TOTAL QUALITY MANAGEMENT AND PERFORMANCE OF SMALL AND MEDIUM CONSTRUCTION COMPANIES IN NAIROBI CITY COUNTY

MICHAEL OTIENO OGOLLA

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

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DECLARATION

I declare that this Research Project is my original work and it has never been presented to the University of Nairobi or any other university for any degree or any other academic award.

Signature………………………………… Date………………………….

Name: MICHAEL OTIENO OGOLLA

Registration Number: D61/72783/2014

This Research Project has been submitted with my approval as the university supervisor.

Signed …………………………………. Date …………………………….

MICHAEL K. CHIRCHIR

Department of Management Science

School of Business
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DEDICATION

I dedicate this Project to my Family, my wife Clarice our children Bravin, Emmanuel and Emmanuella and to my parents Mr & Mrs Ogolla. Thank you all for your support and may God bless you.
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ABBREVIATIONS AND ACRONYMS

ANOVA- Analysis of Variance.

CBK- Central Bank of Kenya.

GDP- Gross Domestic Product.


NCA- National Construction Authority.

NCC- Nairobi City County.

OP- Organizational Performance.

PMS- Performance Management Systems.

QA- Quality Assurance.

RBV - Resource Based View Theory.

SMEs - Small and Medium Enterprises

SPSS- Statistical Package for Social Sciences.

TQM - Total Quality Management.
ABSTRACT

This study was done to find out the Total Quality Management practices which have been adopted by small and medium enterprises that are carrying construction business within Nairobi City County. The study also looked at the effect contributed to by these practices to improve the organizational performance. A census survey was conducted in 108 construction firms by collecting primary data using structured questionnaire administered through drop and collect way of data collection. The data was then analyzed using both descriptive and inferential statistics. The relationship in the variables independent and dependent variables were found to be statistically significant by showing that the TQM practices do influence the organizational performance. A chi-square test was carried out and the result found out that there is a strong evidence of relationship between the TQM practices and the organization performance. The practice of customer focus is found to be the most important among other practices that have been studied in this research. It is also learnt that this research had some shortcomings such as the population sample size was quite small which doesn’t give true representation of the population. Such a small sample size makes it difficult to generalize the results to the entire population. Therefore, some caution needs to be taken in interpreting and generalizing the results. Increasing the sample could yield more statistically significant results. Another possible limitation is that it only surveyed employees of companies mainly in two subsectors i.e. Engineering and Business. By conducting a larger study involving employees of companies in various sub-sectors, the investigator could avoid this limitation and thereby making it easy to generalize the results. In addition, organization performance is a very complex concept since contributions cannot be constrained only to the variables listed by the investigator. Therefore, in determining what exactly contributes to organization performance can be considered to be somewhat subjective. At this point, there is need for more research on other factors that contribute to organization performance that might not have been considered in this study to ascertain other contributors to organization performance since those covered in the model explain only a small proportion of this change according to the goodness of fit results.

Key words, Organizational performance, Total quality management, Small and medium enterprises.
CHAPTER ONE: INTRODUCTION

1.1 The Study Background

Many consumers would want those products and services that have quality more than other attributes and characteristics in the goods and services. They have become more gradually practical to consider other more reliable attributes to fulfill their basic needs, self-esteem and necessities. Service and product Quality has become important and significantly the common element of competitive advantage that business organizations use in the environment in which they operate (Almansour, 2012). The continuous increase of demand for quality by consumers have increasing made several companies to realize that they must provide into the market high quality products and services so that they have competitive advantage over their rivals.

To enhance quality the concept of Total Quality Management is one of the modern management practices that many business organizations are adopting so that they can be competitive in the global arena. It involves changing every aspect of the organization from the organizations culture, attitude, processes and all other practices that will help the business organization to provide goods and services that ultimately meets customers’ needs. The organizations culture is what the organization believes in, it is the way the business organization carry out its own activities, it describes the mission and vision of the company. The company must achieve quality in all the dimensions of the product characteristics, this is done through the business operating processes by eliminating all the defects and wastes by ensuring that they do the first things right and always (Stock and Mulki, 2009). Prompt modifications in the operating environment for instance globalization, shifting customer needs and expectations, and competition to offer innovative products and services have turned out to be the standard backdrop for most organizations if not all. To enable these organizations, compete commendably, it is critical for them to continuously engage in those activities that will help improve more on quality, this may be done through various practices such as product differentiation and performance enhancement through reduction of cost (Chang and Huang, 2005).
Performance of the small and medium construction companies in Kenya was rated high since majority of institutions realized satisfactory performance and improved financial ratings despite increased market competition as every small and medium enterprise scramble for a significant market share (Kenya National Bureau of Statistics, 2014). Total Quality Management have been introduced into the market as a result of raising competition. The small and medium enterprises remained well capitalized, shareholders’ funds deposits and assets increased to 35.2% and 31.9% respectively (CBK, 2010). There are a number of management styles applied in organizations in order to achieve goals, set objectives and targets of their business.

It has been realized that in the global economy Small and medium enterprises (SMEs) are playing a key and significant by contributing more in income output and creation of employment, they also contribute a lot in a nation’s gross domestic product (GDP). The recent global financial crisis of 2007–2008 particularly created a harsh climate for small and medium enterprises, with a significant decline in demand for goods and services and a contraction in lending to SMEs by some financial institutions.

1.1.1 Total Quality Management

Total Quality Management (TQM) is a management practice which has been today adopted by so many business organization, it entails improving continuously in quality targeting all the areas of business organization and all the spheres of life. This approach is not one time event but must be done repeatedly to improve the processes that encompass business organizations, groups of people and individuals (Kanji and Asha 1993, 1996). TQM is a systems approach to management which is interdependent and is a bundle of practices which includes but not limited to top management commitment, customer focus, supplier quality management, people management, continuous improvement, long-range thinking, increased employee involvement, team work, employee empowerment (Ross, 1993). Total quality management is therefore the adherence to specifications of goods and services. Moreover, it is defined as prevention of hitches through deliberate and systematic activities (Oakland, 2013). Total Quality Management is a management style whereby all the resources involved in production of goods and services are constantly improved to meet
expected standards in order to achieve organizational goals. The vehicle for realizing effective leadership is Total Quality Management. It covers the whole organization, all the persons and functions as well as external organizations and supplies. Total Quality Management primarily entails a change in an organizations’ technology, its way of undertakings, a transformation in its norms, culture, values, beliefs and systems as well as how it functions and a change in its political system- decision making processes and power bases.

