

**EFFECTS OF KNOWLEDGE MANAGEMENT PRACTICES ON
FINANCIAL INNOVATION OF KENYAN COMMERCIAL BANKS:**

A CASE OF CHASE BANK (IR) KENYA LTD.

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DECLARATION

I declare that this document and the research that it describes are my original work and that they have not been presented in any other university for academic work.

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This research was conducted under our supervision and is submitted with our approval as university supervisors.

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DEDICATION

I would like to dedicate this research to my loving mother Rose Wangoi for her tireless support during the period of the research paper.

ACKNOWLEDGMENT

I would like to express my sincere gratitude to my supervisor Dr. Peter Gaiku for his invaluable and unlimited guidance and support throughout this study. I would also like to thank all my lecturers and administrators at Africa Nazarene University for creating a conducive and peaceful environment for me to undertake this course without interruption.

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ABSTRACT

Knowledge Management in organizations has become an important strategic weapon for sustaining competitive advantage. Knowledge management manages the corporation's knowledge through a systematically and organizationally specified process for acquiring, organizing, sustaining, applying, sharing and renewing both the tacit and explicit knowledge of employees to enhance organizational performance and create value. This study sought to investigate the effect of Knowledge Management on financial innovation in commercial banks in Kenya. The specific objectives of the study were to determine the influence of knowledge acquisition on financial innovation in commercial banks in Kenya, to examine the effect of knowledge transfer on financial innovation in commercial banks in Kenya and lastly to establish association between knowledge application and financial innovation in commercial banks in Kenya. The study used a case study of Chase Bank (IR) Kenya Ltd. It adopted descriptive survey design which adopted both quantitative methods to ensure a clear description of the outcome of the study results. The target population was 160 employees of Chase Bank (IR) branches operating within Nairobi County. The study used a sampling frame of branch and operational managers of the bank within the county where a mixture of simple/stratified random sampling method was used to select a sample size. They used a sample size of 114 respondents. Data was collected by use of questionnaire containing five sections namely background information, knowledge acquisition, knowledge transfer and knowledge application. The questionnaires were distributed by the research assistant to the selected respondents. Data was analyzed using SPSS software and was presented on graphs and pie charts for easy interpretation. The three independent variables that were studied, explained 66.9% on the knowledge management and financial innovation in Chase Bank (IR). As indicated by the adjusted R^2 which was 65.9%. Knowledge application was found to significantly affect financial innovation. The study recommends that on knowledge acquisition, banks should ensure that they expose their employees to more platforms where they can acquire more knowledge so that they can enhance financial innovation since the study has found that the variable had the lowest correlation to financial innovation. Secondly, on knowledge transfer the management of banks should ensure that they create conducive environment so that employees can be in position of transferring the knowledge that they have acquired. Finally, on knowledge application, the banks should also create conducive environment that will ensure that the employees are able to apply the knowledge that they acquire.

DEFINITION OF TERMS

Financial Innovation - is the act of creating and then popularizing new financial instrument as well as new financial technologies, institution, and markets (Tufano, 2002).

Innovation – refers to coming up with new ideas or the application of better solutions that meet new requirements, unarticulated needs, or current market demands (OECD, 2005).

Knowledge - refers to a practical understanding of a subject. Knowledge can be implicit or explicit and can be more or less formal or systematic (Hana, 2013).

Knowledge Acquisition - is the process used to define the rules and regulations required for knowledge based system (Kendal, 2007).

Knowledge Application - refers to the process through which knowledge is directly applied to task performance or problem solving in organizations. It may be possessed and applied by individuals or by whole teams (Ajmal & Koskinen, 2008).

Knowledge Sharing – refers to the process of encouraging knowledge exchange and creation of information in an organization in order to develop competitive advantages (Gask, 2011).

Knowledge transfer- refers to sharing or disseminating of knowledge and providing inputs to problem solving. In organizational theory, knowledge transfer is the practical problem of transferring knowledge from one part of the organization to another.

ABBREVIATIONS/ACRONYMS

CBK – Central Bank of Kenya

CBR- Central Bank Rate

IDC - International Data Corporation

KBA - Kenya Bankers Association

KBBR- Kenya Banks Reference Rate

KM – Knowledge Management

KSs - Kenya shillings

LPO – Local Purchase Order

MFBs - Microfinance Banks

MOU- Memorandum of Understanding

NGOs – Non Governmental Organizations

SACCO's - Savings and Credit Cooperatives

SPSS - Statistical Packages for social sciences

SMEs – Small and Micro Enterprises

US – United States

CHAPTER ONE: INTRODUCTION

1.1 Introduction

Financial innovation is the act of coming up with new financial instruments and technologies as well as institutions and markets. Financial innovation encompasses financial aspects such as mortgage backed securities, financial products and collateralized obligations (Lin & Howell, 2013). There are three categories of financial innovation and this include; institutional, product, and process. Institutional innovations relate to the creation of new types of financial organizations such as specialist credit card firms such as discount brokering organizations and internet banks; Product innovation concerns with new products such as foreign currency mortgages, derivatives and securitized assets and process innovations relate to new ways of doing financial business (Chuang, 2005). This chapter presents the background of the study, statement of the problem, purpose of the study, research objectives, research hypotheses, significance of the study, delimitations of the study and conceptual framework.

1.2 Background of the Study

Knowledge refers to the acquaintance or awareness of something from facts, information or skills that are acquired through education experience or learning. The term can also be used to refer to a practical understanding a specific subject (Rezgui, 2010). Knowledge can be implicit or explicit it can be more or less formal or systematic. Acquiring of Knowledge can involve complex processes which include communication, reasoning and perception.

Nowadays, banks are operating in unpredictable environment; most of them depend on what they have as capabilities for them to be successful in their service delivery (Lin & Ting, 2011).

Most KM efforts in organizations have been fixated on improved efficacy through sharing of internal best practices, most of which have culminated in formalization. The banking industry in Kenya has been faced with outstanding levels of competition owing to increased globalization. The importance of knowledge management and its relation to innovation is widely acknowledged, however an approach that tries to measure a firm's quantifiable success with innovation achieved through knowledge management is still missing. Increasingly managers are becoming aware that knowledge resources are important to the survival of their organizations (Rezgui, 2010). As a result of this awareness management is taking into account the value of creativity, which enables the transformation of one type of information to the other. Organization success depends on its employee knowledge, experience, creativity activity, and qualification. Knowledge, as Choudhury (2010) concluded is very significant in the innovation process since it acts as a necessary input.

However, innovation is becoming complex by the day due to changing customer needs, stiff competition, rapid technological advancement and the amount of knowledge available to organizations. This is to say that for an organization to experience innovation they must be willing to invest in knowledge management. Alavi (2013) suggested that since innovation consist of the perfect use of modern technology then there exist knowledge creation and use in an organization.

Financial institutions have had challenges in delivery of services in the past; these ranges from capital adequacy, loose credit, non-performing loan ratio, less profitability, lack of innovation and overbanking due to competition. Current financial institutions are looking for ways of enhancing

their financial services through new innovative ways in terms of products and services as well as adoption modern governance systems. Gorton and Metrick (2010) states that the financial institutions have had increased innovation due to tax advantage from the government, reduction in bankruptcy, regulatory costs, reduction in moral hazard, transparency and customization to mention a few. According to them, a highly hostile situation can prompt effective financial revolution by financial institutions thus positioning them well in the market.

In the Kenyan financial markets, almost every financial institution is looking to add value to its products and services plus improving the organization structure; all this is aimed at reduction of production costs high profits and customer satisfaction. Financial institution clients require diversified services in the field that can also satisfy their diversified demands.

Growth and the subsequent globalization in financial industry tend to strengthen the existing financial system. Regulations that relate to financial services have been improved to ease the hurdles that have been dogging the industry. All this are done by commercial banks in order to be at par and not lag behind in competition (Gitau, 2011). In filling this gap, this study took a different route from the past research and tried to unearth how knowledge management influence financial innovations in the commercial banks in Kenya.

1.2.1 Commercial Banks in Kenya

The history of commercial banks in Kenya date back to 1896 with National Bank of India. Commercial Banks are closely monitored by the CBK under the authority of the Banking Act Cap 488. The banking industry comprises of over 40 commercial bank; 12 microfinance institutions,

at least one mortgaging finance company, approximately 80 Forex bureaus and 8 representative offices of foreign banks.

As noted by the Kenya Bankers Association (KBA), the banking sector in Kenya over the years continues to raise the bar of innovation and technology use (kba.co.ke) They not only have expanded their services reach within the country boundaries but they have sought to capture markets in the neighboring countries. Banks in Kenya are reinventing their service offering in order to stay relevant in an environment where customer's needs are changing at a fast pace (kba.co.ke). Kenyan banking sector is growing at a higher rate than in the neighboring countries and this has been linked to the innovativeness of the bank and influential role that mobile payment platforms has played in incorporating a growing number of adults in the banking network (Enyi, 2014).

The CBK (2015) reported an enhanced use of technology resulting in the convergence of mobile telephony platforms and banking plus more internet banking. There was a trend towards agency banking a departure from traditional banking. Since the introduction of agency banking models in 2010, banks have gone on to contractually agree with an array of retailers to serve as their agents in offering simple banking services at the customers' convenience.

The sector is not without challenges though. It is marked with continuous review of its regulations as evidenced by the MOU to lower interest rates that had them adjust their rates to 14% in line with the reduction in the CBR and the KBRR. The banks additionally committed to eliminate some non-interest charges to the benefits of their customers. Also in the last two years, the banking industry sector has seen three banks namely Dubai Bank, Imperial Bank Limited and Chase Bank

Limited go into receivership by the CBK. These ascribe to an industry that is marked by high levels competition, economy downturn and increased customer expectations, whose chance for sustainable competitive advantage must be pegged on innovation as leverage.

1.2.2 Chase Bank (IR) Kenya Limited

Chase Bank Kenya (IR) Limited is a commercial bank in Kenya licensed by the Central Bank of Kenya and national banking regulator. Chase bank (IR) is a large financial services provider in Kenya, with an estimated asset valuation of approximately US\$1.428 billion (KES: 142 BILLION), as of December 2015. At that time, shareholders' equity was valued at US\$ 119.7 million (KES: 11.9 billion). Chase Bank (IR) Kenya Limited provides banking, financial, and related service in Kenya. The company offers savings, current, term deposit, collection, fixed and call deposit, and investment club accounts; and save and borrow plans, bid bonds, LPO financing, invoice financing and cheque discounting products. It also provides various loans; motor, medical, small and medium enterprises (SME), and other insurances; microfinance and Islamic banking services; and debit, pre-paid, traveler and credit cards as well as mobile and online banking services. The company serves youth, women, Diasporas, professionals, business people, elite customers, SMEs, medical professionals, agri-bunisses, institutions and corporations, SACCOs, educational institutions NGOs, churches, and asset finance companies through a network of approximately 67 branches. Chase Bank (IR) Kenya Limited was incorporated in 1995 and headquartered in Nairobi, Kenya.

1.3 Statement of the Problem

As competition and the pace of environmental fluidity increases, organizations are forced to rethink their management practices as well as their strategies. Organizations that will survive such rapid changes in their environment must be unique and agile. The concept of KM and organizational innovation has not received much attention. KM in itself is an emerging issue that has not yet been comprehensively considered. The attention given to how knowledge is created and utilized or on the role of KM in innovation is still inadequate as noted by Rich (2010) and Plessis (2007).

