

**ROLE OF PESALINK INNOVATION IN BUSINESS MODEL RE-
ALIGNMENT OF COMMERCIAL BANKS IN KENYA**

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DECLARATION

I declare that this is my original work and has not been submitted to any university either for examination or essay, or as a management research project.

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This project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

I dedicate this research project to my wife Monica Kimani and to my mother Rose Gathigia, you have both been my source of strength and motivation as I pursued this project. To my friends and colleagues who have supported me all through. I would not have made it without your moral as well as financial support, understanding and perseverance during my period of study for this project.

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ABSTRACT

Financial innovation has been a key feature in the banking sector based on the high levels of innovations and use of modern technologies in the day to day operations. The need to meet customer demands and enhance competitiveness in the dynamic markets, has been a key driver to adoption of modern technologies in the banking sectors to keep up with all these trends. PesaLink is a financial innovation tool that has been adopted by commercial banks in Kenya which has improved market share, quality of resources and reduced instances of imitation in the banking sector. The study was aimed at establishing the role of PesaLink innovation as a financial innovation in business model realignment of commercial banks in Kenya. It was specifically aimed to establish how, value creation, quality of resources, imitability and affect business model realignment of commercial banks in Kenya. The study used descriptive research design since it focused on the role of PesaLink innovation in business model realignment of commercial banks in Kenya. The study was guided by Schumpeter theory of Innovation, Innovation Diffusion Theory and Transaction Cost Innovation theory. The study used a descriptive statistic in its methodology on supply chain management practices and performance of private hospitals in Nairobi. This study used primary data. Data collection was effected by use of structured questionnaires. Senior, middle and low level management were the targeted population from a total of 42 commercial banks in Kenya. These questionnaires were issued through drop and pick method, coded, keyed and analyzed using both descriptive and regression analysis. The regression model used had four variables. PesaLink features value creation, quality of resources, imitability and adaptability) were the dependent variables while business model realignment (performance) was the independent variable. The study findings indicated PesaLink innovation has a positive impact on business model realignment of commercial banks in Kenya. The major limitation of the study is that it was based only on one type of financial innovation which was PesaLink .Other future academicians should research on role of financial innovation on other financial institutions on other financial institutions rather than commercial banks and it should deal with other types of financial innovations rather than PesaLink alone.

Key words: Financial innovation, PesaLink, Commercial banks, business model realignment

CHAPTER ONE

INTRODUCTION

Innovation has become a necessity to the growth, survival and prosperity of organizations today due to changes in both internal and external business environment. PesaLink is a financial innovation tool that has been adopted by commercial banks in Kenya which has improved market share, quality of resources and reduced instances of imitation in the banking sector. The study was aimed at establishing the role of PesaLink innovation as a financial innovation in business model realignment of commercial banks in Kenya.

1.1 Background of the Study

Innovation has become a necessity to the growth, survival and prosperity of organizations today due to changes in both internal and external business environment. Gorton and Metrick (2010) states that the main reasons that have led to an increase in the innovations are reduction in bankruptcy costs, tax advantages, reduction in moral hazard, reduced regulatory costs, transparency and customization. Modern firms are focusing to improve on their financial performance and long term survival prospects by innovating in products, organizational governance and through embrace of modern core technological support systems.

Under this study three theories will be used in explaining various concepts: Innovation diffusion theory which was developed by Rodgers (2003) is used in studying innovation. It asserts that individual's technology and innovations adoption behavior is influenced by several characteristics namely relative advantage, complexity, observability, compatibility of the innovation. This forms the basis of financial innovation in commercial banks. Secondly this study will adopt use of Transaction cost innovation theory which refers to reduction of transaction cost in response to advanced technology (Hicks and Niehans 1983).

The major reason for financial innovations by commercial banks is the aspect of cost reduction which is the basis of transaction cost theory. In addition, Schumpeter Theory of Innovation will also be used. The theory argues that by use of innovations, entrepreneurs can create a catalyst or avenue for generation of new profits and revenue channels (Schumpeter, 1928).

Innovation has become a necessity to the growth, survival and prosperity of organizations today due to changes in both internal and external business environment. Innovations in the banking sector in Kenya largely entail transformation in systems, technology, governance, regulation, processes, products and services. Financial markets have been liberalizing in both financial and non-financial technologies. Hwang, Yen and Cheng (2004) observed that reduction in bankruptcy costs, tax advantages, reduction in moral hazard, reduced regulatory costs, transparency and customization) are the main reasons that have led to an increase in the innovations. Commercial banks in Kenya today are focusing to improve on their financial performance and long term survival prospects by innovating in products, organizational governance and through embrace of modern core banking technological support systems (Thegaya, 2012).

1.1.1 Financial Innovations

Financial innovation is the act of creating and then popularizing new financial instruments as well as new financial technologies, institutions, and markets (Beaver, 2002). According to Lawrence (2010), financial innovation involves the design, the development, and the implementation of innovative financial instruments and processes, and the formulation of creative solutions to problems in finance. Financial innovations can be grouped into as new products, new services, new production processes or new organizational forms (Ignazio, 2010). They are the new financial products (financial assets and derivative instruments) which are better suited to the circumstances of the time (for example to inflation) and to the markets in which they trade and the strategies that primarily use these new financial products (Ross, 1989).

Innovation is an essential element for economic progress of a country and competitiveness of an industry. Financial innovations can be classified based on more specific functions: Price-risk-transferring innovations which provide market participants with more efficient means for dealing with price or exchange-rate risk.

Credit-risk-transferring instruments reallocate the risk of default. Liquidity-generating innovations increase the liquidity of the market, allow the borrowers to draw upon new sources of funds and also allow market participants to circumvent capital constraints imposed by regulations. Credit-generating innovations increase the amount of debt funds available to borrowers while equity-generating innovations increase the capital base of financial and non-financial institutions (Ignazio, 2010).

Commercial banks have continuously been innovating new products, services and governance in order to improve their financial performance. The financial sector has over time developed successfully with innovation products and services available in financial market. Some of these products are debit cards, credit cards, ATM cards, mobile banking, internet banking and others which facilitate the use of electronic means of payment and sometimes substitute for the use of physical cash e.g. E-Commerce platforms.

1.1.2 Business Model Realignment

According to Osterwalder and Pigneur (2005), a business model can be defined as a conceptual tool containing a set of objects, concepts and their relationships with the objective to express the business logic of a specific firm. It is also termed as a collection of business specific decisions which maintain competitive advantage (Richardson 2008). A business model can also be defined as a value that a company offers to its customers and its architecture together with its network partners to facilitate delivery of the value and relationship capital to create profitable and sustainable revenue streams (Osterwalder, Pigneur and Tucci, 2005).

According to Chesbrough and Rosenbloom (2002), a business model has various elements also termed as determinants of a business model. They include: articulation of value proposition, identify market segment, define structure of the value chain to be used by the firm, estimate the cost and determine the assets required to support the firm in the value chain, describe the position of the firm within the network with suppliers and customers and finally formulation of competitive strategy through which an innovating firm can be able to create competitive advantage over the competitors. A business model creates a good platform which facilitates conversion of technological characteristics and inputs into economic outputs through customers and markets. It is termed as focusing device which mediates between development of technology and creation of economic value (Osterwalder, 2004).

There are nine building blocks of a business model namely: value proposition, customer segments, customer relationships, channels, key resources, key activities, key partners, revenue streams and cost structures (Osterwalder and Pigneur, 2009). Business model realignment is usually implemented in three stages: alignment & fit of your business model building blocks whereby there is need for alignment of the nine building blocks of you firm with your business strategies. Second level is the alignment and positioning of your business model in the environment and competitive landscape. This facilitates the understanding of your competitors and aligning your business competitively. The third level is alignment of your business model with future scenarios. By so doing it helps the firm be strong and competitive in the market at all times and be able to cope with uncertainties (Osterwalder et al., 2005).

