EXTENT OF INFLUENCE OF SERVICE CHANNEL INNOVATION ON COMPETITIVE ADVANTAGE IN THE BANKING SECTOR IN KENYA

Kaithia David Arungai
Jomo Kenyatta University of Agriculture and Technology, Kenya


ABSTRACT

Recent developments in the banking industry in Kenya such high costs of operations, narrowing profit margins, high competition for market share, coupled with high regulatory changes, technology evolution and changing consumer demographics and behavior put into focus how banks are innovating their service channels in order to gain competitive advantage in the sector. The main objective of this study was to analyze the influence of service channel innovations in the banking industry towards competitive advantage. The study added to the literature by addressing the role of service channel innovations and competitive advantage and this assumed relationship was moderated by the government regulations in banking sector. The study adopted a triangulation design involving a cross sectional approach. A pilot study was conducted to test reliability and validity of instruments. The target population included all the 44 bank incorporated in Kenya. Stratified random sampling technique was applied where the CEOs, directors and branch managers of all banks in Nairobi were targeted. Heterogeneous purposive sampling technique was used to select the bank customers for interview schedule. Data was collected by use of closed and structured questionnaires and interview schedule. Collected data was analyzed using SPSS V18.0 and statistical analysis focused on correlation between variables and analysis of variance among the variables. Multivariate analysis techniques was applied where a PCA method was applied to reduce the set of factors to a manageable scale, analysis of relationship was done using SEM. Pearson correlation coefficient was computed to test linear relations. The test of statistics was carried out at 5% significance level. The study established that service channel innovations are very important in influencing competitive advantage in the banking sector.

Key Words: Service channel innovation, competitive advantage, banking sector

Introduction

Research on banking industry demonstrates that the recent customer, market and industry trends continue to exert pressure on the value proposition that banks offer to their customers. Voutsas and Weinrich (2012) observed that there is shift in power towards the banking customers enhanced by collapse of customer profitability in many markets all over the world, this combined with technology is shifting the behavior of customers regarding the services which banks offer.
Thus, demand for simplicity, self control, mobility, personalized service and consistency of customer experience for each customer segment across various channels.

To survive and gain competitive advantage, banks in Kenya are constantly in search for solutions which will help them reduce costs of operations and improve customer experiences. In this continuous journey, the banking industry has seen several technology trends being adopted and several innovations delivered (Kiran, 2009). Kanchan (2012) observed that technological advancements and changing client preferences such as the demand for convenience and around – the – clock access to banking services have driven a shift in customer demands and usage patterns of traditional banking channels such as branches. The shift has resulted in direct channels emerging as important media to reach a larger audience at a much lower cost.

Realizing that it is easier to expand the scope of service provided to existing customers than it is to win new customers, banks in Kenya are under pressure to offer an expanding set of financial services to their customers while at the same time trying to focus on their core competencies. These services include insurance and investment products and services, credit and debit cards, bill-payment services and access to financial information from customer’s personal investing software packages. This trend towards unbundling the corporation and leveraging service providers for non core functions drive banks to use the internet for its ubiquitous connectivity and virtual private networking technology to safeguard communication with their integration partners (Louden, 2004).

Banks in Kenya are rethinking investing and innovating to better align their distribution channel strategies with evolving customer needs and preferences. They are increasingly focused on achieving multi-channel integration to achieve seamless customer navigation across different channels. Though multi channel interconnectivity is not new and banks have already made some progress in this direction, delivering a true seamless experience across channels will require banks to overcome some key challenges (Kanchan, 2012).

It is argued that banks in Kenya previously experienced high costs in the branch, and this problem has largely been addressed by evolution of new low cost channels. Channels like ATM, Kiosk, Mobile and internet banking have enabled banks to reach a wide customer base across geographies with little effort. Banks are integrating channels in order to ensure accuracy and integrity of transaction data. Channels are not only a means of customer service but also sales and customer acquisition (Valluri, 2011).

Porter (1985) considered that competitive advantage grows out of a value of a firm is able to create for its buyers that exceeds the firm’s cost of creating it. It is also observed that with wealthy banking customers becoming more technology savvy in recent years, their usage of alternative channels of banking is increasingly a source of competitive advantage. As a consequence, banks are investing in mobile applications to enable their wealth banking customers to transact over smartphones.
Over the last few years, Kenyan banks have been pre-occupied with innovations in the services they offer and how they offer them. Such innovations have become the value proposition for particular banks. For instance, Equity bank (2013) identify itself with money transfer services, mobile banking, ATM services, card services, equity cash back, FAQS, Visa personal payments, online banking and agent banking. Consolidated Bank (2013) identify with banking product which are classified into personal banking products and business banking products. This is characterized by services product innovations: internet banking, mobile banking, agent banking, Forex rates, ATM locations, Branches and debit cards. Chase bank embraces the following services: bank teller, electronic banking, money transfer, safe deposit lockers, and night safe and executive management offices. Barclays bank(2013) is currently focusing on investing in technology and system capabilities so as to offer more affordable and convenient products such as the internet banking, smart phone and tablet banking services to enhance service delivery to all customers wherever they are.

