse. Ease and convenience of online transaction has also been debated as a major benefit to customers who adopt digital banking. In contrast, research has shown that retail banking industry is a personal and pre-dominantly face to face business with little need for such applications to enhance the relationship (Cisco, 2014). This has been a largely debated subject that the study intents to contribute. With the increasing adoption of digital banking by both banks and customers, there is relatively little attention paid to the affects digital banking on customer relationship and the value key stakeholders in the industry can get from understanding the effects. Additionally, most of researches on the subject have been conducted in developed countries with well-established technology infrastructures which is in contrast to the Kenyan economy. This creates a need to establish the situation in Kenya.

GENERAL OBJECTIVE

The general objective of the study was to assess the effects of digital banking on customer relationship in the banking industry in Kenya.

SPECIFIC OBJECTIVES

1. To determine the effects of convenience of online transactions on customer relationship in the banking industry in Kenya.
2. To establish the effects of the online decision support systems on customer relationship in the banking industry in Kenya.
3. To establish the effects of online customer care support systems on customer relationship in the banking industry in Kenya.
4. To determine the effects of online interactivity on customer relationship in the banking industry in Kenya.

THEORETICAL REVIEW

Theory of Disruptive Innovation

A disruptive innovation theory was coined by Christensen (1995) as an innovation that creates a new market and value network and eventually disrupts an existing market and value network, displacing established market leaders and alliances. According to Christensen (1995), a disruptor can take the form of personal computer, cellular phones, etc. In this research, the theory of disruptive innovation will be used to argue the impacts of digital banking on customer relationship in the banking industry in Kenya as compared to the traditional brick and mortar branch banking. Customer relationship refers to a relationship between customers and companies-in this case bank, service providers, and brands. From customer perspective, the existence of a relationship refers greatly to an attitude: perception of mutual way of thinking two –way commitment (Gronroos 2000). Digital banking is a disruptor from the traditional branch banking. From Christensen's (1995) perspective, this is likely to affect the customer relationship based on the perception of the clients towards the technology. This research will adopt this theory and argue on the line that disruption is likely to affect the customer relationship in either way depending on customer's perception towards digital banking.

Technology Acceptance Model (TAM)

This is a commonly used model on adoption of innovative solutions by firms. Technology Acceptance Model as coined by Davis (1989), proposes that both perceived usefulness and perceived ease of use can be used to predict the attitude towards using new technology, which in turn affects the behavioral intention to use the actual system directly. This in turn affects the way users relates to the systems and hence the firms that adopts such technologies. Davis (1989) defines perceived usefulness as the degree to which a person believes that using a particular system would enhance his/her job performance or ease his/her work. From Davis (1989) perspective, the users of digital banking platforms are more likely to adopt and continue using the E-Systems if they believe the system brings benefits in the case of banking, flexibility, easy access to information, easy transaction completion, friendliness and prompt connection to contact person for help, reducing time spent on going to bank and increasing convenience, ease of transaction, access to information and customer care. The outcome will determine how these users relate to the bank employing digital banking. This creates an assumption that if the user feels that digital banking platforms are easy to use, confidential and hustle free, they are likely to adopt and utilize them with a lot of ease. This being a new way of interrelation, it is likely to experience a shift in the way of interaction between the customers and the bank especially on relationship.

The Technology Acceptance Model approach is the most relevant and most applied theory in technology adoption. According to technology Acceptance model the perceive ease of use is basically the degree to which the prospective adopter expects the new technology adopted, to be

a free effort regarding its transfer and utilization (Davis, 1989). However, Nguyen and Singh (2004) in their research on Impacts of internet banking on customer satisfaction and loyalty in Australia noted that the major limitation is that the theory does not factor in other key factors that affects technology adoption like technology accessibility.

On analysis of the predictors of technology adoptions by organizations and individuals, Jeyaraj (2006), concluded that TAM is the most relevant technology adoption model in analysis of how technology adoption influences decisions. However, other researchers argue that, TAM on itself is insufficient in explaining users' decisions to adopt technology (Amin, 2007). Safe from the limitation of Technology Acceptance Model, this research will use model to argue the finding of the study on how the perceived outcomes of digital banking impacts customer relationship. Digital service that is perceived valuable by customers is expected to affect customer relationship positively. This value could be money saved, time, information, convenience, assistance, friendliness, speed, flexibility and easy transaction completion.

