

**QUALITY CONTROL PRACTICES AND ORGANIZATIONAL
PERFORMANCE OF MOBILE TELECOMMUNICATIONS
FIRMS IN KENYA**

BY

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**A RESEARCH PROJECT SUBMITTED IN PARTIAL
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF
THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION
AT THE SCHOOL OF BUSINESS UNIVERSITY OF NAIROBI**

2017

DECLARATION

This research project is my original work and has not been submitted or presented for examination in any other university, either in part or as a whole.

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This research project has been submitted for examination with my approval as University supervisor.

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DEDICATION

This research project is dedicated to my family and my workmates for the love, inspiration, support and prayers throughout my M.B.A program. God bless you.

ACKNOWLEDGEMENT

I take this opportunity to acknowledge several people who made completion of this research project a success. Special recognitions go to my supervisor Mr. Tom Kongere for the guidance and valuable suggestions with many hours spent in reading and providing feedback. I also wish to acknowledge my moderator Mr. Michael Chirchir and the University of Nairobi academic staff who walked with me and assisted me throughout my course work.

ABSTRACT

This study investigated the effect of quality control practices on the organizational performance of mobile telecommunications firms in Kenya as well as the extent to which these quality control practices are implemented in these firms. The study was based on two theories, that is, Deming's theory of Total Quality Management and the Reliability Theory by Rausand and Hoyland. To achieve the objectives of the study, a descriptive survey design was used. The target population comprised the 5 mobile telecommunications firms in Kenya. Primary data, which was collected using a semi-structured questionnaire, was used. Descriptive statistics and regression analysis was used to analyse the data. The study established that there is a statistically significant relationship between quality control practices and organizational performance of mobile telecommunications firms in Kenya. It ranked the quality control practices adopted by mobile telecommunication firms and discussed the implications thereof. Leadership commitment was found to be the most influential quality control practice, followed by Supplier Quality Management. These were followed by Employee Relations, Customer Focus and Process Management in that order. It further revealed that assuming all other independent variables are at zero, a 1% increase in use of quality control practices leads to improved performance of the mobile telecommunication firms. From the study, it was established that up to 72% of the variation in organizational performance can be accounted for by the variation in the quality control practices discussed, with the remaining 28% being accounted for by other factors not in the model or by chance variation. Finally, the study established that increased performance, enhanced sales, increased market competitiveness and acquisition of a bigger market share, enhanced service delivery in the company and increased retention as a result of customer satisfaction were all outcomes of using quality control practices. The study therefore recommended that mobile telecommunication firms should benchmark to borrow the best quality control practices and source for new quality management systems so as to enhance organizational performance. It also recommended further studies to be done on the quality control practices and the organizational performance for the entire telecommunications industry, including internet service providers, courier services and the Postal Corporation of Kenya.

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ABBREVIATIONS AND ACRONYMS

CA	Communications Authority of Kenya
SME's	Small and Medium Sized Enterprises
SPSS	Statistical Package for Social Science
TQM	Total Quality Management

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Continually enhancing organizational performance has become one of the key guiding principles of going concern businesses. Organizational performance can be defined as the actual results or outputs of an organization as compared to its desired outputs, objectives and goals (Jon & Randy, 2009). Generally, all organizations have a mission whose common goal ultimately is to ensure the long-term survival of the company. All organizations have competitors that are already supplying similar products or services. An organization can only survive by manufacturing products or offering services that customers view as one way or another 'better' than those from its competitors. The organization's operations strategy makes sure that such products or services are available in the long run.

While designing its operations strategy, the firm has several options. It can opt to focus on price by driving down costs to guarantee that its products or services are competitively priced in the market. Alternatively, it can focus on product flexibility by offering customized products to the different segments of the market. It could focus on technology by investing in research and development to ensure that its products are not rendered obsolete in today's fast changing business environment. Rapid technological changes and information acquisition have become key factors that determine business success. It could also choose to focus on customer service by investing in a customer relations management system to enable it manage customer expectations and share information regarding its products and services with its clients.

However, one of the key factors that has recently gained prominence in its relevance to enhancing organizational performance is the concept of quality control. Quality control refers to guidelines formulated by an organization to guarantee that a service or product conforms to a specified collection of quality criteria and meets the customer's needs (Ahire, 2012).

Providing higher quality products or services has become a strategic requirement that concerns senior management across diverse sectors around the world (Sardessia, 2014). According to Demirbag, (2006) companies that report high productivity have been proven to implement quality control practices. Quality control leads to increased satisfaction of all stakeholders, for example employees, suppliers and customers (Ahmed & Ali, 2012). According Ahmed and Ali (2012), firms in the telecommunication industry adopt quality control practices as a tool to enhance organizational success and effectiveness.

As a result, organizations in the telecommunication industry have endeavored to adopt a number of quality controls practices that have been established and put in place to guide effective and efficient performance. However, there are conflicting arguments as to the necessity of quality control practices and whether organizations faced with the challenge of scarce resources like those in the telecommunication industry are getting value for money by investing in areas whose benefits have not been fully understood or investigated. Therefore, this research proposed to study the influence of quality control on organizational performance in the telecommunication industry.

1.1.1 Quality Control Practices

Quality control is an integrated management view-point that aims assiduously improving the quality of processes and products to ensure client satisfaction (Ahire, 2012). Firms that establish a strategy for quality management emphasize on attaining and maintaining outputs of high quality by applying management practices (inputs) and quality performance (outputs) (Schroeder & Sakakibara, 2014). Quality control practices are defined as those important areas which a firm must achieve in order to attain its mission through categorization and examination of their impacts (Oakland, 2015). Lee, Ooi, Tan and Chong (2010) defined quality control practices as those vital processes aimed at ensuring that a product manufactured or rendered service conforms to a specified set of criteria of quality and/or meets the desires of the customer.

The pioneers in quality management including Juran, Deming, and Feigenbaum emphasized the significance of the philosophy of quality as a crucial competitive tool in the transformation of an organization. Quality control refers to the process by which organizations evaluate the quality of all factors used in production and focus on fulfilling quality requirements (Lee, Ooi, Tan & Chong, 2010). Elements of quality in which organizations adhere to include well-defined controls, well-managed processes, integrity of operations, knowledge preservation and improvement, skills utilization and continuous improvement through experience.

Quality control in regards to the customer would be the unceasing process of making sure products, in their design and manufacture, are produced to attain and surpass the needs of customers (Kaynak, 2003). The drive of quality control is to ensure that specific processes conform to the organization's set standards. Effective quality control

requires one to define measure, compare, evaluate, correct, and monitor. Statistical process control attempts to remedy processes that are not in line with the preset limits and also to study the output standards to make sure they are up to specifications. Controls comprise product inspection, where each product is examined in great detail before it is released into the market. Inspectors are provided with descriptions and lists of unacceptable product defects for example, surface blemishes, loose fittings and poor workmanship with guidelines on how to handle them (Kaplan, 2013).

1.1.2 Operational Performance

Organizations seek to enhance the overall organizational performance by improving on its operations. Richard and Johnson (2009) define operational performance as the performance of the firm measured against its desired outputs or objectives and goals. The set goals and objective include waste reduction, regulatory compliance and productivity. Operational performance should make business operations efficient and effective. Effectiveness is the capability of an organization to deliver services and products that satisfy the customer's needs whereas efficiency refers to the utilization of company resources without wastage of time, materials and energy. For operational performance to be achieved a company must lay out measures in its operating environment to achieve the desired operational performance (Drucker, 2006).

