QUALITY MANAGEMENT AND OPERATIONAL RISK MANAGEMENT IN COMMERCIAL BANKS IN KENYA

MURIUKI BONIFACE NYAGA
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DECLARATION

I declare that this research project is my original work and has not been presented for academic award in any other university.

Signature …… Date……..
Muriuki Boniface Nyaga

This research project was submitted for examination with my approval as the university supervisor.

Signature …… Date……..
Prof. Gituro Wainaina
Department of Management Science

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DEDICATION

I dedicate this research project with many thanks to God almighty for giving me breath of life, health and strength to carry on with the study up to the end. Thanks to my wife, Angela, and my kinds Bridgid, Michael and Bianca many thanks for patience, perseverance and encouraging me to move on till completion of the study.

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ABBREVIATIONS

BCBS	Basel Committee on Banking Supervision
BFID	Banking Fraud Investigation Department
CBK	Central Bank of Kenya
CCG	Center for Corporate Governance
ISO	International Organization for Standardization
KDIC	Kenya Depositors Insurance Corporation
KRAs	Key Risk Assessments
KRIs	Key Risk Indicators
ORMF	Operational Risk Management Framework
RCSA	Risk and Control Self-Assessment
TQM	Total Quality Management

ABSTRACT

The purpose of the study was to find out relationship between quality management principles and operational risk management in commercial banks in Kenya. Operational risk is one of the many risks faced by banks and if not well managed can cause huge losses in banking industry. Quality management principles are considered to be the overarching means to achieve success of an organization performance by driving effectiveness and efficiency. The study targeted 43 commercial banks in Kenya. However, at the time of undertaking the study, two banks were under receivership thus ending up with a population of 41 commercial banks. Primary data was collected using a questionnaire and analyzed using descriptive statistics and linear regression analysis. The study established that banks had not implemented quality management principles in equal measure. Leadership commitment principle implementation was strong across banks. However, implementation of quality management principles such as employee involvement, customer focus and continuous improvement was weak across all banks. Further analysis revealed that there were a number of operational risks management limitations across banks, which span from lack of encouraging employees to report operational failures, failure to pick learning's from operational risk failures and not keen on making improvement where failures occurred. Thorough analysis of operational failures, learning, sharing lessons as well as seeking input from employees on how to make improvements including senior leadership commitment to quality management were considered best practices in operational risk management. Results affirmed that there was significant relationship between quality management principles and operational risk management implying that implementation of quality management principles leads to effectiveness and efficiency in operations management. Based on this, the study recommends that commercial banks should implement quality management principles in order to achieve high performance by reducing operational risks and increase both efficiency and effectiveness.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Commercial banks contribute to growth of economy across the world by mobilizing financial resources through savings and financing various activities both in manufacturing and service sectors (Ongore, 2013). Classified under financial institutions, commercial banks also undertake intermediary role that involves capital allocation and investments for income generation (Otuori, 2013). Ongore and Kusa (2013) concluded that banking sector is lifeline of trade and economic development through funds injection into economy. Therefore, the sector's health is significant to wellbeing of country's economic performance (Sufians & Chong, 2008). Katrodia (2012) observed that banking sector and economy are interdependent in fostering growth and development.

According to Central Bank of Kenya (CBK) annual report (2016), banking sector comprised of 43 commercial banks among which two banks, Imperial Bank of Kenya and Chase Bank of Kenya were under receivership. Banks are regulated by CBK through banking acts and prudential guidelines in order to protect the interest of depositors and public at large. To protect their interests, banks have come together to form an association called Kenya Bankers Association (KBA), a body that takes care of their interests. Over the last couple of years, a number of commercial banks have collapsed or placed under statutory management by CBK as a result of operational failures. The cause was attributed to fraudulent activities, mismanagement, governance malpractices and ineffective operational risk management. The impacted banks were Dubai Islamic Bank of Kenya, Imperial Bank of Kenya and Chase Bank of Kenya.

The resultant financial impact was detrimental to customers and other stakeholders due to loss of funds or restricted access of funds by Kenya Deposit Insurance Corporation (KDIC). Bank's failure is disastrous to an economy due to systemic nature of spreading to other institutions and parties. According to The East African (2013), Banks Fraud Investigation Department (BFID) reported that Kenya financial institutions had lost KShs 1.6 billion as a result of operational failures linked to fraudulent activities. Operational risk is loss of value caused by failure or inadequate process, systems, people and events outside organization (Basel II, 2004). However, processes, people and systems are critical inputs in creating value in operations management and it is important that they are of quality and supported by right management practices. To remain competitive, banks must adopt quality management practices that are critical in achieving customer needs and overall organization performance by minimizing wastes, defects, financial and non-financial losses. Quality management focuses on quality products and services by deploying quality management principles combined with other resources to achieve quality performance (Flynn, Schroeder & Sakakibara, 994). The main objective of quality management is to achieve effectiveness and efficiency in order to deliver products and services that satisfy customer's needs, increase financial performance and competitiveness (Zu, 2009). By adopting quality management principles, bank's management is guided by a set of behaviors that focus on quality and effective management of operational risks or failures. Traditionally, management was blamed for bank failures yet operations do actually contribute and therefore, this research is breaking new ground by focusing on operational failures.

1.1.1 Quality Management Principles

Quality is a competitive strategy undertaken to improve business performance (Gurnani, 1999). Based on this realization, organizations are pursuing quality management to deliver quality products and services in order to deliver business goals (Gunasekaran & Gurnan, 1999). Overtime, financial institutions have increased and competition for customers has become extremely overwhelming in banking sector. Availability of information through advanced technology has enabled customers to make informed decisions on available products and services in the market. This in mind, it is critical for commercial banks to adopt quality management philosophy that is geared towards improvement of organization performance and competitiveness (Zu, 2009). Organizations, whether in manufacturing or service, use operations management to create value by harnessing resources and deployment of management practices that support delivery of quality performance (Flynn et al., 1994).

Quality management gurus explored quality concept and came up with various definitions. Deming (1986) defined quality of a product or service as features that meet customer's expectation and satisfaction. Juran (1988) pointed out that quality in a product is characteristics that satisfy customer needs and conform to measurable features. According to Crosby (1979), quality is more of product or service conformance to specific requirements. International Organization for Standardization (ISO) 8402-1986 standard linked quality to product and service features that satisfy or meet customer needs and requirements. Powell (1995) highlighted quality management principles as

leadership commitment to quality, customer focus and relationship, employee empowerment, continuous improvement and process management among others. Flynn et al. (1995) attributed quality management principles to senior management support to quality agenda, workforce management, customer relationship and process management. Knoontz and Weihrich (1990) emphasized that it was critical for an organization to implement quality management principles in order to create an environment in which organization goals are effectively and efficiently achieved.

1.1.2 Operational Risk Management

According to Basel Committee on Banking Supervision (2006), operational risk is defined as risk of direct or indirect loss from inadequate or failed internal processes, people, and systems or from external events. Operational risk failures are uncertain, high profile and keep on occurring. More so, with advancement in technology, globalization and competition, landscape of banking operations has become complex thus raising profile of operational risks. According to Cruz (2002), operational risks result from system failures, products anomalies, governance malpractices, fraud and natural disasters. Therefore, it is in interest of banks to ensure risks are managed by establishing risk management techniques coupled with supportive management culture. Failure or lack of quality inputs and underlying quality management principles result in operational losses some huge enough to cause a bank to collapse. More often, employees have been involved in causing operational risk losses through funds misappropriation and fraudulent activities (Canadian Institute of Actuaries, 2011).