Theory of Reasoned Action (TRA)

The theory of reasoned action (TRA) was developed by Martin Fishbein and Icek Ajzen in 1967 and later popularized in 1980s and was derived from previous research that began as the theory of attitude. The theory aims to explain the relationship between attitudes and behaviors within human action. TRA is used to predict how individuals will behave based on their pre-existing attitudes and behavioral intentions. It purports that an individual's decision to engage in a particular behavior is based on pre-existing attitudes and behavioral intentions.

The Customer-Bank relationship could be influenced by the pre-existing attitudes towards digital banking or traditional brick-motor branch banking. There has been held perception that digital banking distance customers from their bank due to lack of human interface (Cisco, 2012). Based on this theory, this study intends totest the theory in investigating how customer's attitude towards digital banking could possibly affects their relationship with the bank.

EMPIRICAL REVIEW

Transaction Processing and Customer Relationship

In their research on Impacts of internet banking on customer satisfaction and loyalty in Australia, Nguyen and Singh (2004) found that better internet banking system quality such as the transaction speed, ease of use, convenience of transaction, interactivity, cost/benefits and customer service delivery is likely to have a positive impact on customer relationship. However, these findings did not consider the factors that may limit the use of technology like age, education, income, disability and emotion, accessibility to internet which are likely to moderate the customer relationship and satisfaction as a results of internet banking. This can affects bank-customer relationship for any bank that digitalizes all its processes without giving a consideration to these key factors. According to Brondmo (2000), other factors like limitation of

accessibility to technology and internet bandwidth can limit access to the very benefits that digital banking promise to offer thus diminishing customer relationship. There is a need to establish how these demographic factors affect the customer relationship despite the perceived convenience of transaction processing associated with digital banking.

As with any information processing system, security and reliability are considerations for many customers. In their study on Variables influencing the customer relationship management of banks, Rootman and Bosch (2008) observed that, unlike traditional transactional processing, online transaction systems are generally more susceptible to direct attack and abused than their offline counterparts. Rootman and Bosch further observed that when organizations choose to rely on online transaction processing, operations can be severely impacted if the transaction system or database is unavailable due to data corruption, systems failure, or network availability issues. However, it's very important to observe that as far as this may affect the clients feeling and attitudes towards the online transaction processing system, it may not necessarily influence the way the customer relate to the bank.

Additionally, like many modern online information technology solutions, some systems require offline maintenance which further affects the cost-benefit analysis. It's important to note that while Rootman and Bosch (2008) made their conclusions based on the benefits of online processing, the duo didn't look at how online transaction processing impacts the customer relationship but instead, they focused on how in long term affects the bottom line. It is very imperative not to give customers a key consideration while looking at this subject given their vital role in achieving the business bottom line.

A research done by KBA, (2015), has indicated that most bank customers prefer using other alternate channels to access their bank accounts as compared to going to the bank. Banks both large and small has invested a lot in digital platforms with an objective of decongesting branches and cut on operational costs. Adoption of digital banking by banks has largely affected the way customer relate with their banks as now customers can access more services offered by their banks from their mobile devices without physically going to the bank. Customer can now easily access different bank services from the comfort of their offices from the internet and other digital platforms (KBA, 2015). According to KBA, this has eased transaction processing and created flexibility on the side of the customers. The research acknowledges these benefits and their likely effects on customer relationship. However, it holds that, the previous researches were silent on other factors that affect accessibility of digital platforms like access to internet which may not have been present in the environment of research.

Online Interactivity and Customer Relationship

Interactivity in digital media offers customers better options to search for information, work as initiators, and gets help. Interactivity also offers new ways to spend time with a product and the banks customer's service providers on a web chat. According to Mesiravo (2003), digital service

has a potential to provide customers with better choice, access, control, and convenience over traditional service channels. This in turn enhances customer satisfaction and loyalty. However, Masiravo's conclusion was based on TAM theory on perceived usefulness and not a field study.

