RELATIONSHIP BETWEEN MANAGEMENT CONTROL SYSTEMS AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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DECLARATION

I hereby declare that this study project is my novel work and has not been presented in any other institution.

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May God bless

DEDICATION

I dedicate this research to my family and friends who have constantly been a great source of support in ensuring that this project is a success.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS AND ACRONYMS

BBK	Barclays Bank of Kenya
CBK	Central Bank of Kenya
EA	East Africa
ERP	Enterprise Risk Management
MCS	Management Control Systems
UBA	United Bank of Africa

ABSTRACT

The management control schemes act as a planning tool plus help to provide data that help to promote the allocation of resources and other decision making activities. When used in organizations the managing mechanism systems help companies to achieve their financial objectives and goals through maximizing the utilization of resources and avoidance of wastages. Commercial Banks can use the management control system models to promote, evaluate and boosts their fiscal performance. The main aim of this research was to establish the relationship between management control systems together with overall banking sector presentation. The study also intended to review the growing body of academic together with empirical researches that have tried over the years to look at the array of extent together with influence of systems of management control systems on commercial banks' performance. The target population was all the 42 licensed commercial banks. Primary together with secondary data collection sources were used. Primary information was gathered for the management control systems using questionnaires and secondary data was collected for financial performance. It was a cross-sectional study, data was collected for several units of analysis over a uniform time frame. The study utilized descriptive statistics to gauge the existence of management control systems in the commercial banks. The research employed inferential statistics, which included correlation analysis together with multiple linear regression equation with the technique of estimation being Ordinary Least Squares (OLS) to create the association of management control systems and fiscal performance of commercial performance. The study findings revealed that the management control aspects are applied to high or very high extents in the commercial banks. Further study findings were that a management control system significantly affects financial performance and it can significantly predict financial performance but however, Continuous Improvement Process is the only management control system aspect that significantly impacts on financial performance. The study made recommendations to policy makers like the National Treasury and CBK and also commercial bank practitioners and consultants to institute management control systems to augment financial performance. Further recommendations was that particular focus should be made on the management aspect of Continuous Improvement Process in order to attain optimal fiscal presentation.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Management control schemes act as a planning tool plus help to provide data that help to promote the allocation of resources and other decision making activities (Sangmi, 2010). When used in organizations the managing mechanism systems help companies to achieve their financial objectives and goals through maximizing the utilization of resources and avoidance of wastages. According to Hightower (2013), organizations such as Commercial Banks can use the management control system models to promote, evaluate and boosts their financial performance.

Additionally, Mohammad (2014) noted that the managing control structure is critical in the process of controlling the behavior of the organization financial resources and help management to adopt formal plans in the control of all their internal operations and activities. Thus, it can be argued that management control system is effective towards distribution of assets together with the regulator and monitoring of the financial plans of the firm leading to proper financial performance levels in the firm (Muraleetharan, 2011). Systems theory, contingency theory and stakeholder theory give details of association amongst management control systems and monetary presentation. Systems theory holds that rather than reducing a unit to belongings of its essentials, systems theory concentrates on inter-relations amongst portions which join them into full (Johnson, 1964).

Organizations like wise have a self-governing system represented by various sections including finance or accounting, human resources, business development or strategy and supply chain, among others (Johnson, 1964). Stakeholder theory pinpoints and models the clusters of stakeholders in a company (Fontaine, 2006). It entails administrative management in occupations leading to development of principles and standards in handling an entity (Fontaine, 2006). Contingency theory holds that no firm is solitary in its organizational arrangement but also depends on size, features of organizational structure, organization's culture, type of the technology, environment stability and the organizations information systems (Scott, 2014).

Commercial banks are fast growing with regards to service supply and client gratification through their innovativeness in terms of product development (Brownbridge, Harvey & Gockel, 1998). As a result, both management and supportive staff have immense concern for the business environment and market competition in the banking industry (Brownbridge *et al*, 1998). Globally, MCS entails consistent scrutiny of efficacy of controls to resolve if they are designed well and operating correctly. Flaws in MCS arise to letdown to attest that capitals are assigned to clear importance and warranty worth for cash (Basel Committee, 2002). The extensive worldwide financial disgraces in recent years enlighten the significance of MCS. Management is mainly accountability for appropriate controls hence MCS is essential in assisting management realize its mission and objectives geared to better monetary presentation (Basel Committee, 2002). The study, therefore, seeks to examine the level to which management control systems affect fiscal presentation in commercial entities.

1.1.1 Management Control Systems

As per Ghosh (2005) systems of management control are made to plan, direct, synchronize, inspire and assess activities in intricate organizations, and study in the field need to begin with a brilliant consideration of the managing control systems and processes in actual organizations. According to study done by Muraleetharan (2011); Anthony (1997), the management control systems is one of the methods where the executives ensure that assets are acquired and used resourcefully plus competently in attainment of institutions aims.

There are five types of control activities in an organization namely; directive, preventive, detective, corrective and recovery (Anthony, 1997). The different mechanisms of MCS are Total Value Management, Time Based Management, Activity Grounded Costing, Balance Score Card, Bench Marking, Re-engineering, Shareholder Value Analysis and Continuous Improvement Process (Simons, 2017). According to Malmi and Brown (2008), MCS includes wholly the methods executives practice to certify the manners plus judgements of workers are dependable on the business's goals plus policies. Any system, such as formation, accounting, accountability centers, cost administration, decision creating, administration control, performance capacity, and reparation are regarded as MCS (Anthony & Govindarajan 2001). MCS in addition have other features which impact their usage.

For instance, management controls may be official or informal (Langfield-Smith, 2007). The presence, usage or absence of MCSs importantly effects the actions and results conceded inside an organization (Anthony & Govindarajan, 2001). Thus, MCS is the appropriate and information-based systems which executives use to uphold or change arrangements in organizational undertakings (Simons, 2017).

1.1.2 Financial Performance

Fiscal presentation entails the financial goals of the institutions and covers various factors that promote the success of a firm such as leverage level, the liquidity ratio as well as the firm size in terms of risk and tangibility ratios. Financial performance is determined by the interest rates and the exchange rates offered by the firm. According to Scott (2014) financial performance measures include the procedures for assessing the outcomes of firms' strategies and procedures in monetary standings (Bertoneeche & Knight, 2001). A firm's performance comprises amassed finale outcomes of all the firm's business practices and undertakings.

Financial presentation measures a firms' total economic wellbeing over a specific time period. In addition, it is also used to relate comparable firms across similar industry (Bertoneeche & Knight, 2001). The bank's ultimate goal is to achieve profitability through more efficient use of resources directed at a bigger segment of the market while providing better products to address client needs (Gerrit & Abdolmohammadi, 2010). Financial performance indicates cost-effectiveness, development and abidance to guidelines and procedures by the organization (Gerrit & Abdolmohammadi, 2010). Financial performance

is indicated by revenue development, income, and yield on resources involved (Whittington and Kurt, 2001). Others are market value added (MVA) for firm price established on the stockholders holding anti full sum of savings as per John and Morris (2011). It is established on the old-style features of monetary presentation namely overall revenues, sales development, profit development and net margin. In addition are price of long-standing savings, economic dependability and usage of business resources (Dwivedi, 2002).

When used in the banking sector, the financial performance help to determine the liquidity ratio of the bank and it can help to indicate how the bank is able to meet its investment obligations (Bertoneeche & Knight, 2001). Additionally, the bank fiscal presentation is related to the profitability ratios and this includes the levels of return on assets and other various such as the net interest rate margin (Simons, 2017). With a stable financial performance measures, the bank can determine its financial health in terms of revenues generations and other return on equity models. This is important for the promotion of short together with long-term objectives of the bank (Ngugi & Kabubo, 1998).

1.1.3 Management Control Systems and Financial Performance

Businesses require strong preventive controls including approval and authorization, review and approval of processes to purchase requisitions and separation of duties (Kantzos & Chondraki, 2006). All these reduce risks and therefore lead to increased profitability. Directive controls in banks such as setting corporate policies or department procedures help to prevent risks including financial risks thus improving the financial performance

(Kantzos & Chondraki, 2006). Similarly, detective controls such as comparing dealings on reports to source documents and monitoring real expenditure helps to discourage employees from engaging in fraudulent activities thus avoiding poor financial performance of firms (Kotey, Reid & Ashelby, 2002).

Corrective controls such as completing information technology access lists of entity's role change helps to prevent further losses in the bank. Additionally, corrective controls such as completing information technology access lists if individual's role changes help to prevent further losses in the bank (Kotey *et al*, 2002). Financial presentation entails suitable operative and proficient MCS. Enhancing MCS enables businesses to notice dangers timely and focus on higher threat zones. This leads to better clarity plus answerability, therefore improving monetary presentation.

MCS have temporary influence on the operation of a business and is the pillar of an institute and guides the affluence or the down fall of an institution (Wielstra, 2014). MCS give a review of the worth of managerial presentation in doing allocated duties for improved performance (Beeler, 1999). Usefulness and adequacy of MCS need emphasis at every stage particularly in administration, to develop feasibility (Wielstra, 2014). MCS have temporary effect on the functioning of an institution. In addition, it supports an organization and it directs the affluence or the failure of an organization (Wielstra, 2014). Evidently, it is true that effective application of MCS models can help firms including banks to promote, monitor and increase the achievement of their positive financial performance levels.

1.1.4 Commercial Banks in Kenya

The Kenyan banking sector is controlled by the Banking and Central Bank of Kenya Act, Companies Act, together with different sensible rules allotted by CBK (CBK, 2015). Commercial banks offer loans and credits, accept deposits and offer related administrations, which activities positively give to the fiscal and social growth of the nation. CBK permits, directs and manages profitable entities as commanded as per the Banking Act. Kenya has 43 accredited banks that are commercial in nature regulated by CBK that are expected to adhere to definite procedural guidelines by CBK including cash reserve ratios, among others (CBK, 2015).

From the reports of the year 2015, banking industry cumulative financial increased by 3.4% up as of 3.26 trillion Kenyan shillings in 2014, December to 3.37 trillion Kenyan shillings in March the following year (CBK, 2015). However, a long-term view reveals that cost-effectiveness on average has been unpredictable banks. During this term, banks have encountered more rivalry due to expanded developments among competitors and entry of new participants into the banking sector (KPMG, 2012). Currently, banks are implementing new approaches to raise profitability together with to decrease the operating expenses. An example of such measures includes utilization of MCS (KPMG, 2012). Through MCS, suitable plans in reducing operating expenses for maximum returns are achieved (Langfield-Smith, 2007).

Banks have adopted various MCS models and software models to increase their fiscal presentation. This includes the adoption of full accounting software, the managing control software plus the total quality management apparatuses and capital budgeting tools. These MCS models have been effective in supporting bank personnel in realization of the banks' financial goals by replying to substantial commerce, functioning, monetary, agreement and other hazards (Langfield-Smith, 2007). In Kenya, the MCS are designed to safeguard banks from swindle and damages and achieve a safeguard accountability organization (Ekut, 2011). This is exemplified by the growth in Balance Sheet for most banks and their increased level of profitability and hence their Return on shareholders' Equity. Through increased performance, stability, productivity and efficiency, MCS therefore lead to financial performance (Ekut, 2011).

1.2 Research Problem

All profit or else non-profit organizations make usage of some type of management control system (KPMG, 2012). Yang and Guan (2004) noted that the use of MCS models has been effective towards the promotion of various bank performance and management around the globe. Hence, it can be argued that the use of MCSs is critical towards the management of every modern organization and it is largely dependent on the essential portion of each company's plans (Wielstra, 2014). The accomplishment or letdown of a company is determined by the numerous systems of management control

As a company develops in magnitude together with intricacy, the systems of controls also evolve from modest to sophisticated (Ekut, 2011). Efficiency of management controls is measured by how goals are attained and how efficiently the threats are addressed. Be that as it may, in spite of the current proof thinking about the significance of management controls in the associations, the performance of commercial banks is still poor (Wanemba, 2010). Many banks and financial organizations in Kenya have placed operative and competent use of management control methods to advance financial presentation. It is evident in many cases that intensive efforts have been exerted to properly utilize management control practice in Kenya (Wanyoike, 2010). However, many organizations have not achieved significant differences over the management control practice, which is being exercised in the country. The issue of management control practice still presents unique challenges with regards to effectively addressing the organizational objectives (Wanemba, 2010).

Many banks in the nation have adopted diverse frames of MCS models with the aim of promoting their performance. Despite this, it has been argued that the process of implemented the MCS frameworks in the banks is very expensive. The gains from these modern technological models are also difficult to maintain and this paradox require proper research to promote the application of MCS models in the management of various programs of the banks in the country (Wanyoike, 2010). Hayali et al. (2012) did a study with regard to importance of inside control systems in banking industry. However, their findings did not specifically show how internal control systems affect monetary presentation. Ayagre (2014) did a study on efficiency inter control systems of banks. His

study only talked about efficiency of internal control systems, but it does not explain how it touches on financial presentation of the banks. Francis (2013) studied about internal controls on profitability of secluded firms. Apart from being limited to one bank branch, that is, KCB Southern Sudan, the study failed to comprehensively determine financial performance levels after the adoption of the MCS models by the bank.

