



INFLUENCE OF STRATEGIC QUALITY MANAGEMENT ON ORGANIZATIONAL PERFORMANCE OF FOOD PROCESSING COMPANIES (A CASE OF UNGA HOLDINGS LIMITED - KENYA)

Mureithi, M. N., Ndambiri, A. N., & Rotich, G.

INFLUENCE OF STRATEGIC QUALITY MANAGEMENT ON ORGANIZATIONAL PERFORMANCE OF FOOD PROCESSING COMPANIES (A CASE OF UNGA HOLDINGS LIMITED - KENYA)

Mureithi, M. N.,^{*1} & Ndambiri, A, N.,² & Rotich, G.³

^{*1} MBA Scholar, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Nairobi, Kenya

² Jomo Kenyatta University of Agriculture & Technology [JKUAT], Nairobi, Kenya

² Ph.D., Jomo Kenyatta University of Agriculture & Technology [JKUAT], Nairobi, Kenya

Accepted: May 11, 2018

ABSTRACT

The general objective of this study was to determine the influence of strategic quality management on organizational performance of food processing companies with a special focus on Unga Holding Limited. The target population for the study were 96 employees from the three subsidiaries of Unga Holding limited which are Unga Limited, Unga Farm Care and Unga Millers Uganda Limited. The study utilized questionnaires which were distributed to the respondents then collected after the agreed period of time. The Statistical Package for Social Sciences (SPSS) version 23 was used in the analysis. Data was then presented in form of tables and figures. The study established that quality improvement contributes the most to organizational performance followed by visionary leadership then quality assurance while quality control contributed the least to organizational performance. Based on findings of this study, it was reasonable to conclude that strategic quality management contributed to performance of Unga Holding Limited. Quality improvement was found to be statistically significant in influencing the firm's performance. Therefore, managers should look for ways of monitoring and sustaining performance through training employees and by ensuring continuous quality audits and system measurements of Unga Holding Limited. The study recommended that the government, in cooperation with other organizations, should be involved in two inter-related approaches to enhance quality and service excellence that will have a tremendous impact on the performance of industries. The first was to establish a quality award program in the country. This would create a sense of competitiveness among the industries. The other was to expedite the condition for actively seeking and obtain international standards such as ISO. Establishing a local certifying agent can be one way to accomplish this. In general the implementation of strategic quality management requires a change in attitude of the society. This would be a long and frustrating journey but at the end, the survival of the industries and improvement of the quality of lives in the country are ensured.

Key Words: Quality Improvement, Visionary Leadership, Quality Assurance, Quality Control

INTRODUCTION

Economic environment is changing rapidly and this change is characterized by such phenomena as the globalization, changing customer and investor demands, ever-increasing product-market competition (Waller, 2010). To complete successfully in this environment, organizations continually need to improve their performance by reducing cost, innovating products and processes and improving quality, productivity and speed to market. According to Waller (2010) strategic quality management is an on-going process that evaluates and controls the business and the industries in which the company is involved, assesses its competitors and set goals and strategies to meet all existing and potential competitors, and then reassess each strategy annually or quarterly (regularly) to determine how it has been implemented and whether it has succeeded or needs replacement by a new strategy to meet changed circumstances, new technology, new competitors, a new economic environment, or a new social, financial or political environment” (Nekoueizadeh, & Esmaili, 2013). Organizations that adopt strategic quality management strategy focus on achieving and sustaining high quality outputs using management practices as the inputs and quality performance as the outputs (Talib, Rahman & Qureshi, 2010). The pioneers in QM, such as Deming, Juran, Cosby and Feigenbaum, highlighted the importance of the quality philosophy as an essential competitive weapon for the transformation of an organization (Kyalo, 2013).