The interactive elements of digital platforms can be used to create self-service options, like allowing customers to track their account movements. With growing number of e-customer service and marketing channels, there seems to be a focus on short-term operational issues, like carrying out online marketing campaigns Mesiravo (2003). Instead, among many others, Godin (1999), Novak (2000) and Brondmo (2000) have given emphasis to the customer relationship and service perspective of digital channels. It is believed that digital channels can be used to create unique and positive experiences to customers trust and relationships in the long term by mixing all aspects of products, service, brand, and communication-not just transactions.

In his research on the impact of perceptions of interactivity on customer trust and transaction intentions in mobile commerce, Min Lee (2005) found that addition of mobile commerce specific components of interactivity improves customer trust. Min Lee also concluded that the perception of user control, responsiveness, connectedness, ubiquitous connectivity and contextual offer have a direct positive effects on transaction intention and customer relationship in mobile commerce. Min Lee (2005) is limited in a way that he only focused on mobile commerce an aspect of e-banking thus leaving out the larger part of e-banking functionalities. On the other hand.

The importance of interactivity will increase in MC environment. Through mobile devices, business entities are able to reach customers anywhere at any time. Technological advancement in MC makes it feasible to deliver customized service; Min Lee (2005) observed that perceived responsiveness is primary focused on response speed or time. Users gauge responsiveness of a system from direct communication as in a reply to an e-mail. It is related to how quickly bank respond to consumers' request or questions.

In his study, Hoffman et al. [1998] proposed that online communities are useful for building site trust in order to reduce the perceived risk of consumers. Based on this study, Min Lee (2005) proposed that perceived connectedness has a positive impact on a customer's trust in MC. His argument was based on the ground that in MC environment, consumers can access to information or mobile Internet service at the point of need regardless of where they are. However, Min Lee over looked at other aspects of mobile commerce that may otherwise influence customer behavior.

Further contribution by Pavlou (2003) viewed trust in the organization as a dimension of the relationship quality and he argued that the relationship quality is positively related to anticipate future interactions in the service context. This was based on the Technology Acceptance Model (TAM) [Davis 1989; Davis et al. 1989; Straub et al. 1997]. These studies highly contributes to the subject of this study, however, they don't give a narrowed view on digital banking a focal point of e-commerce an area this research seek to establish.

Online Customer Care and Customer Relationship

While it is argued that online customer care service is faster and friendlier in solving customer issues. Many have argued that it has no personal touch in solving the said problems hence diminish customer trust and satisfaction. Several studies have been conducted on digital depended customer care on customer relationship. For instance a study conducted by Buss and Begorgis (2015) on impact of social media as a customer relationship management tool to determine if social media can be used as an effective customer care tool found that customer relationship management was not achieved through social media thus not most effective customer relationship management tool. However, more researches have concluded otherwise.

Research suggests that technology assists CRM efforts in banks by integrating computer and telephony to support call center operation, improve business intelligence, assists in mass communication, transaction through web and customer self-service. (Krasnikov and Jayachandran, 2009). A study of Bank of America about E-CRM concluded that E-CRM to a large extent leads to easy access to customer information, increase in quality and efficiency of communication with customer, increase service consistency, enhance customer relationship, increased service consistency and leads to high retention rate of customers (Krasnikov and Jayachandran, 2009).. On the contrary, Rootman (2008) suggests that knowledgeable, trained and empowered employees are the one who can deliver successful customer relationship management. For a bank employee courtesy and justice is very important because the perception of unfair treatment in the mind of customer would destroy the relationship more quickly than anything else hence the need for human contact. It's very difficult to agree with any of the two research findings without considering the important aspect of customer relationship each of the two brings out. Is only imperative to take a middle position and consider the vital aspects in each findings of the researchers.

Rootman (2008) agrees that, the introduction of E-CRM and advanced technologies in the banking sector has improved the quality of services in the banks that ultimately improved bank to customer relationship and satisfied the customer's needs in a better way. The E-CMR brings benefits for both parties; the banks from one side and the customers form the other. The bankers have the ability to access the customer's historical data what enables them anticipate the customer's timing of purchase and to make better decisions about the services and products they offer. However, systems fail, and they can fail when the customer needs them most. This can put the customer relationship in jeopardy thus is only good to dig further on this subject and establish that could the relationship suffice in event of such failure.