Operational risk is largely internal and results from numerous operations undertaken by an organization during value creation process. The risk, when it occurs can wipe an organization out of existence or cripple operations depending on the magnitude and financial exposure (Jorion, 2005). Operational risk failure in banks dates back in early 90s with collapse of Baring Bank in 1995 following a trader's fraudulent actions. In the same period, Daiwa Bank collapsed due to bad debts arising from weak regulatory controls. All these operational failures were outside other risks like market, credit and funding risks. Kenyan banking sector was not spared either with a number of banks incurring losses attributed to operational failures. To counter this, banks have deployed Operational Risk Management Framework (ORMF) that defines risk management techniques used to minimize operational risks or failures such as Risk and Control Self-Assessment (RCSA), loss data reporting, Key Risk Assessments (KRAs), Key Risk Indicators (KRIs) and reporting (Basel Committee on Banking Supervision, 1998). Additionally, other government agencies such as CBK have come in with risk management guidelines to regulate banks risk management process. However, despite all these techniques, banks have continued to experience operational risk failures resulting to huge financial losses, insolvency and poor customer service. This is an indication that more is required in adopting quality management principles, which foster mind shift to quality performance in an organization.

1.1.3 Commercial Banks in Kenya

Commercial banks are classified under financial or banking sector and have over time contributed to development and growth of country's economy thus making them an

integral part of development in line with achievement of the Kenya Vision 2030 economic pillar (Republic of Kenya, 2007). Among key functions of banks are to inject and allocate capital to various sectors, facilitate internal and cross-border trade and provide credit to various sectors (Levin, 1997). Banking sector in Kenya comprises of 43 commercial banks classified according to market share, asset base and number of customers deposits (CBK Annual Report, 2016). Large banks are 8 taking 65 percent market share, medium banks 11 with 26 percent market share and 23 small banks with 9 percent market share.

A sound banking sector is critical for economic growth and stability (Koch & McDonald, 2013). Therefore, creditors, depositors, shareholders and other stakeholders are bound to experience financial detriment incase the sector collapsed. Banking sector has experienced challenges in growth and performance as a result of non-performing loans, poor corporate governance, weak risk management, regulatory or supervisory issues, lack of internal controls and conflict of interest (Brownbridge, 2010). Three Kenyan banks have collapsed over the last couple of years as a result of operational risk failures. Dubai Islamic Bank was placed under statutory management in 2015 as a result of magnitude of its governance weakness (CBK, 2016). Imperial Bank came under receivership in 2015, a move contributed by business malpractices within the bank. On the other hand, Chase Bank was put under statutory management in 2016 due to inability to meet regulatory ratios and misreporting of insider loans due to governance problems.

1.2 Research Problem

Corporate governance is a process through which banks affairs are prudently managed by top leadership and commitment to professional conduct; however it is a big problem in banks (Kihumba, 2010). The Centre for Corporate Governance (CCG) report (2014) highlighted poor risk management, lack of internal controls, and weak corporate governance as the causes of banks collapsing. According to Fusion Investment Management Monetary and Banking Report (2015), banks failure was attributed to mismanagement, irregularities and malpractices. Business Daily (2012) reported that fraud which is part of operational risk was becoming a major problem in banking sector as a result of weak fraud management processes, weak systems, staff collusion and poor governance. Ernst and Young survey report (2014) highlighted that Kenyan banking customers experienced problems when transacting as a result of hitches and instability of the technologies adopted by the banks. Business Daily (2015) reported Equity Bank of Kenya robbery of KShs 30 million by staff, Daily Nation (2010) reported that Co-operative Bank of Kenya lost KShs 26 million to staff whereas Business Daily (2017) reported that National Bank of Kenya lost KShs 300 million to fraudsters.

Central Bank of Kenya risk management guidelines (2013) provide requirements for all banks to set up operational risk management processes. To minimize operational risks, banks have established and resourced fully operational risk department with a well-defined ORMF comprising of risk management techniques like RCSA, KRAs, incident reporting, KRIs and provision of operational loss budget (Basel Committee on Banking Supervision, 1998). In addition, banks have institutionalized other risk and control

assurance methods such as auditing, management assurance and risk governance committees to provide oversight in risks and control management. With all these investments in operational risk management, banks continue to experience and report avoidable financial losses and poor customer service to an extent of being placed under statutory management.

Several studies on operational risk management in commercial banks have been undertaken. Lyambiko (2012) did a study on effects of operational risk on commercial banks performance. Mulu (2010) delved into relationship between operational risk and losses in manufacturing firms whereas Kioko (2012) looked into relationship between liquidity and operational risk management in commercial banks. From these studies, it's evident that no study has been carried out to determine relationship between quality management principles and operational risk management in commercial banks. This study is therefore being carried out to seal that gap and will be addressing the following questions: have commercial banks in Kenya implemented quality management principles? What are operational risk management limitations faced by commercial banks in Kenya? What operational risk management practices are suitable for commercial banks in Kenya? What is the relationship between quality management principles and operational risk management in commercial banks in Kenya?

1.3 Research Objectives

The aim of the project was to look into how quality management principles affect operational risk management in commercial banks in Kenya, while specific objectives were to:

1. Determine implementation of quality management principles in commercial banks in Kenya.
2. Establish operational risk management limitations in commercial banks in Kenya.
3. Identify operational risk management practices suitable for commercial banks in Kenya
4. Find out relationship between quality management and operational risk management.

1.4 Value of Study

Commercial banks in Kenya will benefit by understanding value of implementing quality management principles as a way of minimizing operational risk or failures that affect overall organization performance. It will help bank's management to appreciate that investing in operational risk techniques alone is not enough and risks will continue to happen if the underlying management practices do not support quality performance across the organization. The study will also be used by other financial institutions to improve their operations and manage systemic operational risks inherent in operations management.

Microfinance institutions and insurance companies offer financial services and will benefit from the findings. Manufacturing or service organizations undertake operations in which operational risks are inherent and will find this study useful. The CBK regulates bank's operations and emphasizes on operational risk management and therefore will use findings to formulate policies on how banks should manage operational risks. The study will be used by other scholars to advance studies in quality management by extending coverage to other areas not covered.

Public offices will find this study helpful in managing operations and minimize operational risks that have made government offices provide poor services and to some extent lose money through corruption. Kenya Airways will find the study beneficial in improving operations and deliver quality services to the customer. The airline has had many operational management issues such as flight delays, poor customer service coupled with numerous strikes by employees. By adopting quality management principles, management will establish favorable environment for quality performance and operational risk management. Retail outlets like Uchumi, which has been having operational issues to point of shutting down would benefit from the study by acknowledging the importance of quality management in operational risk management.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The chapter delves into what has been written by other scholars and any other literature related to research problem. It will include what other researchers have documented on quality management and operational risk management. The main areas covered are theoretical framework, quality management principles and operational risk.

2.2 Theoretical Literature Review

The world has become a global village as a result of technological inter-connectivity that avails information real time to customers enabling them make informed decisions. This has made competition very stiff and banks are striving to remain afloat by developing and producing quality products and services. In addition to resources that an organization invests to run operations, management practices are believed to be a critical ingredient in driving organization performance by setting the direction and supporting the right culture. It is on this basis that management theories play a major role in shaping practices that facilitate quality performance across organizations. Quality management concept has an element of management functions and therefore, there are a number of management theories that have explored and linked achievement of quality performance within organizations.