In Kenya, Maingi (2007) focused on the need to mold KM as an additional measure that include profitability, sustainability and continuity, besides the known traditional measures that include financial statement analysis. Mosoti and Masheka (2010) examined how KM practices are carried out and their contribution to the development in Kenya and Africa. Kemboi, Jogongo, Owino (2012), addressed the subject of institutionalization of KM in the manufacturing sector in Kenya. Senaji and Nyaboga (2011) noted that most of KM research has been carried outside Africa and Kenya further noted corporate cultures need to be studied to see how they influences the launch and success of KM program., however these studies failed to examine the effect of knowledge management on financial innovation.

Additionally, the studies did not focus on knowledge management practices in commercial banks in Kenya. This study, therefore, sought to answer to answer the following research question; what is the effect of knowledge management practices on financial innovation in Kenya Commercial Banks

1.4 Purpose of the study

The purpose of this quantitative study was to examine the relationship between knowledge management practices and financial innovations on Kenya Commercial banks. The significance of the relationship is that it may inform an understanding of how knowledge management influences financial innovation.

1.5 Objectives of the Study

This study was guided by general and specific objectives

1.5.1 General Objective

The general objective of this study was to establish the effects of knowledge management practices on financial innovation in commercial banks in Kenya.

1.5.2 Specific Objectives

- i) To determine the effect of knowledge acquisition on financial innovation in Chase Bank(IR), Kenya.
- ii) To examine the effect of knowledge, transfer on financial innovation in Chase Bank(IR), Kenya.
- iii) To establish the effect of knowledge application on financial innovation in Chase Bank(IR), Kenya

1.6 Research Questions

- i) How does knowledge acquisition affect financial innovation in Chase Bank(IR), Kenya?
- ii) To what extent does knowledge transfer affect financial innovation of Chase Bank(IR), Kenya?
- iii) To what extent does knowledge application affect financial innovation of Chase Bank(IR), Kenya?

1.7 Significance of the Study

The purpose of this study was to examine the relationship between KM and financial innovation. This information was significant as it allowed Chase Bank (IR) managers to understand which KM practices significantly influence innovation. The study also assisted the Central Bank of Kenya, which is the chief regulator of commercial banks in Kenya government to come up with knowledge

management policies that supports innovation in the banking industry. Future researchers will also use this study as basis for further research in financial innovation and innovation in general.

1.8 Scope of the Study

The study covered all employees of Chase Bank headquarters in Nairobi County. Bank innovations that was used in the study was automated teller machines, debit and credit cards, mobile banking, internet banking, electronic funds transfer, utility bills payments, agency banking model, and cheque transaction system. The study utilized both primary and secondary data.

1.9 Delimitations of the Study

This research did not cover the relationship between KM application and how it affects financial innovation in Chase Bank (IR), Kenya

1.10 Limitation of the Study

Owing to the fact that there were constraints in terms of time and resources, this research only concentrated itself on innovation in Chase bank Kenya limited and therefore did not include other banks and as well as other financial actors in the financial services industry, this therefore means the study offered a chance for researchers to do further research on the omitted fields in the sector.

Respondent's willingness to participate in the study was another factor that limited this study. This needed active follow-ups to improve the situation. Due to time and resource constraints the study only reviewed only identified objectives in this study. However, this provided an opportunity for further research.

1.11 Assumption of the Study

The study assumed that:

- i) The participants answered the interview questions in an honest and candid manner.
- ii) Participants had a sincere interest in participating in the research and did not have any other motives.

1.12 Theoretical Review

The purpose of theories was to clarify or foretell its association with a situation or an occurrence and provide a generalized explanation to an occurrence. The subsequent section highlighted some of the theories that have been designed to explain financial innovation.

1.12.1 Schumpeter Theory of Innovation

Some early thoughts on innovation can be traced back to Schumpeter (1934). In his first work Schumpeter (1934) was looking at the European industrial structure the emphasis was on the drivers of innovation. Entrepreneurs were the key in driving innovation either as individual or working in big corporations, as they would improve their performance that would destabilize the status quo. This innovation spurred new profits and attracted imitators who are attracted by the super-profits; this would finally take away the profit margin for the innovation. But before a business organization equilibrates a new idea would come up and the whole process would start again. This dynamic is referred to creative destruction or the Schumpeter (1934) Mark I pattern of Innovation (Avermaete, 2003).

The theory was important to this study as it showed that innovation was dependent on exceptional individual entrepreneurs. It relates organizational size and innovation and shows that large organizations such as banks are more likely to innovate than small firms (Korir, 2015). The theory is also important since it shows the cycles under which innovations especially in banks goes

through; whereby the first banks can come up with a specific type of innovation, enjoy huge profit margins, then others are able to copy.

1.12.2 Regulation Innovation Theory

The theory was postulated by Polany (1962) and argues that financial innovation will hardly occur in a planned economy with strict control and in the pure free-market economy. As such any regulation change in the financial system can be termed as financial innovation. When government introduce regulations the financial institutions are likely to come up with financial innovation to circumvent those regulations. This continues back and forth, the government comes up with a regulation the banks come up with innovation, the government control the banks come up with a new innovation. Stewart (2010) seems to support this notion when he noted that regulation may spur either compliance innovation or circumventive innovation. Circumventive innovation occurs when the regulation is narrow or weak and the financial institution innovates to escape the regulation (Stewart, 2010). On the other hand, compliance innovation occurs when the regulation is broad and the resulting financial innovation remains within the regulation scope.

In this study Regulation Innovation Theory assist to keep at bay high level market forces; this theory assists organizations such as Chase Bank (IR) to look for competitive ways for its survival and this case, the banking industry.

Banks will therefore achieve this through the coming up with new products and services that are relevant to the market. In Kenya banks for example, competition in the banking industry can be seen through the ever developing technology which really pushing the sector. Regulation Innovation Theory assists banks to come up with innovations complements so as to maintain a competitive advantage.

1.12.3 Circumvention Innovation Theory

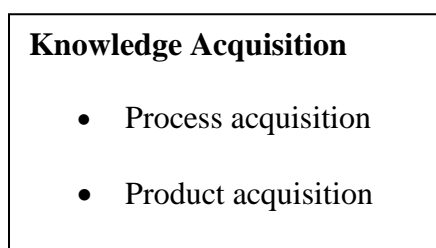
Circumvention innovation theory by Kane (1981) posits that many forms of government regulations and controls, which have the same property of implicit taxation, embarrass the profitable activity engaged by the company and the opportunity of earning profit, so the market innovation and regulation innovation should be regarded as the continuous fighting process between independent economic force and political force. Because financial industry is special, it has the stricter regulations. Financial institutions deal with the status such as the reduction of profit and the failure of management induced by government regulations in order to reduce the potential loss to the minimum. Therefore, financial innovation is mostly induced by the purpose of earning profit and circumventing government regulations.

In this study, circumvention innovation theory is always towards the direction of reinforcing regulation, however, the regulation innovation in reality is always towards the direction of liberal markets innovation such, the result of the game is release of financial regulation and markets become more liberal. This theory not only considered the origin of innovation in the financial markets but also explained the process of regulation innovation and their dynamic relation.

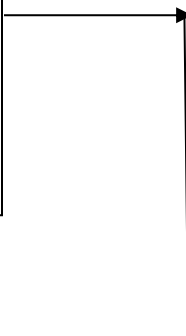
1.13 Conceptual Framework

Figure 1.1 present the conceptual framework analyzes for this study. The framework shows the relationship between independent and dependent variables of the study.

Independent variables



Dependent variable



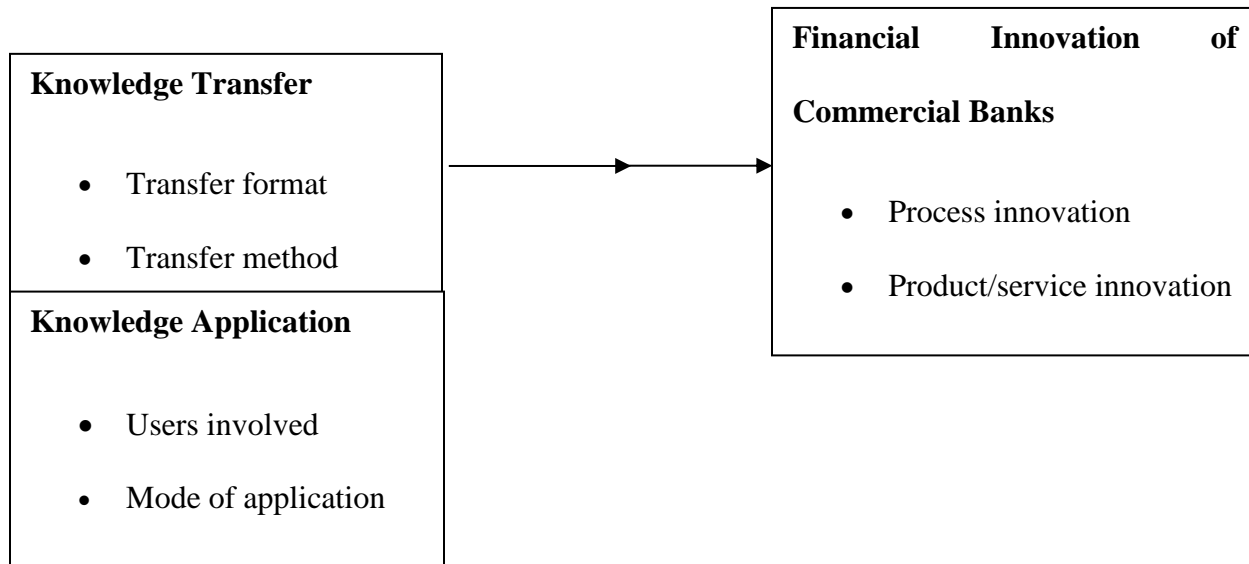
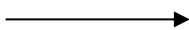


Figure 1.1: Conceptual Framework

Source: Researcher (2019)

This study looked at the effects of knowledge management on financial innovation in commercial banks, especially in Chase Bank (IR), Kenya. The study sought to determine the effect of knowledge acquisition on financial innovation. Knowledge acquisition refers to the process that is used to describe the rules and ontologies required for knowledge based systems that are important during financial innovation.



The study sought to examine the relationship between knowledge transfer and financial innovation. Knowledge transfer involves receiving or learning new technique learning, coming up with new initiatives and core competence creation. Sharing of important knowledge encourages exchange of knowledge and therefore leads to knowledge creation which in turn gives organizations such as banks to realize that competitive edge hence increase their financial innovation methods.

The study also established the effect of knowledge application on financial innovation. Knowledge application refers to the process through which knowledge is directly applied to task performance or problem solving in organizations. Knowledge may be possessed and applied by individuals or by whole team. Knowledge application in terms of intangible assets is known mainly as value drivers and sources of organization's competitive advantage and this may lead to banks financial innovation.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section reviewed and offered a synthesis of previous works from other authors relating to the effects of knowledge management on financial innovation in commercial banks. The chapter also identified theories that supported this study. Literature review themes were derived from the study objectives. Identification of the research gaps was presented here.

2.2 Review of Literature

This section reviewed literature from past researchers and it covers both the dependent and independent variables.

2.2.1 Knowledge Acquisition and Financial Innovation

Knowledge acquisition refers to the process that is used to describe the rules and ontologies required for knowledge based systems. The term is used in conjunction with expert system to define the initial tasks associated with developing the system. Financial innovation in organizations has a long history. It was only able to be brought to the market because of financial backing by Matthew Boulton, and specialist expertise in cylinder manufacture from the firm owned by John Wilkinson. More recent evidence suggests that innovation stimulates creativity, reduces risk in the processes, accelerates or upgrades the state developments made, and points to where the organization wants to go (Leiponen & Helfat, 2010) financial innovation can grow an organization's entry into new expertise from other developed nations. Furthermore, organizations with an extensive network in terms of financial innovation is likely to grow its chances of getting important information from other developed nations and increase the probability that this will be complementary with aspects of firms' internal knowledge base (Leiponen & Helfat, 2010).