Total Quality Management endeavors for the following in every business environment (Kruger, 2007): Establish clear vision and strategies (both in mid and long-term) under a strong leadership of the top management; Proper use of the TQM practices will help in getting the right staff for the organization by ensuring that the recruitment and selection process is done properly that will give the right man for the right job. The physical business infrastructure will be designed and built to ensure that the business operations are kept at optimum level all the time. Occupational, Health and Safety aspect are considered and adhered to at every level of operation, consequently management information systems are maintained to keep communication both from within and without real time. It should be noted clearly that implementing TQM is not the practice of quality assurance system however TQM if implemented successfully help to develop quality control measures through which quality control tools such as production charts are established to help reduction in operation cost, reduced delivery time and all other management aspects that will improve quality that gives customers value for their money.

Moghimi and Anvari, (2014) noted that Total Quality Management should be assumed as management of the system through systems thinking, which means taking into consideration all the elements in the business and putting them to work collectively towards the common goal. Scaling up Excellence is about spreading constructive beliefs and behavior from the few to the many, and recharging the organization with better ways of doing the work at hand (Kruger, 2007). Quality begins and ends with the customer and that Quality means conformance to requirements. Quality is achieved by heeding to the needs of the customer, predicting customer behavior, and then determining customer quality anticipations in order
to meet or even surpass customer expectations (Ishikawa, 1985). So, think of the customer first (requirements), then work back from there to devise your strategies, structures, processes and products (capabilities) to serve them unusually well. Everyone in the organization must also recognize that the supplier’s requirements and expectations must be valued if they are to be fully satisfied. Quality, consequently, means meeting one’s own maximum standards, together with those of consumers and fellow workers. It means ascertaining what it possible for human beings to achieve (Harari, 2007).

1.1.2 Organizational Performance

Performance management systems (PMS) are a foundation of Human Resource Management (HRM) practices and are the premise for building up a framework to organization management. PMS links institution and staff goals through a goal setting process and consequently connects employee goal accomplishments to various HRM resolutions through a performance measurement procedure. Quality issues in the SMEs are amongst the most critical factors for maintaining a competitive advantage. It is also the yardstick for measuring how well an organization can meet and surpass the expectations of its customers (Oakland, 2003). Mitchell (2011) upheld the notion that consumer satisfaction is crucial in a free market. The construction service industry has a solid market rivalry, subsequently, customer satisfaction and retaining will be significant for companies’ prosperity.

1.1.3 Small and Medium Construction Companies in Kenya

Small and medium construction companies in Kenya operates in a sector which is core to the development of the Kenyas gross domestic product. Construction industry in Kenya plays a very important role in the social and economic sector growth and development by creating emerging markets within the environment (Ndemo, 2013). SMEs are very helpful in the job creation which in turn in creates social and economic stability in Kenya. Small and medium construction enterprises’ system practices require uniform and global strategies towards identifying scarcities of specific service and planning strategies. There are 1083 registered Small and Medium Enterprises in the construction industry in Kenya with 108
doing business in Nairobi county and are regulated by National Construction Authority (NCA) Act no.14 of 2011 and formally set up in 2012. The National Construction Authority oversees the construction sector in Kenya, National Construction Authority Strategic plan, (2015). The need for a regulator was evident from a number of outstanding issues, poor building standards, for example a number of buildings have collapsed in Nairobi. Main challenges in Kenyan construction are low participation rates in contractor training programmes, noncompliance with standards, corruption and high contracts fees that encourage crafts. Kipkelion (2013) established that organizational performance is in most of the cases dependent with the implementation of quality management practices. The study was equally able to identify explicit quality management practices that were believed to somewhat have an influence on operational performance. Small and medium enterprises in Kenya therefore have no choice but to embrace total quality management practices in delivery of services effectively and efficiently. It is by this concept that the small and medium enterprises can become competitive within the small and medium construction companies niche of the country.

The study seeks to explore the industry gaps in meeting the clients’ expectations and identify key competences that any industry player needs to address to stay ahead and offer best practice for benchmarking by others. Because of this reason the investigator aimed at finding a solution to the following as to, what is the association between TQM and performance of SMEs in the construction industry in Kenya? PMS links institution and staff goals through a goal setting process and consequently connects employee goal accomplishments to various HRM resolutions through a performance measurement procedure. Quality issues in the SMEs are amongst the most critical factors for maintaining a competitive advantage. It is also the yardstick for measuring how well an organization can meet and surpass the expectations of its customers (Oakland, 2003). Mitchell (2011) upheld the notion that consumer satisfaction is crucial in a free market. The construction service industry has a solid market rivalry, subsequently, customer satisfaction and retaining will be significant for companies’ prosperity.
1.2 Research Problem

Total Quality Management (TQM) has long been practice oriented and the audiences are frequently managers and practitioners rather than managerial theorists. There are so many benefits that are derived from using the TQM practices than not using it at all. These benefits can be categorized into four main dimension i.e. benefits that are received from investment in improving quality overrides the costs as a results of low quality products, wastes and defects, in cases where workers are provided with adequate trainings, right equipments and tools you will find that the employees are more interested in giving quality products. More fundamentally the top management must ensure that all the issues that are related to quality are strictly followed by every member of the organization (Hackman & Wageman, 2013). Fotopoulos and Psomas (2009), discussed various significant issues on the impact and benefits of TQM practices on organizational performance and quality management issues some of the element discussed includes how the top organization executives will source for and retain valuable customers for the business, there should be extreme focus on the quality of the products right from the procurement of raw materials from the suppliers, recruitment and selection of employees should be focused and objective to create value for the organization and meet customer needs. As been observed from the research findings, some of the benefits that are commonly derived from the practice of are general improved organizational performance, an edge in competitiveness of other rivals, increased market share, reduction in wastes and defects and significantly reduced consumers complaints.

Total quality management is therefore the adherence to specifications of goods and services. Moreover, it is defined as prevention of hitches through deliberate and systematic activities (Oakland, 2013). Total Quality Management is a system approach whereby all the resources involved in production of goods and services are constantly improved to meet expected standards in order to achieve organizational goals. The vehicle for realizing effective leadership is Total Quality Management. It covers the whole organization, all the persons and functions as well as external organizations and supplies.
A small and medium enterprise (SMEs) in the construction industry in Kenya operates in a sector which is core to the development of the Kenya's gross domestic product. With the increasing unemployment in the developing countries the SMEs act as a buffer by creating employment opportunities and providing products market to already established business organizations (Ndemo, 2013). Small and medium construction enterprises’ system practices require uniform and global strategies towards identifying scarcities of specific service and planning strategies. There are 1083 registered Small and Medium Enterprises in the construction industry in Kenya with 108 doing business in Nairobi county and are regulated by National Construction Authority (NCA) Act no.14 of 2011 and formally set up in 2012. The National Construction Authority oversees the construction sector in Kenya, National Construction Authority Strategic plan, (2015). The need for a regulator was evident from a number of outstanding issues, poor building standards, for example a number of buildings have collapsed in Nairobi. Main challenges in Kenyan construction are low participation rates in contractor training programmes, noncompliance with standards, corruption and high contracts fees that encourage crafts.