Kabue (2015) conducted a case investigation on influence of interior control on fraud discovery and avoidance amid banks in Kenya. He only used primary data as a source of data to be collected. Ngige and Karwirwa (2015) conducted a research on interior control methods as a way of swindle control in credit enchanting economic organizations in Imenti North in Kenya. However, in their study, they did not focus on how internal control systems assist in improvement of organizations financial presentation. Serem (2014) studied the association amongst internal administration controls plus competence of amenity supply of Kenyan banks. Despite this, the study mainly focuses on the importance of MCs in the management of administration controls and ignored the financial aspects of the organization performance.

From above studies, an observation is made that focus or effort was not made to explain exactly how management control systems affect the operations of a bank especially on their financial performance. Some of the research was also done outside Kenya, hence not applicable due to the different banking policies. This research seeks to therefore answer the research query: What is the association amongst systems of management control together with the overall presentation in the banking industry?

1.3 Research Objective

To establish the connection amongst management control systems and overall performance in the banking industry.

1.4 Value of the Study

Directors and administration team in banking institutions will be assisted to evaluate their operational and financial controls of the bank thus minimizing or hedging the risks that would otherwise occur by looking at the various management control systems that we have talked about and research at their areas of operation if they are effective and efficiently applied.

The study will also be helpful to other academicians and the examiners to research and supplement to the present body of knowledge whereby learners can use them for educational purposes. It helps the researchers to find research gaps and areas of further studies that that the study did not cover.

It will also help investors and the public to increase the confidence of the investors in banks in regards to their financial performance and useful to the public by showing financial presentation of banks through regards to effective plus efficient management systems that defends their interests. The watchdog CBK will discover beneficial this study by identifying the banks that are have poor financial performing owing to absence of operative and efficient management control systems which leads to risks that bank creditors are expose to.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter entails association amongst management control systems and fiscal performance in Kenyan commercial banks. It outlines theories that explain management control methods and financial presentation, and then settles on empirical studies that clarify the association amongst management control method and financial performance by earlier researchers. Finally, the section will discuss and provide a conclusion of the empirical works gathered.

2.2 Theoretical Review

Theoretical examination entails analysis of the fundamental theory of the research and this is an important aspect in educational study. As per Kombo and Tromp (2016), theoretical review comprise of interconnected thoughts established on theories. In addition, it is a logical set of propositions derivative from and reinforced by an overall set of conventions regarding the phenomena of the analysis. Theories offer pointers and instances of what is assimilated in the framework. They are used to direct the research and assist in interpretation of the results. The study utilizes theories to explain association amongst management control systems and fiscal performance. These theories comprise of Contingency theory, Agency and Stakeholder theory.

2.2.1 Contingency Theory

Paul Lawrence and Jay Lorsch founded this theory in the late 1967. The theory indicates that organization cannot use one method or procedure to succeed in their operations and

achieve their goals. This theory is effective in control risks and managing challenges in the firm. Evidently, the contingency theory holds paramount means to organize is subject to the nature of the environment to which an entity should identify (Scott, 2014). Therefore, there is no single kind of administrative arrangement that is totally appropriate to all administrations. Rather, it depends on the size of the entity, characteristics of the administrative arrangement, organization's culture, type of the technology, environment stability and the organizations information systems (Scott, 2014).

The main assumptions of the theory are that it defines the association amongst management control effectiveness and financial presentation of banks, particularly on the financial recording. Adez and Caulding (2008) identified some aspects that affect the administration control systems namely; technology, size and structure of an organization, external environment, organizational plan and ethos. It proposes that the ultimatum enforced by technical skills in a firm encourages the improvement of plans to correspond and control events in technology and environment (Adez & Caulding, 2008).

In this study, the theory can help banks to adopt different ways and methods to manage and guide their operations. The banks management should understand that using one way of organizing and planning organizations activities is not effective. Therefore, it is imperative that the banks adopt a number of ways and methods to meet their needs and objectives. This may include the use of different resources and different models to fit the bank within the challenging environments where they operate. This will allow the banks to engage in flexible view of problem solving and reduce strategic challenges facing their operations.

The bank will use its information to control and evaluate management issues (Adez & Caulding, 2008).

2.2.2 Systems Theory

The theory was advocated by Bertalanffy (1940) and Ashby (1968) in a research titled "Introduction to Cybernetics". Bertalanffy (1968) stressed that actual methods remained exposed to besides intermingle with their surrounding and can obtain qualitatively fresh possessions though occurrence, causing in constant evolution. In his study, he opined that rather than decreasing a unit to belongings of its elements, systems theory concentrated on inter-relations amongst the portions, which join them in full (Bertalanffy, 1968). An organization is a system that is self-governing with independent elements within. Similar qualities and values of such an entity trigger the diverse disciplines thus providing a foundation for their merging (Bertalanffy, 1968).

According to Hartman (2010), the key assumptions of the systems theory is that it offers manager tools for analyzing administrative dynamics without giving an exact way on how an entity should be succeeded. In addition, it should be noted that all administrations entail of handling receivables and outputs with inside plus exterior methods and structures useful for giving practical outline of an entity can be achieved using the theory models. According to Smit and Cronje (2002), a system entails an assembly of segments fused to achieve a general objective. If any segment of the scheme is isolated, the scheme nature is altered (Smit & Cronje, 2002).

The theory is applicable to this study because explains how organizations are systems made up of various roles thereby assisting manages to have a wider viewpoint. A system theory enables manages to appreciate the different elements within the same organization. This awareness of different fragments of the organization also enables them to appreciate the interconnection of the parts. Application of MCS will facilitate the enterprise to realize its intents including improving the financial performance.

2.2.3 Stakeholder theory

Initially proposed by Freeman in 1984 in a document "Strategic Management: A Stakeholder Method", the theory pinpoints plus model's clusters who are shareholders in a company. It is a theory of administrative managing and professional morals that talks principles together with standards on handling an entity (Freeman, 1984). Stakeholders comprises; workers, clients, dealers, investors, publics, governmental organizations, political groups, trade associations and rivals. It identifies and models the bank stakeholders and describes by endorsing means by which administration can offer regard to the benefits of bank stakeholders (Freeman, 1984). Top administration therefore is accountable for safeguarding the welfare of a firm through an understanding and balancing or numerous stakeholder interests by setting corporate roles, laws and policies to be followed.

Blattberg (2004), disparaged stakeholder theory aimed at presuming that welfares of innumerable shareholders could be bargained or composed alongside another shareholder. He contends it is a product of its importance on arbitration as foremost means of dialogue

for dealing with clashes amongst investor welfares. Blattberg (2004) endorses discussion in its place to preserve a 'patriotic' notion of a company as a substitute of that linked with this theory. It is applicable to this research because it explains how businesses function. In this study, the theory can be applied in considering the viewpoints and opinions of different stakeholders in the bank such as the clients, traders, workforces, publics and investors and banks. Therefore, the views of all those who are concerned should be included before a decision is made within the bank. MCS enables managers to consider the interests of clients, employees and investors before decisions are taken. Application of MCS in this way leads to success of the firm including the area of financial presentation.

2.3 Determinants of Financial Performance

Determinants that impact fiscal presentation are grouped into internal together with external determinants. Internal elements include bank features that affect its presentation since are largely subjective to the internal choices of administration and panel. The external factors are countrywide or sector wide.

2.3.1 Asset Quality

Bank asset is a factor that affects a bank's lucrativeness. Example of bank assets includes; static assets, investments, non-current assets, credit collection. For example, bank loans since they generate a main part of the revenue in banks through interests charged on the debtors. Therefore, the bank's lucrativeness is determined by worth of the loan collection. According to Dang (2011), most of the banks face high risks that emanate from the losses made by the delinquent loans.

The banks should maintain the amount of non-performing loans low to hedge against the financial risks of incurring losses. In addition, the banks should minimize losses incurred through lending activities and investments. The banks use the nonperforming loan ratios to determine the quality of the assets (Dang, 2011).

2.3.2 Capital adequacy

Capital is a factor that affects profitability levels in a bank. Capital refers to the sum of cash available to sustain the businesses of the banks where it acts as a precaution in the event of hostile circumstances (Athanasoglou *et al*., 2005). Capital availability in banks improves liquidity owing to the detail that the deposits are susceptible to bank scores and that are most fragile. Additionally, better bank capital lessens the likelihood of financial distresses. Capital Adequacy Ratio determines the suitability of capital and it shows the bank's internal strong point to bear losses and is comparative to the bank's flexibility in loss circumstances (Athanasoglou et al., 2005). Sangmi and Nazir (2010) opine that it has an undeviating effected on viability of banks by defining its growth to uncertain, nonetheless cost-effective activities. Banks ought to sustain sufficient capital to meet both regulatory guidelines and strategic needs (Sangmi & Nazir, 2010).

2.3.3 Bank Size

It determines the ranks of asset base, revenue development together with the level of client gratification as per Kloot (1999). The size of commercial banks also determines the market share with large banks controlling majority of the market share thereby generating more revenue. As a result, banks are implementing novel approaches that include expansion to

rise productivity. Utilization of appropriate MCS minimizes operational costs and achieves maximum profits. Expansion in the number of employees may also lead to the achievement of the banks' financial goals (Kloot, 1999).

2.4 Empirical Review

This part reviews literature from the previous researchers regarding the association amid management control systems and financial presentation. Eze (1992) reviewed the influence of internal control method on income presentation of Nigeria banks. He used a correlation study design that targeted all the main offices and branches within Enogo state. He discovered that both banks had adequate internal control features, but the percentage installation of UBA was higher than OBN and also the installed internal control system were not effectively and adequately operated. However, his research failed to clearly find the association amongst internal control systems and fiscal presentation.

Mauraleetharan (2011) did a research on interior control and the influence on financial performance on governments. His study's aim was ascertaining association amongst internal controls and the monetary presentation. He used the stratified sampling research design where he arbitrarily picked 35 government and private firms in Jaffna district. Chi-square, correlation and the regression methods were used in shaping the association amid internal control and financial presentation. He concluded his report by ascertaining that the apparent inner control had noteworthy influence on level of financial presentation in organizations. Despite this, the study did not go further to discover how internal controls affect financial presentation in the banking industry.

Hayali et al. (2012) did a study with regard to implication of internal regulator methods in Turkey banking sector. The research was carried out using descriptive case study and explanatory study design. Findings reveled that internal regulator methods were significant in banking industry. The study did not however establish how internal control methods affect financial presentation.

Ayagre (2014) studied on efficiency in internal control methods of banks. Multiple regression model checked the form of association amongst dependent plus independent variables. Regression investigation done proved independent variables had a positive association with the reliant variable. His study established efficiency of internal control systems, but failed to explain how it affects the financial presentation of the banks.

Francis (2013) study was about internal controls on profitability of secluded firms. Descriptive research plan was used while targeted population consisted of the secluded firms operating within Juba Southern Sudan. Linear regression analysis was implemented to find association amongst independent and dependent variables. Apart from being limited to one bank branch, that is, KCB Southern Sudan, the study failed to comprehensively determine financial performance.

Kabue (2015) did a study on a case research to find the impact of controls that are internal on swindle discovery besides avoidance amid Kenyan commercial banks. Target populace of her research was all Kenyan commercial banks. She used explanatory study design and used only main information gathered by a questionnaire. She used descriptive such as,

correlation and inferential data analysis such as and the regression and she found out that ineffective strategies cannot adequately control fraud and regular get-togethers remained vital for BBK to be in a position to stop or decrease fraud. However, the study only used primary data as a source of data to be collected.

Mwangi (2011) researched about the association amongst internal controls and fiscal presentation of Alexander Forbes (EA) Company. She adopted use of case study for her research method. Questionnaires and interviews constituted primary data and the company's published financial statements were used as her source of secondary data. The respondents were the employees of the company from different managerial levels. The investigation was conducted by means of descriptive statistics and regression investigation and concluded that company's external auditors reported to the board to ensure that proper control systems have been established.

Ngige and Karwirwa (2015) conducted a research on interior control systems as fraud regulator in credit taking financial organizations in Imenti North in Kenya. Information was gathered using questionnaires besides focused group conversation. Data gathered was evaluated using descriptive together with statistics of inferential in nature. The results showed interior control systems were effective in fraud control. However, in their study, they did not focus on how internal control systems assist in improvement of organizations financial presentation.

Serem (2014) studied the association amongst internal administration controls plus competency of service supply of commercial Kenyan banks. The study was quantitative and with a sample of 30 commercial banks. Findings revealed the association amongst internal controls methods and effectiveness of service supply of banks was significant. However, the study failed to conclude the influence of interior controls methods on monetary presentation.

Muio (2012) investigated effect of inner control methods on monetary presentation in Kenyan private hospital. Descriptive research design was used while populace sample comprised of all private hospitals in Nairobi, Kenya recognized by National Hospital Insurance Fund (NHIF). The linear regression findings showed all five modules of internal control methods must be present for it (ICS) to be considered effective. However, the study failed to establish how the individual components of the independent variable impacted on the financial performance.