2.2.1 System Theory

An organization is made up of parts and sub-systems that perform as a whole system to deliver results through sound management of resources. Based on this, system theory

looks at an organization as a system that is made up of parts. Meadows and Wright (2008) defined system as a combination of parts or sub-parts that collectively work together to achieve a common purpose. An organization has core departments like marketing, operations, finance and when each one of them is interrupted, the entire organization is impacted due to network and relationship of parts. System theory points out that an organization is an open system that influences and also get influenced by its environment. This inter-relationship between parts is involved in process of value creation (Grant & Krishnan, 1994). In reference to quality management, system concept emphasizes on relationship of components to achieve organization goals (Mele & Colurcio, 2006). According to Christopher (2007), organizations are like a system model and gain competitive edge by harnessing resources, deploying sound management functions and establishing harmony with environment.

2.2.2 Total Quality Management Theory

The research is also linked to Total Quality Management (TQM) theory that emphasizes quality as responsibility for everyone in an organization to produce and deliver quality output (Dean & Evans, 1994; Tenner & DeToro, 1992). It further states that TQM requires paradigm shift in organization thinking and culture geared towards quality management (Sashkin & Kiser, 1993). Deming (1986) looked at TQM from 14 principles point of view, such as management commitment, leadership and continuous improvements as critical in improving operations leading to competitiveness through production of high quality products and services. Juran (1989) pointed the need to plan, design products, implement quality audits and focus on both customers and suppliers.

Crosby (1984) was inclined to changes in organization culture, staff training, leadership and sensitivity to quality related costs. This theory appreciates quality management practices as the solution to inefficient operations and poor performance.

2.3 Quality Management Principles

Quality management was shaped by quality experts like Deming (1986), Juran (1989), and Crosby (1984). Today, it is a management philosophy that is embedded in organization operations both in manufacturing and service with interrelated principles (Dean & Bowen, 1994). Efforts to implement quality management have brought different perspectives on what it is and whether it exists. Quality has a different perspective and meaning to different people thus clouded with a lot of ambiguity (Watson & Karukonda, 1995). Heckman and Wageman (1995) emphasized more on key principles and practices as the main components of quality management. Reeves and Bednar (1994) pointed that a common or standard meaning of quality had not been agreed and it depends largely on circumstances. Authors do agree that quality management principles are critical for manufacturing and service sectors (Dean & Bowen, 1994). Powell (1995) highlighted quality management principles as leadership commitment to quality, customer focus and relationship, employee involvement and continuous improvement. Flynn et al. (1995) attributed quality management principles to senior management support to quality, workforce management, customer relationship and process management. Knoontz and Weihrich (1990) emphasized that it was critical for an organization to implement quality management principles in order to create an environment in which organization goals are efficiently and effectively achieved.

2.3.1 Customer Focus

Organizations should endeavor to understand and meet needs of customers by identifying both external and internal customer's specific needs and translate them into products and services. Studies have pointed out that there is strong relationship between quality of products and profitability as a result of customer's satisfaction (Sila & Ebrahimpour, 2005). Customer focus and satisfaction are associated with degree to which customers continuously feel or perceive that firm's product meet their specific needs through products and services (Anderson, Rungtusanatham & Schroeder, 1994). According to Deming (1986), customer is the most critical part of products and services production and focus should be on the specific needs for the customer. It is important to closely involve customer in product design and development process so that quality problems are minimized (Flynn et al., 1994).

2.3.2 Employee Involvement

Employee involvement is critical in achieving firm's goals through quality performance, team work spirit, trainings and involving them in quality related decisions. Conducting trainings and having a positive collaboration among staff will go a long way in supporting quality production (Ho, Duffy & Shih, 1999). Employees are essential in making timely and responsive decisions that establish positive relations with customers through access to resources, data and information (Ahire, Golhar & Waller, 1996). According to Flynn et al. (1994), workforce empowerment and involvement in making continuous improvement will go a long way in improving quality and therefore organization must ensure there is training programs that instill staff with proper skills and competences.

2.3.3 Continuous Improvement

According to Bessant, Caffyn and Gallagher (2001), continuous improvement is a firm wide undertaking that is geared to incremental rather than radical innovation. Gertsen (2001) pointed out that process improvement is implemented and carried out step by step and heavily relying on staff participation. Based on this, continuous improvement is an ongoing activity in an organization through interactions between innovation process, operations management, learning's that support organization's flexibility, efficiency and effectiveness (Davison & Hyland, 2006). However, for continuous improvement to work, it requires a strong foundation anchored on staff creativity, skills and knowledge (Liker & Hoseus, 2010). In this case all the organization elements, starting from strategic planning, making of decisions and execution of tasks, must be scoped in continuous improvement to prevent products defects, improve staff skills, process and technology (Ijaz & Irfan, 2012).

2.3.4 Leadership Commitment

Leadership commitment on quality is a critical factor in an organization. According to Ahire et al. (1996), top management is the main driver of quality management agenda through implementation of common goals, values and processes that satisfy customer needs and improve on organization performance. Senior management plays an important role in establishing culture and long-term vision which are driven by customer's change of expectations by implementing policies, quality goals, resources, trainings and improvement (Juran & Gryna, 1993). It is therefore evident that leadership commitment factor is essential in quality management by championing quality agenda, evaluation of quality, participation in processes improvement, drafting strategies on quality, exploring

customer changing needs and endeavoring to meet them (Saraph, Benson & Schroeder, 1989). On the other hand, leadership commitment should ensure that strategic quality management is incorporated in corporate strategy so that it gets the necessary support. By doing so, organization will produce quality products and a service within a culture that motivates staff, satisfies customers, reduces quality costs, increases productivity and achieves high financial performance (Zu et al., 2009).

2.4 Operational Risk Management

Operational risk is found in all aspects of operations management. According to BCBS (2006), operational risk is attributed to failure in systems, people, and processes or from an external event. In the last 10 years, a number of significant operational risk events or failures were reported with some resulting into huge financial losses. Barclays and Lloyds Group in 2006 lost £4 billion and £5 billion respectively. Baring Bank collapsed in 1995 by incurring loss of £827 million resulting from speculative investment by an employee while Rabobank and Fondiaria-SAI in 2013 lost $1billion and £252 million respectfully. Also in Kenya, a number of banks were reported having lost millions of shillings. The East African report (2013), BFID reported that Kenya's financial institutions lost KShs1.6 billion due to fraud arising from operational risk with some banks being placed under receivership due to corporate governance issues and malpractices.

Businesses landscape is rapidly changing with unpredictable competition and demands from the customers. Therefore, banks have been left with no choice other than to accept

risks and manage them well. All banks face operational risks but the difference is on uniqueness of the bank's operations. Operational risk specialists' pointed out that the biggest challenge was to treat operational risk as a stand-alone yet it is an element of execution which cuts across other risks (Pricewaterhouse Coopers, 2010). Therefore, practicing good risk management is paramount for organization and it requires management to measure risk against reward to avoid taking obvious risks that could easily materialize, top management making right risk decisions and deploying management practices that support a favorable culture (Federal Aviation Administration, 2000).

2.5 Limitations in Operational Risk Management

In Kenya, efforts have been made to put banking sector in order. However, many operational risk management limitations have persisted to a point of some banks being liquidated or put under statutory management due to failures. This was evidenced by collapsing of three banks namely Chase Bank of Kenya, Imperial Bank of Kenya and Dubai Islamic Bank of Kenya. According to CCG report (2014), weak internal controls, conflict of interest, poor risk management and weak supervisory practices were main drivers for operational failures in banks. Kaman (2011) pointed out that internal fraud was on increase thereby causing significant losses to banks. This was linked to staffs that are dishonest and top management access to more information, data and asset thereby giving them advantage to carry out malpractices.