Knowledge procurement is about the process of that essential information for knowledge based system. The term knowledge procurement also known as acquisition was first introduced with expert systems to define its innovative duties in relation to expert system through describing and interrogating domain experts and acquiring their vital information through set rules, objects and frame based regulations (Kendal, 2007).

The process of knowledge acquisition is supported by various events of communication, feedback, innovation, brainstorming, and benchmarking. knowledge acquisition encompasses doing buying knowledge rich organizations, doing external knowledge surveys, sending knowledge employees to workshops, acquiring knowledge rich employees, buying of knowledge rich data sets, observing technological advances, buying of patented processes, and collecting important

information(knowledge) via competitive intelligence (Booker, 2008). All the above mentioned practice is achieved through adhering to some factors such as: respecting employees' behaviors and boosting their morale through developing their skills; coming with an efficient financial system; Aggressively procuring current trends (information) in terms of customer and industry status; becoming aware of market place trends; recruiting and holding on onto a large number of individuals skilled in science, engineering or math sectors; operating in partnership with clients over the world and acquiring important knowledge via market surveys (Booker, 2008).

Financial institutions such as banks need to establish external connections to acquire knowledge for innovation. These institutions have a number of questions relating to the nature of those connections, and they include; should financial institution develop a common or shared networks with allies together to come up with new financial knowledge or adopt non-interactive, imitation or copying strategies (Glucker, 2013). These choices may reflect the fact that interactive and non-interactive knowledge acquisition strategies may provide different types of knowledge and provide the basis for different types of innovation. Interactive knowledge acquisition strategies, involving collaborative or co- operative innovation, may allow exploratory knowledge to transformational innovation. Such interactive partnering approaches may also have uncertain outcomes but may help firms to share the risks and costs implicit in innovation (Glucker, 2013).

The major determinants that make financial institutions to choose either interactive or non-interactive innovation connections depends on the institutions knowledge acquisition strategies. Examples of absorptive measures include R&D which also includes other human capital measures, which have both indicated to have a fundamental part in influencing various organizations in making decisions on how to acquire external knowledge (Moon 2011). In another similar research, Freel and Aslesen (2013) reflected on the part played by organizational structure strategies on

acquisition of institutional knowledge, where the research intended to give evidence that less hierarchic institutions develop more diverse connections, and that team or project-based working may be particularly conducive to the development of deep or strong links between firms. There is a similarity between the breadth of institution's (interactive) knowledge acquisition activities to their use of IP protection (Moon, 2011).

There are two main strategic mechanisms through which financial institutions may decide to utilize knowledge acquired, and something good for innovation purposes. First, organizations may decide to come up with networks with other organizations as in the sense of gaining access to latest knowledge in the field. All this can be achieved either through contract agreement or networks. This kind of associations is considered as strategic intent and mutual engagement of all parties, and is seen as a practice of collaborative culture of gaining skills (Glucker, 2013). The way organizations desire to buy important information purposefully but minus engaging the second party. Examples of this type of mechanism comprise of imitation, reverse engineering or involvement in network or knowledge distribution measures. Here, there is a clear strategic intent on the part of the focal organization but no support in the education process and this may be considered as type of education (Hewitt-Dundas & Roper, 2011).

Current studies on determinants of strategies of securing knowledge in organizations has some limits which range from; interactive knowledge acquisition strategies through innovation partnering, paying less attention to the potential value of non-interactive knowledge sourcing mechanisms such as imitation or copying. Here, there is a separation between the determinants of interactive and non-interactive knowledge acquisition strategies, which may have very different characteristics and therefore implications for innovation (Gluckler 2013) secondly, institutional

characteristics such as R & D, skills and institutional structures and their implications for external knowledge acquisition (Freel & Aslesen 2013).

Institutional innovation strategic objectives may also be important in shaping firms' knowledge acquisition strategies. Finally examining the size and sectoral differences, recognizing that the rationale for external knowledge acquisition may differ significantly between larger and smaller companies and between different sectors; it is therefore important to argue that external knowledge search is of more value for smaller companies due to their weaker internal knowledge base (Vahter, 2013).

In a study done by Shirley and Shusanta (2006) on the impact of information technology on the banking industry; they examined the theoretical and empirical procurement of knowledge related spending and how it can affect bank profits through competition in financial industry especially banks.

The study looked at information related products such as electronic payments, internet banking, financial information exchange, security investments (Berger, 2003). By means of a pane of 68 US banks for a range of more than 20 years to approximate the effect of IT adoption on the productivity of banks, the findings were; although information technology has led to cost saving, greater spending in IT can cause network effects, thus lowering bank productivity. Additionally, the research vies the relationship between acquired information technology knowledge expenses and bank's financial performance is restricted to the level of network outcome. The research was in agreement that when network effect is too low, information technology expenses are likely to; lower payroll expenses, raise market share, which in turn will raise revenue hence profits (Shirley & Sushanta, 2006).

In Africa a study on the acquisition of Information and Communication Technology (ICT) in Banking operations in Nigeria where the study used the nature and degree of adoption of innovative technologies; degree of utilization of the identified technologies; and the impact of the adoption of ICT devices on banks, the study found out that acquisition of technology was the main driving force of competition in the banking industry. Throughout the research, Agboola (2006) the results indicated an increased EFT, ATMs, electronic home and office banking, use of smart cards and telephone banking. The findings also indicated that acquisition of information technology helps improve the banks' image and opens market for more customers. The study also concludes that it is good for financial institutions' administrators step up investing in information technology to help in the speeding, convenience, and perfect financial service delivery in the sector (Agbola, 2006).

Kihumba (2008) conducted a study where he examined the aims of innovation in financial performance of 43 commercial banks in year ranging 2000-2007, and he focused on how knowledge procurement can impact innovation in the Kenyan financial market. The specifically looked on how procured knowledge can assist in revenue addition, increase business volume, reduce employee turnover, increases customer base, facilitate market expansion in banks to mention a few. The findings indicated that some banks procure knowledge apply their excess capacity and to make best use of their revenues within their reach.

Acquisition of knowledge is realized collaborative learning culture and this can be started via organization's strategic decisions to bring together other players in the same field to exploit the acquired knowledge together. There are some attributes that are fundamental in measuring the

interactive learning process in organizations, the ranges from: how many connections the organization has, interaction adopted mode and the nature of the entrenched networks by the organization (Gluckler, 2013). The above studies on the effect of innovation of commercial banks were based in different locations other than Chase Bank(IR) Kenya Ltd, hence the purpose of this study.

2.2.2 Knowledge Transfer/Sharing and Financial Innovation

Many researchers have put great emphasis on innovation in financial institutions environment globally, regional level and locally. As much as all financial institutions in the field have almost the same level of competencies in the areas concerned, many of them demand for extra innovative ways so as to have that competitive edge (Rothermel & Thursby, 2005).

As a result, knowledge transfer/sharing to these organizations becomes a fundamental aspect when it comes to a point of protecting its important assets such as; problem solving, new technique learning, coming up with new initiatives and core competence creation. Sharing of important knowledge will encourage exchange of knowledge and therefore lead to knowledge creation in the organization for that competitive edge which in turn will enhance intellectual capital in the organization. Knowledge is always known to be fundamental in ongoing innovations within organizations, it is therefore necessary to share knowledge as it assists in managing businesses in these organizations (Gasik, 2011).

The basic concept in knowledge management is how it can be shared to enhance information especially in various parts of an institution. Once there is effective communication in an organization via good communication practices, knowledge is then automatically transferred.

Transfer of knowledge in organizations is a sign of individual employees changing their characters through these interactions. The fundamental question here is how these vital resources is turned into valuable assets within an organization, to have that competitive edge (Bock, 2006).

Managing knowledge refers to practices organization employ in producing valuable information from the intangible assets within that organization. For organizations to know the main aim of managing knowledge, then management of knowledge activities in sharing of knowledge is fundamental. Sharing of knowledge is an essential procedure in existing organizations as sharing of effective knowledge assist in interactive shared capital, which is progressively a fundamental source of information. Simply, it is during individual and group knowledge is interpreted to organizational knowledge can an organization start managing it (Fattahiyan, 2013).

The term knowledge sharing in organizations refers to communities of practice where people share the same problems, desire about a topic which can expand their knowledge and expertise in their area of interest by continuous networking. These individuals function as communal learning methods' where experts link to come with solutions to problems in the field, where they transfer ideas, set standards, build tools, and develop relationships with peers and stakeholders (Yusoff & Daudi, 2010).

Many establishments who include research centers across the globe employ different terminologies to describe related phenomena, which include communities of knowledge; capability networks thematic groups and learning networks'. A community of practice which is an example of knowledge transfer strategy is a specific type of network that shows peer-to-peer learning activities to shape member skills and propel the knowledge assets of organizations and society (Yusoff &

Daudi, 2010). It is important to have an effective strategic communication in organizations between different levels of management so that effective transfer of knowledge can be achieved.

The strategy's aim was to give a proactive and reactive message for the organization to realize and accept commitment to knowledge management practices in the organization. Furthermore, it was understood that devoting in social values based on mutuality, trust and respect may result into long-term profits which includes organizational welfare. The advantages come from sharing of knowledge, reduced transaction cost as a result of the spirit of communication within the organization (Yusoff & Daudi, 2010).

According to an International Data Corporation's (IDC) investigation done on over 600 banks across Western Europe, it was clear the only 20% of the banks in the region applied transfer of knowledge techniques to propel their institutions head. This is because transfer of knowledge Principles is fundamental to the accomplishment of banks goals; which raises the value of services offered and hence enhances competitive edge. Competitive advantage is the abundance of an organization's suggestion attractiveness from the client's point of view as compared to other rivals (Lismen, 2004).

Transfer of knowledge is required by Banks in Western Europe to make fundamental decisions and policies that offer direction to frontline employees in offering services bank's clients and assist managers in evaluating their performance. Transfer of knowledge entails adaptive actions in use to assist and detect complaint and establish client satisfaction. With regard to learning from failure, KM uses complaints as learning instances and improving opportunities. KM is intended to promote and support the creation of new knowledge, thus contributing to innovation, an essential ingredient

in banking success. Thus the purpose of this research was to analyze the effect of KM integration in the Banking Sector performance.

In Africa, a study on the role of knowledge sharing in enhancing organizational innovation in selected banks of South Africa, Chigada (2014) indicated that Knowledge sharing has been cited as an asset and a source of competitive advantage for banking organizations. Though Knowledge sharing has been implemented in commercial and business environments towards operational advantages and financial gains, Knowledge sharing survival principles and tools might help South African banks improve performance and fulfill their mandate. Knowledge, when properly shared, can significantly enhance an organization's performance (Chigada, 2014).

In Kenya a study was conducted (Lopez,2014), on the effect knowledge sharing on financial innovation. The results of the study indicated that sharing of knowledge had generally an effect on the financial innovation of commercial banks. The study findings were; that transfer of knowledge influences bank's innovation. The focus of the individual is on the shared knowledge and understanding is realized through interpretations, diffusion is via distribution among organizational members and embedding of knowledge comes through organizational memory, systems and rules (Lopez, 2014).

It should be taken into account to note if or not sharing of knowledge is an action or procedure; the activities in sharing of knowledge encompass different techniques to acquire knowledge. The method of sharing knowledge may turn into the institution's distinctive distinguishing, culture, or system, which affects the organization's performance. One must also reflect if an individual's behavior of sharing knowledge becomes the foundation for successful knowledge sharing in the organization. Dynamic sharing of knowledge by organizational employees starts when other

employees 'voluntarily' share their knowledge and 'eagerly' collect from other employees the knowledge required, hence creating a knowledge sharing cycle in that organization. It is simply from motivation that individual employees will be willingly and truthfully share their knowledge to other employees and specifically through motivation will an employee in need of the knowledge be truly willing to learn it. Sharing of knowledge which is a process, if well managed can propel organizations a head.