2.5 Conceptual Framework

Management Control systems include Total Quality and Time Based Management, Activity Based Costing, BSC, Bench Marking, Re-engineering, Stockholder Value Analysis together with Continuous Improvement Procedure. This formed the independent variables and financial presentation was the dependent variable.

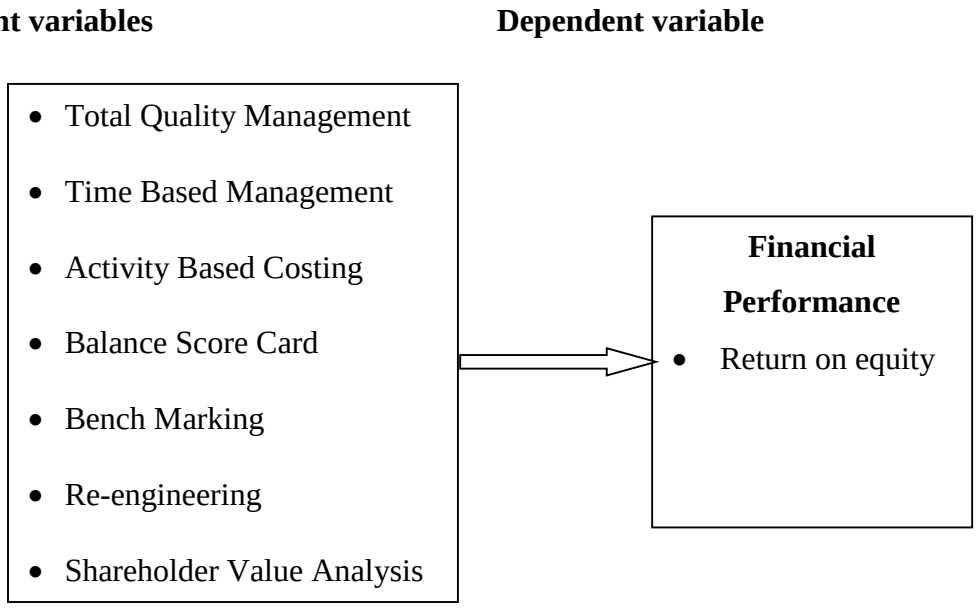

Figure 2.1: Conceptual Framework

2.6 Literature Review Summary

The articles discussed above, clearly show that they studied connection amongst management internal methods and financial presentation but identified gaps in their studies are highlighted below. The studies did not focus specifically on banks and those that focused on them were not done in Kenya (Mwangi, 2011). This gap shall be filled by the association amongst management control systems and financial presentation on commercial banks. The other study only relied on primary data as a source of data collection and it did not focus on a longer time span (Kabue, 2015). To bridge the gap, the research will depend on primary and secondary information and try to emphasis on a longer research to conclude whether the observed relationship changed over the years.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The section discusses the study design that was adopted, target populace, sample size, information gathering, information investigation and finally our conclusion on the research methodology.

3.2 Research Design

Cooper and Schindler (2006) refer to the design of a research as a general plan chosen to assimilate the various constituents of research in an articulate and in a reasonable method. The research utilized the descriptive study design to ascertain the association amongst proper organization control systems together with fiscal presentation in banking sector in commercial Kenyan banks. The research attempted to find the level at which proper management control systems benefit a bank and their relationship with the financial performance and also examined the benefits that accrue if a well implemented management control system is in place.

3.3 The Population of Study

The researched emphases was on Kenyan Commercial Bank and the populace encompassed all Kenyan banks as the target population. As per the recent study by Central Bank of Kenya (CBAK), there exits forty two (42) commercial banks in Kenya (CBK, 2020).

The CBK is a body in charge of formulating monetary policy to realize and uphold price steadiness and help to implement the foreign exchange policies; holds and manages foreign exchange assets together with issuing coinages and act as the consultant to and fiscal agent of the nation (CBK, 2019).

3.4 Data Collection

The research included secondary and primary information. The researcher used questionnaires as the primary method of data gathering. The questions included different subdivisions. Section A provided general data while section B determined the Management Control Systems used by commercial Kenyan banks in Kenya. Section C data included the measures of fiscal presentation of banks in Kenya country. The investigator made use of the bank's yearly reports, websites together with journals and books to establish the financial performance of banks as part of the secondary information gathering method. Since the study was a cross-sectional study, data on financial performance was collected for a single time period, the year 2019.

The primary information was gathered by use of a closed ended questionnaire. The researcher dropped and picked them as well. The researcher tried to use self-administration of questionnaire and the respondents were issued with the questionnaire to fill on their own. A self-administered questionnaire is desired due to its low budget and suitability of time for respondents to provide responses (Kothari, 2008). The questionnaires were administered to the CEOs and top financial managers of the Kenyan commercial banks.

3.5 Validity and Reliability

As per Mugenda and Mugenda, (2003) definition reliability is extent the replies to the questionnaire are unswerving thus consequently yielding reliable findings. Cronbach's alpha value was implemented to assess this dependability of study tool. All statements having an alpha of at least 0.7 were considered for study as they satisfied the internal consistency measure (Mugenda & Mugenda, 2003). According to Robinson (2002), validity is the degree of outcome acquired via analysis of information that truly represents phenomenon under study. It is used to warranty research truly measures what it aims to from the start (Robinson, 2002).

3.6 Data Analysis

Information was validated, coded plus crisscrossed for mistakes together with oversights. Information was organized, tabulated and simplified to make it easier to analyze, interpret and understand. Statistical Packages for Social Sciences (SPSS) version 25 aided in analyzing the data. Descriptive investigation of data applied measures of central tendencies and standard deviations. Further, the associations between the study variables and testing of the hypothesis were executed using inferential statistics, which included correlation scrutiny together with linear regression.

Correlation analysis was used to show if plus how management control systems are associated with financial performance. The goodness of fit among the different models was established using the coefficient of determination (R^2). The dependent variable was continuous (ratio measurement scale) while the independent variables were categorical

(ordinal measurement scale). The independent variables in this case were assumed to be continuous because the categories are equally spaced. Thus, multiple linear regression analysis was utilized to gauge how management control systems have any significant impact on financial performance.

3.6.1 Diagnostic Tests

For the validity of regression analysis, a number of assumptions are done in conducting linear regression models. These are; no multi-collinearity, observations are sampled randomly, conditional mean ought to be zero, linear regression model is "linear in parameters", spherical errors: there exist homoscedasticity together with no auto-correlation, and the elective hypothesis: error terms ought to be distributed normally. According to the Gauss-Markov Theorem, first 5 assumptions of the linear regression model, the regression OLS estimators as per Grewal *et al*. (2004) are the Best Linear Unbiased Estimators

The aforementioned assumptions are of great importance since when any of them is violated would mean the regression estimates will be incorrect and unreliable. Particularly, a violation would bring about incorrect signs of the regression estimates or the difference of the estimates would not be reliable, resulting to confidence intervals that are either too narrow or very wide (Gall et al., 2006).

The diagnostic tests are conducted so as to guarantee that the assumptions are met to attain the Best Linear Unbiased Estimators. Regression diagnostics assess the model assumptions and probe if there are interpretations with a great, unwarranted effect on the examination or not. Diagnostic examinations on normality, linearity, multicollinearity, and autocorrelation were done on the collected data to establish its suitability in the formulation of linear regression model. Normality was tested by the Shapiro Wilk test which though uncommon, fails to work well where large amount of data is involved, and the test will be supplemented by the Kolmogorov-Smirnov test which is suitable for testing distributions of Gaussian nature which have specific mean and variance. Linearity indicates a direct proportionate association amongst dependent and independent variable such that variation in independent variable is followed by a correspondent variation in dependent variable (Gall et al., 2006). Linearity was tested by determining homoscedasticy, which was determined, by the Levene Test of Homogeneity.

Tests for multicollinearity of data was carried out using variance inflation factors (VIF) and Tolerance statistics to determine whether the predictor variables considered in the research are significantly correlated with each other. According to Grewal *et al*. (2004) the main sources of multicollinearity are small sample sizes, low explained variable and low measure reliability in the independent variables. Auto-correlation test was carried out through the Durbin-Watson Statistic.

3.6.2 Analytical Model

The regression model takes the form;

$$\mathbf{Y= \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + e}$$

Where;

Y= Fiscal Performance

α = Constant

$\beta_1 - \beta_4$ = Beta coefficients

X_1 = Total Quality Management

X_2 = Time Based Management

X_3 = Activity Based Costing

X_4 = Balance Score Card

X_5 = Bench Marking

X_6 = Re-engineering

X_7 = Shareholder Value Analysis

X_8 = Continuous Improvement Process

ϵ = error

3.6.2 Tests of Significance

The study will adopt a confidence interval of 95%. The results will be set to be statistically significant at level 0.05, which indicates that the value of implication should be 0.05 of less. A statistical inference technique will be used in making conclusions relating to the accuracy of the model in predicting the market capitalization. The model significance will

be tested using the significance values at 95% confidence and the F-Test. The meaning of the association amongst every predictor variable plus response variable will also be determined by the significance values and the t test, which illustrates how much standard error indicated that the sample deviates from the tested value.

3.7 Operationalization of Study Variables

The independent variable, management control systems will be indicated by Total Quality together with Time Based Management, Activity Based Costing, BSC, Bench Marking, Re-engineering together with Continuous Improvement Process. The dependent variable is financial performance in banking sector. All indicators of the independent variable, management control systems will be gauged using 5-point Likert type scale. Dependent variable and financial presentation will be measured using Net income or Average Total Assets. The variables of this study will be operationalized as displayed in Table 3.1:

Table 3.1: Study Variables Operationalization

Variables	Operational Indicators	Supporting Literature	Rating measure
Total Quality Management	Customer Satisfaction, Continuous Improvement, Consistent Product Quality, Worker Involvement plus Top Management Commitment	Kabue (2015)	5-point Likert type scale
Time Based Management	Time Resource, Time Saving Pattern, Time Management Technique, Category Activities plus Productivity Consciousness	Mauraleetharan (2011)	5-point Likert type scale
Activity Based Costing	Activity Costing, Major Activities, Cost to Cost Pool, Cost Activity plus Cost Driver	Mwangi (2011)	5-point Likert type scale
Balance Score Card	Financial Perspective, Client Viewpoint, Inner Business Process and Education and Development	Athanasoglou et al. (2005)	5-point Likert type scale
Bench Marking	Performance Benchmarking, Improvement Effort, Management Commitment and Benchmarking Types	Bertoneche and Knight (2001)	5-point Likert type scale
Re-engineering	Degree of Re-design, Traditional Approach, Organization Restructuring, Organization Efficiency plus Efficacy and Re-engineering Incentives	Baglieri, 2014	5-point Likert type scale
Shareholder Value Analysis	Estimating Shareholder Value, Wealth & Profit and Use of Shareholder Value	Ngugi and Kabubo, (1998)	5-point Likert type scale
Continuous Improvement Process	Involvement of Employee, Customer Satisfaction and Organization Quality and Performance	Anthony and Govindarajan (2001)	5-point Likert type scale
Financial Performance	Net income, Return on equity and Earnings per share	Bertoneche and Knight (2001)	Net income/ Average Total Assets

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND INTERPRETATION

4.1 Introduction

The chapter discusses the information examination, explanation together with the deliberations of the outcomes. This section hence is fragmented to five sub sections, which entail; the study response rate, the comprehensive respondents' characteristics, descriptive together with inferential statistics, interpretation and discussion of the research findings. Precisely this chapter summarizes the platform for data presentations, analysis, and interpretations.

4.2 Response Rate

In survey research, rate of response is the total responses obtained divided by the number of target respondents. It is also denoted as the conclusion rate or return rate and it is usually expressed percentage form. Information on the rate of response for this research is displayed in the table below:-

Table 4.1: Study Response Rate

Response	Frequency	Percentage
Returned	32	76.19%
Unreturned	10	23.81%
Total	42	100%

Table 4.1 showcases that forty two questionnaires were issued to the licensed commercial Kenyan banks. This research findings exhibit that from the 42 total number of issued questionnaires to the target respondents, only 32 responses were made with adequate information and returned which translated to an overall 76.19% study response rate. This corresponds with Mugenda and Mugenda (2010), who stated a study with 70% response rate and above have a sufficiency for analysis and a conclusion can be drawn from it.

4.3 Background and Respondent Characteristics

The research set out to determine the background and respondent and firm characteristics of all the 42 respondents enlisted for the study who were employees at the licensed Kenyan commercial banks. However, only 32 respondents participated in the study. Highlighted are the background and firm characteristics derived from the Part A of this study's questionnaire, which included; job position, department, gender, age, education qualifications, work experience, and presence of an audit committee, risk committee, and a risk and compliance department in the respective banks. .