2.6 Quality Management Principles and Operational Risk Management

Organizations have operations department that create value by harnessing resources like labor, systems and processes during transformation. However, during value creation things are bound to go wrong resulting to operational failures. Sampaio (2009) concluded that quality management principles highly influenced organization performance by minimizing operational failures. High performance in organizations is achieved through efficient and effective management of the resources, reduction of operational failures, wastes, errors and defects. However, due to the fact that operational failures are inherent in processes, organizations will experience operational risks resulting from fraud, systems down time, machines breakdown and poor quality performance. Since quality management principles advocate for continuous improvement, customer focus and leadership commitment to quality, it means that it has big role to play in minimizing operational risks or failures.

2.7 Empirical Review and Knowledge Gaps

Powell (1995) contented that quality management principles such as training staff on quality, continuous improvement of processes and benchmarking with best in market did not have impact on quality management compared to behavioral factors such as open and conducive culture, employee involvement and commitment by top leadership. Flynn et al. (1995) had a view that quality management and organization infrastructure should create a favorable environment that encourages quality performance. Prajogo and McDermott (2005) investigated how culture influenced quality management and pointed that it had a critical impact on quality management implementation. Culture, in an organization

defines the norms, values and beliefs that are upheld by staff. Ooi, Abu, Arumugam, Vellapan and Kim (2005) linked teamwork, quality oriented culture and customer focus to staff motivation and job satisfaction in an organization. Ching-Chow (2006) extended the study to relationship between quality management and human resource management practices and observed that it significantly influenced both staff and customer satisfaction. Agus and Abdullah (2000) explored firms in manufacturing sector and concluded that quality management implementation highly influenced financial performance and manufacturing companies scored high compared to service oriented companies.

Rahman and Siddiqui (2006) emphasized that quality management was critical in fostering customer satisfaction, increasing productivity, delivering quality products and services. Shammot (2011) echoed same sentiments that quality was a responsibility for everyone in organization with TQM practices significantly affecting customer behavior. Analysts have linked Japan prominence in global economic growth to quality management (Grayson & O'Dell, 1988). Juran (1993) cited that growth and competitiveness of America in economic well-being was linked to quality management. A study by Walton (1986) claimed that adherence to quality management by managers helped organizations in developing and designing quality products and services, reduction of unnecessary costs, customer satisfaction and high financial performance. Hayes and Abernathy (1980) demonstrating impact of quality management explained that around 1980's, there was concern by American firms and they took quality management seriously as a result of Japanese quality of products that would surpass American

standards. Grayson and O'Dell (1998) said that some leaders and analysts predicted that failure to adopt paradigm shift of America style of management, other countries like Japan were headed to dominate world trade and economy. Arthur (1992) observed that American firms like Ford, Xerox and Motorola had lost substantial market share to the quality inclined Japanese manufacturers and they quickly adopted quality management in late 1980 together with other American manufacturers. According to Dizgah (2012), quality management and performance have a significant relationship within an organization achievement of goals. Agus and Hassan (2011) did a study to identify the role played by total quality management and concluded that it was critical in providing organization vision in performance and competitive advantage. On the other hand quality management was critical in contributing significantly to organization innovation and performance (Kim & Kumar, 2012). Jaafreh and Al-abedallat (2013) emphasized that leadership was very critical in supporting and shaping the strategic direction of an organization. According to Wani and Mehraj (2014), leadership and teamwork were some of the quality management principles that significantly influenced organization vision and commitment to overall performance.

Table 2.1: Summary of Empirical Review

Author (s)	Area of Study	Objective	Methodology	Findings	Gaps
Salaheldin (2009)	Quality management implementation and performance on Small and Medium Enterprises	Determine factors that contribute to successful quality management implementation	Primary data collected from Small and Medium Enterprises and analyzed using statistical methods	Strong linkage on quality management ,organization performance and strategic approach was paramount in implementing quality management principles	Study focused on small enterprises and exempted big organizations
Ooi, et al. (2005)	Influence of quality management on employees job satisfaction in Malaysian semi-conductor companies	Identify perception of quality management on employees job satisfaction	Primary data collected from employees in Malaysian companies and analyzed	Team work, organization trust, culture and customer focus had positive impact on employee job satisfaction	Study was limited to employee satisfaction only
Rahman and Siddiqui (2006)	Impact of quality management on product and services quality in organizations	Identify benefits of quality management implementation in organization's performance	Data collected and analyzed through statistical methods	Quality management supports achievement of customer needs through quality products, services and overall organization productivity.	The study was biased towards products/ services and ignored organization culture
Nair (2006)	Impact of quality management on organization performance	Determine influence of quality management principles on organization performance	Collected primary data and analyzed using statistical methods	Leaders commitment, employee empowerment, continuous improvement and customer satisfaction played a critical role in organization performance	The study did not look at the organization environmental factors.
Fyness and Voss (2001)	Quality management impact in meeting customer needs	Identify whether product and service quality is key to customer satisfaction	Primary data collected, analyzed using statistical methods	Customer satisfaction depends on product design and quality characteristics	The study was limited to products design and characteristics

Table 2.1 Cont...

Author (s)	Area of Study	Objective	Methodology	Findings	Gaps
Dizgah (2012)	Quality management practices and performance organization	Identify relationship between total quality management practices and organization performance	Primary data and analyzed using statistical methods	Quality management and organization performance have positive relationship	The study did not look into the underlying values in the organization
Agus and Hassan (2011)	Role of quality management in production	Identify the role that total quality management plays in competitive advantage	Primary data and analyzed using statistical methods	Total quality management provided vision and focus in an organization's competitive advantage	The study narrowed down to production and ignored the organization culture
Kim and Kumar (2012)	Innovation and quality management	To determine relationship between total quality management and innovation	Primary data and analyzed using statistical methods	Quality management contributed significantly to innovation and performance	The study was biased towards innovation and performance
Jaafreh and Al-abedallat (2013)	Leadership commitment and organization strategy	To determine how leadership influence organization strategic direction	Primary data and analyzed using statistical methods	Leadership has a significant role in shaping the strategic direction of an organization.	The study focused on one quality management principle
Wani and Mehraj (2014)	Quality management and organization vision	Establish relationship between quality management and organization vision	Primary data and analyzed using statistical methods	Leadership and teamwork influenced the organization vision and commitment to quality	The authors limited their study on organization vision and failed to consider the overall performance