During the last few decades, organizations all over the world have been trying to cope with a rapidly changing business environment in which management have to be more and more astute in finding ways to sustain or gain competitive advantage. To withstand new global challenges, most manufacturing businesses have adopted new

philosophies such as Concurrent Engineering, Lean Production, Just-In-Time (JIT) strategies, Total Quality Management (TQM), Business Process Re-engineering (BPR) and others, to become more effective in the way they conduct business. The main driver behind these philosophies is the optimization of the organization’s performance both internally and externally within its respective market targets (Yunoh & Ali, 2015). Given the competitive pressures due to increasing input prices, high interest rates, high cost of research and development as well as high customer expectation on the quality of products and services, many manufacturing companies continuously seek ways to improve quality and remain cost-effective (Masood & Mukhtar, 2012).

Product quality is the degree to which the product or service meets the specifications and the needs of customers. Strategic quality management is a concept based on continuous improvement in the performance of processes in an organization and in the quality of the products and services that are the outputs of those processes. Quality advocates have identified several critical principles for successful TQM practices which among others include: top management commitment, customer focus, supplier relationship, benchmarking, quality oriented training, employee focus, zero-defects, process improvement and quality measurement (Zakuan et al., 2010). Top management acts as the main driver for TQM implementation, creating values, goals and systems to satisfy customer expectations and improve an organization’s performance path (Prajogo & Sohal, 2014).

Globally, customer focus keeps the business aware of the changes taking place in its environment and provides the knowledge needed to adapt the product. Benchmarking is a process in which an organization continuously compares and measures itself against business leaders anywhere in the

world to gain information and provide a guideline for rational performance goals (Sajjad & Amjad, 2012). As of late, it has been widely accepted that the most valuable resource within a company is the set of people who work within it (employee focus). Indeed, people in the organization should be continually trained and be given adequate education on prescriptions, methods and the concept of quality, which usually includes QM principles, team skills, and problem solving (quality related training) strategies. Setting a goal of zero-defect, and continuing to renew one's commitment to moving ever closer toward that goal, will lead to improvements that continue to approach absolute perfection over time (Sadikoglu & Zehir, 2010).

Simultaneously, process improvement requires everyone in an organization to work towards doing the right things the first time and every time. Lastly, quality control is a goal-orientation with constant performance measurement, often with the use of statistical analysis. The analysis process ensures that all deviations are appropriately considered, measured and consistently responded to (Reed & Tripathi, 2014).

Regionally, many African countries, including Kenya, have adopted ISO standards (Nekoueizadeh & Esmaeili, 2013). Raphael, (2010) noted that the ISO certification is applicable to any type of organization, including the manufacturing sector, and it drives performance improvement (National Learning Consortium, 2013). According to Resource-Based View theory, a company's performance is based on the resources and capabilities it holds in control which may become a source of competitive advantage (Martinez-Costa et al., 2008). According to Muturi, Maranga and Getecha, (2013), to create a competitive advantage, this is the degree to which a firm outperforms its competitors, performance measures should be chosen for benchmarking.

It is important to note those firm-specific resources

that are valuable, rare, imperfectly inimitable and not substitutable (Yunoh & Ali, 2015). This is to say that performance is built on the resources that add value to firms and that are not homogeneously distributed across competing firms. The food manufacturing sector, globally, is being pushed by unprecedented change arising from challenges associated with delivering quality products and services, leading to the adoption of ISO certification to enhance performance (Adner & Levinthal, 2011). These influences include pressure from the government to ensure that food manufacturing firms are producing high quality products that meet the demands of consumers (Waller, 2010). Terziovski (2011) posited that superior performance comes as a result of management strategies aimed at improving the quality of products and services.

Performance measures that demonstrate the value of an organization's management systems can be difficult to develop, use, and interpret, and different researchers have different views about performance. Although quality itself does have consistent positive relationship with better performance, there is little commonality in how performance is measured and defined. Organizational performance is a recurrent theme in the theory of quality enhancement, and it is of significant interest to academics and practitioners (Samson & Terziovski, 2011). Factors such as employee satisfaction, firm performance, product quality and efficiency and business results are linked to the firms' performance measures (Salegna & Fazel, 2010).