1.1.3 PesaLink Concept

PesaLink is a real time 24 hour digital platform that allows bank to bank money transfers. Customers using PesaLink initiate the transfer through five main platforms namely mobile banking, ATM, internet banking, bank branch, agency banking outlets/Point Of Sale terminals. PesaLink was conceptualized in 2012 and launched in February 2017.

The money transfer platform is revolutionizing how money changes hands, creating innovative solutions that would lead to creation of global currency, establishing cheap and efficient payment and money transfer solutions. PesaLink is an initiative of the Kenya Bankers' Association (KBA), an umbrella body of the institutions licensed and regulated by the Central Bank of Kenya, with a current membership of 47 financial institutions. The idea for the conceptualization of the product came about in 2012 when commercial banks in Kenya realized that they were losing over Kshs 2.3 billion annually to telecommunication companies through mobile money transfer services, mostly Safaricom's MPESA platform (Thegeya, 2012).

PesaLink is operated by Integrated Payment Services Ltd (IPSL), a fully-owned subsidiary of KBA. The main drivers of this new emerging platform are innovation, efficiency, and cost savings, value for customers, risk management and financial inclusion. It is a 24/7 inter-bank framework that allows banks to share technology infrastructure and create new channels for providing an advanced money transfer service to customers. Bank account holders have the ability to send money real time from as low as Kshs 10 to a maximum of Kshs 999,999 at very low costs compared to other channels. 28 commercial banks have currently received regulatory approval from the Central Bank of Kenya. The first phase of the project entailed person to person (P2P) money transfers whereas the second phase will incorporate person to business (P2B) transfers i.e. partnerships with businesses micro finance institutions and government agencies, in addition to collaborations with different players in the money transfer sector. These partnerships will have a huge positive impact on financial inclusivity as the cost of banking services will be lowered (Demombyenes, 2012).

1.1.4 Kenya Bankers Association

Kenya Bankers' Association (KBA) is an umbrella body of the institutions licensed and regulated by the Central Bank of Kenya, with a current membership of 47 financial institutions. Kenya Bankers Association (KBA) was registered as an Industry Association on 16th July 1962 by the Registrar of Trade Unions. Initially its functions were to cater for the interests of the member banks in negotiating terms and conditions of service of its union sable employees and as far as possible standardize management practices in order to ensure harmony in the industry (Odongo, 2012).

It works together with the government and the Central Bank of Kenya (CBK) in promoting the banking industry development and general economic growth of the country. To reinforce the banking industry's ability to be a primary driver of the economy's development aspiration, the mandate of the Association was redefined and enshrined in the KBA 2014-2018 Strategic Plan. The core focus was broadened to include lobbying and advocacy and championing industry development and innovation by coordinating the members and partnering with stakeholders on strategic initiatives. Kenya Bankers Association licensed and regulated by the CBK with a current membership of 46 financial institutions, reinforces a reputable and professional banking sector in a bid to best support Kenyans, who entrust their ambitions and hard-earned resources with its member banks (Gudmundsson, Kisinguh & Odongo, 2013).

Within the Kenyan financial markets, organizations are constantly seeking improved products, services and organizational structures that can help bridge their production costs, ensure client satisfaction and result in increased profitability levels. Increased competition between traditional commercial banks and other financial institutions has led to provision of better improved product and service variety to customers who have diverse and changing needs. Financial regulations have been modified, usually towards reducing constraints on financial activity (Gudmundsson et al., 2013).

1.2 Research Problem

A key assumption of most research work done on the improvement of operations has been financial innovation is directly proportional to improvements in business model realignments (Upton and Kim, 1999). To achieve sufficient performance in the banking sector requires that banks should be prepared in the face of uncertainty, to have good systems in place to counter challenges and sustain their operations while at the same time reduce the risks that come with financial innovations. The only institutions that will survive are those which are able to adapt to the dynamism of the external environment and incorporate new methods of doing business. Forces of change that have had an immense impact on the performance of commercial banks include mainly financial innovation advancement (Oyeyinka, 2006).

Technological change has been inevitable in the financial sector. The adoption of internet banking has changed the dimensions of competition following the introduction of personal computer banking, automated teller machines (ATMs) and phone banking, which are the initial cornerstones of electronic finance. In order to minimize their operational costs, commercial banks have adopted internet banking and mobile banking platforms as key channels for efficient fast and reliable service delivery (Smith, 1999).

Globally, Hao and Hunter (1997) tested the impact of financial innovation and economic innovation on economic growth. The findings indicated that both financial innovation and economic innovation are positively related to economic growth. Phillippas and Costas (2009) carried out a study on influence of financial innovation to the validation of operational risk. The results indicated that financial innovation is more likely to occur and spread in production lines that have a great cross-correction with an increasing operational risk. Kinderstom et al., (2013) carried out a study on service innovation in product-centric firms: a multidimensional business model perspective. The results indicated that there is need for specific resources and capabilities for specific business model elements.

Locally in Kenya, Kigen (2010) studied the impact of mobile banking on transaction costs of micro finance institutions where he found out that by then, mobile banking had reduced transaction costs considerably though they were not directly felt by the banks because of the then small mobile banking customer base. This is however in contrast to today where an increased number of commercial banks have embraced mobile banking platform as a key business driver. Kingoo (2011) did study on the relationship between electronic banking and financial performance of commercial banks in Kenya, and in addition, also examined the wider electronic banking where he established electronic banking has a positive impact on financial performance. Njeri (2013) carried out a study on effects of financial innovation on the financial performance of deposit taking SACCOs in Nairobi County. The results indicated that there is a positive relationship between financial innovation and financial performance.

From the studies above, it is evident that there existed a gap in knowledge on the role of financial innovation in business model re-alignment of commercial banks. Therefore this research study seeks to answer the following research question: what is the role of PesaLink innovation in business model realignment of commercial banks in Kenya?

1.3 Research Objective

To assess the role of PesaLink innovation in business model realignment of commercial banks in Kenya

1.4 Value of the Study

This research study will be of value to different stakeholders in the field: First, to the management in commercial banks, this study will inform them on the need for embracing innovation in designing the organization's business models. Through the findings of this study, the management will be able to evaluate the arising opportunities for the banking industry as they desire to create competitive advantage through service delivery, reduced costs and enhanced efficiency in operations.

Secondly, to the policy makers and government regulatory agencies including the Central bank of Kenya, (CBK), Communications Authority of Kenya (CA), the findings of this study will be important in informing the policy formulation especially with regard to regulating the provision of mobile money transfer services. The research findings will also aid Competition Authority of Kenya to promote and safeguard competition within the banking and telecommunication sectors in addition to protecting and safeguarding consumers.

Lastly, to research scholars, academicians and students of business, the findings of this study are expected to be of benefit as they would assist build the existing literature and knowledge base in the discipline of mobile banking and money transfer solutions. The study will also be used as a source of reference material in addition to suggesting areas where future research may be conducted.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the theoretical framework applied in the study and reviews previous studies done on financial innovations and business models realignment. It contains the theoretical review, determinants of business model adoption, empirical review, conceptual framework and summary of literature review.

2.2 Theoretical Framework

The research study will focus on various innovation theories used for the last two decades to explain possible organizational and consumer behavior on acceptance patterns and adoption of new innovations and technologies. These theories include the innovation diffusion theory, transaction cost innovation theory and Schumpeter theory of innovation.