In his study on the effects of digital marketing on customer relationship Merisavo (2003), found that digital channels allows brand communication and contacts to be more frequent at a lower cost than traditional channels. He also found that online services gives customers better choice, access, control, and convenience on engaging his service provider to access any help as

compared to traditional channels. According to Merisavo, this builds up satisfaction and loyalty. The study suggested that digital channels have positive effects on customer relationship through personalization. However, Merisavo (2003) agrees that the effect of personalization can be different on different customers.

Decision Support and Customer Relationship

According to a research conducted by Deloitte (2015) on the digital transformation of customer services, digital age has disrupted the traditional customer service models. Today, customers are driving the buying process and engaging their service providers using websites, blogs, vlogs and social platforms. In their research on impacts of online banking on service delivery in the Malaysian banking industry Raja, Pahat and Ta'zim (2013),concluded that, the context of online banking has no direct bearing in influencing customer service delivery, rather the behavioral factors like cost, convenience and security. This means that customers do value and satisfied with online banking ones the bank charges is low or affordable, the service is user friendly and their financial transaction is secured. In long run, customers may prepare for normal queuing branch banking once they perceive the online banking and purported decision support as solely based on normal services (Raja, Pahat & Ta'zim, 2013).

Communication technology adopted by banks to create a seamless channel of sharing information with customer has been perceived as a key contributor to an improved relationship between banks and their customers. Previous research by Sharma and Patterson (1999) shows that communication among the system participants leads to mutual trust which thus cultivate customer relationship.

However, it has been argued that the customers must first trust the system in order to build trust in it and improve the perceived relationship. For instance, according to Ganesan (1994), trust in the system is central to a customer's intention to continue the relationship. Geffen (2000) suggested that trust in an e-commerce vendor has a positive impact on people's intention to use the vendor's Web site could it be for communication or transaction. Further, Pavlou (2003) has also shown that trust is positively related to customers' intention to transact in e-commerce environment.

RESEARCH METHODOLOGY

Research Design

This research adopted an exploratory approach as it allows samples to be selected and explanatorily studied. The design permit the collection of original data meant for describing large population with individual as unit analysis. The research is designed to ascertain the effects of digital banking on customer relationship in the banking industry in Kenya.

Target Population

The research took a form of field survey. The study intended to restrict the population of the study to the banking industry. The population of study consists of the 42 registered commercial banks in Kenya on which the work will be generalized.

Sampling Design

The sample size of this research study consisted of a proportion of customers drawn from individual banks in order to assess the "effects of digital banking on customer relationship among commercial banks in Kenya". A stratified sampling technique which is defined by Kothari (2012) as a sampling technique used when a population from which the sample is drawn does not constitute a homogeneous group. This is the case since the study has subgroups which are heterogeneous in the target population whose response is equally important in achieving the objective of this study. The sample size of 6 commercial banks was used for this research work. This comprise of two banks randomly selected from each tier.

Data Collection Instruments

This research employed questionnaires as the instrument of data collection. Olannye (2006) defined a questionnaire as an instrument of gathering data from respondents to aid in finding solution to research problems. Primary and secondary data was employed in this study. The data collected was basically qualitative. Questionnaire administered to respondents is of the primary data source. The internet as well as the library constitute the secondary data collection medium. This includes journals, newspapers, magazines, textbooks, research findings reports etc.

Data Collection procedure

The semi-structured questionnaires were administered to 120 bank customers randomly selected from the 6 sampled banks. The 'drop and pick later' method of data collection was employed. This method is considered because of time factor and to encourage more respondents who will take time filling the questionnaires. Two research assistants will be employed to assist in questionnaire distribution and collection. The data collection period will be limited to 14 days to allow for data coding and analysis.

Data Analysis and Presentation

For data collected to be meaningful, it needed to be analyzed in a way that it is easy to be understood. After the collection of the questionnaires from the respondents, they were reviewed to check for any mismatch of information and whether there were gaps left unfilled. SPSS version 17 computer software were then used to analyze the data. The coefficients of correlation (r) of various variables were determined to assess the nature of relationship between the dependent variables and the independent variables. The p-value was used to respond to research

questions. The conclusions and recommendations were then derived from the analyzed data and presented in percentages, frequency tables, charts and graphs for easy interpretation and understanding.