There are two forms of knowledge sharing, the distinction between two depends on what they perform and they are: knowledge donating and knowledge collecting (Borgatti & Halgin 2011). sharing knowledge in organizations by organizational employees encompasses both knowledge transfers and acquisitions, and that knowledge needed is obtained through knowledge donating, and this involves communicating to other employees the type of intellectual capital that has been donated by another employee. Both processes are active meaning they are either actively communicating to others what one knows, or actively consulting others in order to learn what they know (Borgatti & Halgin 2011). Thus, this study intended to determine whether knowledge sharing that was practiced at Chase Bank(IR) Kenya Limited supports financial innovation.

2.2.3 Knowledge Application and Financial Innovation

There is a strategic management literature that has been produced by a strategic management body which focuses on giving explanations on financial innovation (Hughes & Morgan, 2007). Most of these studies contend that most of the resources are not mobile, but makes long term, sustainable competitive advantage possible in organizations; based on the internal alignment of strategically relevant resources such as knowledge application. To be specific, intangible assets such as knowledge and innovation have been identified as value drivers and sources of company's

competitive advantage. These valuable resources are frequently found in the organization in the form of tacit knowledge which provides heterogeneous capabilities that give each organization its unique character and are the essence of competitive advantage and this include knowledge application (Liu & Wei, 2009).

Knowledge application refers to the process through which knowledge is directly applied to task performance or problem solving in organizations. Knowledge may be possessed and applied by individuals or by whole teams (Ajmal & Koskinen, 2008). Organizations can therefore gain not only from the existence of knowledge but from its proper application. These calls for organizational routines that have direct guidelines and instructions, and self-organizing teams constitute the main mechanisms that guarantee the application of knowledge as knowledge application may take different forms as elaboration in organizations (Gasik, 2011)

In Europe, International Data Corporation's (IDC) survey conducted across more than 600 banks in Western Europe, only 20% of banks currently apply a KM Principle. Knowledge is important to the success of Organizations in raising its quality of service and competitiveness. Competitive edge is abundance of company's suggestion attractiveness from the costumer's point of view in comparison with other rivals (Lismen, 2004). Knowledge is needed by Bank in making decisions and policies that provide guidance to frontline employees in servicing bank customers and guidance to managers in assessing the performance of frontline employees. KM implies adaptive actions by quickly detecting complaint and establishing customer satisfaction. With regard to learning from failure, KM uses complaints as learning instances and improving opportunities. KM is intended to promote and support the creation of new knowledge, thus contributing to innovation, an essential ingredient in banking success (Lisman, 2004).

Chigada (2014) in his study on the role of knowledge management in enhancing organizational innovation in selected banks of South Africa, where knowledge application was one of the objectives that was tested, the results indicated that Knowledge application has also been cited as an asset and a source of competitive advantage for financial institutions. Although Knowledge application has been in practice in commercial and business environments towards operational advantages and financial gains, its survival principles and tools may help South African banks improve performance and fulfill their mandate. Knowledge, when properly applied, can significantly enhance banks innovation (Chigada, 2014).

In Kenya, Banks play a crucial role in economic development of a nation (CBK, 2014) and are commonly seen as most contributors to the economic activity, employment, wealth creation and innovation of any given country (Ongore & Kusa, 2013). Banking is a typical knowledge-intensive industry that involves activities of knowledge exchange rather than exchange of goods. Therefore, managing knowledge in these organizations has become more important as it is for other knowledge based organizations. Knowledge management is indispensable in the banking industry because competition and most of the work in the industry are knowledge-based. Moreover, the last open frontier for banks to create competitive advantage may reside in their ability to leverage knowledge, since banking is not just a business of handling money but also a business that is driven and sustained by information (Rono, 2011).

Knowledge application may take different forms such as elaboration which applies when a different interpretation is required, infusion which is applied when finding underlying issues, and thoroughness which is applied when different people or teams develop different understanding (King & Haney, 2008). Besides, knowledge application is the process through which knowledge is directly applied to task performance or problem solving. Knowledge may be possessed and

applied by individuals or by whole teams, organizations benefit not from the existence of knowledge but from its proper application (Gasik, 2011).

Yusoff and Daudi (2010) posit that knowledge application positively influences innovation as it significant positive link between perceptions of high adoption of the knowledge management practices and perceptions of high organizational innovation. It involved distinct but interdependent processes of knowledge creation, knowledge storage and retrieval, knowledge transfer, and knowledge application. Organizations achieve breakthrough by applying knowledge management concepts to financial innovations (Fattahiyah, 2013). This research intended to determine whether the kind of knowledge application in practice at Chase Bank(IR) Kenya limited assists the bank in terms financial innovation.

2.2.4 Financial Innovation

Innovation as noted by Carayannis (2002) is not an institutionalized concept among researchers; therefore, the definition of the same has not been agreed. Agreeing to this notion UZOKA (2009) noted that innovation is a wide and multidimensional concept and measuring the same is a complex task. There are those who look at organization innovation from three aspects; technological innovation, market innovation, and administrative innovation (Choo's 2006). Others divide organizational innovation into three; product innovation, process innovation and administrative innovation (Chuang, 2005).

Innovation can be defined as the implementation of a new or significantly improved product, process, marketing or organization method in business practices, workplace organization or external relations" (OECD, 2005). UZOKA (2009) adopted innovation as "the introduction of a

new product, service, or process through a certain business model into the market place either by utilization or by commercialization". This definition capture product innovation, process innovation, and business model innovation.

Financial innovation on the other hand can be defined as the act of creating and then popularizing new financial instrument as well as new financial technologies, institution, and markets (Tufano, 2002). Innovation can be categorized into two product and process innovation, whereby product innovation can be exemplified by new derivative products, new pooled investment products. On the other hand, the process innovation is typified by new means of distributing securities, processing transactions or pricing transactions (Tufano, 2002).

A clearer categorization of financial innovations proposes three types; institutional innovation which embraces changes in business structure, formalizing informal finance system, reducing access barriers or setting up a new service structure (Lin & Ting, 2011). This sort of financial innovation relates to coming up with new institutions, new structures. Such innovation can influence the whole financial system, bringing new types of intermediaries a good example here is the Internet banking; process innovation which cover introduction of new business processes for efficiency, and market expansion, it refers to new processes introduced by the financial institution to allow provision of new or existing products and service such as loan tracking system and credit scoring system. This form of financial innovation is normally associated with technological change; product innovations which include introduction of new credit, deposit, insurance among others. The third form of financial innovation is common among commercial bank in Kenya and it is the one that most banks use to differentiate themselves from their competitors (Lin & Ting, 2011).

In explaining how financial innovation come about Tufano (2002), pointed toward market imperfections that hinder individuals from efficiently accessing functions that are critical in the financial system. This perspective view financial innovation as a response to various basic problem or opportunities, thus financial innovation can be seen to originate from the pain point of would be consumer. Financial innovation exists to; address the unmet preferences or needs of particular clientele, address information asymmetry, minimize transaction, search or marketing costs, respond to taxes and regulation, address increasing globalization and risk.

In Kenya some of the notable financial innovations include Agency banking model which the World Bank (2015) noted as a critical model for branchless expansion was started in May 2010 and has witnessed tremendous growth with over 40,592 active agents transacting over 1 trillion in the first quarter of 2015. However it is worth noting that 90% of the agent banking is controlled by three banks i.e. Equity, Kenya Commercial Bank and Co-operative Bank, cheque truncation system (CTS), cheque clearance in one day (T+1), free advisory services, fund transfers, utility bills payments, Internet banking, home banking, long opening hours, Automated Teller Machines (ATMs), mobile banking, e-credit services (such as M-Shwari and Equitel), insurance services (in 2015 CBK allowed 7 banks to partner with insurance companies to offer bank assurance services), shares trading, debit cards, credit cards among others.

This section tried enumerating the state of innovation in different banks across the globe. the relevance here was that the researcher was determined to find out the state of financial innovation in Chase Bank(IR) Kenya limited.

2.3 Summary of Review of Literature and Research Gap

Financial innovation is the act of creating and popularizing new financial instruments in the market. These new products and services are supposed to draw in more consumers and also reduce costs or risks associated with providing the service. Many benefits have been associated with financial innovation these includes economic growth, choice of many financial instruments, decrease in operation cost to the institution, reduction in fees and charges to customers, increase in the industry players, increase in revenue of the banks among others.

This chapter reviewed two theories that were developed to explain, predict relationship between knowledge management on financial innovation. The subsequent section also highlighted past literature on the dependent and independent variables and finally identified the knowledge gap.

Existing literature identified different dimensions of knowledge management that have potential to drive innovation in various organizations. Past researches have focused on knowledge conversion and application as some of the key dimensions of knowledge management with potential to improve organizational performance Ajmal and Koskinen, (2008); Yusoff and Daudi, (2010); Gasik, (2011). As management scholars concur that competitive advantage in the 21st century is linked to knowledge-based resources which provide heterogeneous capabilities thus giving each organization its unique character. Similarly, a few research that has been done come close to tackling knowledge management and financial innovation but still fail to relate the two directly or indirectly, for instance Tan and Nasurdin (2011), looked at HRM practices and organizational innovation. The current study used a wide array of variables beyond HRM practices. These variables include determining the effect of knowledge acquisition on financial innovation at Chase Bank(IR), a field which has never been researched on before, evaluating the effect of knowledge transfer at the bank which has proved to have no empirical literature and establishing

the effect of knowledge application on financial innovation at the bank as none of the existing literature on knowledge application has ever explored Chase Bank(IR). The study looked at financial innovation at Chase Bank(IR) Ltd specifically as opposed to general innovation as there exists a gap on how KM practices influence financial innovation in Chase Bank(IR).

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This section presents the design used in the investigation; it demonstrated how population in the study was arrived at, techniques used in selecting the sample size data collection processes and tools.

3.2 Research Design

Sekaran and Bougie (2010) posit that research design entails planning on how a study was carried out. According Mugenda and Mugenda (2008) research design represents all the methodology involved to achieve a planned goal. This study adopted descriptive research design as it is suitable in the provision of precise explanation of features of an event (Kothari, 2007). This research gathered primary data to examine the effects of knowledge management practices on financial innovation in Kenyan, a case of Chase Bank(IR) Ltd. Saunders (2011) argues that case studies do not lose its meaningful features. However, case studies have been critiqued as deficient but have been of great help in the field of research.

3.3 Research Site

This study was carried out at Chase Bank (IR) Headquarters in Nairobi County. It involved all employee at the headquarter and lasted for three months.

3.4 Target Population

Target population is the entire group of elements in an environment that have common attribute required by the researcher from which he/she can generalize his/her outcome (Creswell, 2013). In this study, population of study included all employees of Chase Bank (IR) head office in Nairobi County. These employees made a complete set of people, events or objects to which the researcher intended to generalize his/her outcome. Chase Bank (IR) head office has 160 employees according to the bank's human resource records of January (2018). Table 3.1 showed the research's target population.

Table 3.1 Target Population

Category	Frequency	Percent (%)
Top Level	22	13.8
Middle Level	63	39.3
Lower Level	75	46.9
Total	160	100

Source: Chase Bank (IR) Records, (2018)

3.5 Study Sample

The study used a sampling frame of branch and operational managers of the bank within the county where a mixture of simple/stratified random sampling method was used to select a sample size.