4.3.1 Job Position

The target respondents were tasked to state their respective management levels. This was to determine if management level has any bearing on the perception of management control systems together with fiscal presentation. In Figure 4.1, the findings are displayed. It displays the respondents in various management levels. The highest proportion of the respondents, that constitutes 62%, were in the middle management level. Top-level management employees comprised of 25% while junior staff constituted 13% of the total

employees. The uneven spread in the number of respondents in the various departments is not an indication bias since top-level management staff proportions is less in all companies and financial institutions have a huge proportion of middle level employees because most of the lower cadre staff are sales staff who are based on the field and are not present in the banks' offices. The top and middle level management staff are also more likely to have information on management control systems and financial performance of the respective banks they work for as they are more likely to be engaged in decision-making roles.

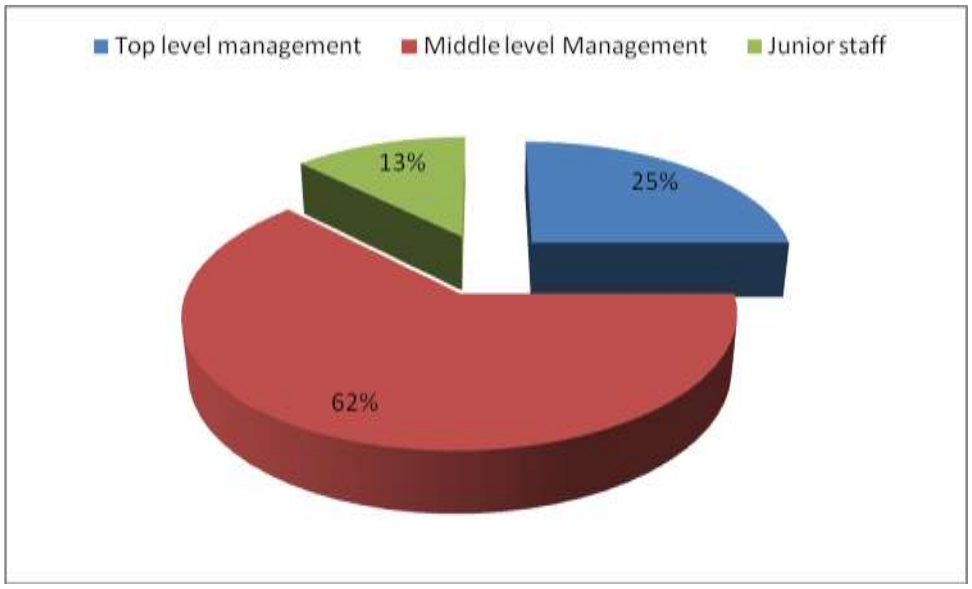

Figure 4.1: Job Position

4.3.2 Department

Target respondents were tasked to identify the specific departments they served. This was to determine if the department has any bearing on the perception of management control systems and financial performance. Figure 4.2 displays the outcome; it indicates the specific division the respondents served. The highest proportion of the respondents that constitutes 34% each worked in the commercial department. Respondents that worked in

the finance department constituted 31%. 22% of the respondents worked in the operations department while the least proportion of the respondents that constituted 13% worked in other departments. The uneven spread in the number of respondents in the various departments is not an indication of bias since financial institutions have a huge proportion of employees working in the commercial services. Additionally, employees in the commercial, finance, and operations departments are more likely to have information on management control systems and financial performance of the respective banks they work for.

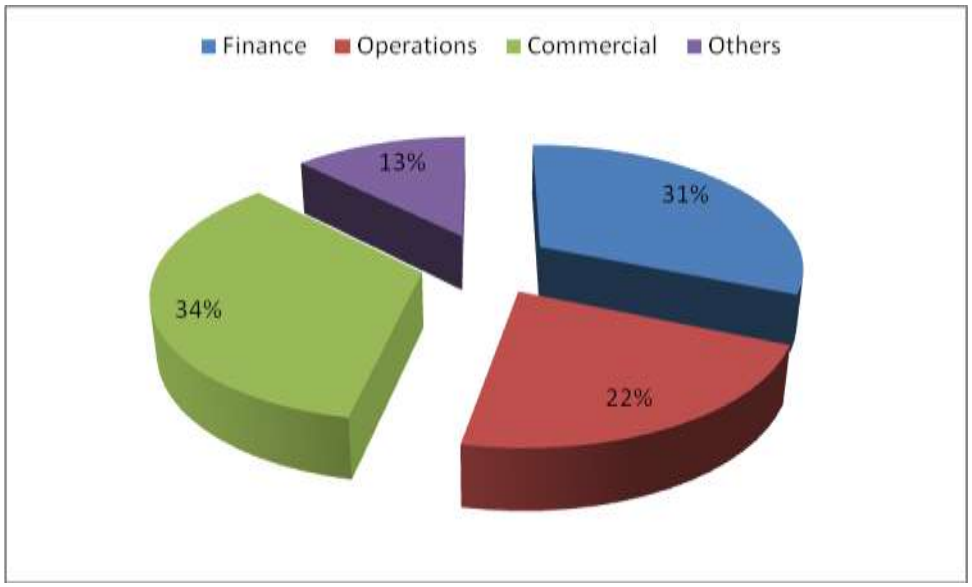

Figure 4.2: Department Worked In

4.3.3 Gender

The target sample was requested to specify their gender. it was done to determine if gender has any bearing on the perception of management control system together with monetary presentation. Displayed in Figure 4.3 are the findings. The study established in Figure 4.3 that 53% of those surveyed were males while 47% percent were females. The even spread

in the number of respondents in accordance to gender is an indication of lack of bias. Gender can have a bearing on the perception of the respondents towards management controls.

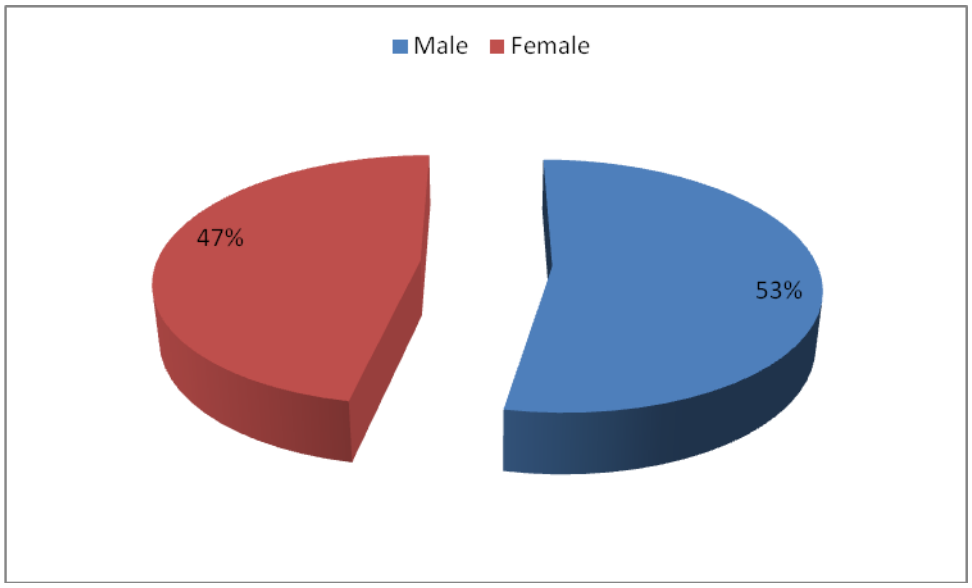

Figure 4.3: Gender

4.3.4 Age

The target respondents were requested to define their present age. This was to determine if age has any connection with the perception of management control systems and financial presentation. The results are shown below.

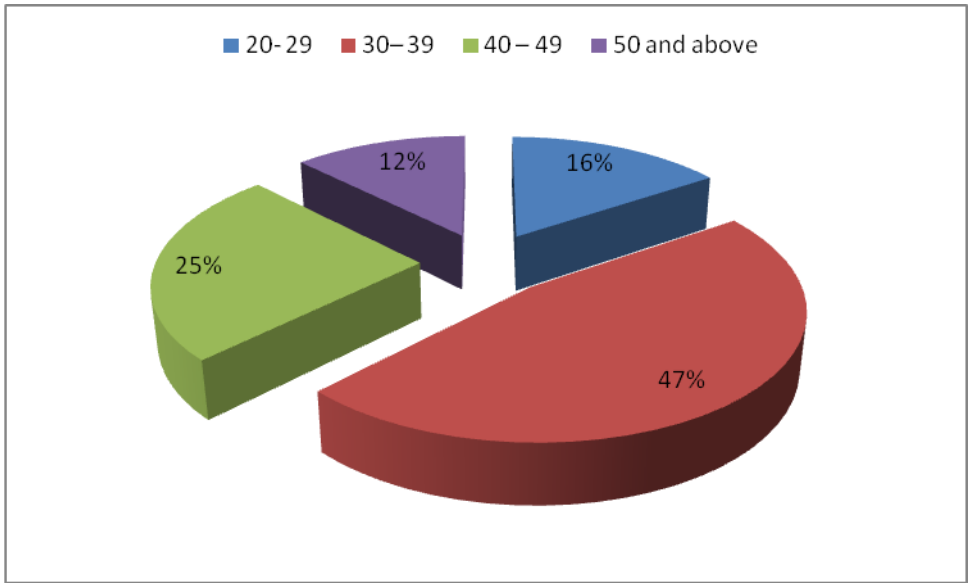

Figure 4.4: Age

Figure 4.4 exhibits that the highest proportion of the respondents that constitutes 47% are of the ages between 30-39. Respondents whose ages range from 40 to 49 constituted 25%, proportion of those aged between 20-29 was 16%, while the least proportion of the respondents that constituted 12% were aged 50 years and more. The even spread in the number of respondents in accordance to age is an indication of lack of bias. Age may have a bearing on the respondents perception towards management control systems. In addition, respondents who are aged more might have greater in-depth knowledge on management control systems.

4.3.5 Education Qualifications

The participants were asked to reveal their education level. This was to determine if education qualifications have any bearing on the perception of MCS and financial performance. Results are shown in the table below:

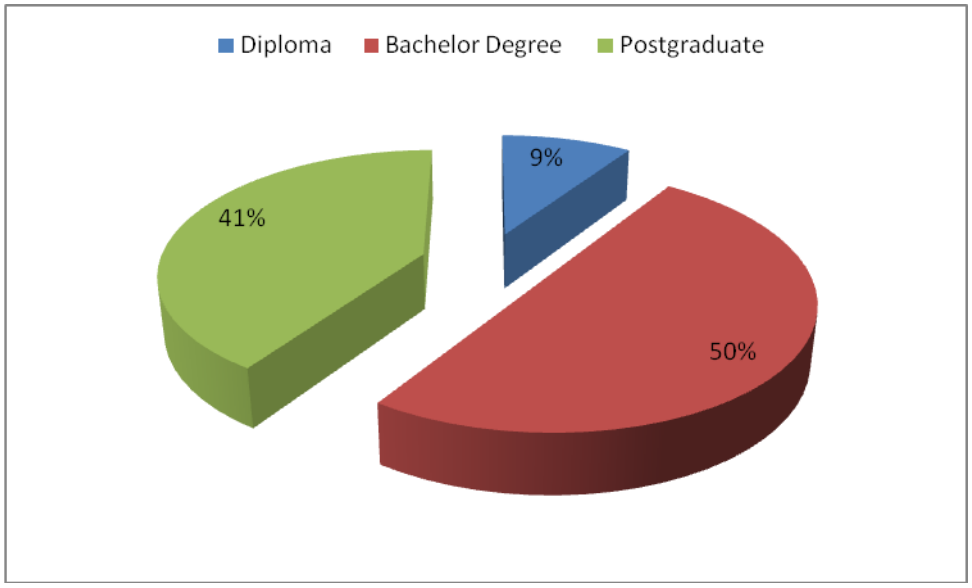

Figure 4.5: Education Qualifications

The above figure demonstrates the various educational qualifications of the study respondents. The highest proportion of the respondents that constitutes 50% had attained a bachelor's degree. Respondents that had postgraduate qualifications constituted 41%, the proportion that attained diploma qualifications was 9%. All the respondents interviewed had surpassed secondary school qualifications. The even spread in the number of respondents in accordance to education qualifications is an indication of lack of bias. Additionally, because majority of the respondents have high education qualifications, they are more likely to have information on management control systems and financial performance of the respective banks they work for.

4.3.6 Work Experience

The target sample were asked to specify their work know-how with the respective banks that they are currently engaged in. This was to determine if duration of working under one employer has any bearing on the perception of management control systems and financial presentation. Results are displayed in Figure 4.6.

