

**EFFECT OF QUALITY MANAGEMENT ON FINANCIAL
PERFORMANCE OF MANUFACTURING FIRMS IN INDUSTRIAL
AREA, NAIROBI COUNTY**

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**RESEARCH PROJECT PRESENTED IN PARTIAL FULFILMENT
OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE
OF MASTER OF BUSINESS ADMINISTRATION, SCHOOL OF
BUSINESS,
UNIVERSITY OF NAIROBI**

NOVEMBER, 2017

DECLARATION

I declare that this is my original works and has not been previously presented for the award of any degree in any other university.

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D61/81830/2015

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

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DEDICATION

I dedicate this research project to my family for their encouragement, moral and financial support when I was pursuing my MBA programme

ACKNOWLEDGEMENT

My gratitude goes to the almighty God who has been my guide throughout. Special thanks to my supervisor Dr. Duncan Ochieng Elly for his invaluable guidance and motivation. My gratitude also goes to the management and staff of University of Nairobi, School of Business for providing the environment conducive for academic excellence. I also acknowledge my family members for their support as well as all who contributed to the successful completion of this research project in one way or another.

ABSTRACT

In the modern day times, quality of products and services is a significant element that may offer a firm a competitive edge in the market. For this reason, it is inarguably of paramount important that firms strategically seek to manage quality in order to survive, grow and enhance their profitability. Quality management takes different aspects such as continuous improvements which is the processes of constant evaluation of process to find avenues of bettering the efficiency and quality of products and services. In addition, benchmarking is quality management technique that compares best practices within the firm or outside the firm with the aim of enhancing efficiency, productivity and customer's satisfaction. This study assessed the effects of quality management practices on financial performance of manufacturing firms in Industrial Area, Nairobi County. The study had a target population of 401 manufacturing firms in Industrial Area, Nairobi County that are members of the Kenya Association of Manufactures. The study adopted a descriptive research design and collected primary data by use of questionnaires. Qualitative analysis was done through descriptive statistics like mean and standard deviation. An analysis of variance was conducted and from the regression model, the results found out that, the regression model is not statistically significant in predicting how Continuous Improvements, Customer Focus, Top management commitment, Benchmarking practices and Supplier partnerships affect financial performance of manufacturing firms in Industrial Area, Nairobi County. This study recommends similar study be conducted focusing on additional variables that affect financial performance of manufacturing firms in Industrial Area, Nairobi County.

LIST OF ACRONYMS AND ABBREVIATIONS

CI –	Continuous Improvements
GDP-	Gross Domestic Product
IMF-	International Monetary Fund
ISO-	International Standardization Organization
JIT-	Just in Time
KAM-	Kenya Association of Manufactures
KNBS-	Kenya National Bureau of Statistics
NSE-	Nairobi Securities Exchange
PDCA-	Plan Do Check Act
QM –	Quality Management
SMEs –	Small and Medium Enterprises
SPSS -	Statistical Package for Social Sciences
TQM –	Total Quality Management
TOC –	Theory of Constraints
RBV-	Resource Based View
UK –	United Kingdom
USA-	United States of America

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CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

According to Ismyrlis & Moschidis (2015), quality is a significant element that enhances the competitive strategies of firms in the modern-day world. The business environment is turbulent and highly competitive characterised by increased customer demands making organisations vulnerable in the markets. To this end, it is prudent that the quality of their services and products are high and that they meet customer expectations. Quality Management (QM) leads to superior performance and leads to institutions having competitive advantages in the market (Allen & Kilmann, 2001).

Goetsch and Davis (2007) notes, that the adoption of QM is a management tool that motivates the staffs to improve and better their skills and expertise. It is important to note that quality should go hand in hand with cost reductions. Foster & Jonker (2007) notes that, the importance of having techniques on total quality management is to make sure that organisations are customer based and thus improving the overall performance of the organisations. Organisations have internal capabilities that may be exploited to improved performance. In this regard, QM established a framework upon which internal environment of the organisations is evaluated and leads to exploitation of avenues of costs reductions, product quality improvements and enhancement of services. According to Foster & Jonker (2007) QM is a framework that encourages innovations that ensures the efficiency of processes is improved. Craig and Douglas (2012), idealizes that when QM is successfully adopted and implemented in organisations, there exists chances for improved profitability and productivity.

This project was underpinned on the following theories: Deming's Theory, Resource based theory and the Theory of constraints. These theories are important in that they seek to give insights on quality management practices. Deming's Theory idealizes that the quality of goods and services can be improved through enhancing the internal environment ensuring continuous improvements and checking the results on statistical balances. Particularly, the theory advocates for system knowledge and variation appreciation. The resource based view theory puts it that it is important for firms to identify their core competencies, capitalize on them in order to improve their results. It is the rare resources that provide a company with chances of improving performance particularly when they cannot be copied by competitors in the market. The Theory of Constraints advocates that for organizations' performance to be improved, management should plan on how to utilize the entities' capabilities and capacities in order to better performance of entities outputs both in quality and quantity

According to Lamport, Seetana, Conhyedass and Sannassee (2014), quality management improves the performance of firms because it ensures that production of goods and provision of services is customer focused. They put it that quality of products is crucial to the survival, growth and improved profitability of manufacturing firms irrespective of the size. Further, according to Goetsch and Davis (2007), quality management is beneficial to the manufacturing firms because it ensures that employees are train and obtain skills and expertise in running the operations of the firm. It is important to note that the overall aim of quality management is to enhance the quality of products for the manufacturing firms.

1.1.1 Quality Management

According to Oakland and Tanner (2007) Quality management may be defined as a set of management practices and style that seeks to enhance an organization's competitiveness and performance. Thus, quality management ensures that the performance of the organization is improved over time at the most efficiency processes. It is important that firms commit themselves to use of processes that aims at reducing costs while at the same time improving quality and fostering innovations. Bell & Omachonu (2011), notes that quality management practices help in creating value for stakeholders of the firm as well as fostering customer satisfaction. It should be noted that quality management aims at creating an internal process that is centred on customer satisfaction. Thus, firms that have adopted quality management practices consequently develop avenues of developing new products with improved productivity, leads proper decision making processes and improves the skills of employees through trainings.

Quality management advocates for zero defects in products. Thus it aims at safeguarding the firms from costs of servicing warranties and repairs. Goetsch and Davis (2007), notes that quality management is concerned with the satisfaction of all stakeholders through customer focus and adopts continuous improvements on the organizations processes. This is because, the modern day customer is becoming increasingly aware of the need for quality of products and services. For this reason, it is crucial that the firms carry their operations with a focus of satisfying the customer. According to Oprime *et al* (2012), quality management is done through various mechanisms including benchmarking, continuous improvements and these two formed the main theme of this study.

1.1.2 Financial Performance

Financial performance is defined as the measure of an organizations output with respect to the inputs which is expressed in terms of profits or losses over a given period of time (Penman 2007). On the other hand, Ananth & Lourthuraj (2013) defines financial performance as the measure of how efficient a firm utilizes its assets in providing products or services and ultimately generates incomes. Thus, financial performance is a measure of firms' performance that is expressed in monetary terms. It is important to note that financial performance is a function of investment decisions and the business environment.

According to Petersen and Kumar (2010), financial performance is commonly expressed as ratios such as return on investments, return on assets return on asset, and also return on equity. It is vital that firms decide on the best measures of financial performance in order to get the most valid outcome on how well an organization utilizes resources in generating revenues. It is true to suffice that resources are scarce and they should be used in the most prudent way. The management should ensure that resources are put into the best way possible. Financial performance is broadly measured in terms of five main measures namely; liquidity, solvency and profitability ratios (Crane, 2010).

Liquidity and solvency rations measures how the firm can honor her financial obligation as and when they fall due while profitability rations measures how well inputs are being employed in generation of revenues. However, it is important to note that organizational performance cannot only be measured in terms of financial measures because non-financial measures are equally being adopted. Drury (2008) asserts that non-financial

measures carry as much importance like financial measures such as earning per share and return on investment.

According to Elly (2012), the success of firm may be expressed in several ways. More importantly, performance of the firm is either expressed on historical or comparative measures depending on the needs or various stakeholders of the firm. The firm has a number of stakeholders whose interests may be different and for this reason, it is crucial that the measures adopted by a specific firm have the capability of addressing the needs of the various stakeholders. The stakeholders include the employees of the firm, the owners (shareholders), government and tax regulators and the public.

1.1.3 Quality Management and Financial Performance

According to Lamport, Seetana, Conhyedass & Sannasee (2014), the successful adoption and application of quality management practices leads to an improved organisational performance. Quality management takes difference aspects including benchmarking and continuous improvements. Thus, for performance to be enhanced, quality must be adhered to and the products and services should meet the customer expectations. It is subtle to note that for companies to acquire competitive advantage in the market, it must have superior products that are produced in the most cost efficient way. In the words of Evangelos & Psomas (2013), quality of services and products should be the main focus of firms that desire to have a competitive edge in the market. The authors for instance give insights that ISO certification is a tool that ensures that firms are running process at international standards that improve financial performance.

Quality management calls for continuous but stead process improvements (Fassoula, 2006). Thus, it can be deduced that all proponents of quality management practices

appreciate that it is not an overnight process of fostering performance. Rather, it takes time and the management must ensure that resources are committed in training employees on how expertly run the business processes. Zeng (2007), notes that there are several ways to pursue quality management and they include: Total Quality Management (TQM), benchmarking, continuous improvement and Just in Time (JIT) practices. To a large extent all practices seeks to improve the efficiency of the processes, reducing costs and increasing the quality of products and services. Accordingly, therefore it is important for firms to have specific quality management practices that work for them given the internal processes and industrial knowledge of the management.