2.2.1 Innovation Diffusion Theory

Innovation Diffusion Theory (IDT) by Rogers (2003) has been employed in studying consumer behavior and technology adoption. Innovation is defined as “an idea, practice or object that is perceived as new by an individual or another unit of adoption” whereas diffusion is described as “the process by which an innovation is communicated through certain channels over time among the members of a social system” Rogers, (2003). According to the theory, there are four elements of diffusion namely time, innovation, social systems and communication channels which affect adoption of innovation.

Roger states that an individual’s technology and innovations adoption behavior is influenced by several characteristics. These are relative advantage, complexity, observability, compatibility of the innovation. Relative advantage is the degree to which the innovation is perceived as being better than the practice it supersedes.

Complexity is the degree to which an innovation is perceived as relatively difficult to understand and use. Observability is the degree to which the results of an innovation are visible to others. Compatibility is the extent to which adopting the innovation is compatible with what people do.

2.2.2 Transaction Cost Innovation Theory

This theory refers to the aspect of reduction of transaction cost in response to advanced technology (Hicks & Niehans, 1983). There is improved efficiency in service delivery facilitated and stimulated by cost reductions due financial innovation. Transaction costs play an important role with respect to innovation. In this case, theory explains it in relationship to other aspect that the primary reason of financial innovation in financial institutions is profit maximization.

According to Hicks and Niehans (1983) the reduction of costs is the dominant factor of financial innovation. Financial innovation and subsequently improvement of financial services is stimulated by reduction in costs. The theory studied the financial innovation from the perspective of microscopic economic structure change. The theory's motive further explained another perspective relative to the radical motive of financial innovation of firms' purpose of earning shareholders' wealth or benefits.

2.2.3 Schumpeter Theory of Innovation

Schumpeter Theory of Innovation was presented by Schumpeter (1928) and argued that by use of innovations, entrepreneurs would create a catalyst or avenue for generation of new profits and revenue channels. In turn, groups of imitators attracted by super normal profits would commence a wave of investment that would erode the profit margin for the innovation. Schumpeter (1934) emphasized the role of entrepreneurship and the seeking out of opportunities for value generating activities which would transform and expand the circular flow of income.

This separation of invention and innovation marked out the typical nineteenth century institutional model of innovation, in which independent inventors typically fed discoveries as potential inputs to entrepreneurial firms. The author further saw innovations as perpetual gales of creative destruction that were essential forces driving growth rates in a capitalist system.

Schumpeter's Theory of Innovation distinguished between the entrepreneurs whose innovations create the conditions for profitable new business ventures and the bankers who provide financing for construction of the new ventures (Schumpeter, 1939). Schumpeter's brief discussions of historical episodes of innovations in the field of banking might appear to suggest a positive role for financial innovations in financing the entrepreneurial ventures that produce the primary wave of growth. The spread of joint stock banking was cited as one of the most important innovations that occurred in the early 1800s (Schumpeter, 1939). Schumpeter's assertions have been supported by Porter (1992) that innovation is indeed vital for a country's long-run economic growth and creation and sustenance of competitive advantage.

2.3 Determinants of Business Models Adopted by Firms

Osterwalder and Pigneur (2010) assert that a business model describes the rationale of how an organization creates, delivers, and captures value. Every company has a business model, even if the word "business" is not used to describe its main purpose. Every firm that creates and delivers value must generate enough income to cover its expenses, in order to ensure the survival of the business. The type and nature of business model adopted by firms is broadly dependent or determined on the market environment and industry within which those financial institutions operate in. Successful business models should be aligned in such a way that they incorporate both the primary goal of a firm which is profit generation, and other secondary business objectives including the organization's social and environmental responsibilities.

A business model is a framework for making money and therefore needs to offer customers benefits which they find valuable. A business model in addition needs to be highly flexible in order to meet the ever changing customer needs, changes in the market and challenges in technological innovations among others. By so doing, it facilitates the adaptability of a framework of business model which facilitates its core parts to be cost effective and configurable and be deployable to offer customers value (Osterwalder et al., 2010). There are a number of determinants of adoption of business model adoption by firms as discussed below:

Value creation is the ability of products offered in the market satisfying customer needs. It is the profits or social value sought from use of products. It defines ways in which items of value are packed and offered to fulfill customer needs. The business model adopted by the banks should be perceived by customers as being valuable to them. Measures of the extent to which a business model offers value to its customers which is measured through customer satisfaction and loyalty, market shares, benefits offered to customers relative to competitor's offerings and image or reputation (Amit, Zott 2011).

Quality of resources is another determinant in adoption of business models by firms. The higher the size of the network, the higher the more valuable the firm becomes before the customers. Quality of activities done by a firm is a great determinant in the benefits to be expected by the customers. The ability of a business model to take advantage of industry value drivers leads to improved customer benefits which are valuable to the customers (Allan, 2014).

Adaptability is the extent to which an adapted business model can offer superior benefits which are superior as compared to competitors in time of need and with the changes in the business environment. This is evaluated through exploring the various capabilities that a business model has in line with customer needs. Rareness is another determinant in adopting a business model.

The business model adopted needs to be the only one in the existence with high ability to offer benefits superior to their competitors (Osterwalder et al., 2010). Imitability as a determinant means that the firm needs to ensure continuity in its profits by ensuring that their products are able to offer very unique benefits to the customers in comparison to their competitors. Besides these products or services should not be imitated or substituted by the competitors (Osterwalder & Pigneur, 2010).

2.4 Empirical Review

This section reviews literature from previous scholars in regard to the role of financial innovation in realignment of business models by commercial banks to ensure long term growth, survival and profitability. Globally, Phillippas and Costas (2009) carried out a study on influence of financial innovation to the validation of operational risk. The objectives of the study was to display on how the influence of the diffusion speed of financial innovation increases the operational risk in any business line with different rate. The researcher used questionnaires in data collection from the respondents. The results indicated that financial innovation is more likely to occur and spread in production lines that have a great cross-correction with an increasing operational risk .The major limitation of the study is that the researchers lacked clear explanations on the relationship between financial innovations and operational risks.

Nader (2011) undertook research on the profit efficiency of the Saudi Arabia Commercial banks between years 1998- 2007. The findings of his research showed that availability of mobile banking, number of ATM's and number of branches had a positive co relation on profit efficiency of Saudi banks. The research study thus concluded that financial innovations had a positive impact on financial performance. The major limitation of the study was that the study was narrowly focused on the Saudi Arabian commercial banks and hence the results cannot be used to drive a conclusion on the topic of study in other countries.

Kinderstom et al., (2013) carried out a study on service innovation in product-centric firms: a multidimensional business model perspective. The objective of the study was to find out the nature and features of business model elements which are required for service innovation. Data was collected from pre-centric firms where by use of interviews and focus groups. The results indicated that there is need for specific resources and capabilities for specific business model elements. Limitation of the study was the study had a narrow scope on the product centric firms.

Githikwa (2009) studied on the co-relation between financial innovation and profitability of commercial banks in Kenya. The research findings concluded that commercial banks invest in innovation as a tool to positively affect their performance in profit attainment. Further, the researcher concluded that implementation of financial innovation requires more commercial banks to invest additional resources to enable client satisfaction. Product implementation process enables the commercial banks to enhance flexibility in their operations thereby attracting skilled labor force and subsequent expansion of the bank's operating network. The limitation of the study was a narrow scope of commercial banks in Kenya.