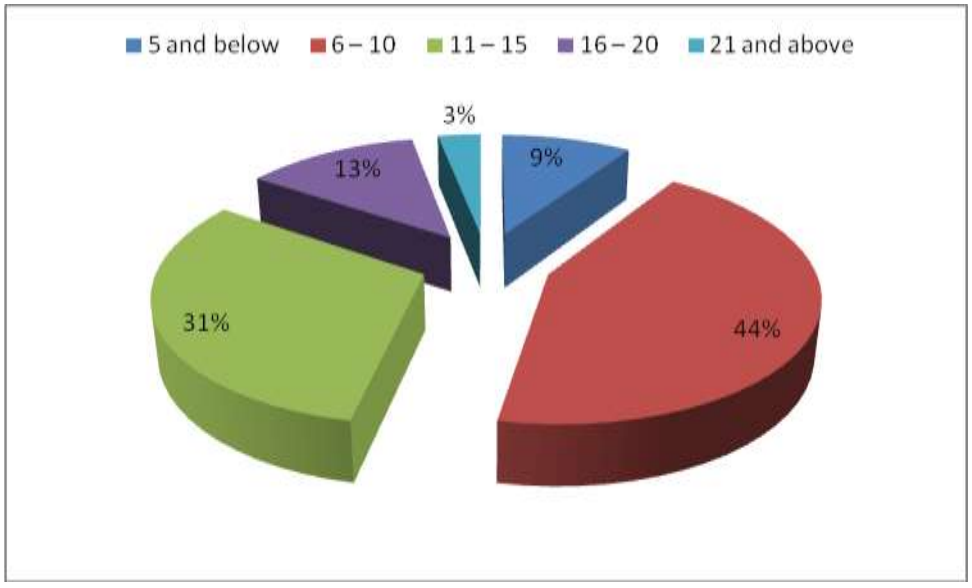

Figure 4.6: Work Experience

This reveals the various years the target sample had worked for respective banks that they are currently engaged in. The highest proportion of the respondents that constitutes 44% had worked for their respective banks for 6 to 10 years. The proportion of respondents who had worked for their respective banks for 11 to 15 was 31% and those who worked for periods ranging from 16 to 20 years and 5 years and below constituted 13% and 9% respectively. The least proportion of the respondents that constituted 3% had worked for their respective banks for 21 years and above. The uneven spread of work experiences maybe an indication of bias although the respondents were randomly distributed.

Employees who have worked longer in their respective banks are more likely to have more information and knowledge on management control systems and financial performance of the respective banks they work for as they are they more likely to have scaled up the corporate ladder and be engaged in decision-making roles.

4.3.7 Audit Committee

The respondents were asked to state whether the respective banks they work in have an audit committee. The responses are summarized in Figure 4.7. The results in the figure below show that 100% of the banks represented by the respondents in the study had an audit committee. This may be attributable to the commercial banks regulator, the CBK, instituting regulations stipulating that the banks should adhere strictly to good corporate governance principles.

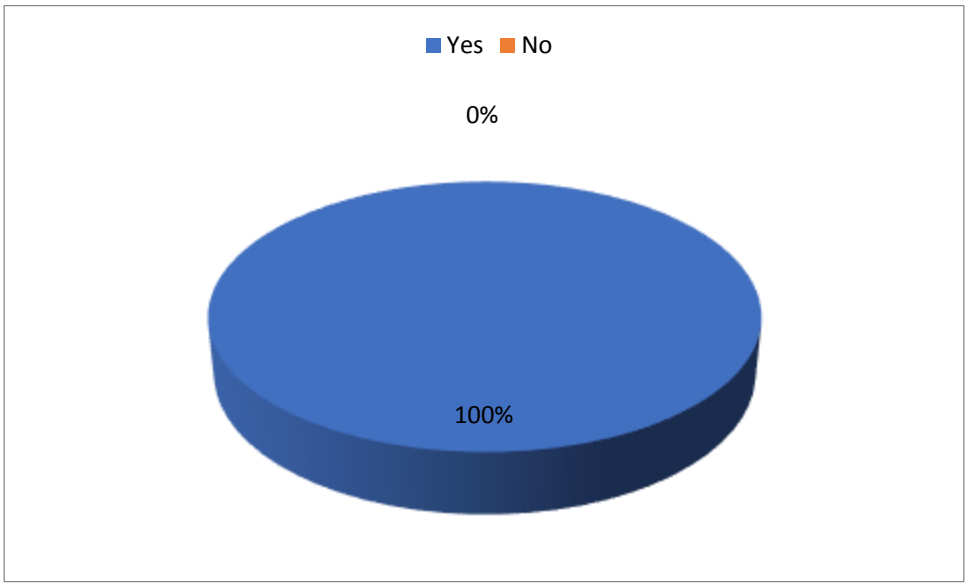

Figure 4.7: Presence of Audit Committee

4.3.8 Risk Committee

The respondents were asked to state whether the respective banks they work in have a risk committee. The responses are summarized in Figure 4.8.

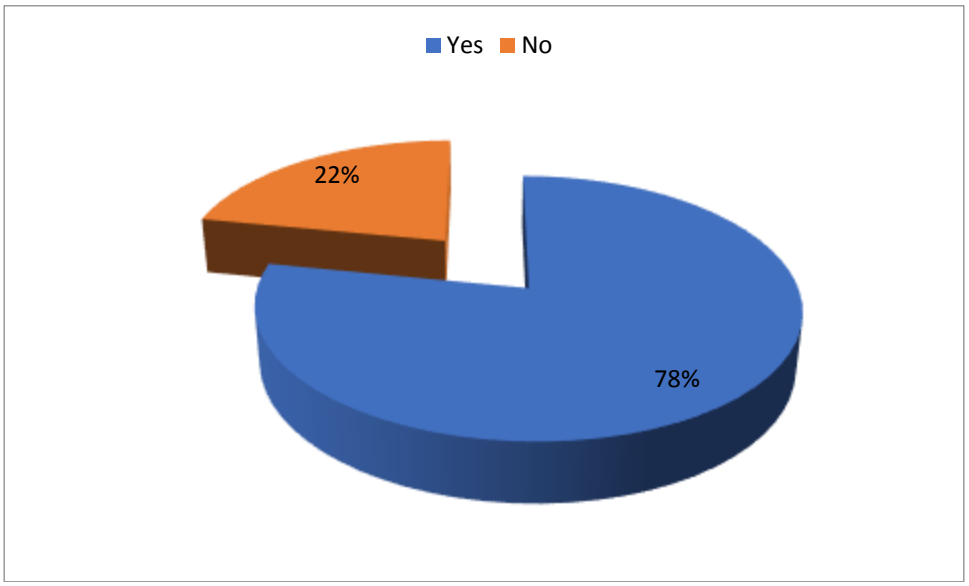

Figure 4.8: Presence of Risk Committee

The results in the figure show that 78% of the banks represented by the respondents in the study had a risk committee while 22% did not have. The high percentage of banks with a risk committee may be attributable to the commercial banks regulator, the CBK, instituting regulations stipulating that banks should try to mitigate their risk and matching it to the firm's capital as stipulated by the Basel I and Basel II frameworks.

4.4 Management Control Systems

Amid the variables used were systems of management control which included; Total Quality together with Time Based Management, Activity Based Costing, BSC Card, Bench Marking, Re-engineering, Shareholder Value Analysis plus Continuous Improvement

Procedure, which were the predictor variables, whereas financial performance was the dependent variable.

4.4.1 Total Quality Management

The target sample was asked to rate the attributes of Total Quality Administration present in the respective banks they are engaged in. An ordinal measurement scale was utilized to measure the variable through a five-point assorted scale to quantity the respondent's view towards Total Quality Management present in banks. Consequently, Total Quality Management present statistics were derived, and the outcomes exhibited in the table below:-

Table 4.2: Total Quality Management

	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
The organization strives to continuously enhance its customer satisfaction and experience	3.0000	1.36783	.081	.414	-1.189	.809
The organization continuously strives to improve its processes and procedures	3.5000	1.21814	.057	.414	-1.589	.809
The organization ensures that its product offerings are held to a certain standard of quality	3.7812	.87009	.456	.414	-1.549	.809
There is employee involvement and top management commitment with regards to quality management in the organization	3.7500	.87988	.530	.414	-1.526	.809
Composite Mean and Standard Deviation	3.5078	1.08399				

It is depicted from the above results in Table 4.2 that 3.7812 is the highest mean of the attribute “The organization ensures that its product offerings are held to a certain standard of quality”, which exhibits a 0.87009 standard deviation. It has a skewness of and 0.081 and a Kurtosis of -1.189 implying normal distribution. The lowest mean is of the attribute “The organization strives to continuously enhance its customer satisfaction and experience”, with a 3.0000 average together with a 1.36783 Standard Deviation (SD). It has a skewness of 0.057 and a Kurtosis of -1.589, implying normal distribution. The attribute “There is employee involvement and top management commitment with regards to quality management in the organization” has a 3.7500 mean plus a 0.87988 as SD. It has a skewness of 0.456 and a Kurtosis of -1.549, implying normal distribution. Finally, the attribute “The organization continuously strives to improve its processes and procedures” has a 3.5000 mean and a 1.21814 standard deviation. It has a skewness of 0.530 and a Kurtosis of -1.526, implying normal distribution. The overall attributes had a 3.5078 mean average and a SD of 1.083985. It gives an implication that commercial banks exhibit to a high extent total quality management as one of the aspects of management control systems.

4.4.2 Time Based Management

The respondents were then requested to rate the attributes of Time Based Management present in the respective banks they are engaged in. An ordinal measurement scale was utilized to measure the variable through a five-point assorted scale to quantity the target sample’s viewpoint towards Time Based Management present in banks. Consequently, Time Based Management statistics were derived, and the outcomes exhibited in Table 4.3.

Table 4.3: Time Based Management

	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
The organization has detailed planning for the development of new products offerings	3.6250	.83280	.827	.414	-1.031	.809
The organization has aggressive timelines for the development of new products	3.5625	.80071	.990	.414	-.662	.809
The organization monitors the progress of the share of new products in total sales	4.2500	.62217	-.214	.414	-.472	.809
The organization believes that a rapid response time to the customer makes a premium price possible	4.4375	.50402	.265	.414	-2.063	.809
Composite Mean and Standard Deviation	3.9688	.68993				

It is displayed from the above findings show that 4.4375 is the highest average of the attribute "The organization believes that a rapid response time to the customer makes a premium price possible", which exhibits a 0.50402 standard deviation. It has a skewness of 0.827 and a Kurtosis of -1.031 implying normal distribution. The lowest mean is of the attribute "The organization has aggressive timelines for the development of new products", with a 3.5625 average together with a deviation of standard of 0.80071. It has a skewness of 0.990 and a Kurtosis of -0.662 implying normal distribution. The attribute "The organization monitors the progress of the share of new products in total sales" has a 4.2500

mean plus a 0.62217 SD. It has a skewness of -0.214 and a Kurtosis of -0.472 implying normal distribution. Finally, the feature "The organization has detailed planning for the development of new products offerings" has a 3.6250 mean and a 0.83280 standard deviation. It has a skewness of 0.265 and a Kurtosis of -2.063 implying normal distribution. The overall attributes had an average of a 3.9688 mean together with a 0.68993 standard deviation. It gives an implication of the banks exhibit to a high extent time based management as one of the aspects of management control systems.

4.4.3 Activity Based Costing

The respondents were then requested to rate the attributes of Activity Based Costing present in respective banks they are engaged in. An ordinal measurement scale was utilized to measure the variable through a five-point assorted measurement of scale of the target sample's perception towards Activity Based Costing present in banks. Consequently, Activity Based Costing statistics were derived and the outcomes exhibited below:-

Table 4.4: Activity Based Costing

	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
The organization identifies the major activities performed	4.5937	.79755	-1.955	.414	3.050	.809
The organization determines the cost of the activities identified	4.2500	.98374	-.759	.414	-1.072	.809
The ABC system is currently implemented in the organization and it is operating as a replacement for the traditional volume-based costing system	3.7500	1.13592	-.176	.414	-1.447	.809
The organization operates Enterprise Resource Planning applications and softwares	4.3125	.82060	-.657	.414	-1.186	.809
Composite Mean and Standard Deviation	4.22655	.93445				

It is highlighted from the above results in Table 4.4 that 4.5937 is the highest mean of the attribute “The organization identifies the major activities performed”, which exhibits a 0.79755 standard deviation. It has a skewness of -1.955 and a Kurtosis of 3.050 implying non-normal distribution. The lowest mean is of the attribute “The ABC system is currently implemented in the organization and it is operating as a replacement for the traditional volume-based costing system”, with 3.7500 average and a SD of 1.13592. It has a skewness of -0.759 and a Kurtosis of -1.072 implying normal distribution.

The trait “The organization operates Enterprise Resource Planning applications and softwares” has a 4.3125 average and a deviation of 0.82060. It has a skewness of -0.176 and a Kurtosis of -1.447 implying normal distribution. Finally, the feature “The organization determines the cost of the activities identified” has an average of 4.2500 together with a 0.98374 deviation. It has a skewness of -0.657 and a Kurtosis of -1.186 implying normal distribution. The overall attributes had a 4.22655 mean plus a deviation of standard of 0.93445. This gives an implication that the banks exhibit to a very high extent Activity Based Costing as one of the aspects of management control systems.