There are forty four banks in Kenya which form the focus of this study. These banks are classified on several basis; capital deposits, size and nature of banking activities. Moreover, each is concentrating service channel innovation so as to offer better services. Generally, it is acknowledged that each is attempting to make improvements in the branch, ATM, mobile, call centers as well as internet channels. Out of the forty four banks, ten are assumed to be the largest banks and are listed in the Nairobi Stock Exchange (NSE). The rest are a total of thirty four small banks which are not enlisted with NSE. Generally, these banks can widely be classified banking institution, non banking institution, microfinance institution and foreign exchange bureaus.

Objective of the Study

To determine the extent of influence of service channel innovation on competitive advantage in the banking sector in Kenya

Literature Review

Service Channel innovation

According to Peppard (2000) a service channel or a distribution channel can be described as any delivery method through which a bank can provide services to customers. Each individual bank typically operates an array of distribution channels, collectively termed the bank’s multi-channel mix. Across the multi-channel mix, those channels that do not involve physical face-to-face contact with bank staff members have been called ‘direct channels.’ Examples of the most commonly employed direct channels include: call centres, web banking, direct mail, and automated teller machines. Historically, banks have actively sought to migrate simple
transactions, products and services away from tellers towards direct channels. This global trend has been driven by a combination of three underlying forces.

Firstly, migration towards direct channels represents a cost saving opportunity for banks, particularly migration towards web banking (Peppard, 2000; Farquhar & Panther, 2007). Secondly, the migration of simple, low-value activities away from in-branch tellers, allows staff to focus instead on the sale of high-value products and services (BearingPoint, 2006). Thirdly, direct channels have the potential to offer customers enhanced levels of service and convenience (Peppard, 2000). Banks that will successfully create an integrated multichannel strategy with a customer-focused approach are expected to turn their channel management efforts into a key differentiator in the market (Kanchan, 2012).

Louden (2004) observed that forty years of banking changes have given customers more flexibility and better service, while leaving most banks with an evolved- rather than crafted-set of delivery channels and supporting organizations. With new distribution channels, banks have enhanced the ability to deliver customer service. With the right connectivity behind these channels, their value-both to the bank and to its customers-has been amplified. Hence, as bank customers choose to interact with their banks over a variety of channels, however, it becomes increasingly necessary for banks to provide a consistent customer experience across all channels.

Voutsas et al. (2011) contend that innovation in the banking channels is a strong value proposition for all generations. They observed six emerging trends in customer needs, behavior and preferences that impact on innovation.

1. Banking customers becoming more experienced and savvy using technology-based banking services
2. Two thirds of the customers demand a consistent service offering through multiple banking channels
3. Customers will conduct 40% of their banking activities in the branch and 50% through direct channels in 2013
4. Customers use internet banking up to 50% as the main channel for interaction with their preferred bank.
5. Every third customer is willing to change to a bank that offers better technology-based services.

Philpott and Dooley (2009) identified examples of channels applicable in banking industry as including the branch, web banking, call center, external ATMs, direct mail, Web agent, social media banking, mobile banking, field agents and partnering with another firm. Louden (2004) stress that innovation in service channels like branches, ATMs, internet banking and mobile banking has helped banks reduce costs.
Pearson (2010) cited more recent innovations which apply in specific channels to include for instance: in branches, more use of technology such as RFID for recognizing customers and printing of debit/credit cards in branch. Banks also focus on creating advisory tools which to be shared by customers and relationship managers. Also, branches creating specialist branches for affluent and SME segments. In self service innovations banks concentrated mainly in terms of new functionality of ATMs and Kiosks. Example use of biometric ATMs, radical ATM designs, among others. In mobile channels include richer application for smartphones, use of electronic signature system for use with mobile banking, augmented reality services for smartphones, remote deposit capture to enable deposit of cheques by taking a photo on mobile phone. In online channels- banks concentrating in web 3.0 technologies and personal financial management tools.