3.5.1 Study Sample Size

Sample size is a small representation from the total target group that has equal attributes (Orodho & Kombo, 2014). This research used three levels of management to conduct the survey as each management got equal treatment in terms sample selection. Every level gave same equivalent number of respondents regardless of its size in the organization. The study applied Mugenda and Mugenda (1999) to arrive at the required sample size.

$$n = \frac{N}{1 + N(e)^2}$$

Where: n = minimum sample size, N = population and e = precision set at 95% (5% =0.05).

$$\text{Hence; } n = \frac{160}{1+160(0.05)^2} = 114$$

Sample size in this study therefore was 114 respondents of Chase Bank(IR)Ltd Head office.

Table 3.2 Sample Size

Category	Frequency	Sample Size	Percent (%)
Top Level	22	16	13.8
Middle Level	63	42	39.3
Lower Level	75	56	46.9
Total	160	114	100

Source: Researcher, (2018)

3.5.2 Sample Procedure

Sampling design (procedure) is a technique used by a researcher to choose a fraction of elements from the whole such that the carefully chosen usually was a representation of the total population (Orodho, 2014). This study used a mixture of simple or stratified random sampling method to choose the required sample size in Chase Bank(IR)ltd head office.

This was determined that all target population is included in the sample selection of all the clusters which otherwise could not be taken care of by other sampling techniques. To stratify refers to bringing elements of similar attributes together.

3.6 Data Collection

Data collection procedures are techniques involved during gathering of raw data from respondents in a study process (Kombo & Tromp, 2006). Data collection in this particular research was realized via the use of structured questionnaire. The research investigator came up with questionnaire with closed and open ended questions which was presented to the respondents after seeking their consent. The questionnaire that was sent to the respondents through the research assistant was easy to understand.

3.6.1 Data Collection Instruments

According to Creswell (2013) Selection of research instrument in a study is fundamental as it's able to gather specific information specific respondents in any given study. A research instrument does not only represent the intentions of the investigator who presents it but also permits full range of responses from various fields. Instruments of data collection such as questionnaire are appropriate due to its capacity to gather enormous data in practically a quick period of time, with fewer resources (Creswell, 2013).

This study used closed and open ended questionnaire to collect data from selected employees of Chase Bank (IR) Kenya limited. The questionnaire contained five sections that is: Background information, knowledge acquisition, knowledge transfer, knowledge application and financial innovation in Chase Bank (IR). The questionnaires were then distributed by the research assistant to the carefully chosen respondents. Likert scale questions was drafted in the questionnaire as these

types of questions are not complex, hence responding to the questions was easier. Respondents were therefore obligated to react to the questions on paper and sent them back to the researcher. This type of questionnaire is good as specific respondents can be able to handle questions contained with a lot of ease. The questionnaire also covered a wider area in terms data collection coverage and at the same time, it was cheap and guaranteed privacy to the respondent.

3.6.2 Pilot Testing of Research Instrument

A pilot study was set of observations that was undertaken to decide how and whether to continue with the intended research project. The importance of piloting research instrument in any given study is to assist in determining the research instruments shortcoming in the process of designing it (Cooper & Schindler, 2003). In this study, the researcher conducted a pilot study on 2% of the overall population in Chase Bank (IR) Ltd head office to determine and validate the accuracy of the questionnaire. If any ambiguity was discovered in the research instrument, then clarification would be done to the instrument for enhancement. Pilot testing used respondents who are excluded from the main study.

3.6.3 Instrument Reliability

Reliability of research instrument refers to the measures to which any research instrument arrives at consistence results after repeated trials in any given study (Mugenda & Mugenda, 2003). To guarantee reliability, the research instrument was piloted in a section of the population to know its accuracy, clarity and suitability before the final field study was done. Test of internal consistency was used during pilot testing of the research instrument. This is because it ensured that each part of the test generated similar results and also measured the correct construct. Essential change was done to allow for the final survey process and to further guarantee reliability of data to be collected.

For reliability reasons, only employees of Chase Bank(IR) were given questionnaires. Similar study was then done again after 1 week to the same staff to assess their reliability.

In analyzing reliability, the study adopted Cronbach's alpha and was calculated by SPSS version 20. The importance of using Cronbach's alpha was its accuracy and simplicity. Research instrument were pretested to guarantee clarity and content validity before administration (Sekaran & Bougie, 2013). The importance of reliability test was to guarantee that scores from a research tool are stable and consistent. This is because scores are meant to be nearly similar when researcher issues the research instrument in several times and at different times. When a respondent reacts to certain questions, the respondent should consistently answer closely related questions in almost the same manner (Creswell, 2014). According to Sekaran and Bourgie, 2013 found out that the moment Cronbach's alpha comes close to 1 the internal consistency and reliability of the instruments of data collection become high.

3.6.4 Instrument Validity

According to Creswell, (2013) Validity of the research findings refers to the accurateness the research instrument provides during the outcome of the research. It is the degree of accuracy to which the study results are realized from existing data examination. To make sure there is validity in the process, the investigator utilized universally acknowledged sampling techniques which emphasized on balanced representation and good data organization methods, needed modifications was done to the research instrument in use. This was to be sure that it has precise questions and that they are in reasonable format; and only correct responses are used to measure what the

investigator intended to research on. The researcher selected a few individuals from the population apart from the sample in the bank to find out its validity.

3.6.5 Data Collection Procedures

Data was collected by use of questionnaire containing five sections namely background information, knowledge acquisition, knowledge transfer, knowledge application and financial innovation. The questionnaires were distributed by the research assistant to the selected respondents.

3.7 Data Analysis

Data analysis and presentation is the processes involved in managing data from the field of study to turn it into meaningful information (Zikmund, 2010). In this state, gathered data acquired through questionnaire was systematized organized for content analysis and presentation. Raw Data was entered into SPSS, coded, edited and any data that need clarifications was sorted before any advanced analysis was done as per (Sekaran and Bourgie, 2013).

Descriptive statistics was involved in the qualitative analysis of collected data where frequencies, percentages mean and standard deviations was used as statistical tools to show the relations between the variables under study.

This therefore used descriptive statistics, inferential statistics and regression to study the collected data and examine its questions in the questionnaire. For descriptive analysis, the mean and standard deviations for knowledge management practices will be arrived at. Mean scores will show the ranking of the various aspects describing knowledge management practices, this indicated the aggregate relative prevalence of each variable. Standard deviation showed the variation among respondents across Chase Bank(IR) Ltd with regard to the various aspects describing each knowledge management practices. The Statistical Program for Social Sciences (SPSS) version 20

was used to transform and analyze data in order to obtain the results of the study. SPSS was further used to generate descriptive statistics for the regression model. SPSS offered a broad range of highly flexible statistical models adequate for data analysis requirements of this study.

The data analysis consisted of descriptive statistics for the respondents, Pearson's correlation analysis, analysis of variance (ANOVA) F-statistics and t-tests and multiple regressions analysis. The multiple regression model for this study was as follows: Multiple linear regression model with dependent variable (Y) – Financial Innovation, independent variables X_1 (Knowledge acquisition), X_2 (Knowledge transfer/sharing), X_3 (Knowledge application), ε was the error term denoting there may be a non-linear relationship between the independent and dependent variables. The regression model equation was illustrated as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

3.8 Legal and Ethical Consideration

The term ethics may be used to refer to the division in philosophy which deals with an individual's behavior; ethics helps to act a guideline to an individual person's conducts. In this research, the investigator was expected to take into account the following ethical principles. He/she was obliged to adhere to the principle of voluntary agreement where respondents were willingly allowed to answer questionnaire on their free will without any interference. This study revealed its outcome after the study to relevant stakeholders. All authors cited were acknowledged in the process. The researcher sought authorization letter from Africa Nazarene University and NACOSTI which permitted the process; the research was also obligated to assure confidentiality to the respondents during the process.

CHAPTER FOUR: DATA ANALYSIS AND FINDINGS.

4.1 Introduction

This chapter presents the analysis and findings in regard to the objectives of the study and discussions of the findings. The main general objective of this research was to establish the effects of knowledge management on financial innovation in commercial banks in Kenya.

4.2 Response Rate

The researcher in this part was required to state the rate at which respondents filled and returned the questionnaires for analysis

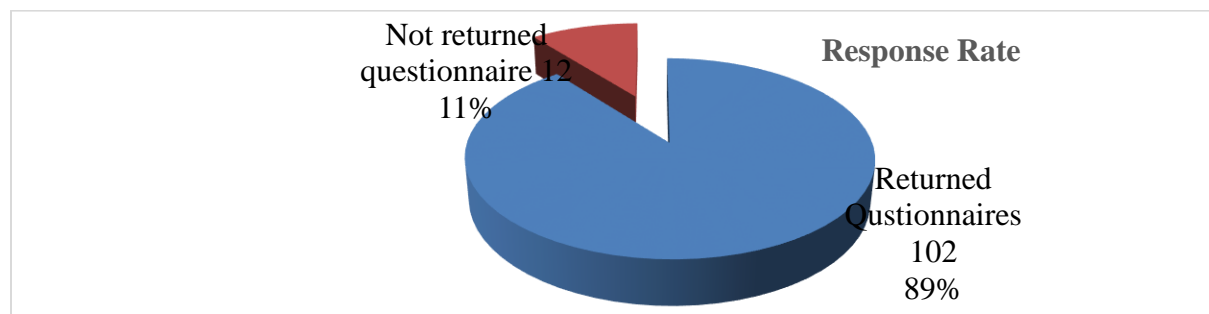


Figure 4.1 Response Rate

From the results as presented in figure 4.1 one hundred and fourteen questionnaires that were administered to the respondents 102 were returned which accounted for a response rate of 89.47%. The response rate was therefore considered very adequate for analysis. According to Mugenda and Mugenda (2003) who agrees that a response rate of 50% is adequate for a study, 60% is good and 70% is very good and therefore, a response rate of 89.47% was considered to be very good for this study. Completed questionnaires were then edited for completeness and consistency. In addition,

a study by Maria and Dwi (2018) survey by knocking the door and response rate enhancement technique in international business research indicated that a survey of 92.7% shows high response rate.

4.3 Presentation of Research Analysis and Findings

The study was guided by the following specific objectives: To determine the effect of knowledge acquisition on financial innovation, to examine the effect of knowledge transfer on financial innovation and to establish the effect of knowledge application on financial innovation in Chase Bank, Kenya. Data was collected from the sampled 114 employee of Chase Bank Kenya (IR) Limited, Nairobi County. The findings were presented in percentages, frequencies, mean, standard deviations, pie charts and tables.

4.3.1 Knowledge Acquisition and Financial Innovation

The first objective of the study was to determine the effect knowledge acquisition on financial innovation in Chase Bank (IR) Ltd; continuous improvement systems were in place in the bank to allow for improvement in processes which have reached the set quality standards; understanding the meaning of the term knowledge acquisition; the bank has a career plan to stimulate continuous learning; and bank employees receive general training which is applied to their usual tasks. The responses were based on strongly disagree =SD, disagree = D, undecided = U, agree = A and Strongly Agree = SA. The results were indicated on the table 4.2

Table 4.1 Knowledge Acquisition and Financial Innovation

Statements	SD%	D%	U%	A%	SA%
A continuous improvement system is in place in the bank to allow for improvement in processes which have reached the set quality standards	2.0	16.6	18.6	20.6	42.2
I understand the meaning of the term knowledge acquisition	6.8	8.8	16.7	22.5	45.2
The bank has a career plan to stimulate continuous learning	2.0	6.0	17.6	19.4	55.0
Bank employees receive general training which is applied to their usual tasks	6.9	9.8	15.7	26.0	41.6

Table 4.1 shows responses on continuous improvement system are in place in the bank to allow for improvement in processes which have reached the set quality standards. Respondents were required evaluate statements on the same. As indicated 2.0% strongly disagreed with the statements; 16.6% only disagreed with the statements; 18.6% of them were neutral; 20.6% of them agreed with the statements and the remaining 42.2% strongly agreed with the statements. It can be deduced that majority of the respondents indicated that is continuous improvement system is in

place in the bank to allow for improvement in processes which have reached the set quality standards.