According to Goetsch and Davis (2007), total quality management is very beneficial to firms since it makes the staff to acquire new skills. Quality management, more often leads to change of processes and employees needs to be trained in order to carry out their activities in line with the new processes. To this end, the human resource of the organization gets skills that enhance their productivity. It should be noted that quality is a function of various factors among them, skills of employees. How well, the firm understands the needs and expectations of the customers are important for the company. Further, quality management aspect should be supported by the top management in order to earn yields for the firm. Jaafreh and Al-abedallat (2013) indicates for quality management to bear fruits the top management should be dedicated it, all the concerned staffs should be involved at planning and implementation of the proposed changes and the overall process should ultimately focus on the customer's needs and not the needs of the firm.

According to Valmohammadi (2011), the aspect of product quality is an important factor that should not be overlooked by the management of a modern day firm. The author notes that where the quality is compromised, the goodwill of the firm from its stakeholders and more so the customers is put at stake. Thus, quality is a strategic goal that needs to be steered by the top management. The concept of quality management calls for the participation of all persons in the organization. Beckham and Kotler (2007) idealizes that quality management has a basic tenet of creating value and ensuring that customer satisfaction is at par and that this makes it necessary that all departments in an organization work towards a common goal. This is further echoed by Jung and Wang (2006) who notes that all employees and management have a role to play if quality management is to succeed in a firm. Thus, quality management should be encompassed in all departments of an organization.

Foster and Jonker (2007) notes that entities should work towards ensuring that they are customer-focused. Organisations should seek to offer quality products to the customers and at the same time perform their processes in the most efficient way that enables cost reductions. However, Standa (2008), argues that the results of quality management practices such as TQM may not necessarily be measured in financial terms. For this reason, quality management is picked as an overall tool for enhancing both financial and non-financial performance of organizations.

1.1.4 Manufacturing Firms in Kenya

According to the Kenya Association of Manufacturers (KAM, 2017), there are 749 manufacturers that are registered with the association. However, the association notes that there are other smaller manufacturers that are not members. In Kenya, most

manufacturers are based in urban areas in zones commonly known as industrial areas. These zones are specifically set aside for establishment of premises for the purpose of manufacturing various products that are consumed locally and also for exports. Kenya has a large manufacturing sector compared to other East African countries. KAM (2017) indicates that the manufacturing sector of Kenya contributes to 10 % to 11 % of Kenya's Gross Domestic Product (GDP). For this reason, the role of the sector in the economy cannot be overlooked.

The Kenya National Bureau of Statistics (KNBS, 2016), indicates that the manufacturing sector of Kenya grew by an estimated percentage of 3.6 % which is lower from that realized in 2015 which stood at 4.1 %. A report by the International Monetary Fund (IMF) indicates that Kenyan economy will grow by 5-6 % in the year and this is attributed to the country robust manufacturing sectors. The KNBS reports that this sector employs over 500,000 directly with an additional 2.4 million people employed through the manufacturing supply and distribution chain which represents aboutn23% of the country's total employment. For this reason, the survival and sustained performance of the manufacturing firms cannot be overlooked. Quality of products is of paramount importance to manufacturing firms.

Manufacturing firms in Kenya engages in practices that aim at promoting quality of their products. In Kenya, firms are involved in benchmarking practices that ensures they remain competitive in the industry. According to (UNEP, 2015) resources scarcity compromises the success of manufacturing firms in Nairobi. Thus, it is important that the resources are utilized in the most economical ways possible. Manufacturing companies in Nairobi Industrial area adopt quality management practices that are customer oriented in

that all efforts are channeled towards customer satisfactions. It is important that firms engage in practices that lead to customer satisfaction. Satisfied customers tend to buy again and this improves the performance of firms.

1.2 Research Problem

Quality management practices have a potential of enhancing performance of entities (Vasileios & Odysseas, 2015). Customer focus aims at ensuring that customer expectations are met by the organization at all times. Quality denotes the product attributes that are deemed of good and are sought by the customers. In this regard, it is crucial to assess the practices that aim at increasing the satisfaction of customers on firm's products. Moreover practices that are aimed at enhancing performance should be assessed. In Kenya, manufacturing firms are operating in a highly turbulent environment that is characterized by stiff competition, rampant changes in technology and an ever increasing demand in quality from customers. The need for competitive advantages and customer satisfaction is of paramount importance to the firm in the modern business set up. Quality management brings about the existence of a system that ensures improved efficiency through continuous improvements. Anderson, Rungtusanatham and Schroeder (2004), notes that Quality Management has a central theme of ensuring that the focus of the firm is on the customer needs and satisfaction. Thus, it is fundamental that firms seek to enhance their products in terms of quality which the customer is seeking. However, despite the fact that QM has benefits not all organizations have adopted it. Hendricks and Singal (2007) argues that quality management is an important tool for fostering excellent financial performance. To this end, it is subtle to assess the role of QM on financial performance of organizations. It is important to note that the shareholders of a firm

expect a return on the funds they have invested in the company. Quality management has the tendency of improving the performance of firms (Choi & Eboch, 2008).

According to Onyango (2016), there exist direct correlation between quality management and organization's performance in Kenya. He sought to assess whether quality management had effects on financial performance of commercial banks, it was established that it improved the profitability by increasing the market shares of the banks. Wachira (2013), also notes that the adoption and implementation of quality management techniques enhanced customer satisfaction and had a positive effect on costs reductions among of supermarkets in Kenya. Kerandi, Nyaoga, Bosire and Nyambega (2014), established that benchmarking had a positive influence on performance of organisations as it was a useful strategy in ensuring that firms were not left out in times of technological changes.

In Iran it has been established that there is a positive relationship between quality management and performance of entities (Moghimi and Anvari, 2014). In their study it was found out that quality management ensures that the customers gains a central focus and processes and products are developed with respect to the needs of the customers. Firms should adopt management practices that lead to quality outputs that will ultimately delight and satisfy the customer. Goetsch and Davis (2007) studied on the impact and challenges facing quality management on the performance of manufacturing firms in Turkey. The study established that there exists a positive impact on the improved profitability. A study that assessed the role of quality management of health services organizations was done by Adam, Corbett, Flores & Harrison (2007) in the Netherlands. The study revealed that quality management led to improved performance of the entities.

In addition, Backstrom (2009) established that inadequacy of quality strategies lowered the financial performance of manufacturing companies in Europe. Thus, globally it can be noted that quality management may lead to improved performance. However, the phenomenon may not be similar to that of Kenya due to differences in business environments. The essence of quality management is bringing into existence means of improving financial performance by focusing on the customer needs and expectations (Wayhan, 2013; Talib, Rahman & Qureshi, 2014).

A number of studies have been undertaken on quality management. Wachira (2013) established that quality management practices have a positive significance on performance of Supermarkets in Nairobi. Oriare (2011) identified that quality management practices leads to reduced costs and improved customer satisfaction among the communication companies in Kenya. Muli (2014) studied quality management among state corporations and found out that the meeting of customer expectations should be the central focus of entities. Onyago (2016), did a study on quality and performance of commercial banks in Kenya and established that quality management increased the profitability of banks in Kenya. Evidently, therefore in as much a number of studies have been done on quality management in Kenya, none has been undertaken with specific reference to the manufacturing entities in Kenya. Due to this gap, the effects of quality management practices on financial performance of manufacturing firms in Industrial Area will be assessed through this study as well as answering the question: does quality management affect the financial performance of manufacturing firms in Industrial Area, Nairobi County affected by quality management?

1.3 Objective of the Study

The general objective of the study was to assess the effects of quality management practices on financial performance of manufacturing firms in Industrial Area, Nairobi County.

1.4 Value of the Study

This study is of importance to manufacturing companies in Kenya. This is because, elements of Quality Management have been discussed and the potential benefits evaluated. Thus, the study is of value to managers in the firms since they will get insights on how to implement the practices of quality management.

The findings of this research are useful to business advisors who may apply them in solving real time challenges facing manufacturing firms in Kenya enhancing the performance of the enterprises. The study has further provided practical solutions to solving the challenges of quality management. The study offers a guide to policy advisers in developing policies that will enhance quality of products and services for a firm's products.

Students and scholars will use this study as a source of empirical review. The study assessed the effect of quality management on financial performance of manufacturing firms in Industrial Area, Nairobi County. The study discussed aspects of quality management and its effects on financial performance and at the end; the study suggested areas for further studies.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviewed the theories under which the study is anchored, empirical review, summary of literature reviews as well as the gaps and conceptual framework.

2.2 Theoretical Review

This study was underpinned on the following theories: Deming's Theory, Resource based theory and the Theory of constraints. These theories are important in that they seek to give insights on quality management practices.

2.2.1 Deming's Theory

Deming's theory was developed by Deming in the 1950s. This theory had the goal of improving an organization's quality of goods and or services especially since America low production and the quality of goods by American industries were low due to the aftermaths of the First World War. According to this theory quality of goods and services can be improved through enhancing the internal environment ensuring continuous improvements and checking the results on statistical balances. Particularly, the theory advocates for system knowledge and variation appreciation. Deming noted that organizations should seek to correct the variations from their quality norms before the system deteriorates.

The Deming's theory on quality is important to this study because it gives insights on how organizations should work in order to continuously improve quality that ultimately may improve the performance. For instance a firm may seek to make customer satisfaction a strategic goal and by so doing the expectations of the customers are met.

Further, the theory sets a formula for continuous improvement, Plan-Do-Check-Act (PDCA). This explained means that strategies needs to be planned and specific quality objectives outlined. Then, actions and activities need to be implemented with the support of the management across the entire firm. As a best principle, checking the results of quality against the expectations is crucial as it ensures corrective actions are taken proactively. At the end of the process, the organization needs to establish whether quality goals have been realized and if not, another plan is set out. This process makes the theory significant to this study. It sheds lights on what actions and steps that an organization can take to enhance the quality of its services and products. Further, the theory assists in identifying the role of monitoring on a system to ensure quality is kept high at all times.