Valluri (2010) observed that banks today are drifting away from branch channel towards alternative channels like online/internet(E) banking, ATM, call centers and mobile banking. Also, recent studies show that eighty percent of customers are not interested in purchasing investment products over electronic channels or phone, they would rather meet a financial expert or analyst in person before coming to a decision. It is also true that even now, sales are high from branch banking in wealth management, but alternative channels provide convenience for the regular transactions and provides banks with higher profits with lower operational expenses and transactional costs.

A study conducted by Mallat, Dahlberg, Saarinen and Tuunainen(2001) showed how customers consumption pattern in financial services is changing with respect to channel application. Thus, ATM recorded highest in accessing account information at 53%. And 91% in cash withdrawal services. Internet led at 41.6% in bill payments followed by branches at 18% .Branches dominated in submitting loan applications while service counters recorded highest in investment services, alternative channels recording low.

Pavier and O’keeffe(2012) demonstrated that technological innovation in retail banking industry produced new distribution channels which give more ways for consumers to access their accounts, also provides many alternatives to a bank. According to Kanchan (2012) banking service channel improvements are being characterized by banks transforming in areas such as layout and design, sales and services as well as staff and people. Also, banks focusing sales through online channels due to steady growth in customer using online banking; the growth of smartphoness, advancement in technology and advanced security levels have helped increase adoption of mobile devices leading to reduced operational costs and improved efficiency. ATMs are evolving with increased automation, integration with direct channels such as mobile and online banking, and delivering value-added services to customers.

Banks are now looking at ways to create revenue streams out of self service channels as opposed to seeing them as channel extensions of branch banking. Increasingly, self service channels are
becoming critical for the mobile and social customers. Gemes, Konik & Moss (2007) stress that branch/teller, online, call center, ATM and mobile banking services are very critical. However, they found that customers still tended to prefer to do most of their banking in branches because of its suitability for all products especially current and saving accounts and mortgages. Voutsas and Heinrich (2012) branch, internet and mobile banking channels are critical in all banks but integration of a multichannel strategy would be an important ingredient supporting customer value proposition in the banking sector. Pearson (2010) also claims that although there many specific channel innovations being experienced in the banking sector, the main challenge facing the sector is how to achieve effective multichannel integration.

**Competitive Advantage**

Kotler (2000) defined competitive advantage as an organizational capability to perform one or many ways that competitors find difficult to imitate now and in future. Porter (1985) considered that competitive advantage grows out of the value of a firm is able to create for its buyers that exceed the firms’ cost of creating it. Porter recognized competitive advantage as strategic goals; that is dependent variable and the reason behind this is the good performance is related to achieving a competitive advantage (Reed and Defillipi, 1990). According to Cole (2008) competitive advantage is an advantage gained over the competitors by offering customers greater value, either through lower prices or by providing additional benefits and service that justify similar or possibly higher prices. Papulova and Papulova (2006) real competitive advantage implies companies are able to satisfy customer needs more efficiently than their competitors. It is achieved if and when real value is added for customers.

Porter (1985) suggests that competitive advantage in an industry arises from differentiation, overall cost leadership and focus by minimizing industry forces which intensify competition. According to Porter (1998) in order to create a competitive advantage and generate shareholder value a company needs a certain set of activities that create value. These activities constitute the value chain. The purpose of these activities is to offer customers with a greater value than the costs of the activities and thereby achieving profit margins. According to Porter (2012) competitive advantage resides in the value chain and strategy is manifested in choices about how activities in the value chain are configured and linked together. However according to Treacy and Wiersema (1992), Veiweire and Revolo (2009) nowadays, companies have taken their leadership positions in their industries in the last decade by narrowing on their focus to delivering superior customer value in one of the following: Operational excellence, Customer intimacy or product leadership.

Tracey et al. (1999) argues that competitive advantage comprises of distinctive competencies that sets an organization apart from competitors, thus giving them an edge in the marketplace. They further add that it is an outcome of critical management decisions. Porter (1985) suggests that competitive advantage arises from cost leadership, where, the source of cost leadership
emanates from pursuit of economies of scale, proprietary technology, preferential access to raw materials and other factors. In fact Cole (2008) contends that quality is an underlying factor in competitive advantage and arises from a product offered being perceived as of higher physical quality than the competitors product or from providing excellent customer service.

Competitive advantage emerges from the creation of superior competencies that are leveraged to create customer value and achieve cost and/or differentiation advantages, resulting in market share and profitability performance (Barney, 1991; Prahalad and Hamel, 1990). Porter's (1991) approach to competitive advantage centers on a firm’s ability to be a low cost producer in its industry, or to be unique in its industry in some aspects that are popularly valued by customers. These views have been contested. According to Reeves and Deimler (2011) competitive advantage no longer arising from positioning or resources, rather, from a firm’s dynamic capabilities. These capabilities include innovation, organization learning, knowledge management, strategic decision making in order to cope with changing competitive environment (Teece, Pisano, & Shuen, 1997). According to Hana (2013) innovations are and will continue to be a means for organizations to survive in today’s turbulent and highly competitive world. According to Campos (2006), an integral part of the strategy of any firm should be to innovate constantly. This means that in order for a company to remain competitive, it must not only improve the products and services but it also has to innovate. This calls for correctly using its resources (tangible and intangible), profit from the clusters it is in and benchmark those activities that foster (impulse) its innovation.