Small and medium enterprises (SMEs) in Kenya are crucial for both social and economic development of emerging markets (Ndemo, 2013). These enterprises play a key role in creation of jobs and income generation for low income earners; they foster economic progress, social stability, besides contributing to the development of a vibrant private sector. Small and medium construction enterprises’ system practices require uniform and global strategies towards identifying scarcities of specific service and planning strategies. The construction service industry has a solid market rivalry, subsequently, customer satisfaction and retaining will be significant for companies’ prosperity. Kipkelion (2013) established that organizational performance is in most of the cases dependent with the implementation of quality management practices. The study was equally able to identify explicit quality management practices that were believed to somewhat have an influence on operational performance. Small and medium enterprises in Kenya therefore have no choice but to embrace total quality management practices in delivery of services effectively and efficiently. It is by this concept that the small and medium enterprises can become competitive within the small and medium construction companies niche of the country.
The study seeks to explore the industry gaps in meeting the clients' expectations and identify key competences that any industry player needs to address to stay ahead and offer best practice for benchmarking by others. Some key areas that this study looked into was to find a solution to the following as to, what is the association between TQM practices and performance of SMEs in the construction industry in Kenya?

1.3 Research Objectives

The study objective;

i. To find out the TQM practices implemented by small and medium enterprises in the construction industry within Nairobi City County.

ii. To find out the effect of Total Quality Management practices on the organizational performance of Small and Medium Enterprises in Nairobi City County.

1.4 Value of the Study

The study is to be used by small and medium enterprises in the construction industry in Kenya since the findings will provide knowledge of the significant of practicing TQM so as to improve the organizational performance in firms. The researchers and policy formulators can access necessary information that may be required to set up guidelines, rules and procedures that will regulate the practice of quality management in the small and medium enterprises in Kenya to enhance their performance. The findings of this research ought to create theory in practice by providing information on the dimensions of total quality management practices that may be adopted as benchmarks and references by the professionals and academicians.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter looks in other previous theories that had been studied regarding this area of research proposal this are studies which have been done by other people. Some of the key areas that are looked in are theories of TQM, TQM practices, organizational performance, empirical studies on TQM and organizational performance, the conceptual framework and chapter summary.

2.2 Theoretical Literature Review

Ramos-Rodríguez and Ruíz-Navarro (2004) categories TQM theories into various dimensions of strategic management: These are economics, sociology and psychology. In the light of transaction the investigator is going to look into Resource based- view theory, Knowledge based- view theory and the systems theory. These theories will give an understanding and a clearer view of the study to be conducted. The resource-based theory of the firm derive from the economic roots of the discipline, resource-based view theory and systems theory derive from the sociological roots (Furrer, 2008).

2.2.1 Resource-Based View Theory

The theory holds that any business organization has its own distinct a unique competencies or combination of resources which are in the form of intangible and tangible assets coupled with unique organizational capabilities and competencies to make use of these resources (Daniels, Radebaugh and Sullivan, 2013). The resource-based view (RBV) is a way of identifying, designing and utilizing the distinct combinations of assets, skills and capabilities of all the tangible and intangibles assets that the organization owns. The basic resources under this theory are the tangible asset, intangible assets and organizational capabilities and competencies. All these organizations resources are used to carry out its day to day operational activities. Some of the intangible assets cannot be physically touched or seen but remains vital. These resources are used by a company to give it competitive advantage (Pearce II and Robinson, 2011).
In support of the RBV point of view, intangible resources particularly product reputation are the main contributors to product innovation performance. Special features of product remain unique if they cannot be easily copied or re-engineered by competitors and reputation sometimes lies in the mind of the customer (Julienti, Bakar and Ahmad, 2010). To support the Resource Based View theory, intangible resources particularly product reputation are the main contributing indicators to product innovative performance (Julienti, Bakar & Ahmad, 2010).

2.2.2 Knowledge-Based View Theory

Knowledge is considered as a very vital and strategic organizational resource in terms of production and operational activities which the firm is able to use to achieve competitive advantage over competitors. For the organization to succeed the knowledge must be programmed into the organization structural system, organizations culture, policies, procedures, documents, and employees, as having been reviewed from the past strategic management literatures. This may also refer to using and managing knowledge and any information within the organization to help in achieving the organizational objectives by ensuring the very good consumption of the knowledge both within the organization and outside for competitive advantage. The RBV is treated as being generic and intrinsic rather than having special characteristics. The knowledge in the firm is absolutely owned by the people working in the firm and it has a close link of how the people in the firm apply it to improve on production of improved products and services offered by the firm. The focus is on the inside of the firm its resources and capabilities to explain the profit and the value of the organization (Penrose 1980; Wernerfelt 1984; Berney 1991 and Makhija 2003). The theory explains the difference in performance within the industry for those firms who own good bundles of knowledge and use them to have competitive advantage over competitors.
2.2.3 The Systems Theory

Systems theory emphasizes that there are three sub systems that overlap among themselves and often creates conflict among businesses actors due to different dimensional views on business issues (Gersick et al, 1997). This systems theory particularly deals with human behavioral aspects which are viewed as a way in which people perceive organization from their inner feelings and this will determine how they relate with other members (Brown, 2008). System is considered as a very vital and strategic organizational strategic competitive tool in terms of production and operational activities which the firm uses to achieve competitive advantage over competitors.

For the organization to succeed the systems must be designed and implemented to boost the organization core competencies must be programmed into the organization structural system i.e. organizations culture, policies, procedures, documents, and employees. As having been reviewed from the past strategic management literatures. The authors contended that the system component contributes to competitive advantage, while the process component generates sustainable advantage and organizational performance. This conforms to the system based value of the firm, and considers TQM elements as either a source of differentiation, cost leadership advantage, or a generator of barriers to imitation given their inherent complexity and tactfulness (Corbett & Claridge, 2008). Marion and Uhl-Bien (2001) advised business organizations top management to practice interrelations within the environments in which they operate, they said that the solutions that come out as a results of the conflict among the parties always arise because of the systems malfunction among the key players.