There are a number of performance measurement systems in use today. These include the Cambridge measurement of performance process (Neely, 1996), the balanced scorecard of Kaplan & Norton (1993, 1996, 2001) and the Neely (2002) performance prism. All these systems of measuring performance identify the basic measurements of organizational performance as efficiency in productivity, improved quality, improved

financial performance and shareholder return, efficiency in asset utilization, cost reduction, enhanced business, continued customer loyalty, customer relations and customer satisfaction. Others are quality service, quality performance, one-time delivery and innovativeness. Therefore, organizational performance is defined as the results or the output of an organization measured using a predetermined measurement system and evaluated against the company's desired or intended performance.

1.1.3 Quality Control Practices and Organizational Performance

Measurement of performance is a key item in all management processes. It has conventionally incorporated accountants using the application of financial indicators like return on investment. Nevertheless, it is claimed that standard aggregate financial indicators are unsuitable in the TQM setting (Drucker, 1990). With the increasing cognizance that the quality of end products and services is a key strategic competitive factor, organizations have acknowledged that the notion of high quality has to be implemented to process of production in order to produce goods of high quality and to reduce costs. TQM progressed as a philosophy that stresses the need to offer products of high value through advances in efficiency through eradicating waste, minimizing lead times at every step of the process of production, minimizing costs, developing people, and continuous improvement (Harmon & Peterson, 1990)

1.1.4 Mobile Telecommunication Firms in Kenya

The Telecommunications sector in Kenya has grown steadily since the introduction of mobile telephones in the Kenyan market in 1992. The industry has experienced tremendous growth since the year 2008 with the advent of mobile money transfer. Given the steady increase in subscriber numbers for both fixed and mobile data

connections, the telecommunications industry in Kenya is anticipated to post healthy growth rates in the coming years.

In its Sustainability Report for the Financial Year ending March 2017, Safaricom assessed the significant indirect value it made to the economy, society and environment using the KPMG “True Value” methodology. According to this report, the total value in monetary terms that Safaricom created for the Kenyan society in the period was Kshs486 billion, which is about ten times its profits for the financial year 2017. Safaricom alone contributes an average of 6.5% annually to the GDP of the country. The economic impact made through the operations of the company is the greatest contributor to the value created. In addition, the social impact of the company’s money transfer service (M-Pesa) remains a significant creator of value for the Kenyan society. The other firms have had a similar impact, albeit on a much smaller scale. Indeed, there has been an ongoing debate on how this market dominance by Safaricom should be treated, with the market regulator proposing tough measures to ensure Safaricom does not abuse its dominance.

Despite the fact that the mobile telecommunications industry in Kenya is highly competitive, the market share is still heavily skewed in favor of one operator, Safaricom. According to the Communications Authority of Kenya, (2017) Safaricom is leading with a market share of 71.9%, Airtel Networks 16.3%, Telkom Kenya 7.2%, Finserve Africa Limited (Equitel) 4.4%, Mobile Pay Limited 0.2% and Sema Mobile services with a subscription base of only 295 customers representing 0.0% of the market. During the period under review, Safaricom gained 0.7% market share, Airtel Networks lost 1.3 percentage points of its market share compared to the previous period

while Telkom Kenya's market share reduced by 0.2% to reach 7.2% compared to the previous quarter. This study focused on four mobile telecommunication firms, that is, Safaricom Limited, Airtel Kenya, Telkom Kenya and Finserve Africa Limited. These four operators account for 99.8% of the market share and hence justifies their choice.

1.2 Research Problem

Quality control is increasingly being perceived as a working tool that provides solutions to a variety of issues affecting organizations today. Franklin (2011) stipulates that there is an increase in adoption of quality control practices by businesses in anticipation that this would translate to improved performance and subsequent achievement of organizational goals. Telecommunications industry players in Kenya have adopted quality control practices. Effective quality control standards enable firms build a reputation for having superior products. As long as you have an effective guarantee, your business will prosper (Omae & Ndung'u, 2015).

In the telecommunications industry in Kenya, mobile telecommunication firms have been forced to devise ways to improve performance. The CA has been enforcing quality of service performance among the mobile telecommunications providers by levying steep penalties for failing to achieve the required standards. Indeed, in the financial year 2015-2016, the CA fined three operators, namely, Safaricom, Airtel and Telkom a combined total amount of Shs311.6 million for failing to meet the required performance parameters in eight areas, including completed calls, speech quality, call success rate and call drop rate. The magnitude of these penalties is therefore an indicator of the importance placed on quality by the market regulator and which therefore compels the firms to embed quality control practices in their operations.

Several studies have been done on quality management and performance both locally and globally. Global studies include Terziovski and Samson (2013) who examined the significance of the connection between the quality control practices and organizational performance for a random sample of manufacturing firms in New Zealand and Australia. The findings of their studies showed that quality control practices explained a substantial degree of performance variance. A few of the classifications of quality control practice were particularly significant forecasters of performance. Research done by Cua, McKone and Schroeder (2001) as well as Kaynak (2003) on the connection between practices of quality management and strategic advantage found an underlying significance and a causal link between the two.

Locally, Ater (2013) carried out a study to find out the difficulties encountered during the application of total quality management in secondary schools in Migori County. The study found that management commitment, organizational culture, resources and organization played a role in Total Quality Management implementation. Thuo (2013) established that the implementation of ISO 9001 is beneficial in terms of improving operational performance. Kariuki (2014) investigated the link between environmentally friendly operations practices and the performance of hotels in the Coastal region in Kenya and revealed that there are positive results for firms implementing green operations.

From the above-mentioned studies, it is evident that no study has covered quality control and operational performance in the telecommunication industry in Kenya. Hence, there exists a knowledge gap. This study purposed to bridge this knowledge gap

by studying the impact of practices of quality control on operational performance in mobile telecommunication firms in Kenya. Thus, the research question: what is the effect of quality control on the organizational performance of mobile telecommunications firms in Kenya?

1.3 Research Objectives

The following were the objectives of this study:

- i. To determine the extent to which quality control practices are implemented in mobile telecommunications firms in Kenya.
- ii. To determine the relationship between quality control practices and operational performance of mobile telecommunications companies in Kenya.

1.4 Value of the Study

The findings of this research will be valuable to researchers and future scholars since the information will serve as a reference point for researchers and academicians who will show an interest in this area or other related topics. It will add to the bank of knowledge for students of operations management.

Management in telecommunication industry will be able to make informed decisions regarding adoption of quality control strategies by understanding how such practices will enhance their competitiveness and improve organizational performance. First, it will aid organizations in Kenya in developing effective quality control strategic plans to ensure their long-term survival and success and to meet stakeholder expectations. In addition, management in Telecommunication industry will be able to assess whether there is value for money in investing in quality control practices.

The recommendations and conclusions of this study will enhance the effectiveness of policy decisions since such decisions are founded on concrete research findings. The findings of this study on the relevance of quality controls to organizational performance can be used to inform policies for Telecommunication industry regulatory bodies. The findings of this study is likely to inform the decision to introduce new regulations on the management of telecommunication industry if the study findings indicate a strong correlation between quality control practices and enhanced organizational performance.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter analyzed the review of literature. A review of the theories was done, underlining the theories of quality control practices and their perceived relationships with organizational performance. It gave insights on the conclusions of other studies and recognized their input to the prevailing body of knowledge. It also provided an understanding of the facets of quality control practices and organizational performance and the relationship thereof between the study variables.