In this study, business performance measures are used to prove that strategic quality management system helps in stepping up efficiency in the company, leading to high performance. For the purpose of this study, performance measures will be defined in terms of productivity, efficiency, and employee satisfaction. These performance

measures have been used in previous studies by Jaafreh & Al-abadallat, 2013 and Zakuan *et al.*, 2010). These quality measures have been used by previous studies as indicators of a company's performance and it was established that they have impact on performance (Belay et al, 2011 and Zakuan et al., 2010)

Locally, quality management systems are widely used in developed countries all over the world (Bantilan, 2012). Moreover, the same trend is picking in developing countries (Albrecht, 2011). Kenya is still in the development phase, and the quality of most products by manufacturing firms is still not consistently up to standard; therefore, there is need to enhance the quality of manufactured products to spur economic growth. Even though, the number of ISO certified firms is on the increase, the product quality is still wanting (Raphael, 2010).

This study, therefore, seeks to bridge the gap by enhancing the understanding of the effects of strategic quality management practices on the performance of food processing firms in Kenya. Kaziliunas (2010) noted that continuous improvement is a post-certification stage where the maintenance of quality system is carried out.

According to Kibe and Wanjau (2014), in Kenya the top management is in charge of setting the direction, providing resources, developing and maintaining systems focused on customers and performance excellence; therefore, the importance of top management to the success of an organization cannot be underestimated. Leadership is the fundamental driver of business excellence. It is the role of leadership to define the mission, vision and goals that promote a quality culture and establish a set of shared values, resulting in high performance (Kanji, 2010). Therefore, the need for full commitment of top management should be understood, communicated, implemented and

maintained at all levels in the organization. The importance of quality management practices should begin to be emphasized at the top, where serious commitment to performance must be demonstrated through vision framework which comprises the organization's guiding philosophy, core values and beliefs, purpose and mission (Talib, Rahman, & Qureshi, 2010). Baidoun (2013) noted that top management commitment/leadership, policy and strategy, partnership and resources management and management of processes, are generally considered to be the initial inputs in the implementation of quality management system leading to high performance.

Statement of the Problem

Over 50% of the organizations all over the world are adopting strategic quality management (Al-Ababneh, 2010). A study of the Turkish large-scale firms in determining the principles affecting perceptions of strategic management implementation explains the differences between Strategic Quality Management (SQM) implementing and not implementing firms according to their perceptions of SQM implementation (Temur et al., 2014). An empirical study of TQM practices in Japanese-owned manufacturers in China showed that TQM practices influence overall company performance significantly in Japanese-owned manufacturers. The research found that most of Japanese-owned manufacturers in China have implemented quality management and that TQM practices have contributed to their operations (Masahiro and Yoshida, 2014).

Unga Holdings Limited is the leading Kenya-based holding company that has a majority shareholding in companies involved with the manufacture and marketing of a broad range of human nutrition, animal nutrition and animal health products. Over 90% of the company's revenue is derived from Kenya with the remainder attributed to sales in

Uganda, Tanzania and Rwanda. Unga Limited prides itself on being Kenya's oldest and still one of the largest millers, with over a century of heritage in grain milling.

The company's turnover increased by 5.4% to Shs.19.7 billion in 2016 and profit from continuing operations increased by 18.4% to Shs. 509 million in comparison to 2015. The overall profit for the year however declined by 18.2% to Shs. 508.8 million in 2016 compared to Shs. 621.9 million in 2015. Consequently the earnings per share reduced from Shs. 5.27 to Shs. 4.32 in 2016. Despite this, the board recommended a dividend of Shs. 1.00 per share, same as prior year. Unga Holding limited is the region's leading manufacturer and marketer of a broad portfolio of quality animal nutrition and health products and has a market share of 70% and a sales volume of 5000 metric tonnes per month (Unga Holding limited, 2016)

Ngware et al., (2016), examined the extent of Total Quality Management use in secondary schools in Kenya. From the study majority of schools are not committed to strategic quality planning, though they do promote human resource development initiatives. Magutuet al., (2010), studied TQM practices application at the University of Nairobi. The results showed that the University of Nairobi to a very great extent has ensured that quality management policy is appropriate to its purpose; and it provides the framework for establishing and reviewing quality objectives. A study on the role of quality in growth of small and medium enterprises in Kenya (Gakure et al., 2010), noted that there existed reluctance among SMEs in Kenya to adopt quality. Further, research on effects of total quality management implementation on business performance at Kenya Wildlife Services (KWS) revealed that, KWS is customer oriented and that it practices TQM to a very large extent (Karani & Bichanga, 2012).