Competitive advantage is defined as the benefits of implementing some unique value creating strategy not simultaneously being implemented by any current or potential competitors (Barney, 1991). However, Customer -centrism proponents or user driven proponents such as Bisgaard & Hogenhoven (2010) agitate for value proposition to the market as arising from user interface, involvement and co-creation, an aspect of services. Empirical findings have shown that differences between organizations may account for more variance in firm performance than differences between industries (Rumelt, 1991). Although important industry effects may be present (e.g., see McGahan & Porter, 1997), organizational-level differences are now acknowledged as a critical source of variation in firm performance over and above industry differences. Gemes, Fletecher and Aggarwal(2009) claim that banks can achieve competitive advantage by focusing on simplifying four areas of value chain: product management, distribution, operations and IT, and organizational structure.

For competitive advantage to be realized through innovation, for instance, Filiscchi, Boone, Brouwer and Wiel (2011) argue that within an industry, successful innovators of new products are the ones that face less intense competition after the innovation and that the firms that introduce new products are the ones that face relatively little competition. Moreover, to compete with established incumbents, in the industry, innovation provides a strong impetus for banks to introduce new products and services as a means of consolidating their foothold in international
competition and for start-ups to strengthen their relative competitive position. In addition, Abernathy and Utterback (1978) suggested that companies would achieve competitive advantage in an atmosphere of threats from old technology and entry of new entrant by developing a dominant design. Alternatively, a company can try to take control of complementary assets and wait for appearance of a dominant design, once the standard becomes clear, it will try to secure most of the profits basing its competitive advantage on the distribution channels, supplier contacts and other complementary assets that will create barriers to entrants.

Teece (1986) describes who will benefit from innovation and what company will have higher incentives to invest in certain innovation as being dictated upon by two factors: imitability and availability of complementary assets. Imitability refers to how easily competitors can copy or duplicate the technology or process underpinning the innovation. Complementary assets includes any activity that gravitates around the core innovation such as distribution channels, reputation, marketing capabilities, strategic alliances, customer relationships licensing agreements among others. However, according to Bharadwaj, Varadajaran and Fay (1993), the presence of co-specialized assets or lack thereof also impacts on the imitability of innovations.

Most managers agree that cost and quality will continue to remain the competitive advantage dimensions of a firm (D’ Souza and Williams, 2000). In a research framework, Koufteros et al. (1997) describe the following five dimensions of competitive capabilities: competitive pricing, premium pricing, value-to-customer quality, dependable delivery, and product innovation. Hong, Callaway, Kunnathur (2010) point to important features of delivery performance improvements as related to delivery speed and reliability, reduced cost and quality. Delivery speed is the ability to reduce time between order taking and customer delivery to as close to zero as possible. Reliability is the ability for firms to meet quoted or anticipated delivery dates and quantities. Flexibility can be focused to achieve a variety of operating attributes such as ability to respond to special service requests. Quality indicates effectiveness of firms to retain customers and focuses on delivery dependability, responsiveness, order flexibility, and delivery flexibility. Time based competition is the ability to reduce lead times and cycle times which assumes close collaboration with suppliers.

**Cost**

Costs can be direct or indirect, fixed or variable and short or long-term. Additionally cost can also be expressed according to its intention. Further cost of quality can be subdivided into failure, appraisal, and prevention costs (Juran, 2004). Firms must make some kind of compromise between the cost and the characteristics of their products and services. In general, most organizations choose to cut total cost by stripping fixed costs and applying continuous control on raw materials, reducing employee compensation rates and by achieving higher levels of productivity (Dilworth, 1992).
Quality