2.2 Theoretical Literature Review

In the study of quality control there are several theories that attempt to explain the perceived relevance of quality control practices on organizational performance. The study was guided by two theories; Deming theory of Total Quality management of (1986) and the Reliability Theory of Engineering.

2.2.1 Deming Theory of Total Quality Management

Total quality management has progressed as an approach to quality that it is characterized in terms of a systematic, integrated organization wide plan for enhancing the quality of services and products (Tenner & DeToro, 1992). Literature review shows that total quality management covers a wide range of topics and perspectives. One individual who has been associated with the total quality management movement is W. Edwards Deming (1986). He based his management philosophy around principles that he presented as necessities to stay competitive in manufacturing products and rendering services, for example, management leadership and commitment, statistical process control, elimination of obstacles to employee input, quality control and continuous processes improvement. Juran (1989) gave emphasis to product design and planning, quality audits, and angling quality management in the direction of both customers and suppliers. Crosby (1984) emphasized on organizational factors such as training, cultural change, leadership, and the continuous calculation of quality costs. Crucial extensions to the total quality management structure include the advance of customer-based specifications in process or product design (Taguchi & Clausing, 1990) as well as benchmarking, that is, gauging of products/services and processes against those of organizations recognized as the best in the industry.

Basing his arguments on this theory, Goldhar (1993) explained that superior quality raw materials, technically competent employees, reliable and flexible suppliers are key for superior quality finished products or services. He further argued that effective quality control involves firm-wide quality assessment, supplier quality management, competitive benchmarking, quality information system, and management systems that promote quality improvement and coordination within an organization. This theory is particularly useful in this study because the total quality management perspective of work performance is perhaps most relevant in understanding the connection between quality and work performance and how to manage such performance. This theory provides an understanding of quality control practices in regard to how quality improvement is a never-ending quest for product innovation that generally leads to improved customer satisfaction and organizational performance.

2.2.2 Reliability Theory

In the early 1930s, Shewhart, Dodge, and Romig (1931) presented the theoretical base for applying statistical approaches in the quality control of products in the manufacturing industry. Borrowing from the foundations of Shewhart, Dodge, and Romig, Rausat and Hoyland (2014) implemented the Reliability theory of quality management. According to Strandberg (1992), reliability can be defined as the capability of a product to execute a desired function, under preset operational and environmental conditions and for a defined period of time.

Reliability theory involves meeting the identified likelihood of success, at a preset statistical confidence level. Reliability is based on the intended purpose and is assumed

to imply flawless operation. According to this theory, the quality of an item is defined not only by its adherence to specifications at the point of purchase by the user, but also by its capability to conform to these specifications over its total lifespan. Quality implies the adherence of the item to its specifications as manufactured while reliability refers to its ability to continue complying with these specification over its entire lifespan. Reliability is therefore an extension of quality into the time domain (Smith, 1997).

According to the theory, a reliability program is utilized to document exactly what methods, tasks, analyses, tools, and tests are needed for a specific system. Reliability is necessary for an effective quality control program. It is established early during the system development phase. It stipulates what the reliability engineer does as well as tasks performed by others (Kaynak, 2003). Reliability addresses the system itself by outlining the assessment and test needs as well as the related documentation and tasks. Reliability requirements are contained within in the applicable system and subsystem requirement test plans, specifications and contract statements. According to this theory, the reliability of technological systems is a key requirement for quality control practices that have a direct influence on organizational efficacy and reliability of the organization by customers and eventually performance.

This theory is applicable in this study because quality management and assurance is progressively focused, inspired by the almost obligatory execution of the ISO 9000 series of standards. The concepts of reliability and quality are tightly linked, (Strandberg, 1992). Reliability may in certain circumstances be deemed to be a characteristic of quality; maybe even the most important characteristic. According to

the theory, all technical components items, systems and sub-systems are designed to achieve one or more desired tasks. For a product to be reliable, it must achieve more than just attaining an initial quality specification or factory performance - it must function satisfactorily for a defined duration in the exact application for which it was intended.

2.3. Quality Management Practices

The relationship between quality management practices and the organization's performance has been of great interest to researchers around the world. Quality management practices that will form the basis of this study are leadership, customer focus, employee relations, supplier quality management and process management.

Anderson's (1994) definition of leadership is the capacity of senior management to envision a long-term perspective of the firm given the dynamic customer needs. The senior leadership team drive quality practices implementation, creating goals, values and systems to meet customers' expectations thereby enhancing organizational performance (Ahire, 1996). There exists a solid link between the production of products and services of high quality and satisfaction of the customer (Sila & Ebrahimpour, 2014). Customer satisfaction is defined as the extent to which an organization's customers constantly perceive that the firm's products or services are meeting their needs and expectations (Anderson, 2014). Organizations need to establish a customer relationship model to gauge customer expectations, involve customers in the process of quality improvement and hence ensure customer satisfaction (Prajogo & Sohal, 2013). The customer is the most significant link in the value chain. Quality should be targeted at meeting the expectations of both present and future consumers (Deming, 1986).

Another quality management practice is employee relations. This emphasizes on recognizing employee perception on quality, encouraging team work, providing training and involving employees in the formulation of quality decisions. Employee training and employee relations have a positive relationship to quality improvement while a quality program's successful implementation depends on the coordination and collaboration among the employees. The employees will therefore be more responsive to customers hence leading to a positive impact on customer relations through improved resources and information access (Ahire, 1996).

Supplier quality management is another vital component of quality management. This is because raw materials and parts are a major contributor of defects in quality (Kaynak, 2013). Supplier relationship focuses on a few suppliers, allows participation by suppliers in product development, ensures quality-based supplier evaluation and provides training and technical assistance to suppliers (Black & Porter, 1996). According to Deming (1986), a measure of the quality being purchased is more important than the price of the product.

The efficacy of implementation of process management has been considered as one of the key features in the integration of quality efforts. Process refers to the totality of methods, machines, tools, people, and materials used in the production process. Quality management assumes that the general product quality can be enriched by enhancing of the process quality that are either directly or indirectly linked to their production (Ahire, 1996). Process management aims to decrease process variation by linking quality to the process of production.

2.4 Empirical Literature Review

International literature shows that firms that implement a strategy of quality management aim at attaining and maintaining outputs of high quality by using practices of management as inputs and quality performance as outputs. Askarany (2012), while examining the diffusion of six proposed quality control practices instruments in regards to the theory of organizational change, explored the link between the implementation of these methods and business competitiveness in manufacturing and service firms in New Zealand. The conclusions imply a substantial link between the distribution of these comparatively recent quality control practices tools and organizational performance.

Al-Qahtani, Alshehri and Aziz (2015) on the other hand discussed total quality management implementation in Pakistan and explored the link between effective implementation and organizational performance. According to them, TQM in Pakistan was implemented in three categories, namely, quality control, quality assurance and continuous improvement. This study found that TQM practices affect the organizational performance both positively and negatively. However, although this study directly focused on distinguishing the relationship between TQM and organizational performance, it failed to consider several other factors such as organization culture, size and level of innovation.

One of the more recent conceptual researches in Nigeria (Ujunwa & Modebe, 2012) encouraged the implementation of quality control practices methodology in safeguarding capital market efficiency due to the apparent crucial role played by the

capital market in the development of the economy. The strategic measures they studied varied from strict regulation to attaining a positive macroeconomic situation. They postulated that these quality control practices not only stimulate the efficacy of the capital market, but also influence the role played by the capital markets in stimulating growth of the economy.