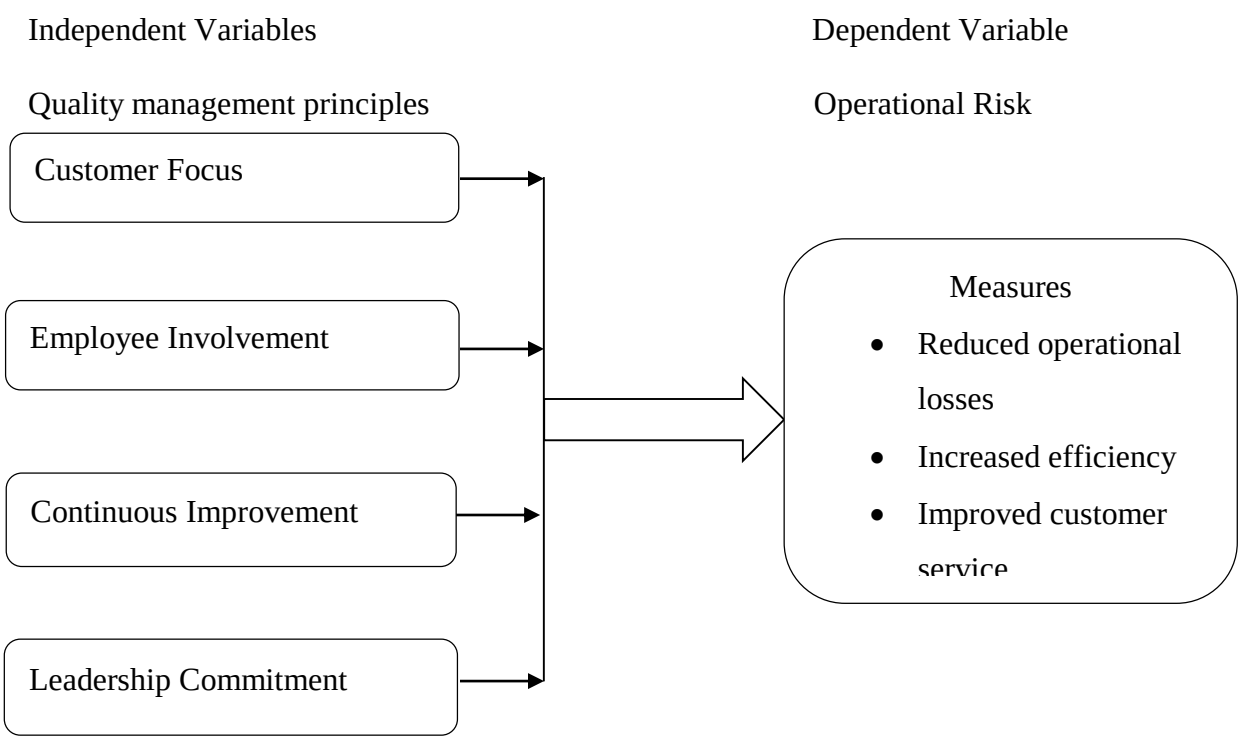
2.8 Conceptual Framework

Chan (2005) defined quality function deployment as a concept that deploys customer needs into product design and production process. Juran (1988) observed that customer focus principle enabled organization to continuously research on new needs and expectations of customer as a way of responding to changes in the market. Juran and Gryna (1993) concluded that leadership commitment is a catalyst in quality management implementation through establishment of culture that is oriented to quality performance in organization. According to Lindborg (2003), employees' involvement forms a critical part of quality management and should work as a team across the organization. Jefferson (2002) acknowledged that employees bring out varied perspective of ideas that are beneficial to organization.

Whalen and Rahim (1994) highlighted that sharing decision making across organization from top to bottom was critical in motivating employees. Sinclair and Zairi (1995) contented that continuous improvement should begin by analyzing processes, products and systems to reduce or eliminate variances and drive efficiency in operations. Therefore customer focus, employee involvement, continuous improvement and leadership commitment are quality management principles that upon implementation, supports organization in becoming quality conscious in management practices and products or service delivery. This highly influences the operations management outcome and affects the overall performance quality. Effective operations management is achieved by ensuring that systems, processes and people produce products that have no defects, elimination of wastes, minimize products variation thereby minimizing operational risk.

This relationship is demonstrated by the conceptual framework model shown on Figure 2.1 below in which quality management principles are independent variables and operational risk dependent variable.

Figure 2.1: Conceptual Framework



Source: Researcher (2017)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The chapter provides details of methods used to undertake research in order to collect data for analysis. It covers research design, methods used to collect data from respondents and data analysis techniques. Details of the target population and sampling are also covered in this section.

3.2 Research Design

Descriptive research design was used in the study. Using this design, data was collected using questionnaires and analyzed for interpretation. The analyzed data was summarized using visual aids such as tables thus making it easier to understand. The design was appropriate especially where many variables are involved in the study and also gave room for describing, explaining and validating study findings. It also allowed interpretation of both qualitative and quantitative methods of data collection and analysis.

3.3 Population of the Study

The total numbers of commercial banks in Kenya are 43 and this being a census study, all the banks were scoped in for study and data collection. At the time of study, two banks; Imperial Bank of Kenya and Chase Bank of Kenya were under receivership and were not considered as part of population resulting to a population of 41 banks.

3.4 Sample Design

In this study, census design was used and therefore data was collected from all the 41 banks. In this case, each bank represented a unit of study in the population resulting to a complete count or enumeration for a complete representation.

3.5 Data Collection

The primary data was collected from the 41 banks using a structured questionnaire (Appendix III). Data was collected from the population by mailing one questionnaire to each bank where any of staff members was requested to answer questions and mail the questionnaire back to or collected by the researcher. The questionnaire had four sections: Section I covered demographic details of respondents, Section II looked at objective one which determined implementation of quality management principles in commercial banks in Kenya, Section III looked at objective two on operational risk management limitations in commercial banks in Kenya, Section IV dealt with objective three on identification of operational risk management practices suitable for commercial banks in Kenya and Section V looked into objective four which sought to find out relationship between quality management and operational risk management in commercial banks in Kenya.

3.6 Data Analysis

Descriptive statistics was used to describe data and determine relationship between variables. Techniques used in data analysis and interpretation were tables, frequencies and central tendency measures. Also used in data analysis were correlation and linear regression to determine causal relationship between quality management principles and

operational risk management in commercial banks in Kenya as shown on Table 3.1 below.

Table 3.1: Summary of Methodology

Objectives	Data Type	Purpose	Analyses
Determine implementation of quality management principles in commercial banks in Kenya.	Primary data	Find out whether commercial banks in Kenya have implemented quality management principles	Frequency tables, percentages and mean
Identify operational risk management limitations in commercial banks in Kenya.	Primary data	Investigate limitations faced by commercial banks in operational risk management	Frequency tables, percentages and mean
Identify operational risk management practices suitable for commercial banks in Kenya	Primary data	Find out operational risk management practices suitable for commercial banks in Kenya	Tables and mean
Find out relationship between quality management and operational risk management	Primary data	Determine relationship between quality management and operational risk management	Table, frequency, percentage and linear regressing linear regression analysis

CHAPTER FOUR: DATA ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter presents data analysis and discussion from research findings. The research was undertaken to determine relationship between quality management and operational risk management in commercial banks in Kenya. The data was collected as per the research methodology where a questionnaire was sent to the respondents to fill in and return to the researcher. One questionnaire was sent to each of 41 banks targeting any staff member.

4.2 Demographics of the Respondents

The research targeted 41 commercial banks in Kenya, out of which 31 banks responded thus making a response rate of 76 percent. In reference to Mugenda and Mugenda (2003), a sample response constituting of 10 percent of the sample size is considered adequate for descriptive study. Thus for this study, a response rate of 76 percent was considered a good representation of the targeted population.

The study looked into the demographic information of respondents to the questionnaire from each bank. Information included current role in the bank, function in which staff worked and the number of years. Majority, 58 percent were in middle management level, 32 percent in other levels and 10 percent in the senior management an indication that most of respondents were knowledgeable about banks operations. Majority of respondents, 19 percent worked in operations and information technology, 16 percent in compliance and risk respectively as shown on Table 4.1 below.