4.4.4 Balance Score Card

The respondents were then requested to rate the attributes of Balance Score Card present in the respective banks they are engaged in. An ordinal measurement scale was utilized to measure the variable through a five-point assorted scale to gauge the sample’s perception towards Balance Score Card present in banks. Consequently, Activity Based Costing statistics were derived and the outcomes exhibited in the table below:-

Table 4.5: Balanced Score Card

	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
The organization utilizes financial performance evaluation measures such as; sales revenue and profitability.	4.3125	.73780	-.582	.414	-.895	.809
The organization utilizes customer perspective objectives such as market share, customer retention and loyalty, customer acquisition, customer satisfaction, and customer profitability as measures of performance evaluation	4.4688	.67127	-1.586	.414	4.241	.809
The organization utilizes inner business process objectives as measures of performance evaluation	4.2813	.77186	-.546	.414	-1.081	.809
The organization utilizes the earnings and growth perspective objectives such as; employees capabilities, information systems capability, and motivation and empowerment of employees as measures of performance evaluation	3.8750	.75134	.213	.414	-1.143	.809
Composite Mean and Standard Deviation	4.2344	.73307				

It is highlighted from the above results in Table 4.5 that 4.4688 is the highest mean of the attribute "The organization utilizes customer perspective objectives such as market share, customer retention and loyalty, customer acquisition, customer satisfaction, and customer profitability as measures of performance evaluation", which exhibits a 0.67127 standard deviation. It has a skewness of -0.582 and a Kurtosis of -1.081 implying normal distribution. The lowest mean is of the attribute "The organization utilizes the earnings and growth perspective objectives such as; employees capabilities, information systems capability, and motivation and empowerment of employees as measures of performance evaluation", with a 3.8750 average mean and a SD of 0.73307. It has a skewness of -1.586 and a Kurtosis of 4.241 implying non-normal distribution.

The attribute "The organization utilizes financial performance evaluation measures such as; sales revenue and profitability" has an average of 4.3125 together with standard deviation of 0.73780. It has a skewness of -0.546 and a Kurtosis of -1.081 implying normal distribution. Finally, the attribute "The organization utilizes inner business process objectives as measures of performance evaluation" has a 4.2813 mean and a 0.98374 standard deviation. It has a skewness of 0.213 and a Kurtosis of -1.143 implying normal distribution. The overall attributes had an average of 4.22655 and a SD of 0.77186. This gives an implication that the banks exhibit to a very high extent Balanced Score Card as one of the aspects of management control systems.

4.4.5 Benchmarking

The respondents were then requested to rate the attributes of bench marking present in the respective banks they are engaged in. An ordinal measurement scale was utilized to measure the variable through a five-point assorted scale to gauge the target sample's perception towards bench marking Card present in banks. Consequently, bench marking statistics were derived and the outcomes exhibited in the table below:-

Table 4.6: Bench Marking

	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
The organization actively encourages employees to learn from the experience and expertise of other colleagues and organizations through comparing practices and processes	3.8125	.78030	.350	.414	-1.244	.809
The organization compares the performance levels of a process/activity with other organizations	4.0625	.84003	-.122	.414	-1.583	.809
The organization follows a structured process for comparing performance levels and learning why betterperformers have higher levels of performance and adapting/implementing those better practices	3.5937	1.10306	-.946	.414	.940	.809
There is management commitment and employee willingness towards benchmarking	3.3750	.87067	.723	.414	-.130	.809
Composite Mean and Standard Deviation	3.7109	.89855				

It is displayed from the results in Table 4.6 that 4.0625 is the highest mean of the attribute "The organization compares the performance levels of a process/activity with other organizations", which exhibits a 0.84003 standard deviation. It has a skewness of 0.350 and a Kurtosis of -1.244 implying normal distribution. The lowest mean is of the attribute "There is management commitment and employee willingness towards benchmarking", with a 3.3750 average and a 0.87067 SD. It has a skewness of -0.122 and a Kurtosis of -1.583 implying normal distribution. The attribute "The organization actively encourages employees to learn from the experience and expertise of other colleagues and organizations through comparing practices and processes" has a 3.8125 average and a Standard Deviation (SD) 0.78030. It has a skewness of -0.946 and a Kurtosis of 0.940 implying normal distribution. Finally, the aspect "The organization follows a structured process for comparing performance levels and learning why better performers have higher levels of performance and adapting/implementing those better practices" has a 3.5937 mean and a 1.10306 standard deviation. It has a skewness of 0.723 and a Kurtosis of -0.130 implying normal distribution. The overall attributes had an average of 3.7109 and a SD of 0.89855. This gives an implication that the banks exhibit to a high extent bench marking as one of the aspects of management control systems.

4.4.6 Re-Engineering

The respondents were then requested to rate the attributes of Re-Engineering present in the respective banks they are engaged in. An ordinal measurement scale was utilized to measure the variable through a five-point assorted scale to measure sample's view point

towards Re-Engineering present in banks. Consequently, Re-Engineering statistics were derived and the outcomes exhibited in the table below:-

Table 4.7: Re-Engineering

	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
The organization periodically re-assess mission and strategic goals	3.3438	1.28539	-.213	.414	-.900	.809
The organization makes significant changes in the design and production of an organization's products/services by focusing on processes rather than traditional functions	3.3125	1.28107	-.142	.414	-.890	.809
Business reengineering efforts have management commitment	3.5000	1.21814	-.400	.414	-.309	.809
A reengineering project carried out in the organization is done by a skilled team	3.3125	1.17604	.102	.414	-1.051	.809
Composite Mean and Standard Deviation	3.3672	1.24016				

It was established from the findings in the above table 4.7 that 3.5000 is the highest average of the attribute "Business reengineering efforts have management commitment", which exhibits a 1.21814 standard deviation. It has a skewness of -0.213 and a Kurtosis of -0.900

implying normal distribution. The lowest mean is of the attributes, "The organization makes significant changes in the design and production of an organization's products/services by focusing on processes rather than traditional functions" and "A reengineering project carried out in the organization is done by a skilled team", has a joint mean of 3.3125 and SD of 1.28107 together with 1.17604 in that order. They have skewness values of -0.142 and -0.400 and Kurtosis values of -0.890 and -0.309 respectively, implying normal distribution. Finally, the attribute "The organization periodically re-assesses mission and strategic goals" has a 3.3438 mean and a 1.28539 standard deviation. It has a skewness of 0.102 and a Kurtosis of -1.051, implying normal distribution. The overall attributes had an average of 3.3672 together with a 1.24016 standard deviation. It therefore gives an implication that the Kenyan banks exhibit to a high extent Re-Engineering as one of the aspects of management control systems.

4.4.7 Shareholder Value Analysis

The respondents were then requested to rate the attributes of Shareholder Value Analysis present in the respective banks they are engaged in. An ordinal measurement scale was utilized to measure the variable through a five-point assorted measure of scale the respondent's viewpoint towards Shareholder Value Analysis present in banks and consequently statistics were derived and the outcomes exhibited in Table 4.8.

Table 4.8: Shareholder Value Analysis

	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
The organization maximizes share-holders wealth	3.2500	1.10716	.532	.414	-1.004	.809
The organization usually retains part of its profit to re-invest in projects that have a higher return than the shareholders' minimum required rate of return	3.3125	.73780	.446	.414	.294	.809
The organization has a target optimal capital structure.	3.5937	.94560	.201	.414	-.929	.809
The organization selects least-cost debt and equity instruments	3.5937	.87471	.003	.414	-.590	.809
The organization reduces business risk factors in manner consistent with strategy	3.8437	.95409	-.858	.414	.056	.809

It was displayed from the findings in Table 4.8 that 3.8437 is the highest mean of the attribute "The organization reduces business risk factors in manner consistent with strategy", which exhibits a 0.95409 standard deviation. It has a skewness of -0.858 and a Kurtosis of -0.056, implying normal distribution. The lowest mean is of the attribute "The organization maximizes share-holders wealth", with an average of 3.2500 and SD of 1.10716. It has a skewness of 0.532 and a Kurtosis of -1.004, implying normal distribution. The elements "The organization has a target optimal capital structure" and "The organization selects least-cost debt and equity instruments" have a joint mean of 3.5937

and SD of 0.94560 together with 0.87471 in that order. They have skewness values of 0.201 and 0.003 and Kurtosis values of -0.929 and -0.590 respectively, implying normal distribution. Finally, the attribute "The organization usually retains part of its profit to re-invest in projects that have a higher return than the shareholders' minimum required rate of return" has a 3.3125 mean and a 0.73780 standard deviation. It has a skewness of 0.446 and a Kurtosis of 0.294, implying normal distribution. The overall attributes had a 3.5187 mean and a 0.92387 Standard Deviation (SD). This gives an implication that the banks exhibit to a high extent Shareholder Value Analysis as one of the aspects of management control systems.

4.4.8 Continuous Improvement Process

The sample of the research study was asked to rate the attributes of Continuous Improvement Process present in the respective banks they are engaged in. An ordinal measurement scale was utilized to measure the variable through a five-point assorted scale to measure the respondent's perception towards Continuous Improvement Process present in banks. Consequently, Continuous Improvement Process statistics were derived and the outcomes exhibited in Table below:-

Table 4.9: Continuous Improvement Process

	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
The organization practices total cost management	3.3750	1.28891	-.862	.414	-.471	.809
The organization conducts value analysis	2.9062	1.71068	-.051	.414	-1.780	.809
The organization conducts internal training and monitoring of employee performance	3.8437	1.54731	-1.004	.414	-.632	.809
Employees search for information, new ideas, and technologies as a part of CI practices	3.9375	1.18967	-.608	.414	-1.212	.809
Composite Mean and Standard Deviation	3.5156	1.43414				

It was highlighted from the findings in Table 4.9 that 3.9375 is the highest mean of the attribute "Employees search for information, new ideas, and technologies as a part of CI practices", which exhibits a 1.18967 standard deviation. It has a skewness of -0.608 and a Kurtosis of -1.212, implying normal distribution. The lowest mean is of the attribute "The organization conducts value analysis", with a 2.9062 mean plus SD of 1.71068. It has a skewness of -1.004 and a Kurtosis of -0.632, implying normal distribution. The attribute "The organization conducts internal training and monitoring of employee performance" has an average of 3.8437 together with a 1.54731 as SD. It has a skewness of -.051 and a Kurtosis of -1.780, implying normal distribution. Finally, the attribute "The organization practices total cost management" has a 3.3750 mean and a 1.28891 standard deviation. It has a skewness of -0.862 and a Kurtosis of -0.471, implying normal distribution. The overall attributes had

an average of 3.5156 and a deviation standard of 1.43414. This gives an implication that the Kenyan banks exhibit to a high extent Continuous Improvement Process as one of the aspects of management control systems.

4.4.9 Return on Assets

A descriptive analysis of the response variable, which was of the ratio measurement scale, was conducted. The descriptive analysis included measures of central tendency that entailed mean together with deviation of standard, the minimum and maximum statistic, and Kurtosis and Skewness.

Table 4.10: ROA Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Median	Mode	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistics	Statistic	Statistic	Std. Error	Statistic	Std. Error
Return on Assets	32	-.01	.07	.0163	.01596	0.012256	0.00	1.204	.414	2.696	.809

Findings in Table 4.10 show highest value for the ROA is 7% and the lowest value is -1%.. The mean was 1.63% and the value of the standard deviation depicts variability in ROA of ±1.596%. Other measures of central tendancy that entailed the average together with the median were 1.2256% and 0% respectively. The data in the series is normally distributed because it has a kurtosis statistic lying within the range of -3 to +3, although the skewness statistic exhibited was out of range of -0.8 to +0.8.

4.5 Diagnostic Tests

Diagnostic tests were conducted as a precursor to conducting linear regression so as to ensure Best Linear Unbiased Estimates. Diagnostic tests done in this study included; normality tests, homoscedacity tests, multicollinearity tests, and autocorrelation tests. Normality test was carried out using Shapiro Wilk test, which was supplemented by the Kolmogorov-Smirnov test. The homoscedacity test was conducted through the Levene Test of Homogeneity. A test on Multicolinearity of data was carried out using VIF and Tolerance tests. The autocorrelation test was done through the Durbin-Watson statistic.

4.5.1 Normality Test

The normality tests for all the variables employed in the study are displayed in the table 4.11 below:

Table 4.11: Normality Test

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	**Df**	**Sig.**	**Statistic**	**df**	**Sig.**
Return on Assets	.126	32	.200*	.916	32	.016
TQM	.260	32	.000	.859	32	.001
TBM	.279	32	.000	.848	32	.000
ABC	.274	32	.000	.809	32	.000
BSC	.276	32	.000	.795	32	.000
BM	.220	32	.000	.877	32	.002
RE	.162	32	.032	.904	32	.008
SHVA	.297	32	.000	.848	32	.000
CIP	.277	32	.000	.799	32	.000

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

In normality testing of the information, the null hypothesis holds that the information has a normal distribution. The level of significance adopted in the study is 5%. The significance value if the Shapiro-Wilk test lies below 0.05 but the one for the Kolmogrov-Sminorv test lies above 0.05. Both tests are complementary, however, when they are in contradiction, the Kolmogrov-Sminorv test is chosen over the Shapiro-Wilk test because the Shapiro-Wilk test fails to work well where large amount of data is involved. Thus, ROA is normally distributed. Since the significance values in both tests for all the independent variables are less than the α (0.05), the null hypothesis is not accepted. Hence, the data series of the independent variables are not normally distributed.