Muogbo (2013) explored the effect of quality control practices on growth of the organization and the development of a number of manufacturing firms in the floriculture industry in Nigeria. The findings indicated that the change processes enhanced growth in net profit, sales volume, and growth in number of employees, increased market share and enhanced the understanding of the process of strategy formulation (Vision, Mission, and Objectives & Goals), strategy implementation, strategy evaluation and strategy control. Findings from the analysis showed that most manufacturing firms in Anambra State did not implement quality control practices. However, their implementation had substantial impact on their competitiveness and influences on manufacturing organizations.

Locally, Owiti (2014) examined the impact of quality control practices on the organizational performance of hotels in Nairobi. Her study revealed that ISO standardization influenced to a great extent the likelihood of guests to recommend the hotel to other guests, repeat customer rate, occupancy rate, revenue per room and reservation efficiency. It established that while quality management practices were implemented to a limited extent in these hotels, with benchmarking being the dominant practice, other quality management practices should be deployed to a greater extent since this will give the organization a greater competitive edge.

Kanorio (2014) examined the effect of TQM practices and operational performance in Kenya's banking sector. Her study findings revealed that implementation of quality management systems has increased bank profitability, improved sales revenue and service delivery. The banks also became more competitive hence acquiring a larger market share. Operational costs were significantly reduced due to operation efficiency and an increased customer retention as a result of customer satisfaction.

Ofunya (2013) studied the relationship of quality control practices and the performance of Postbank in Kenya. The study demonstrated that the quality control practices implemented by Postbank in order to survive the competitive environment included offering excellent customer service, enhancing operational efficiency and vigorous pursuit of cost reductions, among others.

Most of these studies have shown a positive link between quality control practices and performance. In order to withstand the dynamic global challenges, organizations have embraced new philosophies such as Concurrent Engineering, Just In Time strategies, Lean Production and Business Process Re-engineering. This has enabled them become more effective in the manner that they run their businesses. However, according to Terziovsky and Samson (1999), there appears to be substantial variations in the link between TQM and performance across industry sectors and different company sizes, especially on the effect of defects, new products innovation and warranty costs. In their findings, it is not guaranteed that TQM will lead to profitability. There are certainly those organizations that have achieved good returns just as there are those that have implemented TQM but have not realized any profit. The main driver underlying these philosophies is the optimization of the firm's performance in its respective market targets.

2.4.1. Summary of Empirical Studies

Author (Year)	Title of Study	Objectives	Key findings	Knowledge Gaps
Terziovsky and Samson	The Link Between Total Quality Management and Organizational Performance	Test the strength of the link between practices of TQM and organizational performance using covariates like ISO 9000 certification status, industry type and company size	TQM tends to have both positive and negative results when analyzed with company size and industry type.	There is a substantially negative link between TQM defect rates and warranty costs.
Askarany (2012)	A comparative investigation into the diffusion of management accounting innovations in the UK, Australia and New Zealand	To isolate how innovation characteristics affect the distribution of cost and innovations in management accounting	Senior management support and commitment is a key factor in acceptance and successful execution in innovation in processes in cost and management accounting methods.	The study only focused on the role of top management in influencing process improvement but did not consider other factors like process management, customer focus

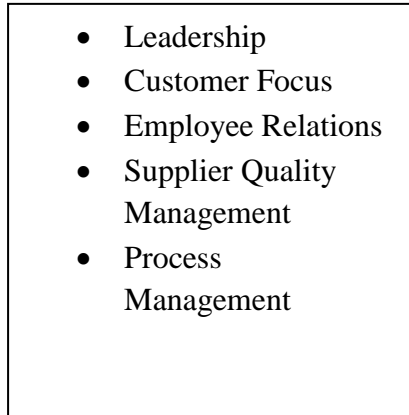
Author (Year)	Title of Study	Objectives	Key findings	Knowledge Gaps
Ujunwa and Modebe, (2012)	Adopting Strategic Management Approach in the Capital Market Development: The Nigerian Case	Examine the impact of approach of strategic management in ensuring efficiency in the capital market	Implementation of effective strategic management measures ensures efficiency of the capital market.	The study only concentrated on strategic management but failed to explore other factors influencing organizational performance like leadership, customer focus and process management.
Muogbo, (2013)	The Impact of Strategic Management on Organizational Growth and Development (A Study of Selected Manufacturing Firms in Anambra State)	To investigate the Quality management practices adopted by hotels in Nairobi and find out the impact of the adopted practices on hotel performance	Strategic management has an effect on firm performance and competitiveness of the firm	The study failed to identify the what causes the low adoption of strategic quality control practices in Anambra State in Nigeria
Owiti (2014)	Quality Management Practices and Performance of Hotels in Nairobi	To determine the strategic management practices adopted by large pharmaceutical firms in Kenya and their effect on their performance	Quality management practices in the hotel industry have been adopted only to a small extent, with benchmarking being dominant.	Reasons for low adoption of quality management practices were not discussed.

Author (Year)	Title of Study	Objectives	Key findings	Knowledge Gaps
Kanorio (2014)	Total Quality Management Practices and Operational Performance of Commercial Banks in Kenya	To examine the effect of TQM practices on operational performance of commercial banks in Kenya	Implementation of quality management systems has increased bank profitability, enhanced sales, increased organizational performance in banks	Lack of empirical data on TQM implementation in the commercial banking sector
Ofunya (2013)	Effects of strategic management practices on performance of financial institutions in Kenya: A case of Kenya Post Office Savings Bank	To examine the relationship of strategic management practices and firm performance in Postbank	There is link between the strategies applied by Postbank Kenya and their corresponding performances considering objective performance indicators, including growth in revenue, assets, net income, market share and overall performance	The study was focused only on one organization. The findings therefore could not be generalized to other organizations within or outside the banking industry.

2.5. Conceptual Framework

Independent Variables

Quality Control Practices



Dependent Variable

Organizational performance

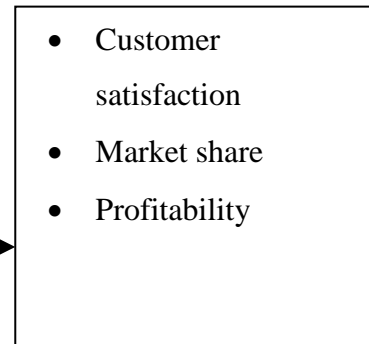


Figure 2.1 Conceptual Framework

Source: (Author, 2017)

The illustration above indicates how quality control practices (independent variable) such as effective leadership, training, customer focus, and effective employee relations positively improve organizational performance by enhancing customer satisfaction, increase in market share and subsequent organizational profitability (dependent variables).

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlined the research methodology adopted in this study. The sub-sections of the research methodology included research design, the population of the study, data collection tool, processing and analysis of data and it described the procedures and techniques adopted.

3.2 Research Design

This study implemented a descriptive research design. Fox and Bayat (2007) describe descriptive research design to involve asking the “why” question with a goal to establish, detail, characterize or identify what is. This gained extensive information on the impact of quality control practices on the performance of organizations in the telecommunication industry in Kenya thus according the researcher the opportunity to probe the various aspects in their natural state without influencing them in any way.

3.3 Population of Study

According to the Communications Authority of Kenya (2017), there are 5 mobile phone companies in Kenya. This study focused on those with at least 5% of the market share which comprise 4 companies, that is: Safaricom Limited, Airtel Networks Kenya Limited, Finserve Africa Limited (Equitel) and Telkom Kenya Limited. The study adopted a census study owing to the small number of study subjects (mobile telecommunication firms in Kenya). Consequently, data collected from the whole population was accurately representative of the whole population and therefore detailed data was availed right down to specific areas.