2.2.2 Resource Based View Theory

The resource based view (RBV) theory was coined by Rapert and Suter (1996). This theory puts it that the performance of an organization is a function of the resources that organization owns. According to Reed & Lemak (2000) total quality management is regarded as a tool for ensuring that an organization has sustainable competitive advantages. It is thus important for firms to identify their core competencies, capitalize on them in order to improve their results. It is the rare resources that provide a company with chances of improving performance particularly when they cannot be copied by competitors in the market. This theory puts it that it is more economical and feasible to control a firm's internal environments as opposed to the external environments. To this end, organizations should strive to improve their processes to ensure improved quality of products. Consequently, therefore, companies should focus on improving the internal processes in order to enhance their performance.

According to Eisenhardt & Martin (2000), the organizational adaptive ability is better dealt internal in times of rampant changes in the economy. Thus, this theory advocates organizations to concentrate on the efficiency of process internally in order to achieve their organizational goals. The theory of RBV identifies resources as the valuable key potentials that cannot be substituted and when put into good use, creates value for the customers. The theory categorizes resources in terms of valuable resources and rare resources depending on their availability. Accordingly therefore, a valuable resource creates value to customers and leads to the organization having competitive advantage, where rare resources can be acquired by a few companies. In the circumstance that the organizations needs to attain a sustained competitive advantage, then it has to differentiate its products and ensure the system runs efficiently.

This theory is relevant to this study because it gives insights on how organizations can improve quality of their products and services. It is important to note that quality management entails ensuring that employees are equipped with relevant skills to perform their duties efficiently and effectively, there is superior and satisfying customer relations and good supplier relations with an overall aim of improving the quality of goods and services

2.2.3 Theory of Constraints

Theory of Constraints (TOC) was coined by in 1980s by Goldratt. The theory of constraints provides a perfect approach on the aspect of continuous improvements. The theory of constraints seeks to explain the fundamentals of any changes in a system within an organization. The theory advocates that in order to improve the performance of organisations, the management should plan on how to utilize the entities' capabilities and

capacities in order to better performance of entities outputs both in quality and quantity. According to Draman (1995) the TOC puts it that there should be paradigms shifts that aim at enhancing the performance of organisations and they are instituted by the management from time to time in a continuous way. Organisations that want to better quality of the products and services must therefore judiciously use their resources through adopting efficient ways of productions.

According to Humair & Willems (2006), the existence of constraints may lead to low quality of produce if not checked. The TOC explains how strategies should be implemented in order to improve the performance of entities through superior quality of products and services. The theory of constraints is therefore very informative with respect to this study in that it explains on the ways that can be taken by entities to ensure continuous improvements. An effective management will realize the means of ensuring quality of products is improved over time (Shah & Ierapetritou, 2011).

2.3 Determinants of Manufacturing Firms' Performance

The performance of firms is influenced by a number of factors which may be within the firm or outside the firm. According to (Hitt, Hoskisson & Ireland, 2007), manufacturing firms have an overall strategic goal of maintain a performance that leads to a competitive edge in the market. These factors that determine the performance of firms may be termed as constraints (Hakala, 2011). These constraints have the effect of hampering the performance of organizations and therefore it is important for the management to prudently channel the resources to ventures that improves the performance of firms. The human resources of a firm determine its performance. It is important to note that the operations of an organization are run by human and it is therefore crucial they possess

relevant skills and expertise in conducting their duties. The smooth running of a firm's operations depends on the willingness of management to train the employees on best practices. It is for this reason, that performance of firms is influenced by human resources. Skilled personnel have the tendency of producing high quality goods and services which in turn improves the performance of organizations.

According to Buracket al. (2014), quality of products and services is a critical factor that should be managed well in order to enhance the performance of firms. In the modern times, the customer is keen on product attributes that satisfy their needs and expectations. For this reason, it is therefore prudent that the firm developed a production process that is customer focused. The firm owes its existence to the needs of customers. Thus, the firm should make customer satisfaction a priority. Sani & Allah (2012), notes that technology change is a common challenge affecting manufacturing firms in most economies. This makes continuous improvement a vital management concept that safeguards the organization from such changes. According to Arend & Levesque (2010), when a firm responds to customer needs efficiently, it has a chance of establishing a competitive edge over other firms in the market and this improves its performance. Thus, it is crucial for a firm to critically consider its competitiveness in order to enhance performance. Barney & Hesterly (2010) idealize that a firm should seek to possess those resources that competitors cannot have as this puts them in a competitive position. There are other factors that affect performance, for instance, managerial experience, financial resources, quality management, brand names, internal processes and the political environment. This study concentrates on impact of quality management on financial performance of manufacturing firms in Industrial Area, Nairobi County.

2.4 Quality Management Practices

According to Moore (2012) the quality of products and services is the measure of conformance to the expectations of the customers. In other words, quality is dependent on the purchaser of products and not as defined by the firms. This is because, firms would use their resources and make products and make them available for sale in the market but the actual measure of quality standards depends on the buyer. In usual circumstance buyers pick the affordable products with respect to their quality. Quality management practices are put in place in order to ensure that at all times, the customer is satisfied with the firm's products. The firm must then carry out survey and understand the needs and preferences of customers before embarking on production. According to Altiook (2012, quality is the intrinsic value a product has in the mind of the customer. In view of this, the firm should seek to improve the quality of services and products in line with the expectations of the customers. This is the very basic theme of quality management. Some of quality management practices include: continuous improvement practices, benchmarking, customer focus, top management commitment and supplier partnerships.

2.4.1 The Process of Continuous Improvement

According to Juergensen (2005), continuous improvement idealizes that a firms process should be often be evaluated because there are inherent avenues for chances of bettering it in terms of efficiency and quality of products and services. This means that over time processes are reevaluated constantly and improvements are made with an overall aim of satisfying the customers. Oakland (2007), notes that the process of continuous improvement ensures that the processes are more efficient and there is reduction of

wastages, the quality of products and services is greatly improved, the staffs are involved in decision making process and that ultimately, the performance of firms is enhanced.

Continuous improvement (CI) is concerned with improving the competitive advantages of firms. It is important that companies ensure they are competitively positioned in the market in terms of cost leadership, quality of produce, reduction of wastes and efficiency of the production runs. Deloitte (2012), notes that for companies to constantly enhance their performance there is a need to restructure and control their costs. It is important to note that customers' demands are ever shifting and for this reason, it is prudent that firms seek to continuously improve on their systems of productions in order to meet the customers' expectations. However, it is very critical that a company adopts new ways of doing things that are economical and not just because of change (Varian, 2007).

According to Krishan (2011), continuous improvements is more than mere changes of processes. Rather, it seeks to realize zero defects in products, mitigating errors and ensuring that staffs are trained to perform their functions. The improvements are made and they focus on the customer. Thus, for successful implementation of continuous improvement to be achieved, it is important that staffs are trained with relevant skills, and are motivated to efficiently fulfil their duties as required. Stephens (2014) equally notes that continuous improvement is a call for each and every one in an organization. The top management should offer support to all employees in the organization.

2.4.2 The Process of Benchmarking

Horngrén *et al.*, (2009), defines benchmarking as a process that seeks to compare an organization's process with those of the best in the same industry or in different industries. The process may take different dimensions depending on the company's

needs. For instance, most companies benchmark on product's quality, the efficiency of processes and means of waste reductions. Benchmarking is a procedure through innovative adaptation where firms learn from one another. Either within or outside the industry. In other word, it is a process of searching for industry "best practices" that is aimed at getting superior performances. Firms belief that adapting to the best will definitely result to improved performance.

There are leaders in the industry as well as in the sector. Thereby having benchmarks in selected areas. According to Blocher in 2010, the best benchmarking company should therefore benchmark on how the well performing market does its practices. Benchmark performance levels should be established as bases of comparison against which actual data can be compared. Such comparisons allow a company to understand another's production and performance methods so that the interested company can identify its strengths and weaknesses.

2.4.2.1 Types of Benchmarking

As noted by Hongren *et al.* (2013), types of benchmarking includes; internal benchmarking, competitive /external benchmarking, functional benchmarking as well and generic benchmarking. Internal benchmarking involves comparison of processes that are similar or totally different within one organization. For instance a firm may seek to explain why the finance department is not doing well when compared to the marketing department. It basically forms the basis for external benchmarking.

Competitive benchmarking is also known as external benchmarking and involves comparison of an organizations process with those of competitors. More importantly to consider is the careful adoption of methods of competitors. Further, it requires a lot of

resources to implement and more often gathering information is quite difficult because competitors would not be willing to share the information on their efficiency. Functional benchmarking is involved in comparisons of processes that are similar in a particular industry. In other words, functional benchmarking uses information from other firms that are similar to it. Generic benchmarking is the comparisons of a company's process with those of other companies regardless of the industry. Perhaps, this is the reason it is the most complex and most expensive to adopt (Drury 2007).

2.4.3 Customer Focus

Customer focus maybe explained as the tendency of firms channeling their resources and efforts to satisfy the customer. This is because, the firms owes their existence to satisfy the needs of customers. According to Knowles, (2011), customer focus is concerned with the understanding of the needs and expectations of the customers, setting customer satisfaction goals and striving to meet them in the most efficient ways. Firms should focus on creating sustainable values to the customers. It is true to suffice that happy customers are easy to retain and often recommends other customers to the firm's products and services. For this reason, customer focus should be a strategic objective of manufacturing firms. Barney & Hesterly, 2010 notes that since resources of an organization are scarce it is important they are channeled to the most profitable ventures, that which will attract more customers. Put differently, resources of a firm are better used to create value to the customers. The customer focus is a quality management practices that ensures that the firms operations are centered on the customers.

2.4.4 Top Management Commitment

According to Besterfield, Michina & Sacre (2010), there is a need for firms to involve all employees in planning productivity objectives because it motivates them to achieve them. Quality management involves processes changes and this calls for involvement of all stakeholders. It is for this reason, that the top management should be committed to quality and should keep a budget for quality improvements. It is crucial to note that the firm's top management is responsible for making sure that the quality of goods and services are within the threshold expected by customers. In pursuit of quality goals the top management should encourage and reward the achievement of quality goals to staffs (Mann, 2009). Equally, the top management should set standards of operations and monitor them to ensure that variations are detected and corrective actions taken in good time. According to Beard and Thomas (2007), it is important that top management of a firm develops a standard of quality of products and services. The quality of products and services improves the brand image of the firm and hence should be promoted by the top management.