2.3 Total Quality Management Practices

TQM is a way and approach of getting work done and accomplishing organizational goals and objectives in the most efficient and affordable way within the agreeable time frame. It is a manage approach which seeks to improve on the way things are done in the organization. Total quality management is therefore the adherence to specifications of goods and services. Moreover, it is defined as prevention of hitches through deliberate and
systematic activities (Oakland, 2013). Total Quality Management is a management style whereby all the resources involved in production of goods and services are constantly improved to meet expected standards in order to achieve organizational goals. The vehicle for realizing effective leadership is Total Quality Management. It covers the whole organization, all the persons and functions as well as external organizations and supplies. Total Quality Management primarily entails a change in an organizations’ technology, its way of undertakings, a transformation in its norms, culture, values, beliefs and systems as well as how it functions and a change in its political system- decision making processes and power bases. Occupational, Health and Safety aspect are considered and adhered to at every level of operations, consequently management information systems are maintained to keep communication both from within and without real time. It should be noted clearly that implementing TQM is not the practice of quality assurance system however TQM if implemented successfully will operate a quality assurance system and other cross-functional management systems such as occupational health and safety services, reduction in operation cost, and reduced delivery time and all other management that will improve quality that gives customers value for their money.

2.3.1 Top Management Commitment

Top Management commitment is a critical factor of TQM strategic focus that is often looked into to identify its influence in the literature review (Crosby, 1979, Lakhe & Mohanty, 1995: Thiagarajan & Zairi, 1997) Organizations who invest more on the top management usually commit to do things in the direction or driving force in the design and implementation of TQM so that to create values, goals, objectives and systems that will be focused in achieving customers’ satisfaction. The significant responsibility carried out by the top management through realizable commitment in designing the best suitable TQM system and further monitoring the effective implementation of the TQM. To make sure that the top management performs its responsibilities effectively, the competency to acquire effective communication skills, team building, performance measurement and evaluation, decision making skills and self-management are required (Koehler & Pankowski 1996). If most of these elements can be implemented effectively and efficiently, they ensure the implementation of efficient and working TQM strategies in several element including the

2.3.2 Customer Focus
This is the believe that everything starts with the customer and ends with the customer, the organization puts most of its attention and focus on the customers’ needs which eventually translates to customer satisfaction. Other studies conducted in the past literatures shows that the ultimate goal of TQM is to identify and focus in fulfilling the needs of consumers. The designing and implementation of a successful TQM can be considered to have value addition to the services and products and provide satisfaction to the consumer consistently (Thiagarajan & Zairi 1997). Therefore to fulfill the needs of the customers, SMEs need to focus on all criteria of products and services that contribute to the value and customers’ satisfaction (Hunt, 1995). These objectives can be achieved when a lot of effort and attention is given to the correlation between the organization and their customers in a very special way (Flynn 1995). If this a special kind of interaction played out the organization is able to determine the critical special features for them to obtain real time information directly.

2.3.3 Supplier Quality Management
Suppliers are playing a crucial role in determining the successful design and implementation of TQM. The qualities of the organization manufactured products mostly depend on the extent of quality of the raw materials supplied by the suppliers (Ahire et al. 1996). After assessing the most significance responsibility supplier, Deming emphasized that an organization should stop the practice of choosing suppliers based on cost only. It is always needful to build a special relationship with qualified and competent suppliers to improve on the quality of raw material and reliable supplies. This will help the organization to have in its data base qualified suppliers who are good, reliable, competitive and cooperative suppliers (Ahire et al. 1996). More so eligible suppliers must at all time adhere to the basic qualification and requirements that in the long run will be able to improve the quality of manufactured products and services., Long-term relationship with a supplier despite the selection of quality suppliers enables organizations to have a positive achievement which
eventually translates to organizational benefits. Other previous studies shows the important of the relationship between suppliers and the organizations performance (Ahire et al., 1996).

2.3.4 People Management

Management of people is one of the special dimensions that are used in the implementation of a successful TQM concept. The recruitment and selection process within the organization needs to be effectively and objectively considered so as to get the right man for the right job. This is a practice that essentially believes that the employees are the important resource of the organization. The behaviour and the attitude of employees always result to improved performance or failure of the organization. For the organization to be more competitive in the job market the recruitment and the selection process of the employees must be done very objectively such that the workforce fits with the job description. Training and continuous learning of the employees must be evaluated periodically to improve on performance and communication should be efficient and be in three channels that is top, down and horizontal, monitoring and job evaluation should also be done periodically

2.4 Organizational Performance

Organizational performance is the measuring of actual result of output that is derived from the organization using its own imputes as measured against the predicted output of the organization (Tomal and Jones, 2015). Measuring and evaluation of the employee performance and leadership competencies are the key factors that will enhance and promote the organizational performance. The critical role played by the leaders is to create a reliable and conducive environment that influences the employees’ morale, attitudes and motivation that will determine their own performance. Leadership competencies are influenced by cognitive, social and Emotional intelligence competencies of the leader (Almatrooshi, Singh and Farouk, 2016). PFM links institution and staff goals through a goal setting process and consequently connects employee goal accomplishments to various HRM resolutions through a performance measurement procedure. Quality issues in the SMEs are amongst the most critical factors for maintaining a competitive advantage. It is also the yardstick for measuring how well an organization can meet and surpass the expectations of its customers (Oakland, 2003). Mitchell (2011) upheld the notion that consumer satisfaction is crucial in a
free market. The construction service industry has a solid market rivalry, subsequently, customer satisfaction and retaining will be significant for companies’ prosperity.

In this study the organization performance is measured against the TQM practices and the benchmark of both the economic and the social benefits the firm derives from designing and implementing TQM practices. Furthermore there are established a number of economic rates of return that can be used to partition economic contributions of each of these determinants of organizational performance. In this study I am looking for both the financial and non-financial benefits derived from the implementation of the TQM practices.

A study carried out by Wang, Bhanugopan and Lockhart (2015), organizational performance can be influenced by the following five factors. Customer satisfaction, Improvement in production, increased profit earnings, reduction on production cost, Reduction on defects. These four factor model of organizational performance can provide benefits to any organization if they are properly leveraged.

2.5 Empirical Literature Review

This study has critically reviewed other literatures which are related to this area of study as been reported by other researchers which many of them have reported a very significant contribution of TQM practices to improvement of organizational performance. This contribution may significantly be attributed a lot to the improvement in the quality of products and services from the manufacturing industry (Flynn, Schroeder & Sakakibara, 1995), A study carried out by Wang, Bhanugopan and Lockhart (2015), organizational performance can be influenced by the following five factors. Customer satisfaction, Improvement in production, increased profit earnings, reduction on production cost, Reduction on defects. These four factor model of organizational performance can provide benefits to any organization if they are properly leveraged. The study also revealed that specific TQM factors such as benchmark, training, flexible manufacturing, process improvement and better measurement are not beneficial to organizational performance. Therefore, the previous researchers recommended the organization to focus on the flawed
quality factors that can be nurtured such as more open culture, employee empowerment and management commitment.