3.4 Data Collection

The researcher collected primary data which provided sufficient and current data regarding the effect of quality control practices on performance of firms in the telecommunication industry in Kenya. A semi-structured questionnaire was utilized to gather primary data. The questionnaires were distributed to four (4) employees in charge of operations or their equivalent with sufficient information in regard to quality control practices and organizational performance from four departments in each company, thereby making a total of sixteen (16) respondents.

The Customer Service department, Supply Chain department, Information Technology department and the Human Resource department, or their equivalents were chosen for this study. These departments are responsible for the day to day running of the organization hence their relevance to this study. The questionnaires were deployed through the drop-and-pick method by the researcher and his assistant by way of email or hand delivery. Once the questionnaire was designed, it was pre-tested on a respondent who was not part of the sample. This helped in determining the strong points and weak areas of the questionnaire in regards to the question format and order as well as choice of words.

The questionnaire was divided into three sections. Section (A) which captured information about general characteristics of the organization and the respondents, section (B) captured information on management perception on the effect of quality control practices on organizational performance while section (C) captured Organizational performance. The collected data was analyzed with a view to determine their relationship as identified in the conceptual framework.

3.5 Data Analysis

Table 3.1: Summary of Data Collection and Data Analysis

Objective	Data Collection	Data Analysis
General/Demographic Information	Section A of the questionnaire	Descriptive Statistics
The effect of Quality Control Practices by the mobile telecommunication firms in Kenya	Section B of the questionnaire	Correlation and regression analysis
Challenges and benefits of implementing quality control practices by the mobile telecommunication firms in Kenya	Section C of the questionnaire	Descriptive statistics

Table 3.1 is a summary of data collection and data analysis which presents how the collected data was analyzed. Data in section A was analyzed by use of descriptive statistics. Section B on the effect of Quality Control Practices by the mobile telecommunication firms in Kenya was analyzed through correlation and regression analysis. Section C on challenges and benefits of implementing quality control practices by the mobile telecommunication firms in Kenya was analyzed through descriptive statistics. The research adopted a multiple regression equation to establish the effect of quality control practices on organizational performance. The regression equation is as shown below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where; Y – Organizational performance

$\beta_0, \beta_1, \beta_2, \beta_3$ – Are constants regression coefficients representing the condition of the independent variables to the dependent variables.

ε = Error term

X_1 – Leadership

X₂ – Customer Focus

X₃ – Employee Relations

X₄ – Supplier Quality Management

X₅ – Process Management

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter discussed the presentation and interpretation of the findings from the field. The chapter presented the background data of the respondents and findings of the analysis based on the study objectives. Primary data was collected using structured questionnaires which were administered to 4 mobile telecommunication firms in Kenya. Descriptive statistics and regression analysis were used to discuss the findings of this study. The findings were presented as per the different classes outlined below.

4.1.1 Response Rate

The study targeted a population of 20 respondents from 5 mobile telecommunication firms of which 16 from 4 firms filled in and returned the questionnaires thus ensuring a response rate of 80%. This response rate was sufficient to draw conclusions from the study since it was representative of the population. According to Mugenda and Mugenda (1999), a 50% response rate is sufficient for analysis and reporting; 60% is good while a response rate of over 70% is excellent. Based on this statement, the response rate was more than sufficient

4.1.2 Gender

This section sought to establish the gender of the respondents. This was done in order to ensure fair engagement of respondents in terms of their gender. Results are shown in table 4.1.

Table 4.1: Gender of the Respondent

Gender	Frequency	Percentage Frequency
Male	10	62.5
Female	6	37.5
Total	16	100.0

Source: Research Data, (2017)

From the results, the study noted that majority of the respondents (62.5%) were males whereas 37.5% were females. This shows that most of the respondents of this study were of the male gender.

4.1.3 Level of Education

Individual level of education is highly associated with problem solving ability and approach to challenges. In this essence, respondents were asked to indicate the highest level of education attained. The results have been analyzed in table 4.2

Table 4.2: Level of Education

Education level	Frequency	Percentage
Diploma	2	12.5
Degree	10	62.5
Master's Degree	3	18.7
PhD	1	6.3
Total	16	100.0

Source: Research Data, (2017)

From this section, the study noted that 12.5% of the respondents held a bachelor's degree, 62.5% of the respondents held a master's degree, 18.7% of the respondents held a PhD whereas 6.3% of the respondents held diploma education. This implies that majority of people in mobile telecommunication firms held a high level of education as they had attained bachelor's degree, master's and PhD level of education.

4.1.4 Years of Service in the Mobile Telecommunication Firm

The researcher sought to determine the years of service in the mobile telecommunication firm in Kenya. Table 4.4 below summarizes the responses.

Table 4.3: Years of Service in the Firm

Years of operation	Frequency	% Frequency
< 5 years	2	12.5
5 to 10 years	12	75
15 years>	2	12.5
Total	16	100.0

Source: Research Data, (2017)

From the data, the majority (75%) of the respondents indicated they had worked for the firms for between 5 to 10 years, 12.5% indicated below 5 years and 12.5% indicated operations above 15 years. This shows that most of the respondents had worked for a sufficient time to be knowledgeable about the information that the study required.

4.1.5 Years of Company Existence

Table 4.4: Years of Company Existence

Years of company existence	Frequency	Percentage
Below 5 years	4	25%
5 to 10 years	8	50%
15 years and above	4	25%
Total	16	100.0

Source: Research Data, (2017)

From the findings above it depicts that 25% of the respondents indicated that their company had been in existence for less than 5 years, 50% indicated that their company had been in service for the period between 5 to 10 years while 25% indicated that their company had being in service for more than 15 years. This is an indication that most of the companies have gained experience since most of them have been in service for long period hence this can help in getting valid findings in the study.

4.1.6 Employees Working Department

Table 4.5: Employees Working Department

Department	Frequency	Percentage
Customer service	4	25
IT	6	37.5
Human Resources	4	25
Supply Chain	2	12.5
Total	16	100.0

Source: Research Data, (2017)

From the above table, it sought to establish the department in which individual employees worked. The findings depict that 25% worked in the Customer service

department, 37.5% in the information and technology department, 25% in the Human Resource department and 12.5% in the supply chain department. This is a good indication since these are the major departments in the organizations that are involved in the day to day operations of the organizations and where quality control practices are highly implemented.

4.2 The extent of Implementing Quality Control Practices by the Mobile Telecommunication Firms in Kenya

4.2.1 Implementation of Quality Control Practices

This section sought to show the extent to which quality control practices had been implemented in the mobile telecommunication firms.

Table 4.6: To What Extent Is the Implementation of Quality Control Practices

Age Distribution	Frequency	Percentage
Fully	12	75
Partially	2	12.5
None of the above	2	12.5
Total	16	100.0

Source: Research Data, (2017)

From the above findings, the study sought to establish to what extent the mobile telecommunication companies had the implemented quality control practices. 75% of the respondents' firms had fully implemented, 12.5% had partially implemented and 12.5% had no options to pick. This finding agrees with Murray and Chapman (2003) who considered the organization as continually improving. According to them, quality

control and total quality management underpin the first phase of a learning organization that is fundamentally about adaptive and incremental learning.