4.5.2 Test for Homoscedasticity

The homoscedasticity tests for all the predictor variables employed in this research are enlisted in Table 4.12. The Levene Test of Homogeneity was applied. However, the levene test could not compute the homogeneity of variance because of the varying measurement scales of the dependent and the independent variables. Thus, to test for homoscedacity, the unstandardized and standardized residuals were saved and transformed by squaring them and regressing the resultant variable with all the independent variables included in the research.

Table 4.12: Test for Homoscedacity

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.000	8	.000	2.575	.036[b]
	Residual	.000	23	.000		
	Total	.000	31			

a. Dependent Variable: sq_res
b. Predictors: (Constant), CIP, SHVA, ABC, BSC, BM, RE_ENG, TBM, TQM

The null hypothesis is that there is homoscedasticity. The level of significance adopted in the study is 5%. Since the significance value obtained in the findings (0.036) is lower than the α (0.05), hence rejected the null hypothesis. Hence, the data series of all the predictor variables are heteroscedastic.

4.5.3 Test for Multicollinearity

Results on Test for Multicolinearity of data carried out using Tolerance and Variance Inflation Factors (VIF) are shown below:-

Table 4.13: Multicollinearity Statistics

Model		Collinearity Statistics	
		Tolerance	**VIF**
1	TQM	.052	19.082
	TBM	.075	13.273
	ABC	.264	3.794
	BSC	.168	5.963
	BM	.284	3.524
	RE_ENG	.062	16.080
	SHVA	.092	10.840
	CIP	.209	4.787

a. Dependent Variable: Return on Assets

The common rule in statistics is that tolerance numbers ought to be greater than 0.1 and VIF values ought to be less than 10 and greater than 1. The findings indicate that that tolerance values exceed 0.1 while VIF values fall below 10 and greater than 1 for all the variables except total quality management, time based management, re-engineering, and Share Holder Value Analysis. There is presence of multicollinearity in the predictor variables enumerated above.

4.5.4 Tests for Autocorrelation

The result on the autocorrelation test carried out using the Durbin-Watson Statistic is presented on the table below:-

Table 4.14: Autocorrelation Test

Model	Durbin-Watson
1	1.640[a]

a. Predictors: (Constant), CIP, SHVA, ABC, BSC, BM, RE_ENG, TBM, TQM
b. Dependent Variable: Return on Assets

The Durbin-Watson statistic ranges from point 0 and point 4. If there exist no correlation between variables, a value of 2 is shown. If the values fall under point 0 up to a point less than 2, this is an indication of an autocorrelation and on the contrast a negative autocorrelation exist if the value falls under point more than 2 up to 4. As a common rule in statistics, value falling under the range 1.5 to 2.5 will be considered relatively normal while values that fall out of the range raise a concern. Field (2009) however, opines that values above 3 and less than 1 are a sure reason for concern. Therefore, the data used in this panel is not serially autocorrelated since it meets this threshold having a Durbin-Watson Statistic of 1.64.

4.6 Inferential Statistics

Inferential statistics are used in determining the direction, relationship, and strength of the association amongst the predictor variables and the response value. This section entails the inferential statistics employed in the study, which entailed correlation and regression analysis. The attributes constituting the various variables were summarized to create a whole variable. This was achieved by estimating the median value of all the attributes.

4.6.1 Correlation Analysis

Correlation analysis establishes whether there exists an association among two variables. The association falls between a perfect positive and a strong negative correlation. The study used Pearson Correlation. This study employed a Confidence Interval of 95% and a two tailed test. Table 4.15 displays that financial performance is significantly correlated at the 5% significance level to; total quality plus time based administration, benchmarking, re-engineering, Share Holder Value Analysis together with Continuous Improvement Process. Consequently, financial performance is not significantly correlated at the 5% significance level to Activity Based Costing and Balanced Score Card.

Table 4.15: Correlation Analysis

		Return Assets	onTQM	TBM	ABC	BSC	BM	RE_ENG	SHVA	CIP
Return on Assets	Pearson Correlation	1								
	Sig. (2-tailed)									
TQM	Pearson Correlation	.706**	1							
	Sig. (2-tailed)	.000								
TBM	Pearson Correlation	.717**	.812**	1						
	Sig. (2-tailed)	.000	.000							
ABC	Pearson Correlation	.219	.194	.195	1					
	Sig. (2-tailed)	.229	.288	.285						
BSC	Pearson Correlation	.254	.064	.291	.574**	1				
	Sig. (2-tailed)	.161	.727	.107	.001					
BM	Pearson Correlation	.548**	.386*	.476**	.193	.644**	1			
	Sig. (2-tailed)	.001	.029	.006	.291	.000				
RE_ENG	Pearson Correlation	.745**	.868**	.790**	.507**	.435*	.522**	1		
	Sig. (2-tailed)	.000	.000	.000	.003	.013	.002			
SHVA	Pearson Correlation	.741**	.661**	.918**	.156	.433*	.512**	.722**		
	Sig. (2-tailed)	.000	.000	.000	.394	.013	.003	.000		
CIP	Pearson Correlation	.622**	.622**	.521**	.497**	.534**	.685**	.685**	.444*	1
	Sig. (2-tailed)	.000	.000	.002	.004	.002	.000	.000	.011	
	N	32	32	32	32	32	32	32	32	32

**. Correlation is significant at the 0.01 level (2-tailed).

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

4.6.2 Multiple Linear Regression Analysis

The cause together with the effect association amongst the predictor variables and response variable was evaluated using a model called multiple linear regression. Because the all the independent variables were not normally distributed as exhibited by the Shapiro-Wilk and Kolmogrov-Sminorv tests and additionally they were heteroscedastic, a logarithmic function was introduced to all the study variables. Also, since the predictor variables total quality management, time based management, re-engineering, and Share Holder Value Analysis exhibited multicollinearity, they were dropped from the study analysis. In case of multicollinearity, the explanatory variables exhibiting multicollinearity may be dropped to produce a model with significant coefficients (Maddala & Lahiri, 2009). The regression analysis adopted a 5% significance level. The significance critical value exhibited from the Analysis of Variance and Model Coefficients were compared with the values obtained in the analysis. Additionally, the F-Value and T Statistic obtained in the study were compared against the critical values. When the various aspects of management control systems was regressed against financial performance, the findings are displayed form Table 4.16 through to Table 4.18.

Table 4.16: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.670[a]	.448	.367	.01270

a. Predictors: (Constant), LOG10CIP, LOG10abc, LOG10BM, LOG10BSC

The Co-efficient of Determination (R^2) indicates deviations in reply variable as a consequence of variations in variables which are predictor. From Table 4.16, the R^2 value is 0.448, a discovery that the management control system aspects included in the study cause 44.8% of the deviations in financial performance. Other factors not incorporated in the model warrant for 55.2% of the variations in fiscal presentation.

Table 4.17: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.004	4	.001	5.488	.002[b]
	Residual	.004	27	.000		
	Total	.008	31			

a. Dependent Variable: Return on Assets

b. Predictors: (Constant), LOG10CIP, LOG10abc, LOG10BM, LOG10BSC

The null hypothesis is that management control systems significantly influence financial performance. The significance value obtained in the study (0.002) is a lesser amount of than critical figure of 0.05. Consequently, the null hypothesis is rejected. Additionally, the critical F-Value is 2.89510731, and the F-Value obtained in this research (5.488) is superior than the critical value. Hence, the null hypothesis is also rejected. Thus, a management control systems significantly affects financial performance. Therefore, a management control system can significantly predict financial performance.

Table 4.18: Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-.010	.023		-.442	.662	-.058	.037
	LOG10abc	.017	.041	.082	.410	.685	-.068	.102
	LOG10BSC	-.069	.058	-.305	-1.185	.246	-.189	.050
	LOG10BM	.082	.041	.495	2.000	.056	-.002	.165
	LOG10CIP	.026	.013	.401	2.086	.047	.000	.053

a. Dependent Variable: Return on Assets

The null hypothesis was that there was no substantial association between each management control system aspects and financial performance. All management control aspects apart from Continuous Improvement Process have significance values that are greater than the critical significance 0.05 value. Additionally, the T critical figure for a two-tailed test is ±2.068658. The T values of all the response variables utilized in the study fall within the range of ±2.068658 except the t value of Continuous Improvement Process (2.086). Thus, the null hypothesis that Continuous Improvement Process does not significantly impact on financial performance is rejected. Therefore, Continuous Improvement Process has a significant positive association with fiscal presentation. The following model was thus developed;

Y = -0.10 + 0.026X

This implies that when there is no Continuous Improvement Process, the financial performance -0.1**.** Subsequently, when one improves Continuous Improvement Process by one unit, there is an increase in fiscal presentation by 0.026 units.

4.7 Interpretation and Discussion of Findings

This research endeavoured to discover the association amongst management control systems and overall presentation in the banking sector. This research sought to unveil the total quality together with time based m anagement, Activity Based Costing, Balance Score Card, Bench Marking, Re-engineering, Stockholder Value Analysis together with Continuous Improvement Process on financial performance. However, the predictor variables; total quality management, time based management, re-engineering, and Share Holder Value Analysis exhibited multicollinearity and were consequently dropped from the study analysis. Additionally, because all the study independent variables were not normally distributed as exhibited by the Shapiro-Wilk and Kolmogrov-Sminorv tests and additionally they were heteroscedastic, a logarithmic function was introduced to all the study variables.

The study findings established that Activity Based Costing and Balance Score Card were exhibited to a very high extent in the Kenyan commercial banks. Additionally, the research findings revealed that total quality and time based management; bench marking, Re-engineering, stockholder value Analysis together with continuous improvement process are exhibited to a high extent in the Kenyan banks. This study finding is congruent to the study finding by Eze (1992) who carried out a study on internal systems control in two Nigerian banks, which established banks usually have adequate internal control features. The study findings are also congruent to findings by the study by Hayali et al. (2012) which was a study on internal control methods in Turkey banking sector that established that internal control methods were significant in banking industry.

The study established that financial performance is significantly correlated at the 5% significance level to; total quality management, time based management, bench marking, re-engineering, Share Holder Value Analysis together with Continuous Improvement Process. Consequently, financial performance is not significantly correlated at the 5% significance level to Activity Based Costing and Balanced Score Card. Additionally, the study findings revealed that a management control system significantly affects financial performance and it can significantly predict financial performance. However, CIP is the only management control aspect that significantly impacts on fiscal presentation.

The results of this study are in tandem with findings of the study by Mauraleetharan (2011) which studied on interior control and the influence on financial performance on the public sector and established that internal controls had noteworthy influence on level of financial presentation in organizations. The research findings are in addition parallel to the study results of a research done by Muio (2012) which investigated the effect of inner control methods on fiscal presentation of Kenyan private hospital and established that internal control methods significantly influences fiscal presentation.

CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

The section shows the study findings in brief, offered deductions together with recommendations on the influence of management control systems and fiscal presentation of Kenyan commercial banks. Additionally, the research limitations and further research suggestions are also outlined.

5.2 Summary

This research endeavoured to institute the association amongst management systems of control together with overall performance in the Kenyan banking sector. This research sought to find out Total Quality Management, Time Based Management, Activity Based Costing, Balance Score Card, Bench Marking, Re-engineering, Shareholder Value Analysis, together with Continuous Improvement Process on financial performance. Thus, the data investigation, exhibition, interpretation together with conversations of the results of the research were as per the aforementioned specific objectives. The study employed the use of descriptive, regression, and correlation analysis. The descriptive statistics indicate that established that Activity Based Costing and Balance Score Card were exhibited to a very high extent in the Kenyan banks. Additionally, the research found out that Total Quality and Time Based Management, Bench Marking, Re-engineering, Shareholder Value Analysis together with continuous Improvement Process are exhibited to a high extent in the Kenyan commercial banks.

The correlation analysis employed in the study established that financial performance is significantly correlated at the 5% significance level to; total quality management, time based management, bench marking, re-engineering, Share Holder Value Analysis together with CI process and consequently financial performance is not significantly correlated at the 5% significance level to Activity Based Costing and Balanced Score Card. The multiple linear regression analysis revealed that a management control system significantly affects financial performance and it can significantly predict financial performance but however, Continuous Improvement Process is the only management control aspect that significantly impacts on fiscal presentation.

5.3 Conclusion

In this section, the conclusion of the research is given; the conclusions were affiliated to the study objectives. The broad study objective was to find out the association amongst management control systems and overall performance in the banking industry. The precise aims of the research were to; establish total quality and time based management, activity based costing, Re-engineering, balance score card, Bench Marking, , Shareholder Value Analysis together with continuous Improvement Process on financial performance.

The study concluded that a management control system significantly affects financial performance. The study conclusion is in tandem to the conclusion by Sangmi (2010) who enumerated that management control schemes act as a planning tool plus help to provide data that help to promote the allocation of resources and other decision making activities and when used in organizations the managing mechanism systems help companies to

achieve their financial objectives and goals through maximizing the utilization of resources and avoidance of wastages. Additionally, the study conclusion is congruent to a conclusion by Hightower (2013) that organizations such as Commercial Banks can use the management control system models to promote, evaluate and boosts their financial performance. Finally, the study conclusion is similar to the conclusion by Wielstra (2014) that management control systems have temporary influence on the operation of a business and is the pillar of an institute and guides the affluence or the downfall of an institution. The study further concluded that Continuous Improvement Process is the only management control aspect that significantly impacts on financial performance

5.4 Recommendations

The study findings will aid in further researches to be carried on the field of administration control systems together with its influence on banks' financial performance. Later scholars keen in research on control systems of management together with its influence on fiscal presentation will use the study findings as referral.