Crosby (1995) defined quality in his concept, as the Four Absolutes of Quality and the Cost of Poor Quality as conformity to certain specifications. Juran (2004) described quality as “fitness for use”, where fitness is defined by the customer. Weinberg (1993) defines fitness more holistically as “value to some person”. Quality can be achieved by adding unique attributes to products to enhance their competitive attractiveness so as to benefit customers in the final stages (Best, 1997; cited by Al-Rousan and Qawasmeh, 2009). Also quality can be achieved through a couple of dimensions such as the quality of design which means to adapt product design to its function (Adam & Elbert, 1996) and the quality of conformity which stands for the organizational capability to transform inputs to comfortable outputs (Hill, 1993) or outputs in accordance to the specific design characteristics and the focus on quality will be reflected in competitive advantage and profitability of the organization. Johnstone(1995) found 18 attributes of service quality in banking sector: access, aesthetics, attentiveness, availability, care, tidiness, comfort, commitment, communication, competence, courtesy, flexibility, friendliness, functionality, integrity, reliability, responsiveness and security. Joseph et al(1999) observed convenience, feedback and complaint management, efficiency, queue management, accessibility and customization as elements of service quality in banking. Jun and Chai(2001) emphasis on reliability, responsiveness, competence, courtesy, credibility, access, communication, understanding the customer, collaboration and continuous improvement, content, accuracy, ease of use, timeliness, aesthetics, security, aesthetics, security and diverse features. Chun and Zeng(2006) found that reliability, responsiveness, security, communication and access as important levers of quality in internet banking.

Time

The original term lead-time used by Hayes and Wheelright (1984) is rephrased as time in this study. It is seen as the total time can activity requires to be executed, from the very beginning to the very end. Firms can consider the time factor to compete among each other. Delivery time can be a source of competitive advantage when firms try to reduce the period of time between receiving and accepting customer orders and provisions of products or services to customers (Stonebrake & Leong,1994). It’s also a measure of the firm’s adherence to delivery schedules agreed upon with customers. The speed of product development also refers to the time factor; that is the time period between product idea generation till achieving the final design or production (Evans,1993). Parasuraman et al. (1985) define responsiveness as speed and timeliness of service delivery, it includes all willingness and readiness of employees to provide for services, prompt response to customer needs, implying quick problem solving, prompt service and convenience in the banking industry.
Flexibility

Knoll and Jarvenpaa (1994), described flexibility as an essential property for maintenance of fit between Business Processes and their supporting systems in changing environments. Floran Forster defined flexibility as the ability to react to changes (Forster, 2006). Flexibility can be viewed as the ability of the processes to switch from one product to another or from one customer to another at the least cost or impact. Flexibility also can be defined as the ability to adapt the production capacity to changes in the environment or market demands (Evans, 1993). Flexibility also encompasses product flexibility in the first place which is defined as the ability of the organization to trace changes in consumers’ needs, tastes and expectations so as to carry out changes in the product designs. The second flexibility has to do with volume which stands for the organization capability to respond to changes in consumer demand. It is believed that such flexibility can yield benefits such as introducing new products variety and controlling volume and delivery time (Stakes et al, 1998).

The list of these sub-constructs, along with their definition and supporting literature, are provided in Table 1.

Table 1: List of sub-constructs for competitive advantage

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<tr>
<th>Constructs</th>
<th>Definitions</th>
<th>Literature</th>
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<td>Cost</td>
<td>“The ability of an organization to compete against major competitors based on low cost / price” (Li et al., 2006, p. 120)</td>
<td>Koufteros, 1995; Wood et al., 1990; Miller et al., 1992, Hall et al., 1993; Rondeau et al., 2000</td>
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<tr>
<td>Quality</td>
<td>“The ability of an organization to offer product quality and performance that creates higher value for customers” (Koufteros, 1995)</td>
<td>Li et al., 2006; Gray and Harvey, 1992; Arogyaswamy and Simmons, 1993; Rondeau et al., 2000</td>
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<tr>
<td>Time</td>
<td>“The ability of an organization to introduce new products faster than major competitors” (Li et al., 2006, p. 120)</td>
<td>Li et al., 2005; Stalk, 1988; Vesey, 1991; Handfield and Pannesi, 1995; Kessler and Chakrobarti, 1996.</td>
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<tr>
<td>Flexibility</td>
<td>‘ability to react changes (Forster,2006). The ability of the processes to switch from one product to another or from one customer to another at the least cost or impact .Its the ability to adapt the production capacity changes in the environment or market demands (Evans,1993)</td>
<td>Forster(2006), Knoll and Jarvenpaa(1994), Stake etal (1998)</td>
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Research Methodology

This chapter focused on methodologies which were to be applied in the research at hand. Of importance was the focus on appropriate research designs, scope, target, sampling techniques, instruments, pilot study procedures, data collection techniques and data analysis methods.

The study adopted a validating quantitative data triangulation design involving descriptive cross-sectional survey approaches. For purposes of triangulation, the researcher implemented the quantitative and qualitative method during the same time and with equal weights (Cresswell, 2006). Descriptive cross-sectional approaches were applied in this study aimed at making predictions regarding the occurrence of phenomenon under study and by taking a sample of a large population at one point in time (Owens, 2002). According to Elahi and Dehdashti (2011) descriptive research design involves making predictions regarding the occurrence of social or physical phenomena.