4.2.2 Extent of agreement With Statements on Leadership, Customer Focus, Employee, Supplier Quality Management and Process Involvement

The study sought to determine to which extent the respondents agreed with the statements on the Table 4.7. The respondents were asked to indicate the extent to which they agreed with the statements on the Quality Management Practices used by mobile telecommunication firms in Kenya. The scale that was applicable was: 1= Strongly disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree. The entries of “Strongly Disagree” and “Disagree” represent a variable with mean score of 0 to 2.5 on the continuous Likert scale; ($0 \leq S.D. < 2.4$). The entries of “Neutral” represent a variable with a mean score of 2.5 to 3.4 ($2.5 \leq N < 3.4$) and the entries of both “Agree” and “Strongly Agree” represent a variable with a mean score of 3.5 to 5.0 ($3.5 \leq S.A. < 5.0$).

Table 4.7: Extent of Agreement with Statements in Leadership, Customer Focus, Employee, Supplier Quality Management and Process Improvement

Statements	Mean	Std. Dev.
Leadership		
The company leadership has provided the necessary resources to meet the new requirements resulting from quality management systems implementation	3.85	0.54
The company leadership has provided conducive working environment to employee involvement in quality management process	4.02	0.27
The company leadership is actively involved in formulating strategies for achieving superior quality in the institution	3.65	0.75
The company leadership has inspired staff and management in effective use of the organizational resources as well as directing institutional efforts towards excellence in quality	4.65	0.71
Average	4.0425	0.5675
Customer focus		
One of the most vital components for the success of a company is its customers	4.25	0.65
The result of one activity (the process) directly affects the other entity (the customer)	3.78	0.84
Customers satisfaction improves the cash flow of an organization	3.69	0.78
Average	3.9067	0.7567
Employee Relations		
As part of implementation of quality management in the company employee's quality of life is effectively managed by the company top management	4.38	0.89
The company spends a large amount of its annual budget on employees training and development on total quality management systems	4.02	0.29
Quality management systems programme allows employees use their creativity in matters of service delivery.	3.42	0.45
The company management has provided a conducive environment that directs efforts of the employee toward attainment of the organizational objectives	4.12	0.78

Employees have been given the latitude to make decisions that affect them and their teams	3.54	0.68
	3.896	0.618
Supplier Quality Management		
Implementation of total quality management benefits both the customer and the supplier	4.23	0.65
Consistent commitment to total quality management benefits both supplier and customer	3.81	0.39
Suppliers are involved in the planning for quality	3.71	0.84
Average	3.9167	0.6267
Process Improvement		
The implementation of the total quality management has been improved	3.05	0.89
A well-implemented total quality management in organization increases customer satisfaction	4.13	0.76
The success of total quality management results to improved employees' involvement.	3.50	0.66
Average	3.56	0.77

From the findings above it depicts that respondents largely agreed with the various assertions, starting with the assertion that company leadership has provided the necessary resources to meet the new requirements resulting from quality management systems implementation (M=3.85, SD=0.54). Leadership has provided conducive working environment to employee involvement in quality management process (M=4.02, SD=0.27), company leadership is actively involved creating plans, systems and strategies for achieving product quality in the institution (M=3.65, SD=0.75), company leadership has inspired staff and management in effective and efficient use of the resources and efforts of the institution towards quality excellence (M=4.65, SD=0.71). One of the most important factors for the success of a company is its

customers (M=4.25, SD=0.65), the result of one activity (the process) directly affects the customer (M=3.78, SD=0.84), Customers satisfaction improves the cash flow of an organization (M=3.69, SD=0.78), The company spends a large amount of its annual budget on employees training and development on total quality management systems (M=4.02, SD=0.29), The company management has promoted the establishment of an environment that encourages employee efforts toward attainment of institutional objectives (M=4.12, SD=0.78), Employees at all levels have the responsibility and authority to make decisions that affect them and their work teams(M=3.54, SD=0.68), Implementation of total quality management benefits both supplier and customer(M=4.23,SD=0.65), Long-term commitment to total quality management benefits both supplier and customer(M=3.81,SD=0.39), suppliers are involved in the planning for quality (M=3.71,SD=0.84). These findings are consistent with Deming's theory of total quality management which was based around principles that he presented as necessary for any organization to remain competitive in both manufacturing and service industries. These principles included leadership commitment, elimination of obstacles to employee input, continuous process improvement, supplier quality management and customer focus.

4.3 Organizational Performance

The study also sought to determine the extent to which the organizations performance have benefited from using the quality control practices. Table 4.9 below represents the findings.

Table 4.8: Organizational Performance

Benefits	Mean	Std. deviation
Implementation of quality management systems has increased company profitability.	4.00	0.56
Quality management systems have enhanced sales which have contributed to company performance	4.03	0.46
Effective implementation of quality management systems has increased company competitiveness and resulted in acquisition of bigger market share.	3.98	0.71
Quality management systems have boosted service delivery in the organization	4.11	0.94
Application of quality management practices has guaranteed effective waste reduction in the organization.	3.78	0.67
Quality management systems improve operation efficiency thus reducing operational costs	4.61	0.53
Application of quality management systems has resulted in improved customer retention as a result of customer satisfaction	4.09	0.29

Source: Research Data, (2017)

From the findings, the majority of the respondents agreed that; Quality control practices are beneficial to the organizational performance in the mobile telecommunications firms in Kenya depicting in increasing company profitability (M=4.00, SD=0.56); Use of quality control practices has enhanced sales (M=4.03, SD=0.46); Quality control practices has increased company competitiveness and resulted in acquisition of bigger market share(M=3.98, SD=0.71); There has been improved and enhanced service delivery in the company (M=4.11, SD=0.94). Further the respondents agreed that use of quality control practices has ensured effective waste reduction in operations. (M=3.78, SD=0.67) and Use of quality control practices has improved operation efficiency thus reducing operation costs (M=4.61, SD=0.53); Quality control practices has led to increased retention due to customer satisfaction (M=4.09, SD=0.29).

These findings are in line with (Ahire, 1996) that the senior leadership team drive quality practices implementation, creating goals, values and systems to meet customers' expectations thereby enhancing organizational performance by increased performance,

enhanced sales, increased market competitiveness and acquisition of bigger markets, enhanced service delivery in the company and increased retention as a result of customer satisfaction.

4.4 Relationship between Quality Control Practices and Organizational performance

A regression analysis was applied to find out the influence of quality control practices on the organizational performance of mobile telecommunications firms in Kenya. The independent variables were measured in terms of Supplier Quality Management, Process Management, Customer Focus, Employee Relations and Leadership. The results are discussed in tables 4.9, 4.10 and 4.11.

Table 4.9: Regression Coefficients Table

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig. (p value)
		B	Std. Error	Beta		
1	(Constant)	.172	.071		2.422	.001
	Leadership	.356	.014	.342	25.42	.002
	Employee relation	.244	.019	.231	12.84	.000
	Customer Focus	.154	.027	.326	5.70	.002
	Supplier Quality Management	.254	.085	.289	2.98	.001
	Process Management	.342	.064	.258	5.34	.000
a. Dependent Variable: Organizational Performance						

Source: Research Data, (2017)

The established regression equation was: $Y = 0.172 + 0.356X_1 + 0.244X_2 + 0.154X_3 + 0.254X_4 + 0.342X_5 + \epsilon$ where X_1 is Leadership, X_2 – Employee Relations, X_3 is Customer Focus, X_4 is Supplier Quality Management, X_5 Process Management and Y

is Organizational Performance. The beta values indicate the extent to which each independent variable affects the dependent variable when all other independent variables are held constant.