Table 4.1: Staffs Distribution Across Bank's Functions

Department	Frequency	Percent	Cumulative Percent
Compliance	5	16.1	16.1
Risk	5	16.1	32.3
Legal	3	9.7	41.9
Operations and Information Technology	6	19.4	61.3
Finance	1	3.2	64.5
Retail Banking	3	9.7	74.2
Corporate Banking	3	9.7	83.9
Other	5	16.1	100.0
Total	31	100.0	100

In terms of staff's experience, 42 percent had worked between 5 to 15 years, while 32 percent had worked for a period less than five years. It was established that 16 percent had worked between 15 and 25 years and therefore majority were experienced in the banking sector as shown on Table 4.2 below.

Table 4.2: Staffs Years of Experience in Banks

Years Worked in the Bank	Frequency	Percent	Cumulative Percent
Less than 5 years	10	32.3	32.3
5 to15 years	13	41.9	74.2
15 to 25 years	5	16.1	90.3
Over 25 years	3	9.7	100.0
Total	31	100.0	

4.3 Implementation of Quality Management Principles in Commercial Banks

The first objective of the study sought to determine implementation of quality management principles in commercial banks in Kenya. The quality management principles were leadership commitment, employee involvement, customer focus and continuous improvement. Respondents were presented with statements relating to leadership commitment and asked to rate level of implementation using scale; 1-weak, 2-strong, 3-outstanding. According to findings, leadership commitment to quality products and services was rated highly as shown by a mean of 1.80 and a standard deviation of 0.66. Also rated high were the following statements in order of their ranking; senior management's behavior is consistent with bank's values had a mean of 1.63, and standard deviation of 0.72. Quality agenda forming part of bank's strategy had a mean of 1.61 and standard deviation of 0.72. Having a bank's culture that allows staff to give ideas on how to improve products had a mean of 1.54 and standard deviation of 0.65. This was an indication that banks had implemented leadership commitment principle to some extent as shown on Table 4.3 below.

Table 4.3: Leadership Commitment Principle

Statements	Sample	Minimum	Maximum	Mean	Standard Deviation
Quality agenda forms part of bank's strategy	31	1.00	3.00	1.61	0.72
Bank's culture allows staff to give ideas on how to improve products	26	1.00	3.00	1.54	0.65
Senior management's behavior is consistent with bank's values	30	1.00	3.00	1.63	0.72
Management is committed to quality products and services	30	1.00	3.00	1.80	0.66

The respondents were asked whether they agreed or disagreed with statements presented relating to employee involvement. The response showed that 52 percent of respondents agreed that staff was empowered through training to build competence while 48 percent disagreed. It was further established that majority, 59 percent of the respondents disagreed that staff were treated with respect and only 41 percent agreed. In regard to whether staffs were recognized for delivering quality performance, 59 percent disagreed while 41 percent agreed. It was also established that majority, 70 percent of the respondents agreed that staff were blamed when things go wrong as shown in Table 4.4 below.

Table 4.4: Employee Involvement Principle

Statements	Agree		Disagree	
	Frequency	Percent	Frequency	Percent
Staffs are empowered through training to build competence.	15	51.7	14	48.3
Staff are treated with respect	12	41.4	17	58.6
Staff are recognized for delivering quality performance	16	53.3	14	46.7
Staff are blamed when things go wrong	21	70	9	30

The respondents were asked to indicate frequency at which banks carry out activities related to customers focus using the scale; 1-Never, 2-Often and 3-Always. Respondents indicated that banks often ensured that designs of products were based on specific customer needs as shown by a mean of 2.23 and a standard deviation of 0.43. It was also established that the banks often strives to understand customer's current and future needs with mean of 2.07 and standard deviation of 0.47. Use of customer's complaints and feedback to identify areas for improvement had a mean of 2.10 and standard deviation of 0.41. It was further established that banks often measures customer's satisfaction as shown by a mean of 2.32 and a standard deviation of 0.48 as shown on Table 4.5 below.

Table 4.5: Customer Focus Principle

Statements	Sample	Minimum	Maximum	Mean	Standard Deviation
Designs products based on specific customer needs	30	2.00	3.00	2.23	0.43
Strives to understand customer's current and future needs	28	1.00	3.00	2.07	0.47
Uses customer's complaints and feedback to identify areas for improvement	30	2.00	3.00	2.20	0.41
Measures customers satisfaction	31	2.00	3.00	2.32	0.48

On continuous improvement principle, majority of the respondents, 67 percent disagreed that banks benchmarked products with best in market while only 33 percent agreed. Also majority, 73 percent agreed that bank empowers and trains staff with new skills and competences while 27 percent disagreed. On whether staffs brainstorm openly on how to improve systems and processes, majority 52 percent disagreed while 48 percent agreed. Majority, 60 percent of the respondents also agreed that bank learns from mistakes and makes improvements while 40 percent disagreed as shown on Table 4.6 below.

Table 4.6: Continuous Improvement Principle

Statements	Yes		No	
	Frequency	Percent	Frequency	Percent
Bank benchmarks its products with the best in market	10	33.3	20	66.7
Bank empowers and trains staff with new skills and competences	22	73.3	8	26.7
Staffs brainstorm openly on how to improve systems and processes.	15	48.4	16	51.6
Bank learns from mistakes and makes improvements	18	60	12	40

4.4 Operational Risk Management Limitations in Commercial Banks

According to the findings, 81 percent of the respondents disagreed that the bank encouraged staff to report operational failures in order to undertake improvements while only 19 percent supported. The findings also showed that 77 percent of the respondents

opposed statement that bank's senior management improves areas where operational failures have occurred while only 22 percent supported. It was also established that staff were not trained on how to prevent operational risk failures in their areas of work as supported by 71 percent of the respondents. Further findings indicated that minority, 29 percent of the respondents agreed that bank emphasizes on learning from operational risk failures in order to make improvement while majority 71 percent disagreed as shown in Table 4.7 below.

Table 4.7: Operational Risk Management Limitations in Commercial Banks

Statements	True		False	
	Frequency	Percent	Frequency	Percent
Bank encourages staff to report operational failures in order to undertake improvements	6	19.4	25	80.6
Bank's senior management improves areas where operational failures have occurred	7	22.6	24	77.4
Staff are trained on how to prevent operational risk failures in their areas of work	9	29.0	22	71.0
Bank emphasizes on learning from operational risk failures in order to make improvement	9	29.0	22	71.0

4.5 Operational Risk Management Practices Suitable for Commercial Banks

The third objective of the study sought to identify operational risk management practices suitable for commercial banks in Kenya. The respondents were therefore presented with statements to rate using the scale; 1-Not Important, 2- Important and 3-Very Important. It was observed that respondents rated all statements very important because they were all above a mean of 2.5. The statement that analyzing operational failures and sharing lessons learn with all staff would help to prevent failure in future was rated very important as shown by a mean of 2.68 and a standard deviation of 0.48. Allowing staff to give ideas on how to continuously improve processes and systems was also rated very important as supported by a mean of 2.74 and a standard deviation of 0.44. Also rated

very important was the fact that senior management should be committed to a quality performance oriented culture across bank to manage operational failures with a mean of 2.68 and a standard deviation of 0.48. Also bank should have teams that deal with quality performance issues such as poor customer service and responds quickly to improve had a mean of 2.65 and a standard deviation of 0.49 whereas bank should continuously monitor operational failures in order to improve processes, systems and up skilling of staffs had a mean of 2.68 and standard deviation of 0.48 as shown in Table 4.8 below.