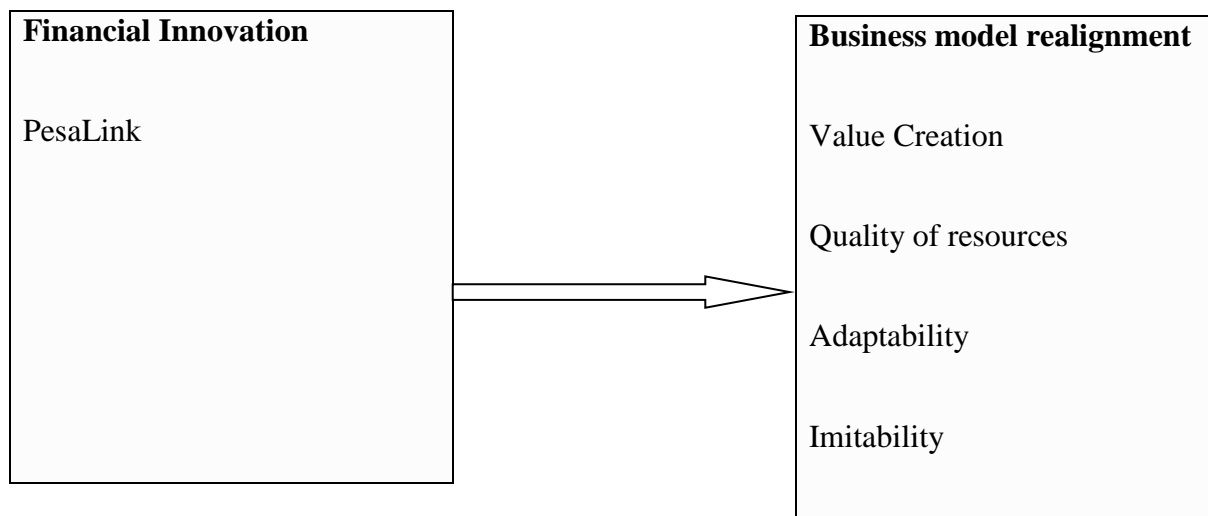
Waweru (2012) carried out a study on the effects of financial innovation on risk management of commercial banks in Kenya. The study concluded that mobile banking had a negative correlation with the risk management framework because financial innovations have exposed commercial banks in Kenya to various risks including credit risks, liquidity risk, interest rate risk, country risk, compliance risk and reputational risks. These inherent risks should therefore guide the overall risk management of commercial banks through realistic risk index factors at any period. The researcher recommended a more robust risk mitigation practices and policies to ensure that all elements of risks are captured in the risk index factors of commercial banks. The study's major limitation was a methodological weakness of focusing on commercial banks alone.

Njeri (2013) carried out a study on effects of financial innovation on the financial performance of deposit taking SACCOs in Nairobi County. The objective of the study was to establish the relationship between financial innovation and financial performance of deposit taking SACCOs in Nairobi County. Data was collected from secondary sources of 44 SACCOs in Nairobi .The results indicated that there is a positive relationship between financial innovation represented by four variables, namely branch network, expenditure in ICT number of customers using mobile banking and the number of ATMs installed and financial performance.

Malak, (2014) studied on the effects of financial innovation on the financial performance of commercial banks in south Sudan. The objective of the study was to establish the relationship between financial innovation and financial performance of commercial banks in South Sudan. Data was collected from secondary sources from the Central bank of South Sudan (2010-2013).The results indicated that financial innovation leads to improved performance. The major weakness of the study was its narrow focus on the South Sudan and hence its results cannot be applied in other countries.

2.5 Conceptual Framework

The conceptual model developed below portrays this expected relationship between the study variables. The factors characterized here are financial innovation and business model realignment. The independent variable is financial innovation as measured by PesaLink. Business model realignment is the dependent variable which the study seeks to explain and it will be measured by value creation, quality of resources, adaptability and imitability.



Independent variables

Dependent variable

Source: Researcher (2017)

Figure 2.1: The Conceptual Model

2.6 Summary of the Literature Review and Research Gaps

A number of studies have been carried out by various scholars on financial innovation and its impacts. Globally, Hao and Hunter (1997) in their study on effect of financial innovation on economic growth established that there is apposite correlation between financial innovations and economic growth. The study's main limitation was that it failed to bring out the various aspects that make up the main variables of the study. Phillippas and Costas (2009) studied on Influence of financial innovation to the validation of operational risk. Results indicate that financial innovation is more likely to occur and spread in production lines that have a great cross-correction with an increasing operational risk. The researchers lacked clear explanations on the relationship between financial innovations and operational risks.

Kinderstom et al., (2013) investigated on the service innovation in product-centric firms: a multidimensional business model perspective. The findings ascertained that there is need for specific resources and capabilities for specific business model elements. However the study suffered from a narrow scope on the product centric firms and hence the results could not apply to PesaLink.

In Kenya Nader (2011) studied on Profit efficiency of the Saudi Arabia Commercial banks between years 1998- 2007. The results indicated that there exists a positive relationship between financial innovations and profitability. The major weakness of the study was that it was narrowly focused on the Saudi Arabian commercial banks and hence the results cannot be used to drive a conclusion on the topic of study in other countries. Githikwa (2009) investigated the co-relation between financial innovation and profitability of commercial banks in Kenya. The findings indicated that commercial banks invest in .innovation as a tool to positively affect their performance in profit attainment.

The limitation of the study was a narrow scope of commercial banks in Kenya. Waweru (2012) studied on the effects of financial innovation on risk management of commercial banks in Kenya. The results of the study ascertained that mobile banking had a negative correlation with the risk management framework because financial innovations have exposed commercial banks in Kenya to various risks. The study's major limitation was a methodological weakness of focusing on commercial banks alone. Malak (2014) studied on the effects of financial innovation on the financial performance of commercial banks in south Sudan. The results indicate that financial innovation leads to improved performance. However the study suffered from a narrow focus on the South Sudan's commercial banks and hence its results cannot be applied in other countries. From above studies there exists a research gap on role of financial innovation and business model realignment.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presented the methods and procedures that were followed in conducting research in pursuit of evaluating the role of financial innovation in business model realignment of commercial banks in Kenya, a case study of PesaLink by Kenya Bankers Association. Therefore, the chapter discussed the research design, population size, sampling technique, the estimated models and the source of data for this study, and consequently, data collection and data analysis.

3.2 Research Design

Research design is defined as a blue print of those procedures, which are adopted by a researcher for testing the relationship between dependent variables and independent variables (Khan, 2008). According to Mugenda and Mugenda (2003) define a descriptive research as the process of collecting data and analyze in order to describe the specific phenomenon in its present of affair and linkages between different factors at that time.

Descriptive cross sectional design was adopted for the study. A descriptive study involves a description of all the elements of the population. It allows estimates of a part of a population that has these attributes. Identifying relationships among various variables is possible, to establish whether the variables are independent or dependent. Cross-sectional study methods are done once and they represent summary at a given timeframe (Cooper and Schindler, 2008).

3.3 Target Population

Population refers to all observations of interest in an entire collection like people or events as described by a researcher (Burns& Burns, 2008). Populace is categorized by a group comprising of persons/people, facilities, elements as well as occasions, various things in groups or family units undergoing explorations (Mugenda and Mugenda, 2003) This study's population comprised of the 42 commercial banks operating in Kenya as at 31/12/2016. Since the population was finite, a census of the 42 banks was undertaken for the study.

PesaLink was introduced in February 2017 hence the study adopted data of six months from March 2017 to August 2017. This period was regarded as sufficiently long to give adequate variables to help in establishment of impacts of financial innovation on business realignment of commercial banks in Kenya a case study of PesaLink. This period was picked so as to provide conclusive outcomes as well as mirror present development. The research applied an evaluation whereby all listed banks will be examined as a part of the study.