2.4.5 Supplier Partnerships

According to Wilkinson, Adrian and Hugh (2006), in modern day times, manufactures are partnering with suppliers in order to make operations lean. This in essence is having direct communication with suppliers of parts and other resources necessary for the smooth running of operations. At times the supplier visits the manufactures premises to inspect and advice on the process and this has the tendency of ensuring that production does not stop due to stoppages that may be caused by shortage of spare parts and raw materials. Also, outsourcing is a current trend in manufacturing industry where firms

enter in arrangements to be providing parts they cannot produce. According to Songini and Marc (20013) outsourcing is one of the best tools of reducing the costs of productions. These partnerships are very beneficial to firms since they act as quality checks. The manufacturer sets standards of quality to the firm they are outsourcing from and if need be they help them achieve them. Murphy and Elana, (2012), notes that the purchasing department of the manufacturer plays an important role in the partnership because it is the link between the two partners. It is the purchasing department that receives information from the production department and gives feedback to the supplier in order to improve quality of items supplied.

2.4.6 Other Determinants of Performance

It should be noted that performance of manufacturing is not only influenced by quality management practices. Other factors that affect firm's performance include; political environment, firm's size, management competency among others. It is the confluence of all these and other factors that will influence the performance of manufacturing firms. For instance, a firm that is large may have better performance than a smaller firm. This is because; the large firm can enjoy economies of scale which may lower the operations costs per unit of products. Thus, the overall profitability of the larger firm is expected to be higher. The reverse case is true for a smaller firm. In fact, Mohanty, 2008) critics the practices of quality management in that they focus on the customers who may not actually purchase the products and thus leading to low profitability.

2.5 Empirical Review

This section contains a review of previous studies that have done on quality management and its influence on performance and is arranged per the objectives.

Otieno (2016), carried out a study on the continuous improvement techniques and efficiency of commercial banks in Kenya. The study had a general objective of establishing the relationship between continuous improvement and efficiency of banks in the Kenyan context. The study collected primary data by administering questionnaires and used a descriptive research design. For the purpose of establishing the relationship between the variables, that, is effect of continuous improvements on efficiency of banks, analysis of data was done by use of SPSS. Findings of the study were, continuous improvements tools that lead to improved efficiency were: quality improvement programs, leadership and training and customer focus. The study is informative on the aspects of continuous improvement but fails to take into consideration its effects on performance of firms. Further, banks and manufacturing firms operate in essentially different business environments. This current study will study manufacturing firms as the units of study.

A study by Muteti (2014), was carried out with an aim of assessing the effect of continuous improvements on operational efficiency of small and medium enterprises (SMEs) in Kenya. The study used an exploratory research design and collected primary data from a sample of the SMEs. The study findings indicated that continuous improvement had a role in improving the operational efficiency of the enterprises. In particular, the study established that continuous improvements leads to improved customer service, enhanced productivity and has better marketing techniques. However, the study did not seek to assess the relationship between continuous improvement and performance of the enterprises.

Kerandi, Nyaoga, Bosire and Nyambega (2014) carried out a study with an aim of establishing the role of benchmarking in performance of commercial banks in Kenya. The study adopted a descriptive research design with inferential statistics in data analysis. Data was analysed using SPSS and the study revealed that benchmarking had a positive influence on performance of organisations. Further, the study indicated that benchmarking was a useful strategy in ensuring that banks were not left out in times of technological changes. Equally, Sajabi (2012) established that benchmarking led to improved performance of commercial banks in Kenya. In the light of this discussion, it can be deduced that benchmarking improves performance. However, the studies relate to the financial markets which operate in different environments from manufacturing firms.

According to Wachira (2013), adoption and implementation of quality management techniques enhanced customer satisfaction and had a positive effect on costs reductions. The study had an overall aim of assessing the impact of quality management on performance of Kenyan supermarkets. Questionnaires were administered to collect primary data and descriptive research design was adopted. The regression model showed a positive relationship among the study variables, that is, quality management was statistically significant in explaining the variations of performance of supermarkets in Kenya. However, the study concentrated on retail markets that are generally merchandisers and may fundamentally face different economic environments from the manufacturing firms.

A study on the benchmarking practices in Nairobi was conducted by Okombo (2013). The study adopted a cross sectional statistical research design and had an overall objective of establishing the extent to which hotels in Nairobi adopted benchmarking.

The study found out that most hotels in Nairobi had carried out deliberate steps of benchmarking their processes. Dishon (2014) also identified that benchmarking had appositive impact on financial performance of SMEs in Kenya. It was further established that benchmarking was valuable to small enterprises as they could learn new ways of doing things efficiently and this increased their profits.

In the UK, a study by Whymark (2008), identified that benchmarking was very helpful in guiding organisations to change to old ways of performing operations. The study established that benchmarking ensured that processes worked efficiently and improves the performance. Akuma (2007) did a study on the effects of benchmarking as a tool of continuous improvement as adopted by the ministry of Agriculture in Kenya. The study established that benchmarking was adopted by state firms and improves process efficiency.

A study on the effects of quality management on performance of health care institutions in the country of the Netherlands was done by Adam, Corbett, Flores & Harrison (2007). The study had a general objective of establishing the role of quality of services on performance and used both primary and secondary data collected from 100 public hospitals in the nation. The study adopted a cross sectional research design and data was analysed through regression model. The study established that where quality management tools were adopted and implemented successfully, there were chances of improvements on performance over time. In as much as this study is significant and gives insights of how continuous improvements was measured in a period of three years, the study was done on service firms whose set up is different from the manufacturing firms in Industrial

Area in Nairobi County. This current study has unit of studies being manufacturing companies.

A study on the assessment of critical success factors on continuous improvements on public sectors in the United Kingdom (UK) was done by Karen, Antony and Douglas (2007). The study had an objective of establishing of identifying the subtle factors that lead to continuous improvements in the UK's public sector. The study adopted a content analysis research design and analyzed several papers to draw conclusions. The study established that among the factors that were evaluated: supplier relationships management, customer expectations management and staff training were the most influencing on continuous improvement. This study is very informative as it gives insights on the process of continuous improvement and discusses the factors that affect the process. This current study will go further and assess the role of continuous improvement practices on financial performance of manufacturing firms in Industrial Area, Nairobi County.

A study on the factors influencing the performance of continuous improvements in Brazil was conducted by Oprime *et al.* (2003). The study had a sample of 46 of respondents and collected data questionnaires sent through emails. The study adopted exploratory research design and established that for continuous improvement to happen the commitment of the employees was paramount. The study provides insights on the subtle reasons that may influence the process of continuous improvements. However, the study fails to connect the potential impact of continuous improvement and performance of organizations. It is important to note that the overall goals of continuous improvement are to positively

impact on organizational performance. Additionally, Adeoti (2003), identified that total quality management had positive effects on performance of commercial banks in Nigeria.

Tohidi *et al.* (2011), undertook a study to establish the how organizational learning affected innovation and how it influenced innovation among ceramic companies in Iran. The study had a descriptive research design where and data was collected from 18 manufacturing firms. The study had 173 respondents identified that organizational learning fostered innovations among the employees of the organisations and consequently, it impacted performance positively. This study is crucial because it indicates that learning is a way of bringing out the existence of new products and an improvement of quality of products and services. However, effect of continuous improvements on financial performance of manufacturing firms was not considered under this study.

2.6 Conceptual Framework

The study variables are connected as per Figure 2.1, conceptual framework.