A study by Madul et al. (1995) this study resolved the importance cause and effect on the ration shown between TQM practices and organization performance. However, the effect is different since it depends on the length and size of an organization’s operations. In the study only three critical factors of TQM were tested, namely customers’ satisfaction, employees’ satisfaction and the quality of service staff. There is no generic rule to implement the quality. Therefore, they have concluded that every organization needs to understand their uniqueness before adopting the TQM. An organizations performance can be measured in various ways including an assessment of the performance. Measurement of the performance of an organization is very important to observe how far the achievements and effectiveness of the programs has been implemented. In measuring the performance of organizations, especially the SMEs, in the process of studying the relations between independent variable and business performance. Total Quality Management endeavors for the following in every business environment (Kruger, 2007): Establish clear vision and strategies (both in mid and long-term) under a strong leadership of the top management; Proper use of the TQM practices will help in getting the right staff for the organization by ensuring that the recruitment and selection process is done properly that will give the right man for the right job. The physical business infrastructure will be designed and built to ensure that the business operations are kept at optimum level all the time. Occupational, Health and Safety aspect are considered and adhered to at every level of operation, consequently management information systems are maintained to keep communication both from within and without real time. It should be noted clearly that implementing TQM is not the practice of quality assurance system however TQM if implemented successfully will operate a quality assurance system and other cross-functional management systems such as occupational health and safety services, reduction in operation cost, and reduced delivery time and all other management that will improve quality that gives customers value for their money.
Moghimi and Anvari, (2014) noted that Total Quality Management should be assumed as management of the system through systems thinking, which means taking into consideration all the elements in the business and putting them to work collectively towards the common goal. Scaling up Excellence is about spreading constructive beliefs and behavior from the few to the many, and recharging the organization with better ways of doing the work at hand (Kruger, 2007). Quality begins and ends with the customer and that Quality means conformance to requirements. Quality is achieved by heeding to the needs of the customer, predicting customer behavior, and then determining customer quality anticipations in order to meet or even surpass customer expectations (Ishikawa, 2015). So, think of the customer first (requirements), then work back from there to devise your strategies, structures, processes and products (capabilities) to serve them unusually well. Everyone in the organization must also recognize that the supplier’s requirements and expectations must be valued if they are to be fully satisfied. Quality, consequently, means meeting one’s own maximum standards, together with those of consumers and fellow workers. It means ascertaining what it possible for human beings to achieve (Harari, 2007). According to the previous studies, these researchers have not reach an agreement on the best way to measure the success of SMEs. The previous studies also show the measurement of the performance of SMEs can be grouped into two categories which are the measurement of financial and non-financial aspects. The researchers in this group felt that the company is considered as successful when there is an increase in sales. As for the non-financial aspect success factors are as the ability of its employees or employees’ personal satisfaction, or the extent of the researchers to measure the performance of an SME. Some only required considering the financial factors while the other party taught otherwise. However, this study will take the approach as advocated by Wiklund (1999, 2005), in which financial and non financial aspects complement each other and are able to give better impact than just considering from one approach only.
### 2.6 Summary of Literature Review and Knowledge Gaps

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Focus</th>
<th>Findings</th>
<th>Knowledge Gap</th>
<th>How current studies address the gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hur (2009)</td>
<td>A case study of Korean Government TQM practices.</td>
<td>Motivation is one of the best ways to implement TQM. Implementing TQM is every one's responsibility.</td>
<td>The moderating role of values system and management capabilities was not studied.</td>
<td>Organizations need to utilize a diagnostic tool for organizational TQM status assessment. Will be examined.</td>
</tr>
<tr>
<td>Lau et al., (2001)</td>
<td>A study of soft elements.</td>
<td>The study looked into soft element practices but not all of them but did not check the process system.</td>
<td>The study lacked the quality management processes for public policies.</td>
<td>The intervening influence of management capabilities from a holistic perspective will be examined.</td>
</tr>
<tr>
<td>Yong et al., (2007)</td>
<td>A survey of TQM initiatives in many organizations.</td>
<td>There is no organization that has implemented TQM practices at ones.</td>
<td>The moderating role of values system and management capabilities was not studied.</td>
<td>The study will examine organizations’ need for context-specific solutions.</td>
</tr>
<tr>
<td>Hackman et al., (1995)</td>
<td>A survey of TQM initiatives in many organizations.</td>
<td>Systems was unchanged and continue to generate the same behavioral dynamics as before.</td>
<td>The combined variables of values system and management capabilities were not considered.</td>
<td>The study will examine the need for a comprehensive guide for practitioners.</td>
</tr>
<tr>
<td>Gorecki (1995)</td>
<td>A survey of TQM initiatives in many organizations.</td>
<td>TQM’s popularity waned mainly due to implementation failures rather than the philosophy itself.</td>
<td>Study limited in Indonesia and the resources were not considered.</td>
<td>Organizations need to transform the whole system of management rather than just building better bureaucracies.</td>
</tr>
</tbody>
</table>
2.7 Conceptual Framework

This conceptual framework is constructed after thorough review of past researches that had been carried out by different scholars. It is developed to the correlation between the independent and dependent variables developed based on an extensive review of previous studies, a conceptual model was developed to help conceptualize the relationship between the two variables TQM practices and organizational performance. The variables are categorized into two areas (Independent variables) – TQM practices and dependent variable – (Organizations performance) as shown in figure 2.1.

**INDEPENDENT VARIABLES**

- TQM PRACTICE
  - Management commitment
  - Customer focus
  - supplier Quality Management
  - People Management

**DEPENDENT VARIABLES**

- ORGANIZATIONAL PERFORMANCE
  - Increased market share
  - Profit increase
  - Improved productivity
  - Customer satisfaction
  - Employee morale

Figure 2.1: Conceptual Model by Author, 2016

**Hypothesis**

H₀₁: There is no significant effect of Total Quality Management practices on the performance of SMEs in carrying out construction business in Nairobi City County
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

Here the investigator used the method statement as elaborated below in collecting analyzing and reporting the research findings. The population of the study was small and medium business enterprises carrying out the construction business in Kenya and particularly Nairobi County, the data was analyzed by computerized software SPSS. The analysis and

3.2 Research Design

The investigation used both inferential and descriptive statistical analysis to evaluate the study, the population was arranged in a more stratum way and data collected from the people who work at the decision level of the organization. More particular emphasis was put into looking at those activities that help in improving the organization performance through interaction (Mugenda and Mugenda, 2009). The study was aimed at collecting data from respondents on their opinions in relation to the effect of TQM practices on performance of construction small and medium enterprises and to evaluate critically if the construction firms are practicing those activities that involves in the proper recruitment and selection of employees, top management involvement in practices that improve quality, the significant role played by the supplier and production geared towards meeting the customers expectation. The description of design was advantageous as it did not only enable the researcher to look into the activities that stimulates performance but also to build a benchmark on which policy formulation can be hinged to come up with those guide lines and procedures to help regulate the industry. To this, a structured method that involves measurements of work, classification and interpretation of data as relates to the construction small and medium enterprises in Nairobi County was done.