Table 4.8: Operational Risk Management Practices Suitable for Commercial Banks

Statements	Sample	Minimum	Maximum	Mean	Standard Deviation
Analyzing operational failures and sharing lessons learnt with all staff would help to prevent failure in future	31	2.00	3.00	2.6	0.48
Allowing staff to give ideas on how to continuously improve processes, systems would improve on quality performance	31	2.00	3.00	2.7	0.44
Senior management should committed to a quality performance oriented culture across bank to manage operational failures	31	2.00	3.00	2.68	0.48
Bank should have teams that deal with quality performance on poor customer service and responds quickly to improve	31	2.00	3.00	2.65	0.49
Bank should continuously monitor operational failures in order to improve processes, systems and up skilling of staff	31	2.00	3.00	2.684	0.48

4.6 Quality Management and Operational Risk Management in Commercial Banks

The study sought to find out the relationship between quality management and operational risk management in commercial banks in Kenya. The respondents were,

therefore presented with quality management principles to indicate whether true or false in respect to their bank. Majority 90 percent of the respondents agreed that continuous improvement of the banks systems, processes and training of staff would help bank to produce quality products and minimize operational failures while 10 percent disagreed. The respondents also overwhelmingly agreed that staff involvement and empowerment is essential in minimizing operational failures in the bank with 90 percent response and that customer focus should be the driving factor in helping the bank to design products and services. Similarly 87 percent of the respondents also agreed that senior management commitment to quality performance culture is critical in management of operational failures as shown in Table 4.9 below.

Table 4.9: Operational Risk Management in Commercial Banks

Quality Management Principles Statements	True		False	
	Frequency	Percent	Frequency	Percent
Continuous improvement of the banks systems, processes and training of staff would help bank to produce quality products and minimize operational failures	28	90.3	3	9.7
Staff involvement and empowerment is essential in minimizing operational failures in the bank	28	90.3	3	9.7
Customer focus should be the driving factor in helping bank to design products and services	28	90.3	3	9.7
Senior management commitment to quality performance culture is critical in management of operational failures	27	87.1	1	3.2

Correlation analysis and linear regression were done to determine the relationship between quality management and operational risk management in commercial banks in Kenya. Table 4.10 below shows the correlation test results which indicate that the continuous improvement had a strong correlation (0.868) and was statistically significant to explain operational risk management as $p = 0.000$ was less than 0.05 (level of

significance). Employee involvement had a strong correlation (0.854) and p = 0.000 < 0.05. Leadership commitment had a strong correlation (0.734) and p = 0.000 < 0.05. It was also established that customer focus had a low mean of (0.48) although significant with p = 0.004 < 0.05. Overall, all the variables were highly correlated and statistically significant as they all had strong positive correlation and a p - values were less than 0.05, respectively.

Table 4.10: Dependent Variable and Independent Variables Correlations Analysis

		LC	EI	CF	CI	ORM
LC	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	31				
EI	Pearson Correlation	.895**	1			
	Sig. (2-tailed)	.000				
	N	30	30			
CF	Pearson Correlation	.845**	.624**	1		
	Sig. (2-tailed)	.000	.000			
	N	31	30	31		
CI	Pearson Correlation	.901**	.959**	.716**	1	
	Sig. (2-tailed)	.000	.000	.000		
	N	31	30	31	31	
ORM	Pearson Correlation	.734**	.854**	.483**	.868**	1
	Sig. (2-tailed)	.000	.000	.004	.000	
	N	31	30	31	31	31
**. Correlation is significant at the 0.01 level (2-tailed).						

where ORM is operational risk management, LC is leadership commitment, EI is employee involvement, CF is customer focus, and CI is continuous improvement

Multiple linear regression analysis was done to determine influence of predictor variables on the dependent variable. As shown in Table 4.11 below, four independent variables that were continuous improvement, customer focus, and leadership commitment and employee involvement explained 79 percent of the variability of operational risk management. This indicated that 79 percent of changes in operational risk management

were explained by the four predictor's variables and the remaining 21 percent was explained by other variables that were not considered– this provided a good fit.

Table 4.11: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.889[a]	.790	.757	.22658
Predictors: (Constant), Continuous improvement, Customer focus, Leadership commitment, Employee commitment				

From the Analysis of Variance (ANOVA) statistics, the overall model was significant since p-value (0.000) was less than 0.05 an indication that quality management principles significantly influences operational risk management as shown in Table 4.12 below.

Table 4.12 Analysis of Variance [a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.835	4	1.209	23.546	.000[b]
	Residual	1.283	25	.051		
	Total	6.119	29			

Dependent Variable: Operational risk management

Predictors: (Constant), Continuous improvement, Customer focus, Leadership commitment and Employee commitment.

Multiple linear regression analysis was conducted to determine relationship between quality management principles and operational risk management and as shown in Table 4.13 below and the estimated equation was ORM = 1.576 + 0.036LC +0.092EI + 0.312CF + 1.036CI. From the findings, a unit change in leadership commitment will change operational risk management by a factor of 0.036; a unit increase in employee involvement will increase operational risk management by a factor 0.092 while a unit increase in customer focus will increase operational risk management by 0.312 units. Further, a unit increase in continuous improvement will increase operational risk management by a factor of 1.036. All the p-values were less than 0.05 implying that the

predictor variables were significant determinants of operational risk management in the banks as shown in Table 4.13 below.

Table 4.13: Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t-value	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.576	.367		4.292	.000
	Leadership Commitment	.036	.220	.052	.162	.023
	Employee Involvement	.092	.395	.090	.232	.018
	Customer Focus	.312	.213	.285	1.467	.045
	Continuous Improvement	1.036	.405	.933	2.560	.017

Dependent Variable: Operational risk management

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter presents summary of findings, conclusions and recommendations based on research data analysis. Limitations encountered when undertaking the study including suggestions for further research are also discussed.

5.2 Summary

The research was carried out to determine relationship between quality management principles and operational risk management in commercial banks in Kenya. Arising from data analysis, it was confirmed that banks had not fully implemented quality management principles. Leadership commitment to quality was rated strong, however employees were not respected, recognized and were blamed for failures. Banks often used customer needs to design products as opposed to always. The study established that banks were not focused on continuous improvement and did not provide environment for staff to freely brainstorm on improvements. Further, banks did very little in encouraging staff to report on operational failures neither was senior management keen on improvements. Staffs were not trained on operational risk management and no learning was picked from the failures and shared with employees. Analysis of operational failures, sharing of lessons learnt, allowing staff to give ideas on how to make improvements and senior management commitment to quality agenda were considered suitable practices in operational risk management. In addition, multiple linear and correlation and analyses indicated that

independent variables were statistically significant and influenced operational risk management with positively, respectively.

5.3 Conclusion

The research established that implementation of quality management principles was weak across banks and this explained why banks were being affected negatively by operational failures and provide poor customer service. This is also linked to limitations in operational risk management across banks where failure to encourage staff to report on operational risks, senior management not keen on improvements and picking learning's from what has gone wrong explains repeat and systemic failures in operations management in banks. Further analysis established that banks had not fully implemented best practices in operational risk management such as analyzing and learning from failures, continuous improvement and staff involvement. Overall, quality management principles had significant relationship with operational risk management and implementation would help banks in achieving effectiveness and efficiency in operations management.