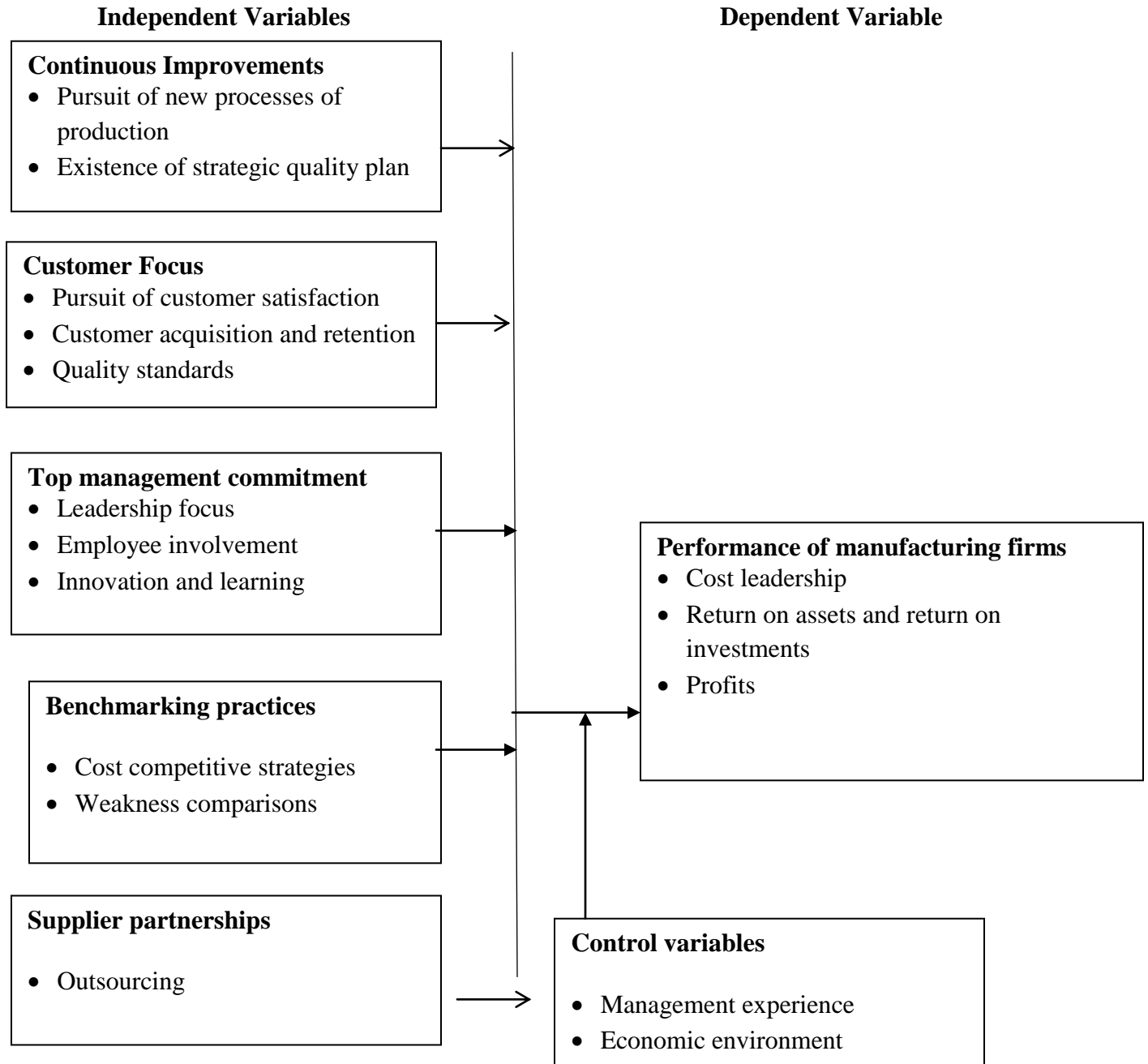


Figure 2. 1 Conceptual Framework

The study sought to assess the impact of quality management on financial performance of manufacturing firms in Industrial Area, Nairobi County. This study has independent

variables being continuous improvement and benchmarking which are aspects of quality management. Continuous improvement idealizes that a firm's process should be often be evaluated because there are inherent avenues for chances of bettering it in terms of efficiency and quality of products and services. It seeks to ensure customer satisfaction and that quality of products is high and on the other hand, benchmarking's indicators include weakness comparisons and cost competitive strategies. The dependent variable is performance of firms measured in terms of Return on Assets, profits, market share and cost leadership.

The top management of a firm needs to commit themselves to improve quality of products and services. It is crucial to note that quality is a function of various factors and therefore, the top management needs to set standards on quality. Customer focus means that the satisfaction of customers is put into consideration during the setting of quality standards and objectives. Further, supplier partnership is a quality management practice that seeks to ensure that raw materials and parts are of high quality. Dependent variable on the other hand, is financial performance of manufacturing firms in Industrial Area, Nairobi County. The financial performance of firms was evaluated on the basis of company profits, customer satisfaction, return on assets and market share.

2.7 Summary of Literature Review

Author (Year)	Focus of the Study	Methodology	Findings	Knowledge Gaps
Otieno (2016)	The study focused on the continuous improvement techniques and efficiency of	The study collected primary data by administering questionnaires	The study found out that continuous improvements tools that lead	The study is informative on the aspects of continuous improvement but

	commercial banks in Kenya	and used a descriptive research design	to improved efficiency	fails to take into consideration its effects on performance of firms
Muteti (2014)	assessing the effect of continuous improvements on operational efficiency of small and medium enterprises (SMEs) in Kenya	The study used an exploratory research design and collected primary data from a sample of the SMEs	continuous improvement had a role in improving the operational efficiency	The study did not seek to assess the relationship between continuous improvement and performance of the enterprises
Kerandi, Nyaoga, Bosire and Nyambega (2014)	Study with an aim of establishing the role of benchmarking in performance of commercial banks in Kenya	The study adopted a descriptive research design with inferential statistics in data analysis	benchmarking had a positive influence on performance of organisations	The study relate to the financial markets which operate in different environments from manufacturing firms.
Adam, Corbett, Flores & Harrison (2007)	The study had a general objective of establishing the role of quality of services on performance	The study adopted a cross sectional research design and data was analysed through regression model	The study established that where quality management tools were adopted and implemented successfully, there were chances of improvements	In as much as this study is significant and gives insights of how continuous improvements was measured in a period of three years, the study

			on performance over time.	was done on service firms whose set up is different from the manufacturing firms
Karen, Antony and Douglas (2007).	The study had an objective of establishing of identifying the subtle factors that lead to continuous improvements in the UK's public sector.	The study adopted a content analysis research design	The study established that among the factors that were evaluated: supplier relationships management, customer expectations management and staff training were the most influencing on continuous improvement.	The study was done on public sector firms whose set up is different from the private manufacturing firms

The review of literature has indicated that quality management tools, that is, continuous improvement and benchmarking have an impact on performance of organizations. Continuous improvements of firm's operations is the goal of benchmarking (Horngren, Datar, Foster, Rajan and Ittner,2009). However, according to Radnor (2008), not all benchmarking leads to improved performance because firms may adopt the wrong strategies that may fail to fit into their existing system. The ultimate goal of benchmarking

process is to gain competitive advantage as well as performance improvements (Elmuti, *et al*, 2011). Several studies have been undertaken in banking sector and service industry (Adam et al.2007; Otieno , 2016). Muteti (2014), carried out research with an aim of assessing the effect of continuous improvements on operational efficiency of small and medium entities (SMEs) in Kenya. Evidently therefore, very few studies have been done on connecting both continuous improvements and benchmarking as tools of quality management and their effects on performance of manufacturing firms. This project assessed effects of quality management practices on financial performance of manufacturing firms in Industrial Area, Nairobi County.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1. Introduction

The content of this chapter is research design, population of the study, sample size and procedures on data collection. Also, it includes how data was analyzed, operationalization, ethics and chapter's summary.

3.2. Research Design

Descriptive research design was adopted. This is because the study aimed at describing the role of quality management on performance on firms. According to Cooper & Schindler (2006), a descriptive research design seeks to explain how variables interact and explains whether there is a relationship between the variables. Bryman & Bell (2011) noted that a descriptive study aims at assessing the relationship among variables. Primary data was collected and assessed the relationship between continuous improvement and benchmarking on financial performance of manufacturing firms in Industrial Area in Nairobi County.

According to Sekaran and Bougie (2011), a descriptive study seeks to explain the variables and relationship between variables as they are in their natural setting. Thus, the design is advantageous as it does not interfere with the variables and interactions among variables are not manipulated but observed and inferences made. This design was suitable for the study because it answered the question if there was a positive or negative impact of one variable or a group of variables on other variable or variables.

3.3. Population of the Study

The target population of this study was all the 401 manufacturing firms in Industrial Area, Nairobi County that are members of the Kenya Association of Manufactures (KAM, 2017). According to Mugenda and Mugenda (2010), a population refers to all elements that have common observable characteristics. According to KAM (2017), there are 727 manufacturers that are members of the Association. Thus, those in Nairobi represent over 55 % of all manufacturers in Kenya. The Manufacturers are divided into 12 categories

Table 1 Population of study

Category	Target population	Percentage
Food and Beverages	143	36%
Metal	31	8%
Motor vehicle	29	7%
Chemical and allied	43	11%
Energy and Allied	26	6%
Plastics	41	10%
Timber	15	4%
Textiles	18	4%
Mining	21	5%
Leather	5	1%
Paper and Board	12	3%
Pharmaceuticals	17	4%
Total	401	100

3.4. Sample size

This study used a statistical sample size determination formula. Population was heterogeneous because the skills and responses of the staff was different and thus it was

important to use a statistical approach in determining the sample size. The study had a significant level of 95 % at a margin of error of 5 %. Thus the formula:

$$n_f = \frac{z^2 pq}{e^2}$$

Where n_f is the quantity of elements to be picked as the sample size, Z is the confidence interval (for instance 1.96 for 95% confidence interval) for a normal quartile and p is the fraction of the population with the desired characteristics, for instance adoption of continuous improvement and or benchmarking as quality management aspects while on the other hand $q= 1-p$, that is the desired margin of error which was 5 % for this study.

The formula was substituted as;

$$n_f = \frac{z^2 pq}{e^2} = \frac{1.96^2 * 0.5 * 0.5}{0.05^2} = 384$$

However, it is important to note that this formula is adopted when the target population has more than 10, 000 elements. But, this study had 401 firms and thus it was modified as;

$$n = \frac{n_f}{1 + \frac{n_f - 1}{N}}$$

After substitutions,

$$n = 384 / \{1 + (383/401)\}$$

$$n = 196$$

Therefore, the sample size was estimated at 196 firms.

Table 2 Sample size

Category	Sample Size	Percentage
Food and Beverages	70	36%
Metal	23	12%
Motor vehicle	12	6%
Chemical and allied	25	13%
Energy and Allied	15	8%
Plastics	7	4%
Timber	14	7%
Textiles	9	5%
Mining	10	5%
Leather	2	1%
Paper and Board	2	1%
Pharmaceuticals	7	4%
Total	196	100%

According to Krejcie and Morgan (1970), a target population of 401 elements requires 196 items as the representative sample.

3.5. Research Instrumentation

The study used questionnaires to collect primary data from respondents. The questionnaire was best suited to collect data since the study used primary data.

3.5.1 Questionnaire

This study collected data by use of questionnaires. Mugenda and Mugenda (2003), the questionnaire is one of the best tools of collecting primary data. The main method of data collection instrument was self-administered questionnaire. The study questionnaire had two types of questions: the closed ended questionnaires captured data on specific issues

and also appreciated the busy schedules of the medium businesses managers and the open ended question allowed flexibility and enabled capturing of data that had not been earlier seen.

3.5.2 Validity of Instruments

Validity of research instruments is the measure of the quality of data a given instrument provides with respect to what it is expected to collect. Content validity defined implies whether a given set of data can result into meaningful and useful inferences (Creswell, 2003). Also referred as content validity, validity of instruments ensures that all respondents understand the questionnaires in a similar manner hence giving out valid data findings. More importantly side notes were prepared to guide the respondents. The questionnaire used a simple language to make sure that the questions are free from misinterpretation.