3.3 Target Population

A census survey was done in 108 small and medium enterprises which are doing business of construction within Nairobi County.
3.4 Data Collection

The investigator collected primary data from the target population. This was done by using structured questionnaires that were dropped at the firms and collect later after they have been filled by the authorized person. The questionnaires dealt with the general background of the business organization and that of the person filling it in section A. Section B identified the TQM practices adopted by each company, and section C determined to what extent TQM practices has impacted on performance. The closed-ended questions used a five point Likert, and the open-ended questions to allow the respondent to add any other information.

3.5 Data Analysis

To analyze data computerized data analysis techniques was used to develop charts, measures of central tendencies, measures of dispersions and multiple regression. Section A and B was analyzed using descriptive techniques while section C the multiple regression analysis and chi square test techniques were used to analyze the data.

A conceptualized regression model shown below was used to determine the effect of TQM practices on organizational performance.

\[ Y_1 = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \]

\( Y_1 \) = Organizational performance

\( \alpha \) = represent the model Constant (intercept)

\( \beta_1 \ldots \beta_4 \) = regression coefficient which measures unit changes included in Y for each unit change in X variables

\( X_1 \) = Top Management commitment,

\( X_2 \) = Customer focus,

\( X_3 \) = Supply quality management,

\( X_4 \) = People management,

\( \varepsilon \) = Error term.
CHAPTER FOUR : RESULTS AND FINDINGS

4.1 Socio - Demographic Characteristic

This study was carried out on construction companies that are doing the business of construction at the level of small and medium enterprises within Nairobi county. 108 companies are registered at this level and a census survey was carried out, of the 108 questionnaires that were dropped 10 of the questionnaires were found out to be defective and could not be analyzed due to filling errors, another 7 questionnaires were not returned by the respondents leaving only 91 valid questionnaire from the total population. The respondents were senior managers of these organizations working at the level of top and middle management. Education background of the respondents was considered and the special professional skills that they possesses.

4.1.1 Company Background

The study sampled managers from various companies, of which the majority of these firms were locally owned 93.4% with only 6% being owned by foreigners; out of these 71.4% were registered in the period from the year 2000 forward while 28.6% were registered in the period of the 1900s. All the companies from which the respondents were derived had not previously received any ISO Certification, although 13.2% of those interviewed indicated that their companies are intending to get the ISO certification.

4.1.2 Education Background

The distribution of the respondents by training background is shown in in Table 4.0 below. Majority of these were those trained as engineers at 83.5% while the remaining had a business training background at 16.5%.
Table 4.0: Training background of the respondents

<table>
<thead>
<tr>
<th>Field of Training</th>
<th>Position in company</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Top Management</td>
<td>Middle level</td>
</tr>
<tr>
<td>Business</td>
<td>6.6%</td>
<td>9.9%</td>
</tr>
<tr>
<td>Engineering</td>
<td>71.4%</td>
<td>12.1%</td>
</tr>
<tr>
<td>Total</td>
<td>78%</td>
<td>22%</td>
</tr>
</tbody>
</table>

However, the level of education from either groups were equally varied with majority 51.6% having acquired a college diploma, 35.2% having a bachelors’ degree and only 5.5% having trained to certificate level as shown in table 4.1 below.

Table 4.1: Level of Education

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Position in the company</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Top Management</td>
<td>Middle Level</td>
</tr>
<tr>
<td>Master</td>
<td>7.7%</td>
<td></td>
</tr>
<tr>
<td>Bachelors</td>
<td>29.7%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Diploma/College</td>
<td>35.2%</td>
<td>16.5%</td>
</tr>
<tr>
<td>Certificate</td>
<td>5.5%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>78.0%</td>
<td>22.0%</td>
</tr>
</tbody>
</table>
4.1.3 Position and the Duration Worked in the Company

The sample as is evident from table 4.2 indicate that majority (78%) of those interviewed were top level managers with only 22% serving in middle level management. Within the 78% of the top management, 37.4% had served in the same companies for more than 10 years and 34.1% had served for between 5-10 years within the same companies. Amongst the 22% of those in middle level management, 9.9% had served for more than 10 years; this brings the cumulative value of those who has served for more than 10 years to 47.3% as show in table 4.2 below.

Table 4. 2: Period served in the company

<table>
<thead>
<tr>
<th>Period stayed in the company</th>
<th>Position in the company</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Top Management</td>
<td></td>
</tr>
<tr>
<td>Less than 5years</td>
<td>6.6%</td>
<td>13.2%</td>
</tr>
<tr>
<td>5-10 years</td>
<td>34.1%</td>
<td>39.6%</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>37.4%</td>
<td>47.3%</td>
</tr>
<tr>
<td></td>
<td>Middle Level</td>
<td></td>
</tr>
<tr>
<td>Less than 5years</td>
<td>6.6%</td>
<td></td>
</tr>
<tr>
<td>5-10 years</td>
<td>5.5%</td>
<td></td>
</tr>
<tr>
<td>More than 10 years</td>
<td>9.9%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

4.2 Association of Organizational Performance with Total Quality Management (TQM)

The study looked into the TQM practices influences on the organization performance, the investigator used the chi square test and multiple regression analysis to find the association and correlation that exist between these two variables; the independent and dependent variables. The fit of total quality management in how they influence the relationship of organization operating strategies and the organization performance. The empirical study for this was drawn from 108 companies within Nairobi where by the findings indicated that TQM is positively and significantly related to customer focus and negatively but significantly related to people management, top management and supply quality management. This implies that TQM needs to be complemented by other resources to more effectively realize that the strategy is achieving high level of performance.
4.2.1 Chi Square Test

The Chi-Square test, results showed that there is evidence of association of organization performance and management commitment which is significant ($p = 0.000$) at 0.05 confidence level as shown in Table 4.3 which demonstrates that there is a significant relationship between top management commitments that translate to having good organization performance. Therefore, the null hypothesis ($H_0$) that there was no association between organization performance and management commitment is rejected.

Table 4.3: Chi-Square test of association between organizational performance and management commitment

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>289.023</td>
<td>30</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>218.662</td>
<td>30</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>1.691</td>
<td>1</td>
<td>.193</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>91</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 40 cells (95.2%) have expected count less than 5. The minimum expected count is .66.