The study established a significant relationship between Organizational performance and the independent variables; Leadership Use ($p=0.002<0.05$) and Customer focus ($p=0.000<0.05$), Employees Relations ($p=0.002<0.05$), Supplier Quality Management ($p=0.001<0.05$) and Process management ($p=0.000<0.05$). The regression coefficients were tested for significance at $\alpha =0.05$. Significance occurs at p-values less than 0.05. From the above results, all the predictors are good indicators for Organizational performance. Using the t-statistics displayed in the table above, the researcher was also able to establish the most influential predictor variables in the regression model. As a rule of the thumb, if the calculated t-statistic is greater than the $t_{critical} (\alpha=0.05)$ value then the independent variable is a significant predictor of the outcome variable and that the greater the calculated t-statistic the greater the predictability of the variable. Consequently, the most influential predictor variable in the regression model was leadership (25.42 (Calculated t-value) >1.96 ($t_{critical} (\alpha=0.05)$), closely followed by employee relations (12.84 (Calculated t-value) >1.96 ($t_{critical} (\alpha=0.05)$), then customer focus (5.70 (Calculated t-value) >1.96 ($t_{critical} (\alpha=0.05)$), process management (5.34 (Calculated t-value) >1.96 ($t_{critical} (\alpha=0.05)$), and finally supplier quality management (2.98 (Calculated t-value) >1.96 ($t_{critical} (\alpha=0.05)$).

According to this regression model, assuming these quality control practices (Leadership, Customer Focus, Employee Relations, Supplier Quality Management and Process Improvement) as zero, the organizational performance realized will be 0.172.

The results show that taking all the other independent variables as constant, a unit increase in application of Leadership will result in a 0.356 increase in performance. Similarly, a unit increase in application of Employee Relations, assuming all other factors are held constant will result in a 0.244 increase in organizational performance, a unit increase in application of application of Customer Focus will result in a 0.154 increase in organizational performance and a unit increase in application of Supplier Quality Management will lead to a 0.254 increase in performance. Finally, a unit increase in application of Process Improvement will result in a 0.342 increase in organizational performance. These findings were consistent with that of Demirbag, (2006) who stated that companies that report high performance have been proven to implement quality control practices.

Table 4.10: Regression Model Summary

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	0.833 ^a	0.720	0.700	0.001

Source: Research Data, (2017)

From the regression summary, the R squared (R²) value of 0.720 shows that 72% of the organizational performance is explained by the Quality Control practices. The remaining 28% is explained by other factors not included in the model and by chance variation.

Table 4.11: Anova ^a

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	143.8	5	28.76	11.23	.001 ^a
Residual	25.61	10	2.561		
Total	169.41	15			

Source: Research Data, (2017)

The ANOVA results in table 4.11 shows the calculated F-value of 11.23, which is significant at $0.001^b < 0.05$. From the F-distribution table, it was found that $F_{\text{critical}}(5, 10) = 4.24$ at $\alpha = 0.05$. Given these findings, it is evident that the calculated F-value is greater than the critical F-value, that is $11.23 (F_{\text{calculated}}) > 4.24 (F_{\text{critical}})$. Therefore, the null hypothesis that the regression coefficients are zero is rejected and the conclusion is that indeed the regression model has a predictive capability. Moreover, this implies a match between the regression model and the data and that the use of regression analysis was justified. Regression coefficients are presented in table 4.9. All the coefficients of the two study variables or attributes were statistically significant at $p < 0.05$.

4.5 Discussion of the Findings

From the results of the analysis, all the firms have adopted quality control practices in their operations, although the extent of the adoption of these practices differ. The majority of the respondents (75%) indicated that their firms have adopted quality control practices to a large extent with 12.5% indicating adoption of these practices to a small extent while another 12.5% who were not sure. The number of years that the company had been in existence was a pointer of the extent of adoption and implementation of these practices. Those companies which had been in existence for more than 10 years were shown to have implemented these quality control practices to a much greater extent than those which had been in existence for less than 10 years. According to the regression model, it is clear that the quality control practices under study have a significant effect on organizational performance. The R^2 value of 0.72 indicates that up to 72% of the organization's performance can be explained by the implementation of these quality control practices.

The role played by the company leadership in directing the quality strategy for the organization was evident as can be seen by the high mean score of 4.0245 and standard deviation of 0.5675. This agrees with Ahire's (1996) assertion that the role of senior leadership is to drive the implementation of quality control practices, create goals, values and systems to meet customer's expectations thereby enhancing organizational performance. The leadership provided the necessary resources needed to meet regulatory requirements in the industry. In addition, they provided a conducive working environment by allowing the employees to be involved in the quality management process. It did this by inspiring staff and management in creating strategies, plans and systems for achieving superior quality of the products and services provided by the organization. All the firms in studied in this research have a strong senior leadership team that guided the organization in this direction.

Supplier quality management was also found to have been deployed to a great extent, with a mean Score 3.9167 and a standard deviation of 0.6267. This concurs with Kaynak (2013) who posited that raw materials and parts are a major contributor of defects in quality. This therefore means that the supplier is a vital component in the strategic quality planning process. This is because the quality of the goods and services provided by the organization is only as good as its suppliers. As a result, it was noted that all the 4 companies have adopted the ISO standards of quality in all its processes thus ensuring that for any supplier to do business with them they also need to be ISO certified.

The study found that focus on the customer is vital for the success of the company, with an average mean of 3.9067 and a standard deviation of 0.7567. By being customer-centric, the organization is assured of its long-term survival. By involving the customer in its quality planning process, the company secures its business into the future. This conclusion agrees with Sila and Ebrahimpour, (2005) who established a strong relationship between the provision of goods and service of high quality and profitability of the organization as a result of customer satisfaction. The firm needs to identify a customer relationship model to measure customer needs and expectations, embed the voice of the customer in quality improvement and hence ensure satisfaction of the customer (Prajogo & Sohal, 2003).

The importance of employee relations on organizational performance was also evident from the analysis, with an average mean of 3.896 and average standard deviation of 0.618. The organizations put a lot of emphasis on quality of life of the employees and spent a significant amount of their annual budget on employee training and development. In addition, employees at all levels were empowered to make decisions that affect them and their teams. Ahire, (1996) affirms this when he posited that employees who are positively engaged and empowered are more responsive to customers hence resulting in a positive impact on how they relate to the customers through improved information access.

Finally, the importance of process improvement on organizational performance was also highlighted by this study. Process improvement cuts across all the departments in the organizations. By continually improving its processes, the organizations were able to cut down on waste and improve efficiencies in the way they conduct their businesses.

On organizational performance, quality management is often used as a multi-pronged approach to measuring the performance of the organization. Both financial and non-financial measures are considered as equally important (Sila, 2007). There are various measures of performance, for instance, customer-focused outcomes, product and service outcomes, process effectiveness outcomes, leadership outcomes, financial and market outcomes and workforce-focused outcomes.

However, despite the fact that all the respondents seemed to agree to a large extent that these quality control practices affect organizational performance, it is interesting to note that of the 4 companies, only one of them is profitable, both in terms of market share and financial performance. It would have been expected that the industry would be more competitive. One possible explanation of this paradox is that unlike its competitors, the dominant operator has a unique product that has ensured customer loyalty, that is, M-pesa. This, coupled with its vast network coverage and market presence has ensured an unassailable lead in profitability and market dominance, despite the tough regulatory and political environment. This concurs with Terziovsky and Samson (1999) who observed substantial variations in the link between TQM practices and performance across industry sectors and different company sizes. According to them, it is not guaranteed that adoption of quality management practices will lead to profitability.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the research findings on the influence of quality control practices on organizational performance in the telecommunication industry in Kenya with conclusions and recommendations.