3.5.3 Reliability of Instruments

The measure of the degree to which a given data collection instruments yields consistent results is referred to as the reliability. The questionnaire was tested and retested to remove elements of vagueness and ensure it is well understood by the respondents.

3.6 Data Analysis

This study adopted descriptive statistics in order to establish the relationship between quality management and financial performance of manufacturing firms in Industrial Area, Nairobi County. This study adopted a regression model where performance of the firms was the dependent variable and benchmarking and continuous improvement was the independent variables.

The study had the following regression model:

$$Y_t = \beta_0 + \beta_1 BP_i + \beta_2 CI_i + \beta_3 CF_i + \beta_4 TM_i + \beta_5 SP_i + \varepsilon_t$$

Where;

Y_{ti} = Performance of manufacturing firm.

β_0 = is the regression's constant to be estimated by the model

β_1, β_2 and β_3 = is the coefficient indicating influence of independent variables on the dependent variable

BP_{ti} = Benchmarking practices

CI_{ti} = Continuous improvement

CF_{ti} = Customer Focus

TM_{ti} = Top Management commitment

SP_{ti} = Supplier partnership and

ε_t = inherent error in the model.

Data analysis was done by use of SPSS where the extent of relationship was established by finding out the F-statistics

3.7 Operationalization of the Variables

Operationalization of variables has been tabulated below

Table 3 Operationalization of the variables

Category	Variables	Operationalization	Measurement Scale
Independent variable	Benchmarking practices	Comparison of own processes	Nominal and ordinal
Independent variable	Continuous improvement	Processes of improving performance	Nominal and ordinal
Independent variable	Customer Focus	Practices of enhancing customer satisfaction	Nominal and ordinal
Independent variable	Top Management commitment	Commitment to quality aspects	Nominal and ordinal
Independent variable	Supplier partnership and	Partnering to promote quality of raw material and parts	Nominal and ordinal
Dependent variable	Performance	Profits of the firms	Ordinal

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents an analysis of data as per the set objectives. The results are presented using tables and statistical analysis. The raw data was coded, evaluated and tabulated as per the set objectives.

4.2 Response Rate

The study targeted 196 employees working at manufacturing firms located in Nairobi County. Out of the targeted employee population, the study managed to achieve a population of 100 employees. Out of the 196 issued questionnaires, 101 questionnaires representing 51.5 % of the total questionnaires issued were returned fully completed. Mugenda and Mugenda (2003) state that a 50% response rate is adequate, 60% good and above 70% very good therefore it can be inferred that this study's response rate was adequate.

4.3 Data Reliability and Validity

Data used was considered reliable as it was from primary data and the respondents were employees of various firms with knowledge on operation of their respective firms. Analysis having been done through SPSS, no unusual item noted on validity of data.

4.4 Descriptive Statistics

This section analyses the data obtained and presents it under the respective themes.

The following statements on Quality management Practices adopted by manufacturing firms in Nairobi were fielded to the targeted respondents on a scale of 5-1, where 5= strongly agree, 4=agree 3=neutral 2=disagree 1=strongly disagree.

Quality Management Practices	N	MEAN	STANDARD DEVIATION
The company has policies that allow continuous quality improvements	101	4.673	0.567
The company offers training to staffs on quality improvements	101	4.257	1.229
The firm compares its processes and products with the market leaders	101	4.752	0.4
The firm has policies for handling customer complaints and they are adhered to	101	4.733	0.642
Customer care is given a priority by the management	101	4.653	0.742
The company compares its customer service with other firms in the industry	101	4.723	0.786
The company compares its customer service with other firms outside the industry	101	4.505	1.033
The top management recognizes quality management	101	4.287	1.149
The top management trains the staff on quality of products and services	101	4.723	0.823
The management has set policies and procedures that promote quality	101	4.713	0.776
The management takes roles in establishing quality standards for the products	101	4.119	1.384
Management is actively involved in quality management practices	101	4.535	0.874

Respondents strongly agree that manufacturing firms have policies that allow continuous quality improvements. To large extent, they strongly agree that firms compare its processes and products with the market leaders. Also, respondents strongly agree that firms have policies for handling customer complaints and they are adhered to. Further, respondents strongly agree that top management train staff and set procedures that

promote quality. This can be supported by the average mean of 4.556 and a standard deviation of 0.867.

The following statements on Influence of Continuous Improvement on Performance adopted by manufacturing firms in Nairobi were fielded to the targeted respondents on a scale of 5-1, where 5= strongly agree, 4=agree 3=neutral 2=disagree 1=strongly disagree.

Influence of Continuous Improvement on Performance	N	MEAN	STANDARD DEVIATION
The firm promotes innovative human resource practices and this enhances customer satisfaction	101	4.119	1.172
The firm constantly pursues new production methods that saves time and costs	101	3.98	1.216
The firm has a strategic quality plan that improves customer satisfaction	101	4.079	1.116
The firm has a policy on minimal defects and this enhances its profitability	101	3.871	0.981
Our standard operating procedures ensures products quality innovations	101	4.129	1.114
The firm has a supportive leadership that improves its brand image	101	4.584	0.673
The firm has quality improvements and testing procedures which enhance customer satisfaction	101	4.683	0.545
Training is offered to employees on regular basis in order to enhance their skills and expertise	101	3.99	1.135

The study sought to find out if manufacturing firms have adopted continuous improvement in their operations. The average mean was 4.179 and standard deviation of 0.994. We can therefore conclude that respondents agree that continuous improvement is practiced in manufacturing firms

The following statements on Benchmarking and Performance of Firms adopted by manufacturing firms in Nairobi were fielded to the targeted respondents on a scale of 5-1, where 5= strongly agree, 4=agree 3=neutral 2=disagree 1=strongly disagree.

Benchmarking and Performance of Firms	N	MEAN	STANDARD DEVIATION
Our company compares its production process with those of competitors in order to manage costs and wastes	101	4.564	1.067
We always seek to learn the industry's best practices and this way the we gain competitive advantages	101	4.881	0.255
The firm encourages internal comparisons in order to save costs	101	3.584	1.586
The firms policy allows for production process comparisons among the industry competitors and this leads to product innovations	101	3.822	1.393
From time to time, the firm seeks to identify weaknesses and works on improving them hence improving the returns	101	3.822	1.334
The firm does strategic benchmarking that seeks to analyze the emerging trends in the economy and sets mitigating measures	101	3.9	0.936
The firm benchmarks its product and this enhances the quality of products	101	3.752	1.259
I believe, benchmarking establishes specific standard goals that improves the quality of products and enhances customer satisfaction	101	3.96	1.058
Benchmarking ensures that the firm is made aware of the industry's best practices	101	4.079	0.828

I believe, that benchmarking in itself is a good platform for effecting change that may lead to cost savings	101	4.139	1.024
Benchmarking is valuable to our firm since it provides genuine measures of productivity as used by the industry's best practices	101	4.149	0.966
Benchmarking leads to realization of competitive advantages that puts our firm ahead of the rest	101	3.693	1.63
I believe that cost benchmarking increases the profits of the firm	101	4.168	0.864
Benchmarking has an overall benefit of enhancing quality, productivity and customer satisfaction.	101	4.04	1.189

Based on the findings, respondents agreed that manufacturing firms compares their production process with those of competitors in order to manage costs and wastes. Also, respondents agree that manufacturing firms seek to learn the industry's best practices and gain competitive advantages. Further, the respondents agreed that benchmarking is valuable to manufacturing firms since it provides genuine measures of productivity as used by the industry's best practices. In conclusion, be respondents agree that benchmarking has an overall benefit of enhancing quality, productivity and customer satisfaction. This can be supported by the average mean of 4.04 and standard deviation of 1.099

The following statements on Customer Focus and Performance of Firms adopted by manufacturing firms in Nairobi were fielded to the targeted respondents on a scale of 5-1, where 5= strongly agree, 4=agree 3=neutral 2=disagree 1=strongly disagree.

Customer Focus and Performance of Firms	N	MEAN	STANDARD DEVIATION
Our company has a well-trained customer care department	101	4.653	0.608
The firm does customer feedback survey on frequent basis	101	4.001	1.023
The customer complaints are dedicatedly addressed by the firm	101	3.871	1.05
The firm is committed to meeting customer expectations	101	3.921	1.199
The firm has a mechanism through customer expectations are communicated to all departments	101	4.257	1.17

On whether manufacturing firms have well trained customer care department, respondent agreed. Respondents also agreed that firms administer customer feedback survey on frequent basis. They also agreed that firms have mechanism that helps in communicating customer expectations to all departments. As a whole, manufacturing firms priorities on customer focus. This can be supported by an average mean of 4.141 and standard deviation of 1.01

The following statements on Supplier Partnership and Performance of Firms adopted by manufacturing firms in Nairobi were fielded to the targeted respondents on a scale of 5-1, where 5= strongly agree, 4=agree 3=neutral 2=disagree 1=strongly disagree.

Supplier Partnership and Performance of Firms	N	MEAN	STANDARD DEVIATION
The firm has partnered with supplier to enhance quality of raw materials and parts used in production	101	4.218	1.119
The firm does outsource parts that it cannot product cost effectively	101	4.129	1.209
The firm offers technical assistance to suppliers	101	4.327	1.064
The firm has standards that ensure materials are purchased from qualified suppliers	101	4.129	0.928
The Firm at all times works with suppliers to ensures that no defective materials are supplied	101	4.029	1.061

The study sought to investigate whether supplier partnership as a quality management practice is adopted and practiced by the manufacturing firms. From the study, respondents agreed that firms have partnered with supplier to enhance quality of raw materials and parts used in production. They agreed that, firms outsource parts that cannot be produced cost effectively. There was an agreement that firms offers technical assistance to suppliers as well as firms have standards that ensure materials are purchased from qualified suppliers. This can be supported by average mean of 4.167 and standard deviation of 1.076

4.5 Correlation Analysis

The Pearson correlation coefficient was used to measure the strength of the linear association between the variables. The correlation matrix below is an important indicator that tests the linear relationship between the variables.