The Chi-Square test reveals that there is strong evidence of association of organization performance and customer focus showed that relationship is significant ($p = 0.000$) at 0.05 confidence level as shown in Table 4.4. That is to say, very good customer focus can somewhat translate to having good organization performance. Therefore, the null hypothesis ($H0$) that there was no association between organization performance and management commitment is rejected.
Table 4.4: Chi-Square test of association between organizational performance and customer focus

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>251.493(^a)</td>
<td>24</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>192.462</td>
<td>24</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>0.043</td>
<td>1</td>
<td>.836</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>91</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) 32 cells (91.4%) have expected count less than 5. The minimum expected count is 1.10.

A test of association between organization performance and people management also showed that relationship is significant \((p = 0.000)\) at 0.05 confidence level as shown in Table 4.5. That is to say, very good people management can translate to having good organization performance. Therefore, the null hypothesis \((H_0)\) that there was no association between organization performance and people management is rejected.

Table 4.5: Chi-Square test of association between organizational performance and people management

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>256.836(^a)</td>
<td>30</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>229.586</td>
<td>30</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>0.095</td>
<td>1</td>
<td>.758</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>91</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) 41 cells (97.6%) have expected count less than 5. The minimum expected count is .66.

A test of association between organization performance and supply quality management also showed that relationship is significant \((p = 0.000)\) at 0.05 confidence level as shown in Table 4.6. That is to say, very good supply quality management can translate to having good organization performance. Therefore, the null hypothesis \((H_0)\) that there was no association between organization performance and supplier quality management is rejected.
Table 4.6: Chi-Square test of association between organizational performance and supply quality management

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>289.410^a</td>
<td>30</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>244.510</td>
<td>30</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.551</td>
<td>1</td>
<td>.458</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>91</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

^a. 42 cells (100.0%) have expected count less than 5. The minimum expected count is .66.

4.2.2 Regression Analysis

Table 4.7: Model Summary

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R Square Change</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F Change</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>df1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>df2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sig. F Change</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.344^a</td>
<td>.118</td>
<td>.077</td>
<td>.65406</td>
<td>.118</td>
<td>2.881</td>
<td>4</td>
<td>86</td>
<td>.027</td>
</tr>
</tbody>
</table>

^a. Predictors: (Constant), Mean People Management, Mean Management Commitment, Mean Supply Quality Management, Mean Customer focus

Adjusted R² which is termed as the coefficient of determination tells us how organization performance varies with people management, management commitment, supply quality management, and customer focus. As per the illustration in the table 7 above the value of adjusted R² is 0.077. This implies that, there was a variation of 7.7% of organization performance with changes in people management, management commitment, supply quality management, and customer focus at a confidence level of 95%. R is the correlation coefficient which shows that there is some correlation between the study variable as shown by the correlation coefficient of 0.344. This depicts a very small change.
Table 4.8: Summary of the Coefficients.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>3.623</td>
<td>.999</td>
<td>3.627</td>
<td>.000</td>
</tr>
<tr>
<td>Mean Management Commitment (X₁)</td>
<td>-1.406</td>
<td>.507</td>
<td>-2.774</td>
<td>.007</td>
</tr>
<tr>
<td>Mean Customer focus (X₂)</td>
<td>1.388</td>
<td>.543</td>
<td>2.555</td>
<td>.012</td>
</tr>
<tr>
<td>Mean Supply Quality Management (X₃)</td>
<td>-.076</td>
<td>.426</td>
<td>-1.78</td>
<td>.085</td>
</tr>
<tr>
<td>Mean People Management (X₄)</td>
<td>-.012</td>
<td>.401</td>
<td>-0.30</td>
<td>.976</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Mean Organization Performance (Y)

From the finding in table the established regression equation becomes

\[ Y = 3.623 - 1.406 X_1 + 1.388 X_2 - 0.076 X_3 - 0.012 X_4 \]

From the above regression model, holding people management, management commitment, supply quality management, and customer focus to constant zero organization performance would be at 3.623. It therefore shows that any variation in management commitment would cause change in organization performance by -1.406. A variation in customer focus would lead to a change in organization performance by of 1.388, also variation in supply quality management would create a difference in organization performance -0.076, a variation in people management would causes a change in an increased organization performance by factors of -0.012. This shows that there is a strong evidence of positive relationship between organization performance with customer focus while others relationships are inverse.
CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The study validates the ordinal regression technique to model organization performance and the TQM practices. This technique used because the statistical outcome was ordered categorically. Ordinal regression allows for predicted probabilities of composite variables to be calculated from individual responses.

5.2 Summary of the Discussion of the Findings

Based on the goodness of fit information, it is evident that the model is credible with coefficient of determination (Adjusted $R^2$) at 7.7%. This implies that there is a variation of 7.7% in organization performance with joint changes in people management, management commitment, supply quality management, and customer focus. Therefore, it is evident that there are more factors that contribute to organization performance that need to be investigated since the four jointly contribute to only 7.7% leaving about 92.3% to unexplained variables. In this study, the composite variables generated from the Likert scale variables are assumed to be continuous as opposed to the original Likert type variables which were discrete. From the findings the study found that there were many factors affecting organization performance including people management, management commitment, supply quality management, and customer focus.

There was a revelation of strong evidence that there exist a relationship of organization performance with changes in people management, management commitment, supply quality management, and customer focus. The study found that organization performance has a strong evidence of positive relationship with customer focus and a strong evidence of a negative relationship with people management, management commitment and supply quality management.

5.3 Conclusion

From this study the conclusion made was that it is significantly important to focus more on customer demands and needs to realize high organization performance. Production with customer focus contribute largely to organization’s performance through the acquisition and
retention of customers. Since the analysis of the data presented shows evidence of strong relationship between the TQM practices and the organizational performance and customer focus remains core. It is therefore important for a company to ensure that the needs of their customers are highly considered in their production to realize high profits and growth.

5.4 Limitations

As seen in this research study first limitation of this research was the study population sample size was quite small in number (n=91) which doesn’t give true representation of the population. Such a small sample size makes it difficult to generalize the results to the entire population. Therefore, some caution needs to be taken in interpreting and generalizing the results. Increasing the sample could yield more statistically significant results. Another possible limitation is that it only surveyed employees of companies mainly in two subsectors i.e. Engineering and Business. By conducting a larger study involving employees of companies in various sub-sectors, the investigator could avoid this limitation and thereby making it easy to generalize the results.

In addition, organization performance is a very complex concept since contributions cannot be constrained only to the variables listed by the investigator. Therefore, in determining what exactly contributes to organization performance can be considered to be somewhat subjective.