5.2 Summary of Findings

The purpose of this study was to determine the extent to which quality control practices are implemented in mobile telecommunication firms in Kenya as well as to determine the relationship between quality control practices and operational performance of these firms. The target population was all the 5 mobile telecommunication firms in the country, of which data was obtained from 4 of them. Primary data was collected using a close-ended questionnaire. Descriptive statistics were used to summarize the basic features of the data in the study.

From the data collected, the respondents reported that the quality control practices that were the subject of this study were implemented to a large extent. The homogeneity of their responses is not surprising, given that the market regulator has made quality of service a non-negotiable requirement to be allowed to offer telecommunication services in Kenya. From the analysis, Top management commitment to quality is evident as demonstrated by the average mean of 4.04. This shows the senior leadership has embraced quality and has recognized its importance in the overall organization strategy. The study also highlighted the importance of the customer, given the highly competitive nature of the industry. All of these organizations have put the customer at the center of

their strategic focus by having multiple channels for customers to share feedback and complaints handling, having well trained customer care representatives and having a clear customer journey for all its products and services so that the customer's experience is factored in before a product is launched.

The study has also shown that all these organizations consider employees to be their most valuable resource and have therefore spent significant amounts of their annual budgets on employee welfare, learning and development. The employees have been encouraged to give their input in regards to the quality of products and services produced by the organization.

5.3 Conclusion

This study has provided a comprehensive review of Quality control practices and organizational performance in the mobile telecommunication firms in Kenya. The successful implementation of quality control practices in the telecommunications industry in Kenya is influenced largely by top leadership. Having a strong leadership team enables the organization to avail the required resources to fully implement the quality management practices discussed earlier. Some of the many benefits the mobile telecommunication companies get from using quality control practice include improved market share, enhanced sales, increased, enhanced service delivery in the company and increased customer retention as a result of customer satisfaction.

Further the study concludes that the mobile telecommunication firms are a faced with a number of challenges in the use of quality control practices such as high cost of budgeting for quality management systems, poor leadership support and steep penalties

by the industry regulator for failing to meet quality of service requirements. Lastly the study concludes that there is a significance relationship between the quality control practices and the organizational performance of mobile telecommunication firms in Kenya

5.4 Policy Recommendations

This study recommends that the regulatory environment be reviewed so that mobile telecommunications firms have some input in the enforcement of quality in the industry. This is because technology changes very fast and hence the guidelines for measuring quality of service should adapt accordingly. This can be done by benchmarking with countries in the developed world on best practice in regards to regulating technology firms.

5.6 Limitations of the Study

Given the fact that this study was based on a self-assessment of quality by managers in the studied organizations there could have been an inherent bias in their responses. Future studies may do well to examine the perceptions of customers and employees of quality in these telecommunications firms.

5.7 Recommendation for Further Research

Arising from this study, the following directions for future research in mobile telecommunications companies in Kenya were recommended: First, this study focused only on the mobile telecommunications companies in Kenya. Therefore, generalizations cannot adequately be relied upon based on their small number and the markets they serve. Based on this fact among others, it is therefore recommended that a broader analysis be done for the telecommunications industry in general. This will

include all internet service providers as well as the Postal Corporation of Kenya. Similar surveys to this can be replicated in a few years to come to assess if the factors have changed as more mobile telecommunications companies are established in Kenya and as the regulatory environment changes.

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APPENDICES

APPENDIX I: QUESTIONNAIRE

This questionnaire has 3 Sections.

Section A: Background Information,

Section B: The extent of implementing Quality Control Practices by the mobile telecommunication firms in Kenya

Section C: Organizational performance.

SECTION A: Background Information

1. Indicate your gender (Mark \surd)

Male () Female ()

2. Please indicate your highest level of education attained (Mark \surd)

Diploma () Bachelor Degree () Master's Degree ()

PhD () None of the above ()

3. How long have you worked for the mobile telephone operators in Kenya?

(Mark \surd)

Below 5 Years () 5 – 10 Years () 10 – 15 Years () Above 15 Years ()

4. How long has this Company been in existence? (Mark \surd)

Below 5 Years () 5 – 10 Years () 10 – 15 Years () Above 15 Years ()

5. Please indicate your department (Mark \surd)

Customer Service () Information technology () Human Resources ()

Supply Chain ()

SECTION B: The extent of implementing Quality control Practices by the mobile telecommunication firms in Kenya

6. To what extent has your firm implemented quality control practices? (Mark √)

Fully () Partially () None of the above ()

7. Using a scale of 1-5, where 5= strongly agree; 4=Agree; 3=Neutral; 2=

Disagree; 1=strongly Disagree; Please indicate the extent to which you agree with the following statements? (Mark √)

Statements					
Leadership	1	2	3	4	5
The company leadership has provided the necessary resources to meet the new requirements resulting from quality management systems implementation					
The company leadership has provided conducive working environment to employee involvement in quality management process					
The company leadership is actively involved in formulating strategies for achieving superior quality in the institution					
The company leadership has inspired staff and management in effective use of the organizational resources as well as directing institutional efforts towards excellence in quality					

Statements					
Customer focus	1	2	3	4	5
One of the most vital components for the success of a company is its customers					
The results of one activity (the process) directly influences the other entity (the customer)					
Customers satisfaction improves the cash flow of an organization					

Employee Relations					
As part of implementation of quality management in the company employees quality of life is effectively managed by the company top management					
The company spends a large amount of its annual budget on employees training and development on total quality management systems					
Quality management systems programme allows employees use their creativity in matters of service delivery.					
The company management has provided a conducive environment that directs efforts of the employee toward attainment of the organizational objectives					
Employees have been given the latitude to make decisions that affect them and their teams					
Supplier Quality Management					
Implementation of total quality management benefits both the customer and the supplier					
Consistent commitment to total quality management benefits both supplier and customer					
Long-term relationship between purchasers and suppliers is necessary for best economy.					
Suppliers are involved in the planning for quality					
Process Improvement					
The implementation of the total quality management has been improved					
A well implemented total quality management in organization increases customer satisfaction					
The success of total quality management results to improved employees involvement.					

SECTION C: Organizational Performance

8. Using a scale of 1-5, where 5= strongly agree; 4=Agree; 3=Neutral; 2=

Disagree; 1=strongly Disagree; Please indicate the extent to which you agree with the following statements? (Mark √)

Statements					
Performance	1	2	3	4	5
Implementation of quality management systems has increased company profitability.					
Quality management systems have enhanced sales which have contributed to company performance.					
Effective implementation of quality management systems has increased company competitiveness and resulted in acquisition of bigger market share.					
Quality management systems have boosted service delivery in the organization					
Application of quality management practices has guaranteed effective waste reduction in the organization.					
Quality management systems improve operation efficiency thus reducing operational costs					
Application of quality management systems has resulted in improved customer retention as a result of customer satisfaction					

9. Please indicate any challenges facing your firms in implementing quality control practices.

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**APPENDIX II: TELECOMMUNICATIONS COMPANIES IN
KENYA**

1. Safaricom Limited
2. Airtel Networks Kenya
3. Telkom Kenya Limited
4. Finserve Africa Limited
5. Sema Mobile Services

APPENDIX III: LETTER OF INTRODUCTION