Correlations						
	Quality Management Practices	Continuous Improvement	Benchmarking	Customer Focus	Supplier Partnership	Market share
Quality Management Practices	1					
Continuous Improvement	0.142	1				
	0.16					
Benchmarking	0.054	0.186	1			
	0.593	0.065				
Customer Focus	0.044	0.065	-0.113	1		
	0.664	0.521	0.264			
Supplier Partnership	0.094	0.107	-0.036	.451**	1	
Market share						
	0.086	0.066	-0.005	-0.07	-.216*	1
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

The study sought to find out how management practices, continuous improvement, benchmarking, customer focus and supplier partnership correlate with the market share.

From the study, it is evident that continuous improvement has a positive correlation coefficient with market share at 0.142. Benchmarking has a positive correlation coefficient with market share at 0.054 and also positive correlation with continuous improvement at 0.186. Customer focus has a positive correlation coefficient with market

share at 0.044, positive correlation coefficient with continuous improvement at 0.065 and a negative correlation coefficient with benchmarking at -0.113. Further, supplier partnership has a positive correlation coefficient with market share at 0.094. Positive correlation coefficient with continuous improvement at 0.107 and negative correlation coefficient with benchmarking at -0.036 . Though weak, market share has a positive correlation coefficient with quality management practices at 0.086, weak positive correlation coefficient of market share with continuous improvement at 0.066 and a negative correlation coefficient between market share and benchmarking at -0.005 . Also, market share has a negative correlation coefficient with customer focus at -0.07

4.6 Regression Analysis

This section addresses objective one which sought to establish the effects of quality management practices on financial performance of manufacturing firms in Industrial Area, Nairobi County.

The results shown on table below sought to establish the regression between financial performance of manufacturing firms and quality management practices. The degree to which quality management practices are related to financial performance of manufacturing firms in Industrial Area is expressed in the positive correlation coefficient (r) = 0.256 and coefficient of determination, (r^2) =0.066 as shown on table 4.1 below. This implies that the five independent variables together predict about 6.6 % of the market share performance of the manufacturing firms.

Table 4 model summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.256 ^a	.066	.016	6.66219	.066	1.319	5	95	.263

4.61 ANOVA Results

Analysis of variance was used to test the significance of the regression model as pertains to differences in means of the dependent and independent variables as shown on table 4.2 below. The ANOVA test produced an F-value of 1.319 which is significant at p=0.263. This depicts that the regression model is not significant at 95% confidence level. Thus, the regression model is not statistically significant in predicting how Continuous Improvements, Customer Focus, Top management commitment, Benchmarking practices and Supplier partnerships affect the market share performance of manufacturing firms in Industrial Area, Nairobi County.

Table 5 Anova

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	292.697	5	58.539	1.319	.263 ^b
	Residual	4172.172	95	44.385		
	Total	4464.868	100			

4.62 Multiple Regressions between Independent and Dependent Variables

The findings on table below are based on the following regression model:

$$Y_t = \beta_0 + \beta_1 BP_i + \beta_2 CI_i + \beta_3 CF_i + \beta_4 QMP_i + \beta_5 SP_i + \varepsilon_t$$

Where;

Y_{ti} = Market Share Performance of manufacturing firm.

β_0 = is the regression's constant to be estimated by the model

β_1, β_2 and β_3 = is the coefficient indicating influence of independent variables on the dependent variable

BP_{ti} = Benchmarking practices

CI_{ti} = Continuous improvement

CF_{ti} = Customer Focus

QMP_{ti} = Quality Management Practices

SP_{ti} = Supplier partnership and

ε_t = inherent error in the model.

The study sought to establish the extent to which Customer Focus (CF), Continuous Improvement (CI), Benchmarking practices (BP), Quality Management Practices (QMP) and Supplier partnerships (SP) affect the market share performance of manufacturing firms in Industrial Area, Nairobi County.

Hence the regression model became:

$$Y_t = \beta_0 + \beta_1 BP_i + \beta_2 CI_i + \beta_3 CF_i + \beta_4 QMP_i + \beta_5 SP_i + \varepsilon_t$$

Therefore Table below shows that Customer Focus (CF) and Supplier partnership (SP) have negative coefficients, implying that these independent variables negatively predict market share performance of manufacturing firms in Industrial Area, Nairobi County.

Therefore, taking all independent variables (Customer Focus (CF), Continuous

Improvement (CI), Benchmarking practices (BP), Quality Management Practices (QMP) and Supplier partnerships (SP)) constant at zero (0); market share performance of manufacturing firms will be at 5.528.

Therefore, a unit increase in Customer Focus (CF), Continuous Improvement (CI), Benchmarking practices (BP), Quality Management Practices (QMP) and Supplier partnerships (SP) will lead to -.018, .064, .057, .046 and -.420 unit increases in market share performance of manufacturing firms in Nairobi county.

The results of the study further indicate that p-value of = (0.796) for Quality Management Practices, (0.424) for Continuous Improvement, (0.336) for Benchmarking, (0.761) for Customer Focus and (0.030) for Supplier Partnership are larger than the significance level of 0.05. The implications of these results is that there is a non-significant relationship between Customer Focus (CF), Continuous Improvement (CI), Benchmarking practices (BP), Quality Management Practices (QMP) and Supplier partnerships (SP) and the market share performance of manufacturing firms in Industrial Area, Nairobi County.

Table 6 Coefficients

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
	(Constant)	5.528	5.165				1.070
1 Benchmarking practices	.057	.059	.098	.967	.336	-.060	.173
Continuous improvement	.064	.079	.083	.803	.424	-.094	.221
Customer Focus	-.018	.058	-.031	-.304	.761	-.132	.097
Quality Management Practices	.046	.177	.029	.259	.796	-.305	.396
Supplier partnerships	-.420	.190	-.248	-2.208	.030	-.798	-.042

4.63 Effect of Quality Management Practices on Market Share Performance of Manufacturing Firms in Industrial Area.

This section addresses the objective which sought to establish the effects of quality management practices on financial performance of manufacturing firms in Industrial Area, Nairobi County.

The results shown on table below sought to establish the regression between profitability performance of manufacturing firms and quality management practices. The degree to which quality management practices are related to financial performance of manufacturing firms in Industrial Area, Nairobi County is expressed in the positive correlation coefficient (r) = 0.159 and coefficient of determination, (r^2) = 0.025 as shown

on table 4.4 below. This implies that the five independent variables together predict about 2.5 % of the profitability performance of the manufacturing firms

Table 7 Model summary

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. Change	F
1	.159 ^a	.025	-.027	9.16979	.025	.488	5	95	.785	

4.7 Summary and Interpretation of Findings

The study sought to establish the extent to which Customer Focus (CF), Continuous Improvement (CI), Benchmarking practices (BP), Quality Management Practices (QMP) and Supplier partnerships (SP) affect the market share performance of manufacturing firms in Industrial Area, Nairobi County.

Hence the regression model became:

$$Y_t = \beta_0 + \beta_1 BP_i + \beta_2 CI_i + \beta_3 CF_i + \beta_4 QMP_i + \beta_5 SP_i + \varepsilon_t$$

Previous analysis in this chapter has shows that Continuous Improvement (CI) and Benchmarking practices (BP) have positive coefficients, while Customer Focus (CF), Quality Management Practices (QMP) and Supplier partnerships (SP) have negative coefficients, implying that these independent variables positively predict profitability performance of manufacturing firms in Industrial Area, Nairobi County. Therefore, taking all independent variables (Customer Focus (CF), Continuous Improvement (CI), Benchmarking practices (BP), Quality Management Practices (QMP) and Supplier

partnerships (SP)) constant at zero (0); profitability performance of manufacturing firms will be at 1.603.

Therefore, a unit increase in Customer Focus (CF), Continuous Improvement (CI), Benchmarking practices (BP), Quality Management Practices (QMP) and Supplier partnerships (SP) will lead to -0.012, 0.075, 0.091, -0.026 and -0.189 unit increases in profitability performance of manufacturing firms.

The results of the study further indicate that p-value of = (0.915) for Quality Management Practices, (0.495) for Continuous Improvement, (0.256) for Benchmarking, (0.822) for Customer Focus and (0.473) for Supplier Partnership are larger than the significance level of 0.05. The implications of these results are that there is a non-significant relationship between Customer Focus (CF), Continuous Improvement (CI), Benchmarking practices (BP), Quality Management Practices (QMP) and Supplier partnerships (SP) and the profitability performance of manufacturing firms in Industrial Area, Nairobi County.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introductions

Results of the study shows respondents do not agree that quality management practices affect performance of manufacturing firms in industrial area that is growth in market share and profitability. Performance of manufacturing firms in industrial area, that is operating profitably and increase in market share could be as a result of other factors other than quality management practices application within an organization. The study could also have arrived at a statistically insignificant relationship between quality management practices and performance of manufacturing firms in industrial area in Nairobi County due to the use of in-appropriate statistical tools.

5.2 Summary of Findings

The study sought to uncover the effect of quality management practices on the performance of manufacturing firms in industrial area that is growth in market share and profitability. The regression between financial performance of manufacturing firms and quality management practices. The degree to which quality management practices are related to financial performance of manufacturing firms in Industrial Area, Nairobi County is expressed in the positive correlation coefficient (r) = 0.256 and coefficient of determination, (R^2) =0.066. This implies that the five independent variables together predict about 6.6 % of the market share performance of the manufacturing firms.

The ANOVA test produced an F-value of 1.319 which is significant at $p=0.263$. This depicts that the regression model is not significant at 95% confidence level. Thus, the

regression model is not statistically significant in predicting how Continuous Improvements, Customer Focus, Top management commitment, Benchmarking practices and Supplier partnerships affect the market share performance of manufacturing firms in Industrial Area, Nairobi County.