3.4 Data Collection

Data will be collected from a primary source. The primary data will be collected by use of structured questionnaires using the Likert scale. The targeted respondents in this study were senior level officers who interact directly with PesaLink. The researcher administered the questionnaire to one respondent in each organization. Close-ended questions were structured in the questionnaire.

More structured responses was achieved by the use of the close-ended questions such as the ratings for various attributes which reduced cases of receiving similar responses. The research instrument was personally administered by the researcher in order to reach out to various respondents. Care and control was achieved by keeping a register of all the questionnaires sent to the field.

3.5 Data Analysis

Analysis of the collected data was made using both descriptive and inferential statistics. The Statistical Package for Social Sciences (SPSS) version 21 computer software was used in the analysis. The data was inputted into the SPSS and examined using descriptive, correlation and regression analyses. In descriptive statistics, the study used mean, standard deviation and scatter plot. In inferential statistics, the study used multivariate regression analysis to determine the relationship between the dependent variable (business model realignment) and independent variables financial innovations.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter comprises of data analysis, findings and interpretation. The findings are presented in tables and diagrams. The analyzed data was arranged under themes that reflected the research objectives.

4.2 The Response Rate

The study's purpose was to determine the role of PesaLink innovation on business model realignment of commercial banks in Kenya. The study target population was the senior level management, middle level management, and lower level management staff in all the commercial banks in Kenya. The questionnaires were self-administered by the researcher and follow-ups through phone calls.

The various respondents were explained to what the high importance of the study information obtained and its importance to the researcher. By so doing, it ensured a 100% response rate a response rate of 50% is considered adequate, 60% good and above 70% rated very good (Mugenda & Mugenda, 2003). The number of questionnaires that were administered was 42. A total of 27 questionnaires were properly filled and returned. This represented an overall successful response rate of 64% as shown in Table 4.1.

Table 4.1: Survey Response Rate

Response	Frequency	Percent
Returned	27	64.3%
Not returned	15	35.7%
Total	80	100%

The response rate was considered adequate and could give adequate information sought by the researcher on the role of financial innovation on business model realignment in commercial banks in Kenya.

4.3 Descriptive Statistics

The researcher conducted descriptive statistics on the data collected before conducting correlation and regression analysis. The descriptive analysis involved frequency, percentages, means and standard deviations. The statistics were presented in tables and charts

4.3.1 Biographic Information

The study intended to have knowledge of the basic background information of the respondents working at the various commercial banks in Kenya. The study gathered data on various aspects of respondents at various commercial banks in Kenya in order to evaluate the role of financial innovation in business model realignment of commercial banks in Kenya. Background checks were carried out to establish the relationship between the information gathered on their experience, management level in the bank and the knowledge sought. The findings of the study are as discussed below:

4.3.2 Management level

The respondents were asked to indicate their management level in the banks they worked for and the responses .The responses indicated that 14.8% of the respondents were senior level management, 70.4% of the respondents were middle level management and 14.8% of the respondents were lower level management. This was an indication that most of the middle level management in the commercial banks dealt with issues to do with financial innovation which in this case was PesaLink. The findings are as indicated as shown on Table 4.2:

Table 4.2 Management level of the respondents

	Frequency	Percent
Senior level management	4	14.8
Middle level management	19	70.4
Lower level management	4	14.8
Total	27	100

4.3.3 Experience

The respondents were asked to indicate their work experience .The findings indicated that 3.7% of the respondents had less than one year experience, 33.3% of the respondents had 1-5 years’ experience, 29.6% of the respondents had experience between 5-10 years and 33.3% of the respondents had over 10 years’ experience, an indication that the respondents had adequate knowledge on the data sough since most of them had adequate experience of over 5 years. The findings are as indicated on Table 4.4:

Table 4.4 Experience

	Frequency	Percent
Less than1 year	1	3.7
Between1-5years	9	33.3
5-10years	8	29.6
over 10 years	9	33.3
Total	27	100.0

4.4 PesaLink Innovation

The respondents were asked to indicate the role of the various features of PesaLink as a financial innovation tool in business model realignment of commercial banks in Kenya.

4.4.1 Value creation

The respondents were asked to indicate to ways that PesaLink has contributed to value creation in commercial banks in Kenya. The respondents indicated that PesaLink to a large extent has contributed to value creation .This is indicated by the positive mean values above four whereby: 4.1481 was a mean value for the fact that PesaLink led to customer satisfaction, 4.0370 indicated that PesaLink has led to increased customer loyalty, 4.741 mean value of the respondents indicated that PesaLink had led to increased market share,4.0370 mean value of the respondents indicated that PesaLink has led to increase benefits offered to customers relative to competitors offerings and image and 3.5185 of the respondents indicated that PesaLink has led to improved image and reputation .This findings indicated that value creation has been attained based on the effect of the adoption of PesaLink as a financial innovation tool. The findings are as indicated in Table 4.4:

Table 4.4: Value creation

Descriptive Statistics			
	N	Mean	Std. Deviation
PesaLink has led to satisfaction of customer needs	27	4.1481	1.16697
PesaLink has led to increased customer loyalty	27	4.0370	1.12597
PesaLink has led to increased market share	27	4.0741	1.03500
PesaLink has led to increase benefits offered to customers relative to competitors offerings and image	27	4.0370	1.15962
PesaLink has led to improved image and reputation	27	3.5185	1.08735
Valid N (list wise)	27		

4.4.2 Quality of Resources

The respondents were asked to indicate impact of PesaLink innovation as financial innovation in contributing to quality of resources in business model realignment of commercial banks in Kenya. From the findings it was ascertained that to a large extent, PesaLink has improved the quality of resources for the banks .A mean value of 4.0370 was attained for the responses which ascertained that PesaLink has enabled the bank to take advantage of industry value drivers. A mean of 4.2963 was indicated PesaLink have enabled improved customer benefits.

A mean of 4.114 indicated that PesaLink has led to increased quantity of resources owned by the bank. A mean of 4.3704 was indicated for the attribute that PesaLink has enabled the bank to be more valuable before the customers. A mean value of 3.9630 was attained for responses on the fact that PesaLink has enabled timely provision of services.

Table 4.3 Quality of resources

Descriptive Statistics			
	N	Mean	Std. Deviation
PesaLink has enabled the bank to take advantage of industry value drivers	27	4.0370	1.19233
PesaLink has enabled improved customer benefits	27	4.2963	1.03086
PesaLink has led to increased quantity of resources owned by the bank	26	4.1154	.81618
PesaLink has enabled banks to be more valuable to is customers	27	4.3704	.79169
PesaLink has enabled timely provision of services	27	3.9630	.85402
PesaLink has enabled efficient provision of services	27	3.9630	.85402
Valid N (list wise)	26		

4.4.3 Adaptability

The respondents were asked to indicate to what extent they agreed to the fact that PesaLink innovation has contributed to the business model realignment through the adaptability feature of PesaLink .The findings indicated that, a mean of 3.5926 was attained for the fact that PesaLink offers superior benefits as compared to competitors in time of need. A mean of 4.3704 was indicated for the attribute that PesaLink offers superior benefits as compared to competitors with the changes in the business environment. A mean value of 4.1852 was indicated for the attributes that PesaLink has various capabilities in line with customer needs and same mean value for the fact that PesaLink is unique and has ability to offer benefits superior to their competitors. From these findings, it was an indication that PesaLink as a financial innovation tool has to great extent led to adaptability aspect of the banks to its services rendered to customers.