Further, responses on whether the respondents understood the meaning of the term knowledge acquisition. As indicated 6.8% strongly disagreed with the statements; 8.8% only disagreed with the statements; 16.7% of them were neutral; 22.5% of them agreed with the statements and the remaining 45.2% strongly agreed with the statements. It can be deduced that majority of the respondents understood the meaning of the term knowledge acquisition.

Moreover, responses on whether the bank had a career plan to stimulate continuous learning were evaluated. As indicated 2.0% strongly disagreed with the statements; 6.0% only disagreed with the statements; 17.6% of them were neutral; 19.4% of them agreed with the statements and the remaining 55.0% strongly agreed with the statements. It can be deduced that most of the respondents indicated that the bank has a career plan to stimulate continuous learning.

In addition, responses on whether the bank employees received general training which was applied to their usual tasks. 6.9% strongly disagreed with the statements; 9.8% only disagreed with the statements; 15.7% of them were neutral; 26.0% of them agreed with the statements and the remaining 41.6% strongly agreed with the statements. The analyses indicate that majority of the respondents rated that bank employees received general training which was applied to their usual tasks.

Extent of knowledge acquisition on financial innovation

The respondents were asked to indicate the extent of knowledge acquisition on financial innovation. The results were indicated on the figure 4.6.

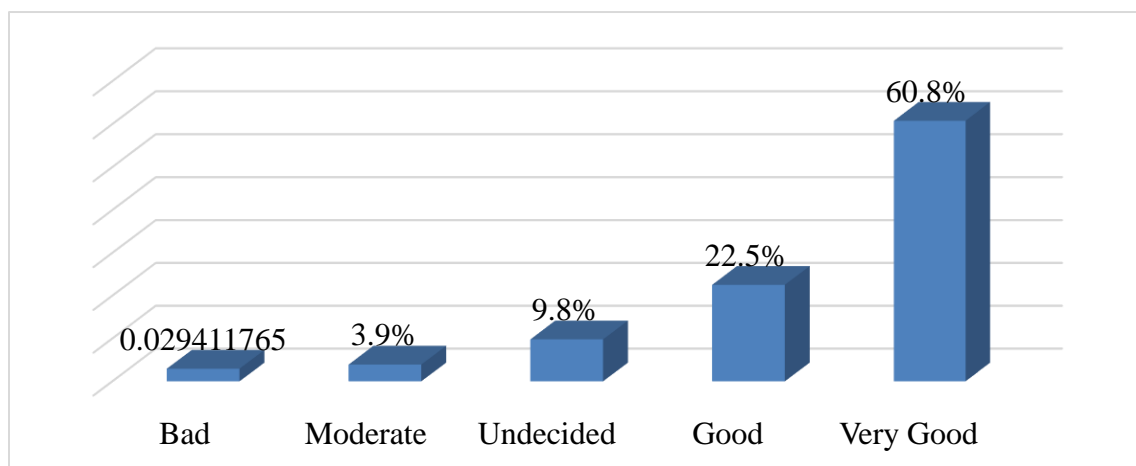


Figure 4.2 Extent of knowledge acquisition on financial innovation

Figure 4.6, responses on extent of knowledge acquisition on financial innovation was indicated as follows. 3.0% rated bad on the statements; 3.9% indicated moderate on the statements; 9.8% of them were undecided; 22.5% of them rated good on the statements and the remaining 60.8% rated very good with the statements. It can be deduced that majority of the respondents have acquired knowledge through the financial innovation.

4.3.2 Knowledge Transfer and Financial Innovation

The second objective of the study was to determine the effect knowledge transfer and financial innovation in Chase Bank (IR) Ltd; systems for codifying explicit knowledge; understanding of knowledge transfer; existing information technologies, available mechanisms to encourage employee; information on banks survival and existence of interdepartmental projects in the bank.

The responses were based on strongly disagree =SD, disagree = D, undecided = U, agree = A and Strongly Agree = SA. The results were indicated on the table 4.3.

Table 4.2 Knowledge Transfer and Financial Innovation

Statements	SD%	D%	U%	A%	SA%
The bank has a system to codify its explicit knowledge	7.8	6.9	17.6	23.5	44.2
I understand the term knowledge transfer	6.9	8.8	18.6	22.5	43.2
Information technologies and systems in the bank are available to give the employee access to the information required	8.8	9.8	17.6	22.5	41.3
Mechanisms are in place to encourage the members of the bank to share information	2.0	6.8	13.7	32.4	45.1
The bank avails important information concerning the bank's survival in the industry to her employees	8.8	2.0	16.7	31.3	41.2
Inter-departmental projects are carried out in the bank	8.8	13.7	20.6	25.5	31.4

Table 4.3 shows responses on whether the bank had a system to codify its explicit knowledge. Respondents were required evaluate statements on the same. The analyses 7.8% strongly disagreed

with the statements; 6.9% only disagreed with the statements; 17.6% of them were undecided; 23.5% of them agreed with the statements and the remaining 44.2% strongly agreed with the statements. It can be deduced that majority of the respondents indicated that the bank had a system to codify its explicit knowledge.

In addition, responses on whether they understand the term knowledge transfer. Respondents were required evaluate statements on the same.

The analyses 6.9% strongly disagreed with the statements; 8.8% only disagreed with the statements; 18.6% of them were undecided; 22.5% of them agreed with the statements and the remaining 43.2% strongly agreed with the statements. It can be deduced that majority of the respondents indicated that they understood the term knowledge transfer.

Moreover, responses on whether information technologies and systems in the bank were available to give the employee access to the information required. The analyses 8.8% strongly disagreed with the statements; 9.8% only disagreed with the statements; 17.6% of them were undecided; 22.5% of them agreed with the statements and the remaining 41.3% strongly agreed with the statements. It can be deduced that majority of the respondents indicated that information technologies and systems in the bank were available to give the employee access to the information required.

Also, responses on whether mechanisms were in place to encourage the members of the bank to share information. The analyses 2.0% strongly disagreed with the statements; 6.8% only disagreed with the statements; 13.7% of them were undecided; 32.4% of them agreed with the statements and the remaining 45.1% strongly agreed with the statements. It can be deduced that majority of the respondents indicated that mechanisms were in place to encourage the members of the bank to share information.

Further, responses on whether the bank availed important information concerning the bank's survival in the industry to her employees. The analyses 8.8% strongly disagreed with the statements; 2.0% only disagreed with the statements; 16.7% of them were undecided; 31.3% of them agreed with the statements and the remaining 41.2% strongly agreed with the statements. It can be deduced that majority of the respondents indicated that the bank availed important information concerning the bank's survival in the industry to her employees.

Finally, responses on whether inter-departmental projects are carried out in the bank. The analyses 8.8% strongly disagreed with the statements; 13.7% only disagreed with the statements; 20.6% of them were undecided; 25.5% of them agreed with the statements and the remaining 31.4% strongly agreed with the statements. It can be deduced that majority of the respondents indicated that Inter-departmental projects are carried out in the bank.

Extent of knowledge transfer on financial innovation

The respondents were asked to indicate the extent of knowledge transfer on financial innovation.

The results were indicated on the figure 4.3.

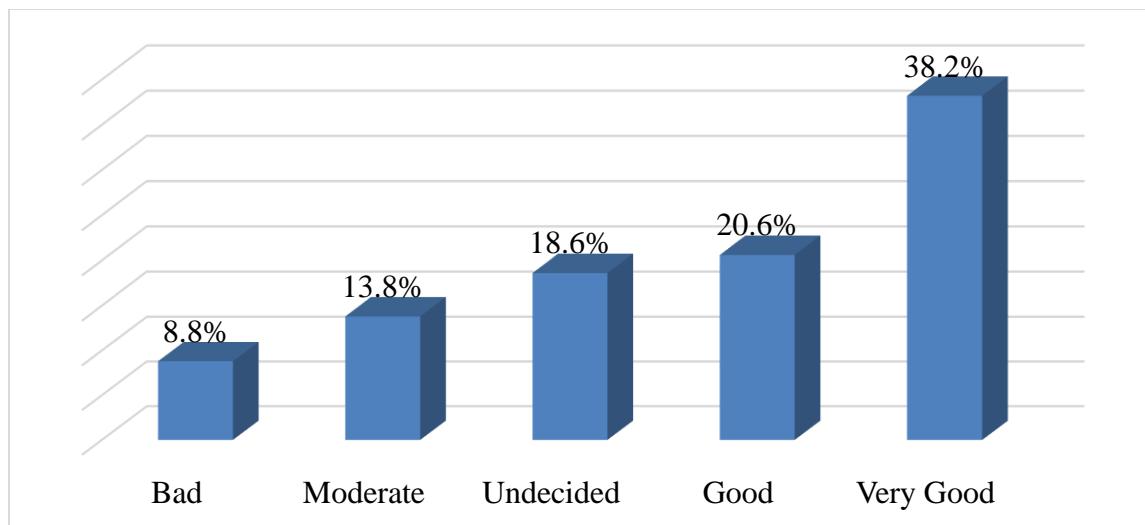


Figure 4.3 Extent of knowledge transfer on financial innovation

Figure 4.3, responses on extent of knowledge transfer on financial innovation were indicated as follows. 8.8% rated bad on the statements; 13.8% indicated moderate on the statements; 18.6% of them were undecided; 20.6% of them rated good on the statements and the remaining 38.2% rated very good with the statements. It can be deduced that majority of the respondents experienced knowledge transfer through the financial innovation.

4.3.3 Knowledge Application and Financial Innovation

The third objective of the study was to determine the effect knowledge application and financial innovation in Chase Bank that involved; tasks were established to identify the information resources necessary for the bank; understanding of knowledge transfer; respondents understood the meaning of term knowledge application; the bank encourages teamwork; the bank had systems to measure its employee competence; and the bank used benchmarking techniques to improve its employees' competences. The responses were based on strongly disagree =SD, disagree = D, undecided = U, agree = A and Strongly Agree = SA. The results were indicated on the table 4.4.

Table 4.1 Knowledge Application and Financial Innovation

Statements	SD%	D%	U%	A%	SA%
Tasks are established to identify the information resources necessary for the bank	2.0	6.9	15.6	27.5	48.0
I understand the meaning of term knowledge application	8.8	13.7	18.6	22.5	36.4
The bank encourages teamwork	9.8	15.7	17.6	18.6	38.3
The bank has systems to measure its employee competence	8.8	9.8	17.6	27.5	36.3
The bank uses benchmarking techniques to improve its employees' competences	7.8	10.8	22.5	24.5	34.4

Table 4.4 shows responses on whether the tasks were established to identify the information resources necessary for the bank. Respondents were required evaluate statements on the same. The analyses indicate that 2.0% strongly disagreed with the statements; 6.9% only disagreed with the statements; 15.6% of them were undecided; 27.5% of them agreed with the statements and the remaining 48.0% strongly agreed with the statements. It can be deduced that majority of the respondents indicated that tasks were established to identify the information resources necessary for the bank.

In addition, responses on whether they understood the meaning of term knowledge application. Respondents were required evaluate statements on the same. The analyses indicate that 8.8% strongly disagreed with the statements; 13.7% only disagreed with the statements; 18.6% of them

were undecided; 22.5% of them agreed with the statements and the remaining 36.4% strongly agreed with the statements. It can be deduced that majority of the respondents indicated that they understood the meaning of term knowledge application.