The causal effect of independent variables will be determined using the regression model

$$Y = A + \beta IX\ I + \beta 2X2 + \beta 3X3 + \beta 4X4 + E$$

Where: Y=Percentage surplus/Change in membership; A =Constant; β= Coefficient of X; XI=Convenience of Online transaction; X2=Online decision support systems; X3 =Online Customer care support system; X4=Online interactivity; E=Error term

RESEARCH RESULTS

The research provides both theory development implications for academics and practical implications. The main contribution to the theory development involves the confirmation of the hypothesized relationship amongst the elements of digital banking-transaction processing, online interactivity, online customer care and online decision support to customer relationship among commercial banks in Nairobi County.

The research elicited primary data through questionnaires and simple percentage was used to analyze the research questions and a multiple regression was used to test the research hypothesis. Through these, the major finding was that, amongst the elements of digital banking, transaction processing and online interactivity were found to have major influence on customer relationship. This means when customers experience seamless online transaction processing and effortlessly interact with their accounts online a better customer relationship is going to be established.

The effect of the four factors of digital banking i.e. online transaction processing, online interactivity, online customer care and decision support accounted on average for 92.8% (R2) variance in customer relationship, while 7.8% (R2) can be attributed to the non-listed variables not included in the model in explaining the variance in customer relationship.

The above conclusion is in line with earlier researchers who agreed that online banking significantly and positively influence the nature of customer relationships such that banks keen at investing in a more interactive and user friendly online platforms will most likely register high levels of customer satisfaction and loyalty. Among the reasons for adoption of digital banking are the notion that electronic banking and payments will cut banks 'costs, increase banks 'revenue growth, and make banking more convenient for customers and improve bank-customer relationship (Ngugi 2013).This can be explained by the fact that online banking covers larger geographical areas reaching out mass population with little man power as compared to direct sales representative.

Although the findings of this research seem to contrast the conclusions of researchers like Cisco (2014) and it can be argued that while digital banking offers banks a great opportunity to meet the needs of resurgent digital generation who rely on mobile technology to transact their businesses. Therefore for banks to keep up their needs, digital banking as a strategy need to be embraces online banking.

Notwithstanding the risks that come with technology including cybercrimes, banks need to invest in safeguards to protect client information as this may instill fear and anxiety while undertaking online transactions a factor that may jeopardize customer relationship improvement efforts.

CORRELATION MATRIX

Table 1: Pair-wise Pearson Coefficient of Correlation

ONLINE TRANSACTION	DECISION SUPPORT	ONLINE CUSTOMER CARE	INTERACTIVITY	
1	0.9522	0.9582	0.9062	ONLINE TRANSACTIONS
	1	0.9488	0.8614	DECISION SUPPORT
		1	0.7993	ONLINECUSTOMER CAR
			1	INTERACTIVITY

Table 1 shows pairwise correlation between the explanatory variables. Correlation matrix is generated to determine the extent to which explanatory variables included in the model influence each other. Notably, the transaction processing provided through the online platform and the customer care support privileges provided by the online platform shows the highest positively correlation at 0.9522.This is informed by the fact that online platforms allows varied users to access wide range of information online the service provider is able to meet the inquired services instantaneously implying an improved customer service experience. In an effort to meet such needs of the various clients therefore, financial institutions customize their interactive platform with tailor made capabilities capable of meeting diverse client needs.

Statistically, strongly correlated explanatory variable are not included simultaneously while estimating a regression model as this will result to wrong signs and values of the estimated parameters which may result to inaccurate and misleading interpretations. The threshold for a strong multi-collinearity is 0.8.

Further there is a low positive correlation between the level of interaction between the bank and the satisfaction encompassed by online customer care services at 0.7993. This can be attributed to the fact that online transactions are undertaken without the natural face to face interaction which between the bank staff and the clients. This scenario can be qualified by the fact that even

with enormous investments by banks to develop user friendly and one stop platforms where bank customers can conduct their transactions ,they still visit a bank branch transact a simple service over the counter.