The degree to which quality management practices are related to financial performance of manufacturing firms in Industrial Area is expressed in the positive correlation coefficient (r) = 0.159 and coefficient of determination, (r^2) =0.025. This implies that the five independent variables together predict about 2.5 % of the profitability performance of the manufacturing firms.

The ANOVA test produced an F-value of 0.488 which is significant at $p=0.785$. This depicts that the regression model is not significant at 95% confidence level. Thus, the regression model is not statistically significant in predicting how Continuous Improvements, Customer Focus, Top management commitment, Benchmarking practices and Supplier partnerships affect the market share performance of manufacturing firms in Industrial Area, Nairobi County.

Performance of manufacturing firms in industrial area, that is operating profitably and increase in market share could be as a result of other factors other than quality management practices application within an organization. The study could also have arrived at a statistically insignificant relationship between quality management practices and performance of manufacturing firms in industrial area in Nairobi County due to the use of in-appropriate statistical tools.

These findings contradict a study conducted by Kerandi, Nyaoga, Bosire and Nyambega (2014) with an aim of establishing the role of benchmarking in performance of

commercial banks in Kenya. They found out that benchmarking had a positive influence on performance of organisations.

On his study of assessing the effect of continuous improvements on operational efficiency of small and medium enterprises (SMEs) in Kenya, Muteti (2014) found out that, continuous improvement had a role in improving the operational efficiency.

5.3 Conclusions

The data analysis results in chapter four indicated there is a non-significant relationship between customer focus, continuous improvement, benchmarking practices, quality management practices and supplier partnerships and the profitability performance of manufacturing firms in Industrial Area, Nairobi County.

A test on significance of regression model on dependent and independent variables depicts that the regression model is not significant at 95% confidence level. Thus, the regression model is not statistically significant in predicting how continuous improvements, customer focus, top management commitment, benchmarking practices and supplier partnerships affect the market share performance of manufacturing firms in Industrial Area, Nairobi County.

Continuous and benchmarking practices have positive coefficients, while customer focus, quality management practices and supplier partnerships have negative coefficients, implying that these independent variables positively predict profitability performance of manufacturing firms in Industrial Area, Nairobi County. Therefore, taking all independent variables customer focus, continuous improvement, benchmarking practices, quality management practices and supplier partnerships constant at zero (0); profitability performance of manufacturing firms will be at 1.603.

Considering the findings of this study, the following conclusions can be drawn.

The implications of these results are that there is a non-significant relationship between customer focus, continuous improvement, benchmarking practices, quality management practices and supplier partnerships and the profitability performance of manufacturing firms in Industrial Area, Nairobi County.

5.4 Recommendations

From the findings, the study established that customer focus, continuous improvement, benchmarking practices, quality management practices and supplier partnerships did not significantly affect the financial performance of manufacturing firms in Industrial Area, Nairobi County. The study recommended that the management of the manufacturing firms in Industrial Area, Nairobi County should not invest much on them since they had no significance.

Additionally, this study reviewed a number of theories. For instance, the Deming theory on continuous improvements. Since continuous improvement did not show significance effect on financial performance of manufacturing firms in Industrial Area, Nairobi County, this study recommends formulation of more theories on continuous improvements among other variables.

Finally, the study found that the above discussed independent variables were not scientifically significance to the financial performance of manufacturing firms in Industrial Area, Nairobi County. Therefore, the study recommended that managers of the manufacturing firms in Industrial Area, Nairobi County should be able to identify and

address other factors that may be affecting the financial performance of their manufacturing firms.

5.5 Limitations of the study

The study deployed use of a questionnaire to collect data; however, the problem with this is that a questionnaire use is based on the assumption that participants' responses to the questions will be honest and accurate. However, this is not always the case that participants will answer in an honest manner. This is due to the fact that participants often give responses that they believe to be desirable.

Some respondents were reluctant in disclosing information with regards to the Quality Management Practices implementation in their organizations' due to the fear of being reprimanded by their managers in the organization whom handle the issues under study. The respondents were however assured of confidentiality of the information provided.

This study also had limitation of collecting 100% of the administered questionnaires

5.6 Suggestions for further research

This study examined certain Quality Management practices that affect financial performance of manufacturing firms in Industrial Area, Nairobi County. This study recommends similar study be conducted focusing on additional variables that affect financial performance of manufacturing firms.

Further, there is need to conduct similar study with focus on all manufacturing firms in Kenya and other countries. As discussed in this study, there are 749 manufacturing firms in Kenya. This study focused on 401 manufacturing firms located in Industrial Area ,

Nairobi County. It is therefore suggested in this study that all this manufacturing firms in Kenya be studied.

This study further recommends research be conducted on effect of political environment, firm's size and management competency affect firm's performance

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Appendix A: The Study Questionnaire

EFFECTS OF QUALITY MANAGEMENT PRACTICES ON FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS IN INDUSTRIAL AREA, NAIROBI COUNTY

I am a master's degree student at the University of Nairobi and I have formulated the questions in the following questionnaire with regard to the topic of study. Kindly, please and honestly answer all the questions to the best of your knowledge. Indicate with a tick (√) or filling in the space(s) provided.

Section A: Demographic Characteristics of the Respondents.

1. Please tick(√) your gender

Male ()

Female ()

2. Please indicate your age

(a) Below 20 years ()

b) between 21-30 years ()

(c) Between 31-40 years ()

d) between 41-50 years ()

e) Above 50 years ().

3. What is your area of specialization?

Finance () Human Resource ()

Marketing () Production () Strategy and Operations ()

4. Kindly indicate how long you have been with the firm.

Management is actively involved in quality management practices					
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Section C: Influence of Continuous Improvement on Performance

The following statements show how quality of products and services may continuously be improved .Please indicate your rate of agreement as per your firms case by ticking appropriately on a scale of 5-1, where 5= strongly agree, 4=agree 3=neutral 2=disagree 1=strongly disagree.

Influence of continuous improvement on performance	5	4	3	2	1
The firm promotes innovative human resource practices and this enhances customer satisfaction					
The firm constantly pursues new production methods that saves time and costs					
The firm has a strategic quality plan that improves customer satisfaction					
The firm has a policy on minimal defects and this enhances its profitability					
Our standard operating procedures ensures products quality innovations					
The firm has a supportive leadership that improves its brand image					
The firm has quality improvements and testing procedures which enhance customer satisfaction					
Training is offered to employees on regular basis in order to enhance their skills and expertise					
The firm adopts new processes of production which ideally fosters suppliers relations					

Section D: Benchmarking and Performance of Firms

The following statements show how benchmarking may have influence the performance of your business. Please indicate your rate by ticking appropriately on a scale of 5-1, where 5= strongly agree, 4=agree 3=neutral 2=disagree 1=strongly disagree.

Benchmarking and Performance of Firms	5	4	3	2	1
Our company compares its production process with those of competitors in order to manage costs and wastes					
We always seek to learn the industry's best practices and this way the we gain competitive advantages					
The firm encourages internal comparisons in order to save costs					
The firms policy allows for production process comparisons among the industry competitors and this leads to product innovations					
From time to time, the firm seeks to identify weaknesses and works on improving them hence improving the returns					
The firm does strategic benchmarking that seeks to analyze the emerging trends in the economy and sets mitigating measures					
The firm benchmarks its product and this enhances the quality of products					
I believe, benchmarking establishes specific standard goals that improves the quality of products and enhances customer satisfaction					
Benchmarking ensures that the firm is made aware of the industry's best practices					
I believe, that benchmarking in itself is a good platform for effecting change that may lead to cost savings					
Benchmarking is valuable to our firm since it provides genuine measures of productivity as used by the industry's best practices					
Benchmarking leads to realization of competitive advantages that puts our firm ahead of the rest					
I believe that cost benchmarking increases the profits of the firm					
Benchmarking has an overall benefit of enhancing quality, productivity and customer satisfaction.					

Section E: Customer Focus and Performance of Firms

The following statements show how Customer Focus of your business. Please indicate your rate by ticking appropriately on a scale of 5-1, where 5= strongly agree, 4=agree 3=neutral 2=disagree 1=strongly disagree.

Customer Focus and Performance of Firms	5	4	3	2	1
Our company has a well-trained customer care department					
The firm does customer feedback survey on frequent basis					
The customer complaints are dedicatedly addressed by the firm					
The firm is committed to meeting customer expectations					
The firm has a mechanism through customer expectations are communicated to all departments					

Section F: Supplier Partnership and Performance of Firms

The following statements show how Supplier Partnership of your business. Please indicate your rate by ticking appropriately on a scale of 5-1, where 5= strongly agree, 4=agree 3=neutral 2=disagree 1=strongly disagree.

Supplier Partnership and Performance of Firms	5	4	3	2	1
The firm has partnered with supplier to enhance quality of raw materials and parts used in production					
The firm does outsource parts that it cannot product cost effectively					
The firm offers technical assistance to suppliers					

The firm has standards that ensure materials are purchased from qualified suppliers					
The Firm at all times works with suppliers to ensures that no defective materials are supplied					

Section G: Top Management commitment and Performance of Firms

The following statements show how Top Management Commitment of your business. Please indicate your rate by ticking appropriately on a scale of 5-1, where 5= strongly agree, 4=agree 3=neutral 2=disagree 1=strongly disagree.

Top Management commitment and Performance of Firms	5	4	3	2	1
The top management has developed a quality management strategy that seeks to promote quality of products					
The top management considers quality a strategic objective					
The top management trains employees on quality					
The top management allocates enough resources to achievement of quality					
The top management has clear set quality standard and policies					

Section H: Performance of Manufacturing Firms

Kindly fill the increase or decrease in percentage (%) during the period from 2011 to 2016 with 2011 being the base year. The base year is regarded as 100 %.

Items	2011=100 %	2011	2012	2013	2014	2015	2016	Average
Number of staffs								
Profits of the firm								
Number of customers served								
Size of the market share								
Total revenue in Kenya Shillings								
Reduction in number of customer complaints								
Number of supplier partners								

Thank you for your time and responses