Moreover, responses on whether the bank encouraged teamwork. Respondents were required evaluate statements on the same. The analyses indicate that 9.8% strongly disagreed with the statements; 15.7% only disagreed with the statements; 17.6% of them were undecided; 18.6% of them agreed with the statements and the remaining 38.3% strongly agreed with the statements. It can be deduced that majority of the respondents indicated that the bank encouraged teamwork.

Further, responses on whether the bank had systems to measure its employee competence. Respondents were required evaluate statements on the same. The analyses indicate that 8.8% strongly disagreed with the statements; 9.8% only disagreed with the statements; 17.6% of them were undecided; 27.5% of them agreed with the statements and the remaining 36.3% strongly agreed with the statements. It can be deduced that majority of the respondents indicated that the bank had systems to measure its employee competence.

Finally, responses on whether the bank used benchmarking techniques to improve its employees' competences. Respondents were required evaluate statements on the same. The analyses indicate that 7.8% strongly disagreed with the statements; 10.8% only disagreed with the statements; 22.5% of them were undecided; 24.5% of them agreed with the statements and the remaining 34.4% strongly agreed with the statements. It can be deduced that majority of the respondents indicated that the bank used benchmarking techniques to improve its employees' competences.

Extent of Knowledge Application.

The respondents were asked to indicate the extent of knowledge application.

The results were indicated on the figure 4.7.

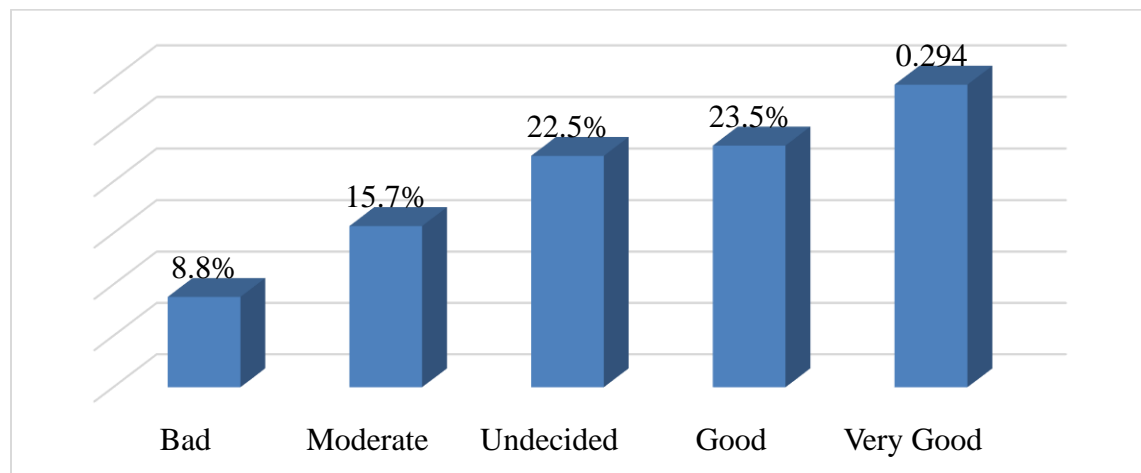


Figure 4.2 Extent of Knowledge Application on Financial Innovation

Figure 4.8, responses on extent of knowledge application on financial innovation were indicated as follows. 8.8% rated bad on the statements; 15.7% indicated moderate on the statements; 22.5% of them were undecided; 23.5% of them rated good on the statements and the remaining 29.5% rated very good with the statements.

It can be deduced that majority of the respondents indicated that knowledge was applied through the financial innovation

4.3.4 Financial Innovation,

The study evaluated the independent variable of financial innovation on the basis of the following statements; innovative techniques were established to develop external benchmarking, the bank to learn from; respondents understood financial innovations; the bank had systems that capture and deal with information about processes, when an innovative project finishes, feedback for

developing new projects is obtained; and innovative projects are provided with control mechanisms to monitor them in the bank. The responses were based on strongly disagree =SD, disagree = D, undecided = U, agree = A and Strongly Agree = SA. The results were indicated on the table 4.5.

Table 4.2 Financial Innovation.

Statements	SD%	D%	U%	A%	SA%
Innovative techniques are established to develop external benchmarking, the bank to learn from	6.9	8.8	15.7	22.5	46.1
I understand what financial innovation means	2.0	11.7	15.7	27.5	43.1
The bank has systems that capture and deal with information about processes	6.9	2.0	18.4	22.4	50.3
When an innovative project finishes, feedback for developing new projects is obtained	8.8	9.8	15.7	20.6	45.1
Innovative projects are provided with control mechanisms to monitor them in the bank	9.8	11.7	24.6	17.6	36.3
Employees who come up with innovative ideas in the bank have the necessary training to put them into practice	8.8	2.0	14.7	22.5	52.0

Table 4.5 shows responses on whether the innovative techniques were established to develop external benchmarking, the bank to learn from. Respondents were required evaluate statements on

the same. The analyses indicate that 6.9% strongly disagreed with the statements; 8.8% only disagreed with the statements; 15.7% of them were undecided; 22.5% of them agreed with the statements and the remaining 46.1% strongly agreed with the statements. It can be deduced that majority of the respondents indicated that innovative techniques were established to develop external benchmarking, the bank to learn from.

In addition, responses on whether they understood the meaning of the term financial innovation. Respondents were required evaluate statements on the same. The analyses indicate that 2.0% strongly disagreed with the statements; 11.7% only disagreed with the statements; 15.7% of them were undecided; 27.5% of them agreed with the statements and the remaining 43.1% strongly agreed with the statements. It can be deduced that majority of the respondents indicated that they understood the meaning of the term financial innovation.

Moreover, responses on whether the bank had systems that captures and deal with information about processes. Respondents were required evaluate statements on the same. The analyses indicate that 6.9% strongly disagreed with the statements; 2.0% only disagreed with the statements; 18.4% of them were undecided; 22.4% of them agreed with the statements and the remaining 50.3% strongly agreed with the statements. It can be deduced that majority of the respondents indicated that the bank had systems that capture and deal with information about processes.

Further, responses on whether when an innovative project finishes, feedback for developing new projects was obtained. Respondents were required evaluate statements on the same. The analyses indicate that 8.8% strongly disagreed with the statements; 9.8% only disagreed with the statements; 15.7% of them were undecided; 20.6% of them agreed with the statements and the remaining

45.1% strongly agreed with the statements. It can be deduced that majority of the respondents indicated that when an innovative project finishes, feedback for developing new projects was obtained.

Moreover, responses on whether innovative projects were provided with control mechanisms to monitor them in the bank. Respondents were required evaluate statements on the same. The analyses indicate that 9.8% strongly disagreed with the statements; 11.7% only disagreed with the statements; 24.6% of them were undecided; 17.6% of them agreed with the statements and the remaining 36.3% strongly agreed with the statements. It can be deduced that majority of the respondents indicated that innovative projects were provided with control mechanisms to monitor them in the bank.

Finally, responses on whether the employees who came up with innovative ideas in the bank have the necessary training to put them into practice. Respondents were required evaluate statements on the same. The analyses indicate that 8.8% strongly disagreed with the statements; 2.0% only disagreed with the statements; 14.7% of them were undecided; 22.5% of them agreed with the statements and the remaining 52.0% strongly agreed with the statements. It can be deduced that majority of the respondents indicated that the employees who came up with innovative ideas in the bank have the necessary training to put them into practice.

Extent of financial innovation in Chase Bank (IR)

The respondents were asked to indicate the extent of financial innovation in Chase Bank. The results were indicated on the figure 4.9.

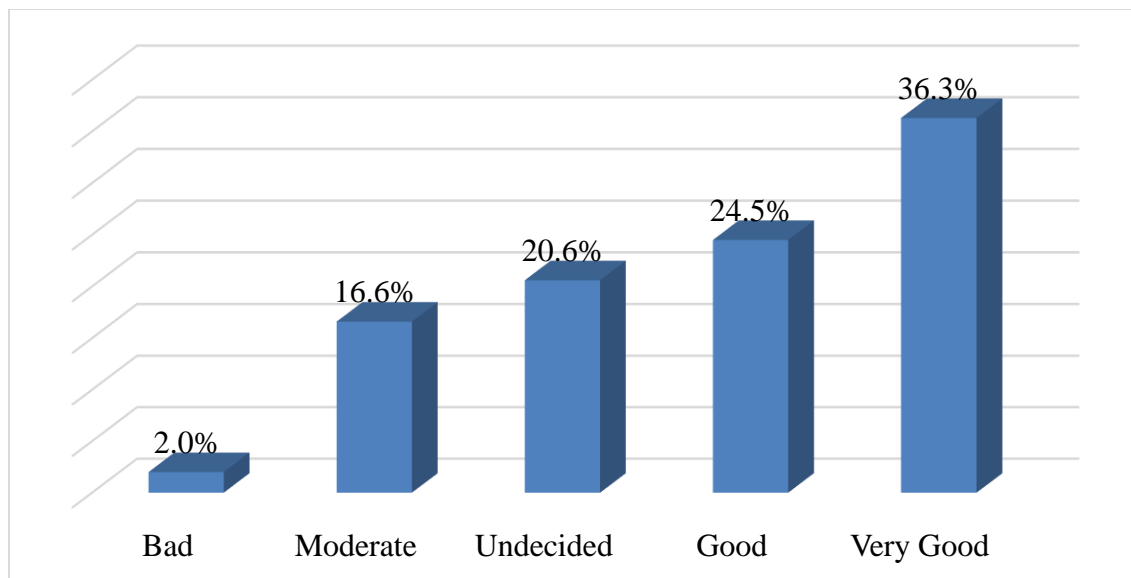


Figure 4.3 Extent of financial innovation in Chase Bank(IR)

Figure 4.8, responses on extent of financial innovation was indicated as follows. 2.0% rated bad on the statements; 16.6% indicated moderate on the statements; 20.6% of them were undecided; 24.5% of them rated good on the statements and the remaining 36.3% rated very good with the statements. It can be deduced that majority of the respondents indicated that there was financial innovation in Chase Bank (IR).

CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter is going to present the summary, which is drawn from the research data which was analyzed, discussion of the study and conclusion about the study. Finally, the research elucidated

on recommendation on the effects of knowledge management practices on financial innovation in Chase Bank (IR).

5.2 Discussions

The study has found that there is a statistically significant relationship between knowledge acquisition and financial innovation. The findings are in line with the study done by Shirley and Shusanta (2006) on the impact of information technology on the banking industry; they examined the theoretical and empirical procurement of knowledge related spending and how it can affect bank profits through competition in financial industry especially banks.

5.2.1 Knowledge Acquisition

The study looked at information related products such as electronic payments, internet banking, and financial information exchange and security investments. The findings concur with the study of Agboola (2006) on the acquisition of Information and Communication Technology (ICT) in Banking operations in Nigeria where the study used the nature and degree of adoption of innovative technologies; degree of utilization of the identified technologies; and the impact of the adoption of ICT devices on banks, the study found out that acquisition of technology was the main driving force of competition in the banking industry.

Throughout the research, the results indicated an increased EFT, ATMs, electronic home and office banking, use of smart cards and telephone banking. The findings also indicated that acquisition of information technology helps improve the banks' image and opens market for more customers.

The study also concludes that it is good for financial institutions' administrators step up investing

in information technology to help in the speeding, convenience, and perfect financial service delivery in the sector.

5.2.2 Knowledge Transfer

In addition, the findings of the study were that knowledge transfer affects the financial innovation. The findings concur with the study of Chigada (2014) that Knowledge sharing has been cited as an asset and a source of competitive advantage for banking organizations. Though Knowledge sharing has been implemented in commercial and business environments towards operational advantages and financial gains, Knowledge sharing survival principles and tools might help South African banks improve performance and fulfill their mandate. Knowledge, when properly shared, can significantly enhance an organization's performance. Similarly, the study agrees with the findings of Lopez (2014) on the effect knowledge sharing on financial innovation.