The rationale for mixing was that neither qualitative nor quantitative methods are sufficiently by themselves to capture the trends and details of the situation such as a complex issue of service innovation (Ivankova, 2002). Yeasmin and Rahman (2012) triangulation in social research refers to the combination of two or more theories, data sources, methods or investigator in one study of a single phenomena to converge to a single construct. Both open and closed ended items were applied in the response categories so as to reflect triangulation design and the results of the findings from both were compared and they were beneficial in drawing conclusions and making recommendations. An interview schedule was used to gather views from the customers regarding competitive advantage in the banking sector in Kenya. This information further cemented and validated results gathered from the questionnaires informants.

The study was located in Nairobi County in Kenya. Given the technicality associated with the banking sector information it was imperative to conduct this study in this county where the respondents were likely to generate better information due to high experiences at the headquarters where most of the innovations are generated from. In addition, Nairobi County was suitable because of its centrality and demographic potential of the banking sector. That meant the researcher expected to realize better data information and better responses as compared to other counties in Kenya.

The study focused on all the forty four banks in Kenya with special reference to head offices and branches. It was expected that by focusing on banks head offices and their branches the results of this study would be reliable and representative given information sought. The respondents in this study were the bank CEOs, directors of three departments which are responsible for innovations in the banking sector i.e. R&D, operations and marketing (Frei, et al, 1998) and branch managers of all the banks in Nairobi. The officers targeted in this study comprised of 584 members. They were believed to be endowed with knowledge and information regarding innovations in the
The study also interviewed a few selected customers drawn from some banks in Nairobi County.

The study adopted a mixed method sampling schemes involving a stratified random sampling for the bank officers and a purposive sampling for the customers. Stratified random technique sought to generate a representative sample from target population by addressing a quantitative strand of a study as in this case. In purposive sampling scheme, the researcher utilized sampling technique that yielded information rich cases (Teddie, 2009) as is explained below.

To arrive at stratified sample, first, the banks in Kenya were classified into large and small categories as guided by Kenya business directory, banking journals and articles. To ensure representativeness of the sample, simple random sampling method was used to select respondents in each category and that the study utilized a random sample size of 30% in each target respondent category. Azmi et al. (2012) used a random sample size of 21% to study innovations applied in Jordan banking sector. The target sample population comprised of 175 members as summarized in the table below. The sample which was adopted in this study is justified given that it investigated above 30 observations. According to Mason et al (1996 pp.400) a sample is regarded small if it investigates less than 30 observations.

In order to select a few customer to be interviewed, heterogeneous purposive sampling technique which aimed to achieve a heterogeneous sample, i.e. a sample whose units share the different characteristics or traits was applied (Teddie, 2009). Customers were included in the study so as qualify aspects of competitive advantage drawn from service innovation in the banking sector. They were selected from banks in Nairobi, and in such a way as to represent different customer segment groups: Retail banking segment, business banking segment, corporate banking segment and treasury banking segment which mainly apply in banking sector in Kenya. In order to get these respondents the researcher requested the branch manager of the respective bank to provide names of the information rich customers. The researcher developed a rapport with the customer and arranged where to meet and be administered with a structured interview. In cases where the customer chose to volunteer information away from the researcher, telephone method was apply.

In a mixed method i.e. triangulation research as is this study, questions are questions that embed both a quantitative and qualitative research within the same question whereby, quantitative research questions tend to be specific in nature; they may either be descriptive, comparative or relationship questions. Conversely, qualitative research questions are open ended, evolving and non-directional and seek to discover, explore a process or describe experiences. They attempt to describe rather than relate variables or compare groups avoiding use of words such as affects, influence, compare and relate (Onwuegbuzie and Leed, 2006)

In this study a questionnaire and an interview schedule were used to solicit the information from the respondents. The questionnaire constructed in this study will comprise of closed and open ended questionnaire items in the same questionnaire paper carefully worded to capture and
solicit the intended information. Dichotomous and ordinal scales were applied and were useful in generating descriptive statistics. Likert scale data was constructed and was analyzed at interval measurement scale whereby scale items were created by calculating a composite score from a five type likert –type items (Boone and Boone, 2012). This study mainly utilized likert five point scale as it is one of the best and most frequently used scales to measure opinions due to its ease and balance (Zikmund, 2000).