Policy recommendations are made to the treasury and CBK since it has been established that management control systems have a noteworthy influence on momentary presentation of banks that are commercial in nature, the policy makers should direct commercial banks, and by extension other financial institutions, to implement management control systems. The recommendation will guide government regulators in making policies and practices to boost the financial system.

The finding of the study that management control systems have a noteworthy effect on financial presentation of banks will help banks and by extension, other financial institutions, and consultants to employ management control systems to augment the banks financial performance. The additionally finding that Continuous Improvement Process is the only management control aspect that significantly impacts on financial performance calls for the recommendation that the bank practitioners should mainly focus on Continuous Improvement Process in order to increase fiscal presentation.

5.5 Recommendations for Further Study

Exploring the effect of administration control systems on banks' financial presentation is of great importance the policy makers in the treasury and CBK, practitioners in the banking sector, and consultants. However, the current study was carried out in the setting of the financial industry and the same study could be carried out across other financial institutions as well as other sectors to establish if the study findings will hold. The study was only carried out in the Kenyan context, further studies can be conducted out of Kenyan context, they can be conducted in the African or global jurisdictions to establish if the research findings would hold.

The study only considered the management control systems entailing; total quality and time based management, activity based costing, Balance Score Card, Shareholder Value Analysis , Bench Marking, Re-engineering together with Continuous Improvement Process. A study can be conducted to ascertain it there are other management control system aspects. Further studies can be conducted to ascertain if there are factors that

moderating the association amongst management control systems and fiscal performance. Several attributes were determined in the study as constituting the management control systems and financial performance, further studies can be conducted to ascertain if other attributes can represent them.

This study only used a mixture of primary data and secondary data, a subsequent research should be undertaken applying solely primary or secondary data. This can either complement or criticize the finding of this study. Multiple linear regression and correlation analysis were applied in the study; Other analysis technique for example cluster analysis, discriminant analysis, granger causality and factors should be incorporated in the subsequent research.

5.6 Limitations of the Study

This study was conducted only in the Kenyan commercial banks due to time and cost constraints which does not give clear indication of findings if other financial institutions were also incorporated in the study. More uncertainties would occur if similar studies were replicated in different companies, sectors, and countries. Although the research mainly engaged primary sources of data by utilizing questionnaires, major challenges like non-responsiveness of respondents or misunderstanding of the questionnaire were encountered. Raw data could also not be utilized hence, it needed to be coded with the assistance of a SPSS to achieve a synchronized information that can be compiled and conclusions drawn. The process also consumed some considerable amount of time in compiling and recurrent delays of synchronizing the data.

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APPENDICES

Appendix I: Letter of Introduction

Dear Respondent

My name is Paul Ikabwe Marwa, a graduate student at the University of Nairobi. As part of my dissertation I am examining:

RELATIONSHIP BETWEEN MANAGEMENT CONTROL SYSTEMS AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

This questionnaire will require about five minutes of your time to fill out. This activity is for the purposes of my academic research. The information given in this questionnaire will be used for educational purpose alone. No reference will be made to your name and strict ethical principles will be adhered to guarantee confidentiality. Kindly, do not specify your name in this questionnaire.

CONSENT SECTION

- I agree to participate in this study- YES
- I do not agree to participate in this study

Appendix II: Study Questionnaire

The questionnaire is structured to gather information on the association amongst management control systems and fiscal performance of Kenyan commercial banks. Kindly read the questions carefully and tick against the asked question as per your position or understanding and relevance to the study. Utmost confidentiality is assured as the data collected from this exercise will purely be made use for educational reasons.

PART A: BACKGROUND INFORMATION

3. Gender: Male ( ) Female ( )

4. Age: 20- 29 ( ) 30– 39 ( ) 40 – 49 ( ) 50 and above ( )

5. Highest education level: Secondary ( ) Diploma ( ) Bachelor Degree ( )
Postgraduate ( )

6. Working experience with the current employer: -
5 and below ( ) 6 – 10 ( ) 11 – 15 (*) 16 – 20 ( ) 21 and above ( )

PART B: IT INTEGRATION

TOTAL QUALITY MANAGEMENT

12. Kindly indicate the extent to which you agree with each of the statements by using the following scale:

Use 1 – Very Low Extent, 2 - Low Extent, 3 – Moderate Extent 4 – High Extent, 5- Very High Extent

Statement	**1**	**2**	**3**	**4**	**5**
The organization strives to continuously enhance its customer satisfaction and experience					
The organization continuously strives to improve its processes and procedures					
The organization ensures that its product offerings are held to a certain standard of quality					
There is employee involvement and top management commitment with regards to quality management in the organization					

TIME BASED MANAGEMENT

13. Kindly tick the extent to which you as a respondant agree with each of the statements by using the following scale:

Use 1 – Very Low Extent, 2 - Low Extent, 3 – Moderate Extent 4 – High Extent, 5- Very High Extent

Statement	**1**	**2**	**3**	**4**	**5**
The organization has thorough planning for the growth of new produce offerings					
The organization has aggressive timelines for the growth of new products					
The organization monitors the improvement of the share of novel products in total production					
The organization believes that a quick reply time to the client makes a premium fee possible					

ACTIVITY BASED COSTING

14. Kindly tick the extent to which you as a respondent agree with each of the statements by using the following scale:

Use 1 – Very Low Extent, 2 - Low Extent, 3 – Moderate Extent 4 – High Extent, 5- Very High Extent

Statement	**1**	**2**	**3**	**4**	**5**
The organization identifies the major activities performed					
The organization determines the cost of the activities identified					
The ABC system is presently applied in the organization and it is functioning as a extra for the out-of-date volume-based costing systems					
The organization operates Enterprise Resource Planning applications and softwares					

BALANCE SCORE CARD

15. Kindly tick the extent to which you agree with each of the statements by using the following scale:

Use 1 – Very Low Extent, 2 - Low Extent, 3 – Moderate Extent 4 – High Extent, 5- Very High Extent

Statement	**1**	**2**	**3**	**4**	**5**
The organization utilizes financial performance evaluation measures such as; sales revenue and profitability.					
The organization utilizes customer perspective objectives such as market share, client retaining plus loyalty, client acquisition, customer gratification, and client profitability as actions of performance evaluation					
The organization utilizes inner business process objectives as measures of performance evaluation					

The organization utilizes the earnings and growth perspective objectives such as; employees capabilities, information systems capability, and motivation and empowerment of employees as measures of performance evaluation					

BENCH MARKING

16. Kindly tick the extent to which you agree with each of the statements by using the following scale:

Use 1 – Very Low Extent, 2 - Low Extent, 3 – Moderate Extent 4 – High Extent, 5- Very High Extent

Statement	**1**	**2**	**3**	**4**	**5**
The organization actively encourages workers to learn from the know-how together with expertise of fellow employees and company's via relating practices and processes					
The firm equates the performance levels of a process/activity with other firms					
The company follows a organized process for relating presentation levels plus learning why better performers have greater levels of presentation plus acclimating/implementing those better doing					
There is management commitment and employee willingness towards benchmarking					

RE-ENGINEERING

17. Kindly show by indicating the extent to which you agree with each of the statements by using the following scale:

Use 1 – Very Low Extent, 2 - Low Extent, 3 – Moderate Extent 4 – High Extent, 5- Very High Extent

Statement	1	2	3	4	5
The organization periodically re-assess mission and strategic goals					
The organization makes noteworthy changes in the design plus production of a company's goods/services by concentrating on procedures rather than out-of-date purposes					
Business reengineering efforts have management commitment					
A reengineering project carried out in the organization is done by a skilled team					

SHAREHOLDER VALUE ANALYSIS

18. Kindly tick the degree to which you agree with each of the listed comments by using the following scale:

Use 1 – Very Low Extent, 2 - Low Extent, 3 – Moderate Extent 4 – High Extent 5- Very High Extent

Statement	1	2	3	4	5
The organization maximizes share-holders wealth					*
The organization usually retains part of its profit to re-invest in projects that have a higher return than the shareholders' minimum required rate of return				*	
The organization has a target optimum capital arrangement.					*
The organization selects least-cost debt together with equity instruments					*
The organization reduces trade risk issues in a way that is reliable with policy					*

CONTINUOUS IMPROVEMENT PROCESS

19. Kindly tick the extent to which you concur with each of the statements by using the following scale:

Use 1 – Very Low Extent, 2 - Low Extent, 3 – Moderate Extent 4 – High Extent, 5- Very High Extent

Statement	**1**	**2**	**3**	**4**	**5**
Organization practices total cost management					
The organization conducts value analysis					
The organization conducts internal training and monitoring of employee performance					
Workers seek for information, new ideas together with technologies as a part of Continuous Improvement processes					

Thank you for your co-operation

Appendix III: List of Commercial Banks in Kenya as at 30th June 2020

1. Absa Bank Limited
2. African Banking Corp. Ltd
3. Bank of Africa Kenya Ltd
4. Bank of India
5. Bank of Baroda (K) Ltd
6. Stanbic Bank Ltd
7. Chase Bank (K) Ltd (In Receivership)
8. Citibank N.A.
9. Consolidated Bank of Kenya Ltd
10. Co-operative Bank of Kenya Ltd
11. Credit Bank Ltd
12. Development Bank (K) Ltd
13. Diamond Trust Bank (K) Ltd
14. Dubai Bank Ltd (In Receivership)
15. Dubai Islamic Bank (Kenya) Ltd
16. Ecobank Limited
17. Spire Bank
18. Equity Bank Ltd
19. Family Bank Ltd
20. Guaranty Trust Bank
21. First Community Bank Ltd
22. Guardian Bank Ltd
22. Gulf African Bank Ltd
24. Habib Bank A.G. Zurich
25. HFC Ltd
26. Imperial Bank Ltd (In Receivership)
27. I & M Bank Ltd
28. Jamii Bora Bank Ltd
29. KCB Bank Kenya Ltd
30. Mayfair Bank Ltd

31. Middle East Bank (K) Ltd
32. M Oriental Bank Ltd
33. National Bank of Kenya Ltd
34. NCBA Bank Kenya
35. Paramount Universal Bank Ltd
36. Prime Bank Ltd
37. Sidian Bank
38. Standard Chartered Bank (K) Ltd
39. SBM Bank (Kenya) Ltd
40. Transnational Bank Ltd
41. UBA Kenya Bank Ltd
42. Victoria Commercial bank Ltd

Source: Kenya Bankers Association Website (2020)

Appendix IV: Research Data

	Bank	Year	Net income	Total assets	ROA
1	KCB Bank	2019	25165168	898572213	0.028006
2	Diamond Trust Bank	2019	7269592	386230186	0.018822
3	Ecobank	2019	159495	75377851	0.002116
4	ABC Bank	2019	68958	29395753	0.002346
5	Citibank	2019	2932682	96570193	0.030368
6	Commercial Bank of Africa	2019	5542081	245106892	0.022611
7	Bank of India	2019	2341091	62543244	0.037432
8	Co-operative bank of Kenya	2019	14311247	457008946	0.031315
9	Standard Chartered Bank	2019	8236773	302139056	0.027262
10	National Bank of Kenya	2019	-802023	112028747	-0.00716
11	Credit bank	2019	212019	21660616	0.009788
12	Bank of Baroda	2019	4092768	143311335	0.028559
13	Development Bank of Kenya	2019	1079115	15358069	0.070264
14	Prime Bank	2019	2619348	108785527	0.024078
15	Housing finance Company ltd	2019	-110108	56454918	-0.00195
16	Middle East Bank (K) Ltd	2019	3614	8466284	0.000427
17	Equity Bank	2019	24366293	673682541	0.036169
18	Family bank	2019	949836	78857125	0.012045
19	First Community Bank	2019	190927	18762844	0.010176
20	Guaranty Trust Bank	2019	572158	29082395	0.019674
21	Guardian Bank	2019	183658	16386450	0.011208
22	Gulf African Bank	2019	167000	35122982	0.004755
23	Habib Bank Ltd	2019	239949	24823459	0.009666
24	Housing finance Company ltd	2019	-110108	56454918	-0.00195
25	I&M Bank	2019	8942877	274027749	0.032635
26	M-Oriental bank ltd	2019	-21948	12393776	-0.00177
27	UBA Kenya Bank Ltd	2019	67588	16088319	0.004201
28	Paramount Bank Ltd	2019	91601	10443296	0.008771
29	SBM Bank	2019	904102	72519356	0.012467
30	Stanbic Bank Kenya Ltd	2019	6176072	292705136	0.0211
31	Victoria Commercial Bank	2019	527145	36072410	0.014614
32	Sidian Bank	2019	107738	26451638	0.004073