The above preliminary observations indicate that investments in online platform by banks may not translate into a perfect customer relationship to the extent that a customer can remain loyal to one bank in the contrary it may even empower a customer to switch banks with ease due to lower switching cost occasioned by information access.

Due to the strong positive correlation among the explanatory variables as depicted by the correlation matrix, we estimate 4 models separately each time holding the other variables constant. The results of the estimated models are shown in Table 2.

Model 2: OLS, using observations 1-5

	Model 1	Model 2	Model 3	Model 4
Explanatory variable	online transactions	Decision support	online customer care	Interactivity
Constant	1.79369	3.218	-1.66843	2.86
coefficient	0.896	0.8131	1.097	0.833
t-ratio	11.79	8.638	6.77	3.87
Std.error	0.075	0.094	0.162	0.215
p-value	0.0013***	0.003***	0.0066***	0.0304***
R-Squared	0.979	0.961	0.938	0.834
Significance	Significant at all levels	Significant at all levels	Significant at all levels	Significant at all levels

Dependent variable: EXTENT

Notes: *** indicates statistical significance at all conventional levels i.e 1%, 5% and 10%.

From the above estimated models, it can be deduced that customer relationships in banks are influence positively by online transactions offered by online banking evidenced by the positive signs of the coefficients. This can be interpreted to mean that seamless online transactions, improvement in the online decision support tools as well as improved user friendly customer care service and heightened levels of interactivity go a long way in guaranteeing improved customer relationships which is a function of a happy and contented clientele.

Online based transactions is a significant and important variable that determine to a large extent the level of customer relationship enjoyed by banks evidenced by a large R2 value of 97% implying that 97 % of all factors determining scale of customer relations is attributable to the extent to which a bank has migrated its core transactions to online platforms with only 3% attributable to other factors.

Notably, decision support tools offered by online banking platforms also positively and significantly influence the magnitude of customer relationships evidences by a positive coefficient of 0.8131 with 0.96 coefficient of determination. The constant has a positive coefficient implying that even with no decision support tools. Customer relationship is not affected adversely Decision tools such as loan calculators offer clients a transparent way of understanding the level of indebtedness and to assess their own credit worthiness, this way the client gets a sense of fulfilment knowing that he/she is making a well thought out decision.

Online customer care has an explanatory variable in determining customer relationship has a positive coefficient of 1.097 contributing up to 93.8% of customer relationship status. This follows from the fact that email capabilities, each to reach out to customer care representatives trained and strategically equipped to answer specific client queries and the speed at which issues raised are resolved go a long way in solidifying and bettering client-bank relationships. Important to note is the negative sign of the constant (-1.6684) an indication that failure by banks to design and implement a functioning online customer care platform may result to a deterioration customer relationship which may result to low customer retention occasioned by a high customer attrition rates.

The level of interaction provided by online baking positively and significantly determines the nature of customer relationship evidenced by a positive coefficient (0.833) contributing up to 0.83 with a positive constant of 2.86 when viewed in isolation. Aided by online banking platform, customers are able to conduct plausibility checks on some of the services and products on offer by banks helped by ease of access to information materials online making it easier to compare and make informed decisions in real time.

In summary the regression model show that ease of interaction ,decision support tools, customer care opportunities as well ease and flexibility in conducting transactions online to a large extent positively influence customer relationships across banks.

CONCLUSIONS

The main objective of the research was to establish the influence of digital banking on customer relationship among commercial banks in Kenya. In reviewing the literature on this research, it was observed that the commercial banks in Kenya and the world over are currently competing to establish good customer service that enhances good bank-customer relationship. In reviewing the literature of this research it was observed that the commercial banks locally and globally are immensely implementing digital banking to minimize the costs related to the traditional brick and motor banks and also to stay competitive and retain market share in the digital oriented market. The banks are constantly investing in information technologies that aims to put them above their rivals. The banks main assets are the customers and therefore these customers are meant to be treated well and a profitable relationship sustained.

RECOMMENDATIONS

Based on the results of this study, it is the opinion of the researcher that the below recommendations will help the banks and other key stakeholder in gauging customer relationship in digital era. Future research can be drawn from the current limitations. Therefore, future research will seek to generalize the model developed in this study to other services.

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