Qualitative data in this study targeted to obtain different but complementary data on the same topic to best understand the research problem in this case the role of service innovation on competitive advantage in the banking sector banks (Cresswell, 2006). Open ended questionnaire items were used for soliciting opinions of the respondents in regard to the theme and study objectives and their results were used to further the literature, validate or negate the findings of quantitative survey. Also, the results of an interview schedule which was conducted on customers helped validate information arrived at from quantitative survey as well as furthering the literature on service innovation.

A pilot study was important because it enabled the researcher to test the validity and reliability of the research instruments. Five bank branch managers from a different county in Kenya were used for the pilot study. According to Drost(2011) reliability is the extent to which measurements are repeatable when different persons perform the measurement on different occasions, under different conditions, with supposedly alternative instruments which measure same thing and validity as concerned with meaningfulness of research components. In order to for the instruments to be valid and reliable, the items in the questionnaires were carefully designed and the supervisors scrutinized them before a pilot study was carried out on five respondents from outside the target area. The validity of instrument was tested by Pearson Moment Correlation as was done by Munizu(2013). An instrument has high validity if the correlation value of each indicator to total correlation is more than 0.30 or r-value is greater than 0.30 (Cooper & Emory, 2002, in Munizu, 2013). Also, according to Thenasegaran (2009) the most common method of assessing internal consistency reliability is through the use of coefficient alpha which is an average of all the possible split-half reliability estimates and varies from 0 to 1 and a value of 0.6 or less signals unsatisfactory internal consistency. According to Nunnally and Berneistein (1994) the acceptable reliability estimates range from 0.7 to 0.8. In this study, a Cronbach alpha of .70 and above was deemed acceptable.

Data collection exercised was programmed to take place in the month January 2013. However, due to unexpected circumstances, the exercise started in the month of February, 2014. It was envisaged to last for a maximum of three weeks. Before actual collection of data began, the researcher sought a research permit from the Entrepreneurship and Procurement Department (EPD) from the Jomo Kenyatta University of Agriculture and Technology. Preliminary visits were made to some of the banks head offices so as to enable the researcher familiarize with the bank offices locations and to collect preliminary information which included: the types of
innovations applicable to particular banks, departments applicable in banking industry, reports, websites and journals. The researcher delivered the questionnaires face to face to the respondents by visiting them in the banks for branch managers and in the head offices for CEOs and directors. The researcher noted down telephone numbers of the respondents which enabled him make follow-up using telephone calls. The researcher requested the respondents to fill the questionnaires in three weeks so as to give them ample time to respond to the questionnaires. The questionnaires were collected by the researcher after three weeks and preparations for analysis and interpretation ensued.

Both primary and secondary data was targeted in this study. Secondary data was collected from the banks’ websites, internets, journals, reports from Central Bank of Kenya, banking portals, business directories as well as R&D divisions in the banking sector. Secondary data was used to refine the problem as well as clarify important issues in the research findings. The primary data was collected from the respondents using a carefully designed questionnaire and an interview schedule. The questionnaires were administered to bank branch managers, CEOs and directors of three departments at the head offices. In order to validate the results of the finding from quantitative survey, an interview schedule was administered to bank’s customers who were approached by requesting the managers of respective banks to guide the researcher in selecting them using banking membership registry. The researcher made calls and organized how to meet and interview them. In order to make the data collected amenable to statistical analysis using the SPSS v18 (Statistical Package for Social Sciences), the data was coded as follows: For nominal data for example, representing demographics of the respondents and other characteristics of the bank studied such as, male = 0 and female = 1. In categorical data where likert scale was used, representing, 1-5 where, 1 imply least, 5- imply most was used.

In order to extract the relationships presented, multivariate data analysis was performed in two stages. The first stage was about extracting the factor structure of research framework. The aim was to apply a principal component analysis (PCA) in order to reduce the larger set of variables into a more manageable set of scales, since the initial number of variables is too large to conduct an analysis of individual linkages (Flynn et al., 1990; Benson et al., 1991; Saraph et al., 1989, Smith, 2002). A PCA with varimax rotation was conducted to find out the underlying dimensions of service innovations and competitive advantage. The title for each factor was selected to represent the included variables as closely as possible. This stage was concluded by exploring internal consistency and reliability (content validity) among the items of each construct via Cronbach α (Carmines and Zeller, 1979) and unidimensionality tests.