5.5 Recommendation for Further Research

At this point, there is need for more research on other factors that contribute to organization performance that might not have been considered in this study to ascertain other contributors to organization performance since those covered in the model explain only a small proportion of this change according to the goodness of fit results. The study can also be done in future with bigger sample size, larger sample may enable the researcher to apply some statistical tests which are inherently more powerful than those used here.
REFERENCES


Kipkelion, N. Kirwa,(2013).Total quality management and business excellence, customers and stakeholders: do we agree on what we are talking about, and does it matter. *The TQM Journal*, 20(2):120-129


APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

TO WHOM IT MAY CONCERN

The bearer of this letter Michael Otieno Ochola

Registration No. D6114783/2014

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

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

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

Thank you.

[Signature]

Patrick Nyabuto
Senior Administrative Assistant
School of Business

27 Sept 2016
APPENDIX II: QUESTIONNAIRE

This questionnaire will be treated with utmost confidentiality and only used for academic purposes.

The questionnaire is comprised of three sections as follows

- **Section A**: The general information the company and personal information of the person.

- **Section B**: The TQM practices status and their implementation by the organizations.

- **Section C**: The measurement of organization performance and TQM practices.

Please do not include your name anywhere and note that there are no wrong answers

- **Section A**: The general information the company and personal information of the person.

Please fill in the question as best as possible.

1. What is the name of your company?………………………………………………(optional)

2. What is the highest level of your education?
   i. Phd Degree [   ]
   ii. Master Degree [   ]
   iii. Bachelor Degree [   ]
   iv. Diploma/College [   ]
   v. Certificate [   ]

3. What is your education background?
   vi. Engineering [   ]
   vii. Business [   ]
   viii. Science [   ]
ix. Others kindly specify..................................................

4. Which is your current position in the company?
   a) Top management staff [ ]
   b) Middle level management staff [ ]
   c) Subordinate staff [ ]

5. For how long have you been employed in the company?
   i. Less than 5 years [ ]
   ii. 5-10 years [ ]
   iii. Over 10 years [ ]

6. Indicate the ownership of your company.
   i. Locally owned [ ]
   ii. Foreign owned [ ]

7. When was your company established? Year...........................................

8. How many people are employed in your company?..........................................

9. Is your company certified to any of the ISO quality systems?
   i. ISO 9001 [ ]
   ii. ISO 9002 [ ]
   iii. ISO 9003 [ ]
   ix. ISO 9001:2000 [ ]
   x. None [ ]
   xi. Others specify.............................................................................

10. Is your company planning to have any ISO certification quality assurance system (ISO) in the short term? Yes [ ] No [ ]

**Section B: Total quality management**

Please indicate the extent to which you agree with the following statements on the Total quality management used by your company. The scale below will be applicable: 1= Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree.
11. Key 1= Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

<table>
<thead>
<tr>
<th>Top management commitment</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Managers communicate effectively the organization’s vision, goals, plans and values for the quality program.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Top management institute organizations change and make plans to implement it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Top management allocates adequate resources towards efforts to improve quality.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Senior executives insist on information and communication accuracy and reliability.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Do the employees have faith, trust and confidence in their managers and the juniors would want to follow them as role models.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

12. Key 1= Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

<table>
<thead>
<tr>
<th>Customer focus</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Product/service/process systems are designed, developed and delivery are based on meeting the needs of the customer.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Customers’ core value requirements are identified.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Complaints process and guidelines are established recorded and properly reported.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Communication and training processes emphasize customer focus.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The channels of communication between the customer and the company is easy and effective (certain phone numbers, email address and websites are available).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
13. Key 1= Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

<table>
<thead>
<tr>
<th>Supplier quality management</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our company has established long term co-operative relationship with supplier.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Our company always participates in supplier activities related to quality.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Our company has detailed information related to the supplier performance.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Our company regards product quality as the most important factor for selecting supplier (e.g. quality rather than the price or schedule).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Our company always gives feedback on the performance of suppliers’ products.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

14. Key 1= Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

<table>
<thead>
<tr>
<th>People Management</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruitment and the selection of the right man for the right job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Communication is open and continuous in three directions, top, bottom and horizontal.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Occupational, Health and Safety practices are excellent in our firm.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The satisfaction of employees is continuously and regularly evaluated.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Monitoring and evaluation is done to improve performance.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Section C: Performance measurement.
This section ask you to take into account a number of statements in respect with your company's current performance level for each of the listed attributes please specify (by selecting a single number ranging from 1 to 5 in the first column).
## 15. Customer satisfaction

<table>
<thead>
<tr>
<th>NO</th>
<th>Current level of performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sometimes meets expectations</td>
</tr>
<tr>
<td>2</td>
<td>Generally meets expectations</td>
</tr>
<tr>
<td>3</td>
<td>Consistently meets expectations</td>
</tr>
<tr>
<td>4</td>
<td>Always meets expectations</td>
</tr>
<tr>
<td>5</td>
<td>Expectations exceeds delighted customers</td>
</tr>
</tbody>
</table>

## 16. Employee morale

<table>
<thead>
<tr>
<th>NO</th>
<th>Current level of performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very low</td>
</tr>
<tr>
<td>2</td>
<td>Low</td>
</tr>
<tr>
<td>3</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>4</td>
<td>High</td>
</tr>
<tr>
<td>5</td>
<td>Very high</td>
</tr>
</tbody>
</table>

## 17. Defects as a % of production volume.

<table>
<thead>
<tr>
<th>NO</th>
<th>Current level of performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Less than 1%</td>
</tr>
<tr>
<td>2</td>
<td>1%-2%</td>
</tr>
<tr>
<td>3</td>
<td>2.1%-3.5%</td>
</tr>
<tr>
<td>4</td>
<td>3.6%-5%</td>
</tr>
<tr>
<td>5</td>
<td>More than 5%</td>
</tr>
</tbody>
</table>

## 18. Profit improvement in % increase.

<table>
<thead>
<tr>
<th>NO</th>
<th>Current level of performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No change</td>
</tr>
<tr>
<td>2</td>
<td>1.0% increase</td>
</tr>
<tr>
<td>3</td>
<td>1.1% -2.5% increase</td>
</tr>
<tr>
<td>4</td>
<td>2.6% -15% increase</td>
</tr>
<tr>
<td>5</td>
<td>More than 15% increase</td>
</tr>
</tbody>
</table>
19. Please indicate the business performance of your company (A) compared with an excellent competitor company (B) by circling the appropriate number.

<table>
<thead>
<tr>
<th>NO</th>
<th>Current level of performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Much less</td>
</tr>
<tr>
<td>2</td>
<td>Less</td>
</tr>
<tr>
<td>3</td>
<td>Equal</td>
</tr>
<tr>
<td>4</td>
<td>Greater</td>
</tr>
<tr>
<td>5</td>
<td>Much greater</td>
</tr>
</tbody>
</table>

20. Do wish to obtain a copy of the outcomes of this study?

Yes [  ]  No [  ]

Thank you for your cooperation.