Table 4.6 Adaptability

	N	Mean	Std. Deviation
PesaLink offers superior benefits as compared to competitors in time of need	27	3.5926	.79707
PesaLink offers superior benefits as compared to competitors	27	4.3704	.96668
PesaLink has various capabilities in line with customer needs	27	4.1852	.92141
PesaLink is unique and has ability to offer benefits superior to their competitors	27	4.1852	.92141

4.4.3 Imitability

The respondents were asked to indicate to what extent they agree to PesaLink impacts on business model realignment of commercial bank based on its feature of imitability. The findings indicated a mean of 3.7778 as associated with the tribute that PesaLink can be imitated by competitors. A mean value of 3.3704 for the attribute that PesaLink can have close substitutes by competitors. A mean value of 4.2853 for the attribute that PesaLink is able to offer very unique benefits to the customers in comparison to their competitors. A mean value of 4.1481 for the attribute that PesaLink ensures sustained and a mean value of 4.2963 for the attribute that PesaLink ensures long term survival of the bank.

From these findings it was concluded that PesaLink has large impact on the business model adopted by banks. The findings are as indicated in the table 4.7:

Table 4.7 Imitability Descriptive Statistics

	N	Mean	Std. Deviation
PesaLink can be imitated by competitors	27	3.7778	1.12090
PesaLink can have close substitutes by competitors	27	3.3704	.88353
PesaLink offers unique benefits to the customers in comparison to their competitors.	27	4.1852	1.00142
PesaLink ensures sustained profitability of the bank	27	4.1481	.94883
PesaLink ensures long term survival of the bank in the long-term	27	4.2963	.82345

4.5 Summary of descriptive statics (T-test)

T-test were carried out to identify the role of financial innovation (PesaLink) on business model realignment. In summary PesaLink has led to improved performance of commercial banks in Kenya .It has improved to a great extent the quality of services offered by banks as indicated by a mean value of 4.2963 .In addition PesaLink has to a great extent facilitated adaptability of the bank as indicated by a mean value of 4.1852.PesaLink has led to value creation to the customers to moderate extent as indicated by a mean value of 3.5185.PesaLink has facilitated imitability by various commercial banks in Kenya as indicated by a mean value 3.3704.It was concluded that to a great extent, Imitability, adaptability, quality of resources in commercial banks in Nairobi has been facilitated by adoption of PesaLink as a financial innovation tool in business model realignment of all the commercial banks in Nairobi. However Imitability as a factor was the least as indicated by a mean value of 3.3704.In addition the p-test values were all 0.000 an indication that financial innovation (PesaLink) is statically significant at 95% confidence level and hence it has impact on business model realignment. Imitability as a determinant means that the firm needs to ensure continuity in its profits by ensuring that their products are able to offer very unique benefits to the customers in comparison to their competitors. Besides these products or services should not be imitated or substituted by the competitors (Osterwalder & Pigneur, 2010).Based on this fact, the researcher highly recommends that the banks should strategies on improving their services and more innovations under PesaLink to facilitate the immaturity factor by the banks.

Table 4.6 One-Sample Test

Test Value = 0						
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
V5	16.814	26	.000	3.51852	3.0884	3.9487
Q2	21.656	26	.000	4.29630	3.8885	4.7041
A3	23.602	26	.000	4.18519	3.8207	4.5497
I2	19.822	26	.000	3.37037	3.0209	3.7199

4.6 Correlation analysis

The correlation of imitability and business model realignment indicated by performance indicated a positive correlation value of ($r=0.297$, $p=0.132$).An indication that PesaLink innovation through mutability by commercial banks in Kenya, facilitates business model realignment. Hence imitability is not statically significant since it has a p-value of 0.132 which is above the critical value of 0.05 at 95% confidence level. The correlation between Adaptability innovation feature of PesaLink and business model realignment indicated: ($r=0.408$, $p=0.035$).An indication that there exists a positive relationship between adaptability and business model realignment. A p-value of 0.035 indicates that adaptability is statistical significant since it is below the 0.05 at 95% confidence level.

Quality of resources as PesaLink innovation attribute has a correlation and p-value of ($r=0.408$, $p=0.229$) an indication that there exists a positive correlation between quality of resources and business model realignment indicated by a positive value of 0.408, besides a p-value of 0.229 indicated that quality of resources is not statistical significant at 95% confidence level since it is above the 0.05 critical value. Value creation is positively related to business model realignment indicated by a ($r=0.235$, $p=0.238$). The p-value of 0.238 ascertains that it is statically significant 95% confidence level since it is above 0.05.

These findings are in relation a study carried out by Githikwa (2009) studied on the co-relation between financial innovation and profitability of commercial banks in Kenya where he established that there is positive correlation between financial innovation and performance .The researcher highly recommends adoption of PesaLink as a financial innovation tool should be adopted based on the fact that it results into improved performance.

Njeri (2013) carried out a study on effects of financial innovation on the financial performance of deposit taking SACCOs in Nairobi County. The objective of the study was to establish the relationship between financial innovation and financial performance of deposit taking SACCOs in Nairobi County. Data was collected from secondary sources of 44 SACCOs in Nairobi .The results indicated that there is a positive relationship between financial innovation represented by four variables, namely branch network, expenditure in ICT number of customers using mobile banking and the number of ATMs installed and financial performance. PesaLink is also a financial innovation tool and has positive impact on business model realignment which leads to improved performance of banks.

Table 4.9 Correlation Matrix

Table		Performance	I2	A3	Q2	V5
	Pearson Correlation	1	.297	.408*	.239	-.235
Performance	Sig. (2-tailed)		.132	.035	.229	.238
	N	27	27	27	27	27
	Pearson Correlation	.297	1	-.229	.382*	.233
Imitability	Sig. (2-tailed)	.132		.250	.050	.243
	N	27	27	27	27	27
	Pearson Correlation	.408*	-.229	1	.385*	.169
Adaptability	Sig. (2-tailed)	.035	.250		.047	.399
	N	27	27	27	27	27
	Pearson Correlation	.239	.382*	.385*	1	.407*
Quality of resources	Sig. (2-tailed)	.229	.050	.047		.035
	N	27	27	27	27	27
	Pearson Correlation	-.235	.233	.169	.407*	1
Value addition	Sig. (2-tailed)	.238	.243	.399	.035	
	N	27	27	27	27	27

*. Correlation is significant at the 0.05 level (2-tailed).

4.7 Regression Analysis

The results presented in table 4.11 present the fitness of model used of the regression model in explaining the study phenomena. Adaptability, Value creation, quality of resources and Imitability were found to be satisfactory variables in business model realignment. This is supported by coefficient of determination also known as the R square of 52.2%. This means that adaptability, Value creation, quality of resources and Imitability which represent PesaLink features explain 52.2% of the variations in the dependent variable which is business model realignment performance. These results also imply that the model applied to link the relationship of the variables was satisfactory.

Table 4.11 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.722 ^a	.522	.435	.47313

Predictors: (Constant), adaptability, Value creation, quality of resources, imitability.

4.8 Analysis of Variance

In statistics significance testing the p-value indicates the level of relation of the independent variable to the dependent variable. If the significance number is found to be less than the critical value also known as the probability value (p) which is statistically set at 0.05, then the conclusion would be that the model is significant in explaining the relationship; otherwise the model would be regarded as non-significant.

Table 4.12 provides the results on the analysis of the variance (ANOVA). The results indicate that the overall model was statistically significant. Further, the results imply that the independent variables are good predictors of business model realignment. This was supported by an F statistic of 5.999 and the reported p value (0.002) which was less than the conventional probability of 0.05 significance level.