5.4 Recommendations

The study established that quality management principles significantly influenced operational risk management. Therefore, the study recommends that commercial banks top management should ensure that quality management principles are fully implemented and used as a guide in managing banks operations. However, for this to get support in the organization, it should be one of the agenda in strategic planning. In day-to-day operations, banks senior leadership should advocate for quality management with same

vigor as they do in achieving sales. Implementing quality management principles would create effectiveness, efficiency, reduce operational losses and improve on customer service.

5.5 Limitations of the Study

The research aimed at finding out relationship between quality management and operational risk management in commercial banks in Kenya. The scope was limited to commercial banks and operational risk as one of the principle risks faced by banks. Therefore, the study could be extended to other principle risks to determine how they relate with quality management. Other limitations encountered were unwillingness by staffs to fill in questionnaire for fear of risking their jobs by giving out banks information. In some cases, questionnaires were filled in a hurry and others were not forwarded to researcher for analysis. Some questionnaires were not completely filled and some were returned blank arising from fact that staffs were busy with their work or were not willing to fill in the questionnaire. In some cases, the respondents were not reachable to give out their questionnaires.

5.6 Suggestions for Further Research

Operational risk is found in operations management both manufacturing and service industry. On the other hand, quality management principles are the overarching means to achieve effectiveness and efficiency in operations management. Based on the fact that the study delved on service industry, research could be done on manufacturing sector and find out the relationship between quality management and operational risk. Research can

also be extended to micro finance, insurance companies, hospitals or telecommunication firms to find out the extent to which they have implemented quality management principles and the resultant impact on operations management.

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APPENDICES

Appendix I Letter of Introduction

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS

Telephone: 020-2059162
Telegrams: "Varsity", Nairobi
Telex: 22095 Varsity

P.O. Box 30197
Nairobi, Kenya

DATE 17/10/2017

TO WHOM IT MAY CONCERN

The bearer of this letter MWANIKI BONIFACE NYAGA

Registration No. D61/83672/2014

is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
17 OCT 2017
P.O. Box 30197 – 00100, NAIROBI

PATRICK NYABUTO
SENIOR ADMINISTRATIVE ASSISTANT
SCHOOL OF BUSINESS

Appendix II List of Commercial Banks in Kenya

1. ABC Bank
2. Bank of Africa
3. Bank of Baroda
4. Bank of India
5. Barclays Bank of Kenya
6. Chase Bank Kenya (In Receivership)
7. Citibank
8. Commercial Bank of Africa
9. Consolidated Bank of Kenya
10. Cooperative Bank
11. Credit Bank
12. Development Bank of Kenya
13. Diamond Trust
14. Dubai Islamic Bank
15. Eco bank of Kenya
16. Equity Bank
17. Family Bank
18. First Community Bank
19. Giro Commercial Bank
20. Guaranty Trust Bank Kenya
21. Guardian Bank
22. Gulf African Bank
23. Habib Bank AG Zurich
24. Housing Finance Company
25. I&M Bank
26. Imperial Bank Kenya (In Receivership)
27. Jamii Bora Bank
28. Kenya Commercial Bank
29. Mayfair Bank
30. Middle East Bank Kenya

31. National Bank of Kenya
32. NIC Bank
33. Oriental Commercial Bank
34. Paramount Universal Bank
35. Prime Bank (Kenya)
36. SBM Bank Kenya Limited
37. Sidian Bank
38. Spire Bank
39. Stanbic Bank Kenya
40. Standard Chartered Kenya
41. Trans National Bank Kenya
42. United Bank for Africa
43. Victoria Commercial Bank

Source: CBK Report (2016)

Appendix III Questionnaire

The main purpose of this questionnaire is to collect data to be used in conducting research on quality management and operational risk management in commercial banks in Kenya. Your honest participation in responding to the questionnaire will be helpful in completing the study. Being a purely academic study, the data will be used for that purpose only and will be handled with confidentiality.

SECTION A: DEMOGRAPHIC DETAILS

1. Your current role or grade in the bank.
Middle management [ ] Senior Management [ ] other [ ]

2. Which function do you work in?
Compliance {} Risk { } Legal {} Operations& IT { } Finance {}
Retail Banking { } Corporate Banking { } Other { }

3. For how many years have you worked in the bank?
Less than 5 years {} 5 to15 years { } 15 to 25 years { } Over 25 years { }

SECTION B: IMPLEMENTATION OF QUALITY MANAGEMENT PRINCIPLES IN COMMERCIAL BANKS IN KENYA.

4. Using Weak-1, Strong- 2and Outstanding-3, please rate the bank on the following:

Statements	Weak-1	Strong-2	Outstanding-3
Quality agenda forms part of bank's strategy			
Bank's culture allows staff to give ideas on how to improve products			
Senior management's behavior is consistent with bank's values			
Management is committed to quality products and services			

5. Do you agree or disagree on the following statements?

Statements	Disagree	Agree
Staffs are empowered through training to build competence.		
Staff are treated with respect		
Staff are recognized for delivering quality performance		
Staff are blamed when things go wrong		

6. How frequent does the bank carry out the following?

Statements	Never	Often	Always
Designs products based on specific customer needs			
Strives to understand customer's current and future needs			
Uses customer's complaints and feedback to identify areas for improvement			
Measures customers satisfaction			

7. Using Yes or No please provide your views on the following areas.

Statements	No	Yes
Bank benchmarks its products with the best in market		
Bank empowers and trains staff with new skills and competences		
Staffs brainstorm openly on how to improve systems and processes.		
Bank learns from failure and makes improvements		

SECTION C: OPERATIONAL RISK MANAGEMENT LIMITATIONS IN COMMERCIAL BANKS IN KENYA.

Using True or False, please rate the bank on the following;

8. Bank encourages staff to report operational failures in order to undertake improvements

True [ ] False [ ]

9. Bank's senior management improves areas where operational failures have occurred.

True [ ] False [ ]

10. Staffs are trained on how to prevent operational risk failures in their areas of work.

True [ ] False [ ]

11. Bank emphasizes on learning from operational risk failures in order to make improvements.

True [ ] False [ ]

SECTION D: OPERATIONAL RISK MANAGEMENT PRACTICES SUITABLE FOR COMMERCIAL BANKS IN KENYA

Please rate the following using Not important, Important and Very important

12. Analyzing operational failures and sharing lessons learnt with all staff would help to prevent failures in future.

Not Important [ ] Important [ ] Very Important [ ]

13. Allowing staff to give ideas on how to continuously improve processes, systems would improve on quality performance.

Not Important [ ] Important [ ] Very Important [ ]

14. Senior management should be committed to a quality performance oriented culture across bank to manage operational failures
Not Important [ ] Important [ ] Very Important [ ]

15. Bank should have teams that deal with quality performance issues such as poor customer service and responds quickly to improve.
Not Important [ ] Important [ ] Very Important [ ]

16. Bank should continuously monitor operational failures in order to improve processes, systems and up skilling of staff.
Not Important [ ] Important [ ] Very Important [ ]

SECTION E: RELATIONSHIP BETWEEN QUALITY MANAGEMENT PRINCIPLES AND OPERATIONAL RISK MANAGEMENT

Please rate the following using True or False

17. Continuous improvement of the banks systems, processes and training of staff would help bank to minimize operational failures
True [ ] False [ ]

18. Staff involvement is essential in minimizing operational failures in the bank
True [ ] False [ ]

19. Customer focus should be the driving factor in helping the bank to design products and services
True [ ] False [ ]

20. Senior management commitment to quality performance culture is critical in management of operational failures
True [ ] False [ ]
Other comments if any……