Moreover, discriminant validity between the innovation constructs were also examined and verified by the average-variance extracted (AVE) test. The second stage involved the analysis of the relationships between these factors using structural equation modeling (SEM) approach. In this stage, the findings and results of SEM analysis were also presented.
The purposes of factor analysis in this study were to explore how various items within each of the constructs (service innovations, competitive advantage and innovation determinants) interact with one another; and to develop scales (by combining several closely correlated items) to be used in the following analysis on linkage (Kim and Arnold, 1996). Factor analytic methods were useful to observe the underlying patterns or relationships for a large number of variables and they determine whether the information can be condensed or summarized in a smaller set of factors or components. PCA with varimax rotation was performed separately on the service innovations and competitive advantage in order to extract the dimensions of each construct. Factors with eigenvalues (the amount of variance accounted for by a factor) larger than 1 was carried for further analysis (Kim and Mueller, 1978).

The Pearson Correlation coefficient was used to measure the degree of the relationship between linear related variables. In this study, the correlation between innovation constructs and competitive advantage was measured. By using MANOVA, the significance of the regression model was tested through the Wilks’ Labda .When the overall model is significant, then the study can predict the individual significance of each variable. In addition, Levene’s tests were also used to test whether or not the variance between the group in the independent constructs is equal. Insignificant value of Levene;s test shows equal variance between groups. Additionally, the beta coefficient in the regression analysis indicated how effectively the predictor variable influences the criterion variable. These data analysis procedures were applied by Gunday et al. (2009) to measure effects of innovations on firm performance.

**Research Findings**

**Service channel innovation**

The study found that majority of the banks have started service channel innovation in different area but they have not started web chat, click to call, remote video conferencing with customers at branch level with the headquarters. These are areas the bank can explore to recruit more customers without opening bank branches and ensure one on one communication with bank staff. The findings support the arguments by Louden (2004) and Voustas and Heinrich (2012) who stated that internet and mobile banking channels are critical in all banks .They stressed the need for multichannel strategy for supporting customer value proposition in the banking sector. Specifically, the innovations in the banking sector as Louden (2004) stress that innovation in service channels like ATMs, internet banking and mobile banking in order to reduce costs and be competitive. This is because migration towards direct channels represent a cost saving opportunity for banks. However, failure by most banks in Kenya to invest in web chat, click to call, remote video conferencing with customers has denied the banks an opportunity to offer customers enhanced levels of service and convenience (Peppered, 2000). The banks could use the web banking and online chats as a differentiator in customer service (Kachan, 2012).
Competitive advantage

The study found that ATM withdrawal charges had remained the same across banks, banking staff courtesy has also remained the same, so are the banking hall appearance in most of the banks surveyed, the loan origination fees. However, over the period of last 3 years, the respondents said that the customer care has increased significantly while the rest of the competitive advantage metrics have slightly increased. The increase in the cost of service, interest rates, over the counter withdrawals, bank statement charges have increased slightly as banks try to cover the increased costs of doing business in Kenya due to increased inflation and other government regulations. The banks have also been known to report billions of profits in the last three years as a result of non-traditional charges that have managed to be concealed from the regulators and enhanced the bank’s profitability over the years. The major banks that have reported over 1 billion operating profits in the last three years include KCB, Cooperative bank, Equity Bank, Barclays bank, Stanchart and Citibank. These and other banks have resorted to non-traditional charges such as over the counter charges being too high.

Conclusions

The study concludes that banks have now shifted their focus into email marketing and SMS banking using the mobile technology. However, most of the banks delayed implementation technology in their marketing processes probably due to the high level of mobile connectivity among the Kenyan populace is a big disservice. Internet banking is not really embraced for all the market segments and banks are therefore segmenting their markets while innovating in this area. The study concludes that banks have gained competitiveness as a result of service channel innovations. In addition the banks have started service channel innovation in different area but they have not started web chat, click to call, remote video conferencing with customers at branch level with the headquarters. These are areas the bank can explore to recruit more customers without opening bank branches and ensure one on one communication with bank staff.

Recommendations

1. That banks adopt their innovations through a value added approach where services and products become superior as opposed to publishing their innovations to avoid competitive imitations which water down the innovations. The innovations costs a lot to the company but competitors may end up reaping the benefits after imitation.
2. The failure by most banks in Kenya to invest in web chat, click to call, remote video conferencing with customers has denied the banks an opportunity to offer customers enhanced levels of service and convenience. It’s recommended that banks look into innovating in this area in order to achieve cost savings in communication, information sharing marketing and product and service design as well in customer satisfaction surveys.
3. The study recommends that bank managers invest in IT and more so the mobile technology where majority of the Kenyan population have access to due to mobile connectivity. The mobile technology would serve a greater number of customers even those who do not know how to write and read English because the mobile phone software allows Swahili in its use. Internet banking although widely hyped among the city residents, it may not be worthwhile in the rural areas. However, more secure features of mobile banking should be enhanced to avoid personal critical data falling into the wrong hands.

References