Table 4.12 Analysis of Variance

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	5.372	4	1.343	5.999	.002 ^b
Residual	4.925	22	.224		
Total	10.296	26			

a. Dependent Variable: Business model realignment Performance

Predictors: (Constant), adaptability, Value creation, quality of resources and Imitability

4.6.3 Coefficients

Regression of coefficients results in Table 4.13 below shows that value creation and business model realignment are positively and significantly related ($r=0.226$, $p=0.002$). An increase in the unit change in value creation would lead to an increase in the business model realignment performance by 0.226 units. The results further indicate that quality of resources as an attribute of PesaLink and business model realignment performance were positively and significantly related ($r=0.016$, $p=0.010$).

These results imply that an increase in the unit change in quality of resources feature of PesaLink would lead to an increase in the business model realignment performance by 0.267 units. It was further established that adaptability and business model realignment performance were positively and significantly related ($r=0.426$, $p=0.002$). This meant that a unit change in promotion would lead to 0.426 units in business model realignment performance. Moreover, imitability, and business model realignment performance were also positively and significantly related ($r=0.397$, $p=0.005$ and this shows that an increase in the unit change in, imitability factors would lead to an increase in business model realignment performance by 0.397.

Table 4.2 Regression of Coefficients

Model	Unstandardized Coefficients		Standardized	T	Sig.	
	B	Std. Error	Coefficients			
	(Constant)	2.256	.642		3.514	.002
	Value creation	.266	.094	-.460	-2.830	.010
1	Quality of resources	.016	.119	-.027	-.137	.892
	imitability	.397	.127	.557	3.117	.005
	Adaptability	.426	.122	.624	3.496	.002

a. Dependent Variable: Business model realignment Performance

Based on the results of these study indicated in the table above, $Y = \beta_0 + \beta_1X_1 + \beta_2X_2$

+ $\beta_3X_3 + \beta_4X_4$ becomes;

$$Y = 2.256 + 0.226X_1 + 0.016X_2 + 0.397X_3 + 0.426X_4$$

X_1 =value creation

X_2 =quality of resources

X_3 =imitability

X_4 =adaptability

Y = Business model realignment

4.6 Discussion of Research Findings

This study sought to determine the role of financial innovation (PesaLink) in business model realignment of commercial banks in Kenya. The study had one objective. The objective of the study was to assess the role of PesaLink innovation in business model realignment of commercial banks in Kenya. The study used Primary data which was collected by aid of questionnaires while descriptive research design was applied to aid analysis. Findings on biographic data indicated that 14.8% of the respondents were in the senior level management, 70.4% of the respondents were middle level management while 14.8% of the respondents were in the lower level management. 33.3% of the respondents had experience over 10 years, 29.6% of the respondents were aged between 5-10 years while 33.3% of the respondents had 1-5 years in terms of experience. This was an indication that most of the respondents had adequate knowledge on the data sought this study.

The researcher conducted descriptive correlation and regression analysis in order to address the research objective of the study. The correlation of imitability and business model realignment indicated by performance indicated a positive correlation value of ($r=0.297$, $p=0.132$). The correlation between Adaptability innovation feature of PesaLink and business model realignment indicated: ($r=0.408$, $p=0.035$). Quality of resources as PesaLink innovation attribute has a correlation and p-value of ($r=0.408$, $p=0.229$). Value creation is positively related to business model realignment indicate by a ($r=0.235$, $p=0.238$).

The findings further established that based on the various attributes of PesaLink innovations, Quality of resources role in business model realignment had greatest impact indicated with a mean value of 4.2965, followed by a large effect indicated by adaptability as a feature of PesaLink innovation as an example of financial innovation by a mean value of 4.1852 followed by value creation attribute which indicated a mean value of 3.5825 and finally imitability as a feature of PesaLink innovation had the least impact as indicated by a mean value of 3.364. From this it could be attained that PesaLink effect on business model realignment had the greatest impact through quality of resources feature and the least in imitability feature.

Besides the regression analysis was carried out where the various PesaLink innovation features were regressed against business model realignment performance. The regression analysis established that 52% of the performance of commercial banks in Kenya is affected by PesaLink: value creation, quality of resources, adaptability and imitability. This indicated that the procurement management practices had great impact on performance. The Anova analysis indicated a 0.000 value as the significance level an indication that the model used was significant since the value is less than 0.005.

The findings of this study are in agreement with Githikwa (2009) studied on the co-relation between financial innovation and profitability of commercial banks in Kenya. The research objectives were to establish the role of financial innovation on performance of commercial banks in Kenya. The research findings concluded that commercial banks invest in innovation as a tool to positively affect their performance in profit attainment. Further, the researcher concluded that implementation of financial innovation requires more commercial banks to invest additional resources to enable client satisfaction. Product implementation process enables the commercial banks to enhance flexibility in their operations thereby attracting skilled labor force and subsequent expansion of the bank's operating network. The research design involved a cross sectional survey of all commercial banks in Kenya. Data was collected using a questionnaire that was administered through drop and pick later method. Descriptive statistics were used to analyze information on the rate of use of PesaLink adoption in commercial banks based on various statements describing the various features of PesaLink whereas correlation and regression analysis was used to analyze the relationship financial innovation and performance. The findings were presented in tables. It was also evident that there was a very significant relationship between financial innovation and performance.

CHAPTER FIVE

SUMMARY, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter addressed the summary of the findings, the conclusions and the recommendations. This was done in line with the objectives of the study. This chapter goes further to discuss the various limitations of the study. The study objective was to establish the role of PesaLink innovation in business model realignment of commercial banks in Kenya.

5.2 Summary of Findings

This section provided a summary of the findings from the analysis and this was done in line with the objectives of the study.

5.2.1 PesaLink Innovations

The objective of the study was to establish the role of PesaLink innovations on business model realignment of commercial banks in Kenya. In the first question the respondents were asked to what extent value creation as a PesaLink innovation has contributed to business model realignment of the bank. This was asked based on the various attributes of Value creation as a PesaLink innovation on whether it has led to customer satisfaction, led to increased customer loyalty, increased market share and image. Majority of the respondents indicated that value creation has been experienced and attained by the commercial banks in Kenya as indicated by high mean values of the responses which were above 3.585. According to these responses, this study concluded that majority of commercial banks in Kenya had experienced business model realignment of their processes by use of adoption of value creation feature of PesaLink, thus increased level of customer satisfaction and market share by commercial banks in Kenya.

Quality of resources as the second feature of PesaLink Innovation, the results ascertained that it had affected business model realignment to a great extent indicated by a mean value of 4.29 an indication that to large extent, quality of resources offered by commercial banks offered by Commercial banks in Kenya had been improved to a great extent by the adoption of PesaLink innovations. The third feature of PesaLink, Adaptability had a large impact on business mode realignment of commercial banks in Kenya as indicated by a mean value of 4.18 .Commercial banks in Kenya have experienced improved customer benefits, timely provision of services and efficient provision of services by adoption of PesaLink and this has faceted their realignment of their business models. The fourth feature of PesaLink was imitability. The responses indicated that to moderate extent commercial banks in Kenya have been able to realign their business models based on the fact that they are able to offer very unique products that cannot be imitated by their competitors, they are able to survive in the long run and in addition to that they have been able to get sustained profitability.

5.2.2 Establishing the Role of PesaLink innovation on business model realignment of commercial banks in Kenya

PesaLink innovations which are value creation features, quality of resources, imitability and adaptability were found to have positive impact on business model realignment which results in improved performance. This is supported by coefficient of determination also known as the R square of 52.2%. This means that aloe creation features, quality of resources, imitability and adaptability explain 52.2% of the variations in the dependent variable which is business model realignment. These results also imply that the model applied to link the relationship of the variables was satisfactory. The results indicate that the overall model was statistically significant. Further, the results imply that the independent variables are good predictors of business model realignment. This was supported by reported p value (0.001) which was less than the conventional probability of 0.05 significance level.