The results of the study indicated that sharing of knowledge had generally an effect on the financial innovation of commercial banks. The study findings were; that transfer of knowledge influences bank's innovation. The focus of the individual is on the shared knowledge and understanding is realized through interpretations, diffusion is via distribution among organizational members and embedding of knowledge comes through organizational memory, systems and rules.

5.2.3 Knowledge Application

The study found that knowledge application affects financial innovation. The finding echo the findings of Yusoff and Daudi (2010) that knowledge application positively influences innovation as it significant positive link between perceptions of high adoption of the knowledge management practices and perceptions of high organizational innovation.

It involves distinct but interdependent processes of knowledge creation, knowledge storage and retrieval, knowledge transfer, and knowledge application. Organizations achieve breakthrough by applying knowledge management concepts to financial innovations.

5.2.4 Financial Innovation

On financial innovation, it can be summarized that majority of the respondents indicated that when an innovative project finishes, feedback for developing new projects was obtained. Moreover, majority of the respondents indicated that innovative projects were provided with control mechanisms to monitor them in the bank. In addition, majority of the respondents indicated that the employees who came up with innovative ideas in the bank have the necessary training to put them into practice. Finally, majority of the respondents indicated that there was financial innovation in Chase Bank(IR).

5.3 Summary of Main Findings

It can be summarized that on knowledge acquisition, that majority of the respondents indicated that continuous improvement system is in place in the bank to allow for improvement in processes which have reached the set quality standards. Further, majority of the respondents understood the meaning of the term knowledge acquisition. Moreover, most of the respondents indicated that the bank has a career plan to stimulate continuous learning. In addition, majority of the respondents rated that bank employees received general training which was applied to their usual tasks. Also, majority of the respondents had acquired knowledge through the financial innovation. Finally,

knowledge application had the highest positive Pearson correlation (R) of 0.800 which was significant since the $P = 0.00$ that is less than alpha of 0.05.

On knowledge transfer, it can be summarized that majority of the respondents indicated that the bank had a system to codify its explicit knowledge. Moreover, majority of the respondents indicated that they understood the term knowledge transfer. In addition, majority of the respondents indicated that information technologies and systems in the bank were available to give the employee access to the information required. Majority of the respondents indicated that mechanisms were in place to encourage the members of the bank to share information. Also, majority of the respondents indicated that the bank availed important information concerning the bank's survival in the industry to her employees. Further, majority of the respondents indicated that Inter-departmental projects are carried out in the bank. Finally, majority of the respondents experienced knowledge transfer through the financial innovation. Finally, knowledge transfer followed with positive Pearson correlation (R) of 0.754 which was significant since the $P = 0.00$ as $P < 0.05$.

On knowledge application, it can be summarized that majority of the respondents indicated that the bank used benchmarking techniques to improve its employees' competences. Further, majority of the respondents indicated that knowledge was applied through the financial innovation. Moreover, majority of the respondents indicated that innovative techniques were established to develop external benchmarking, the bank to learn from. In addition, majority of the respondents indicated that they understood the meaning of the term financial innovation. Also, most of the respondents indicated that the bank had systems that capture and deal with information about

processes. Finally, knowledge acquisition was third because Pearson correlation (R) of 0.399 which was significant since the $P = 0.00$ as this P value was less than 0.05.

On financial innovation, it can be summarized that majority of the respondents indicated that when an innovative project finishes, feedback for developing new projects was obtained. Moreover, majority of the respondents indicated that innovative projects were provided with control mechanisms to monitor them in the bank. In addition, majority of the respondents indicated that the employees who came up with innovative ideas in the bank have the necessary training to put them into practice. Finally, majority of the respondents indicated that there was financial innovation in Chase Bank (IR).

5.4 Conclusion

It can be concluded that knowledge acquisition affects financial innovation, the findings were that there were continuous improvement systems were in place in the bank to allow for improvement in processes which have reached the set quality standards; respondents understood the meaning of the term knowledge acquisition; the bank has a career plan to stimulate continuous learning; and bank employees received general training which was applied to their usual tasks.

Further, it can be concluded that knowledge transfer affects financial innovation, the findings were that systems for codifying explicit knowledge; respondents understood knowledge transfer; existing information technologies, available mechanisms encouraged employee; information on banks survival and existence of interdepartmental projects in the bank.

Moreover, it can be concluded that knowledge application affected financial innovation, the findings were that tasks were established to identify the information resources necessary for the

bank; respondents understood knowledge transfer; respondents understood the meaning of term knowledge application; the bank encourages teamwork; the bank had systems to measure its employee competence; and the bank used benchmarking techniques to improve its employees' competences.

In addition, it can be concluded that knowledge application had the highest positive Pearson correlation (R) of 0.800 which was significant since the $P = 0.00$. Also, it can be concluded that knowledge transfer followed with positive Pearson correlation (R) of 0.754 which was significant since the $P = 0.00$. Finally, knowledge acquisition was third because Pearson correlation (R) of 0.399 which was significant since the $P = 0.00$.

Finally, it can be concluded that from the regression model, knowledge acquisition was identified to not affect the financial innovation in commercial banks as P value was greater than 0.05 hence it had a positive relationship. Knowledge transfer was found to significantly affect financial innovation with a P-value = 0.000. Finally, knowledge application was found to significantly affect financial innovation.

5.5 Recommendations

The research findings on the effect of knowledge management practices on financial innovation the following recommendation were made.

First on knowledge acquisition, the banks should ensure that they expose their employees to more platforms where they can acquire more knowledge so that they can enhance financial innovation since the study has found that the variable had the lowest correlation to financial innovation. Secondly, on knowledge transfer the management of banks should ensure that they create conducive environment so that employees can be in position of transferring the knowledge that

they have acquired. Finally, on knowledge application, the banks should also create conducive environment that will ensure that the employees are able to apply the knowledge that they acquire.

5.6 Areas for Further Research

Further study researchers may be conducted on the effects of knowledge management practices on financial innovation in Tier 1 commercial banks.

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APPENDICES

APPENDIX 1: QUESTIONNAIRE

Please answer the questions by putting a tick in the appropriate box or by writing in the space provided.

Section One: Background Information

1. Please indicate your Gender:

Male [] Female []

2. Age of the respondent:

18– 25 years [] 26 – 30 years [] 31 – 40 years [] over 45 years []

3. How long have you worked in the bank.....

4. How long has your bank been in existence?

Below 5 Years [] 5 – 10 years [] 10 -15 years [] Over 15 years []

5. Which respondent category do you belong to?

Top level Management [] Middle level management [] Lower level management []

Section Two: Knowledge Acquisition And Financial Innovation In Chase Bank

Show your level of agreement concerning statements related to knowledge acquisition on financial innovation of Chase Bank, by ticking [√] your agreement level. The following scale will be applicable 5-1, 5 relates to strongly agree (SA), 4 relates to agree (A), 3 relates to undecided (U), 2 relates to disagree (D) and 1 relates to strongly disagree (SD).

No.	Statements	Level of agreement with Statements				
		SA	A	U	D	SD
		5	4	3	2	1
6	A continuous improvement system is in place in the bank to allow for improvement in processes which have reached the set quality standards					
7	I understand the meaning of the term knowledge acquisition					
8	The bank has a career plan to stimulate continuous learning					
9	Bank employees receive general training which is applied to their usual tasks					

10. In your own opinion, what is your general comment on knowledge acquisition on financial innovation of Chase Bank?

Very Good () Good () Moderate () Bad () Undecided ()

Section Three: Knowledge Transfer and Financial Innovation in Chase Banks

Show your level of agreement concerning statements related to knowledge transfer on financial innovation of Chase Bank, by ticking [√] your agreement level. The following scale will be applicable 5-1, 5 relates to strongly agree (SA), 4 relates to agree (A), 3 relates to undecided (U), 2 relates to disagree (D) and 1 relates to strongly disagree (SD).

No.	Statements	Level of agreement with Statements				
		SA	A	U	D	SD
		5	4	3	2	1
11	The bank has a system to codify its explicit knowledge					
12	I understand the term knowledge transfer					
13	Information technologies and systems in the bank are available to give the employee access to the information required					

14	Mechanisms are in place to encourage the members of the bank to share information					
15	The bank avails important information concerning the bank's survival in the industry to her employees					
16	Inter-departmental projects are carried out in the bank					

17. In your own opinion, what is your general comment on knowledge transfer on financial innovation of Chase Bank?

Very Good () Good () Moderate () Bad () Undecided ()

Section Four: Knowledge Application and Financial Innovation in Chase Bank

Show your level of agreement concerning statements related to knowledge application on financial innovation of Chase Bank, by ticking [√] your agreement level. The following scale will be applicable 5-1, 5 relates to strongly agree (SA), 4 relates to agree (A), 3 relates to undecided (U), 2 relates to disagree (D) and 1 relates to strongly disagree (SD).

No.	Statements	Level of agreement with Statements				
		SA	A	U	D	SD
		5	4	3	2	1
18	Tasks are established to identify the information resources necessary for the bank					
19	I understand the meaning of term knowledge application					

20	The bank encourages teamwork					
21	The bank has systems to measure its employee competence					
22	The bank uses benchmarking techniques to improve its employees competences					

23. In your own opinion, what is your general comment on knowledge application on financial innovation of Chase Bank?

Very Good () Good () Moderate () Bad () Undecided ()

Section Five: Financial Innovation in Chase Bank

Show you level of agreement concerning statements related to financial innovation of Chase Bank, by ticking [] to your agreement level. The following scale will be applicable 5-1, 5 relates to strongly agree (SA), 4 relates to agree (A), 3 relates to undecided (U), 2 relates to disagree (D) and 1 relates to strongly disagree (SD).

No.	Statements	Level of agreement with Statements				
		SA	A	U	D	SD
		5	4	3	2	1
24	Innovative techniques are established to develop external benchmarking, the bank to learn from					
25	I understand what financial innovation means					

APPENDIX 3: RESEARCH APPROVALS AND LETTER



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,
2241349,3310571,2219420
Fax: +254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref. No. **NACOSTI/P/18/55608/25313**

Date: **18th October, 2018**

Rachael Mweru Thiongo
Africa Nazarene University
P.O. Box 53067-00200
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *“Effects of knowledge management practices on financial innovation of Kenyan Commercial Banks: A case study of Chase Bank Kenya Ltd”* I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for the period ending **12th October, 2019.**

You are advised to report to **the County Commissioner and the County Director of Education, Nairobi County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

**GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO**

Copy to:

The County Commissioner
Nairobi County.

The County Director of Education
Nairobi County.



AFRICA NAZARENE
UNIVERSITY

14th August 2018

E-mail: researchwriting.mba.anu@gmail.com

Tel. 0202711213

Our Ref: 16J03EMBA026

The Director,
National Commission for Science,
Technology and Innovation (NACOSTI),
P. O. Box 30623, 00100
Nairobi, Kenya

Dear Sir/Madam:

RE: RESEARCH AUTHORIZATION FOR: MS. RACHAEL MWERU THIONGO

Ms. Thiongo is a postgraduate student of Africa Nazarene University in the Master of Business Administration (MBA) program.

In order to complete her program, Ms. Thiongo is conducting a research entitled: **“Effect of Knowledge Management Practices on the Financial Innovation of Kenyan Commercial Banks: A Case Study of Chase Bank Kenya Ltd”**

Any assistance offered to her will be highly appreciated.



PROF. ORPHA ONG'ITI,
PRINCIPAL: NAIROBI CBD CAMPUS.

APPENDIX 4: MAP OF STUDY AREA