5.3 Conclusions

Based on the findings above the study concluded that adoption of PesaLink innovation which is an example of financial innovation has led to positive improvement in the business ,model realignment of commercial banks which has long term effect of improved performance of the banks. The results indicated that the various features of PesaLink had been experienced to a great extent in the commercial banks in Kenya. Commercial banks have been able to increase market share, increase their customer loyalty, improved the quality of resources that they offer to the customers, been able to increase their effectiveness in their operations and reduced the instances of imitations of their products and brands due to the adoption of PesaLink innovations as a financial tool. Based on these findings it was concluded that to great extent the role of PesaLink in commercial banks in Kenya has led to business model realignment whereby firms have been able to realign their activities .This has resulted in the long term profitability and better performance of the banks. This is based on improved customer satisfaction, good reputation, increased revenues, improved quality of resources, lowered levels of imitation, which has been facilitated by the adoption of PesaLink.

5.4 Recommendations

The study recommends that Commercial banks need to create awareness to their customers on the use of PesaLink in order to get much benefits from the adoption of PesaLink as a financial tool in order to attain business model realignment addition, senior managers and supervisors of various supermarkets should nominate individuals to spearhead these trainings. The study recommended that the top management should take up responsibility and ensure that their banks have fully implemented PesaLink and it is well adopted and communicated to achieve business model realignment.

The study further recommends that management, policy makers and investors either existing or intending to venture in the area of offering financial services like banking, should have knowledge on PesaLink and take the courage to ensure that it implemented in their system to be able to gain business model realignment and in the long run acquire profitability and better performance. Based on the fact that PesaLink has substantial impact on business model realignment which is a predetermining factor of improved performance.

5.5 Limitations of the Study

The study findings were applicable to the commercial banks settings in Kenya specifically those in Nairobi Kenya only. Therefore, the findings cannot be used as representative of all other without considering other lending institutions or financial institutions. Some commercial banks were reluctant on providing information based on the nature of their business and the criticality of the information sought. Some of the respondents has very tight working schedules and were therefore not available for the interview. However, the researcher tried as much as possible and got above 60% response rate which was considered an adequate representative sample of the target population. The study was majorly focused on role of PesaLink as a financial innovation in business model realignment in commercial banks in Kenya. However the study suffered a limitation only focusing on PesaLink as a financial innovation tool and leaving out the other types of financial innovations available or in use.

5.6 Suggestions for Further Research

The study sought to determine the role of PesaLink as a financial innovation tool in business model realignment of commercial banks in Kenya. This study, therefore, focused on commercial banks in Kenya alone; therefore there is need for more research to be done on other financial institutions and not commercial banks. In addition, future studies should consider other financial innovations should be studies and their role on business model realignment and comparison carried out in relation to this study.

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APPENDICES

Appendix II: List of Commercial Banks in Kenya as at 31st December 2016

1. African Banking Corporation Ltd.
2. Bank of Africa Kenya Ltd.
3. Bank of Baroda (K) Ltd.
4. Bank of India
5. Barclays Bank of Kenya Ltd.
6. CFC Stanbic Bank Ltd.
7. Chase Bank (K) Ltd.
8. Citibank N.A Kenya
9. Commercial Bank of Africa Ltd.
10. Consolidated Bank of Kenya Ltd.
11. Co-operative Bank of Kenya Ltd.
12. Credit Bank Ltd.
13. Development Bank of Kenya Ltd.
14. Diamond Trust Bank (K) Ltd.
15. Dubai Bank Kenya Ltd.
16. Ecobank Kenya Ltd
17. Equatorial Commercial Bank Ltd.
18. Equity Bank Ltd.
29. Family Bank Ltd
20. Fidelity Commercial Bank Ltd
21. GTB Ltd
22. First community Bank Limited

23. Giro Commercial Bank Ltd.
24. Guardian Bank Ltd
25. Gulf African Bank Limited
26. Habib Bank A.G Zurich
27. Habib Bank Ltd.
28. Housing Finance
29. Imperial Bank Ltd
30. Investment & Mortgages Bank Ltd
31. Jamii Bora Bank.
32. Kenya Commercial Bank Ltd
33. Sidian Bank Ltd
34. Middle East Bank (K) Ltd
35. National Bank of Kenya Ltd
36. NIC BANK
37. Oriental Commercial Bank Ltd
38. Paramount Universal Bank Ltd
39. Prime Bank Ltd
40. Standard Chartered Bank (K) Ltd
41. Trans-National Bank Ltd
42. UBA Kenya Bank.

Appendix III – Questionnaire

This questionnaire has been designed to collect information on the role of financial innovation in business models realignment of commercial banks in Kenya. Please read carefully and answer the questions as honestly as possible. The information gathered will be used purely for the purpose of academic research and will be treated with utmost confidence.

Instructions

- 1. Tick appropriately in the box or fill in the space provided.
- 2. Feel free to give further relevant information to the research.

SECTION A: BIOGRAPHIC INFORMATION

1. Name of the Bank

.....

2. Your management level in the bank

- Senior Level Management
- Middle Level Management
- Lower Level Management

3. How long have you worked in the Banking Sector (tick as appropriate)

No	Period	Tick as appropriate
i.	Less than 1 yr	
ii.	Btw 1-5 yrs	
iii.	Btw 5-10 yrs	
iv.	Over 10 yrs	

PART B: ROLE OF FINANCIAL INNOVATION (PESALINK) IN BUSINESS

MODELS REALIGNMENT OF COMMERCIAL BANKS IN KENYA

Component One: Value Creation

To what extent do you agree with the following attributes as ways that PesaLink has contributed to value creation of the business model in the bank? Use 1- Very low extent, 2- Low extent, 3-Moderate extent, 4- Great extent, 5- Very great extent

Component	1	2	3	4	5
PesaLink has led to satisfaction of customer needs					
PesaLink has led to increased customer loyalty					
PesaLink has led to increased market share					
PesaLink has led to increased benefits offered to customers relative to competitor's offerings and image or reputation					
PesaLink has led to improved image and reputation					

Component Two: Quality of Resources

To what extent do you feel that PesaLink has impacted on the quality of resources offered by the bank? Use 1- Very low extent, 2-Low extent, 3-Moderate extent, 4- Great extent, 5- Very great extent

Component	1	2	3	4	5
PesaLink has enabled the bank to take advantage of industry value drivers					
PesaLink has enabled improved customer benefits					
PesaLink has led to increased quantity of resources owned by the bank					
PesaLink has enabled the bank to be more valuable before the customers					
PesaLink has enabled timely provision of services					
PesaLink has enabled efficient provision of services					

Component Three: Adaptability

To what extent do you agree with the following attributes as ways that PesaLink has impacted on adaptability in the bank? Use 1- Very low extent, 2-Low extent, 3-Moderate extent, 4-Great extent, 5- Very great extent

Component	1	2	3	4	5
PesaLink offers superior benefits as compared to competitors in time of need					
PesaLink offers superior benefits as compared to competitors with the changes in the business environment					
PesaLink has various capabilities in line with customer needs					

PesaLink is unique and has ability to offer benefits superior to their competitors					
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Component Four: Imitability

To what extent do you agree with the following attributes as ways through which PesaLink impacts on imitability of the business model adopted by the bank? Use 1- Very low extent, 2- Low extent, 3-Moderate extent, 4- Great extent, 5- Very great extent

Component	1	2	3	4	5
PesaLink can be imitated by competitors					
PesaLink can have close substitutes by competitors					
PesaLink is able to offer very unique benefits to the customers in comparison to their competitors.					
PesaLink ensures sustained profitability by the bank					
PesaLink ensures long term survival of the bank in the long-term					

Thank you for your co-operation