None of these studies has explored the strategic quality management practices in food processing industry as a case study and the extent of implementing quality management system and thus the current study therefore aimed at filling the highlighted knowledge gaps by examining the influence of strategic quality management on organizational performance of food processing companies, with a case study of Unga Holdings Limited, Kenya.

Study Objectives

The general objective of this study was to determine the influence of strategic quality management on organizational performance of food processing companies (a case of Unga Holding Limited). The specific Objectives were:-

- To determine the influence of quality assurance on organizational performance of food processing companies
- To assess the influence of quality control on organizational performance of food processing companies
- To determine the influence of quality improvement on organizational performance of food processing companies
- To investigate the influence of visionary leadership on organizational performance of food processing companies

LITERATURE REVIEW

Theoretical Review

Quality Improvement Theory

This theory was coined by Deming, 1986. Quality Improvement Theory postulates that a feature of quality management doctrine is that it places responsibility for manufacturing organizations squarely at the door of top management (Jung, Wang, & Teece, 2010). The theory states that the

management is responsible for the systems, and that it is the system that generates 80 per cent of the problems in firms (Hardie, 2013). Deming (2011) noted that no quality management system could succeed without top management commitment; it is the management that invests in the processes, creates corporate culture and also selects suppliers and develops long-term relationships. Deming's Quality Improvement Theory provides business with a plan to eliminate poor quality control issues through effective managerial techniques. It's a fact that management's behaviour shapes the corporate attitude and defines what is important for the success and survival of the firm. Hardie (2013) has detailed the theoretical approach of Deming (2011) in respect to the quality management system, and it envisages the creation of an organizational system that fosters cooperation and learning to facilitate the implementation of process management practices. This, in turn, leads to the continual improvement of the processes, products, and services and helps to instil employee satisfaction. These are critical to promoting customer focus, and, ultimately, helping in the survival of any organization.

Deming (2011) believed in a systematic approach to problem-solving and promoted the widely known Plan Do Check Act cycle. The Plan Do Check Act (PDCA) cycle of continuous improvement is a universal quality improvement concept whose aim is to constantly improve performance, thereby reducing the difference between customer requirements and the performance of the manufacturing firms (Ikay & Aslan, 2011). The theoretical essence of the Quality Improvement Theory focused on quality concerns in the creation of an organizational system that fosters cooperation and learning for facilitating the implementation of process management practices, which, in turn, leads to performance (Jaafreh & Al-abadallat., 2013). Krause (2013) stressed that the

responsibilities of top management should take the lead in changing processes and systems. Leadership plays a crucial role in ensuring the success of quality management because it is the top management's responsibility to create and communicate the vision to move the firm toward performance improvement. Top management is responsible for most quality problems; it should give employees clear directions on what is considered acceptable work, and provide the methods to achieve it. These methods include an appropriate working environment and climate for work that is free of fault finding, blame or fear and instead provide clarity of issues, communicate effectively and provide appropriate environment for work to enhance performance (Lamport et al., 2010). The top management should be committed to applying the principles and practices of System of Profound Knowledge (SOPK), where a business can simultaneously reduce costs through reducing waste, rework, staff attrition and litigation while increasing quality, customer loyalty, worker satisfaction and, ultimately, profitability (Lakhali & Limam, 2016). Deming's Quality Improvement Theory is relevant to study in that quality management practices is a quality management system which can be used to enhance quality of products and services through continuous improvement and which organizations can use to realize performance.

Feigenbaum Theory

Feigenbaum is known as the originator of total quality control, a concept he introduced in the 1950s. Feigenbaum saw it as a business method and proposed three steps to quality as, Quality leadership; Modern quality technology; and Organizational commitment. TQM requires a high degree of effective functional integration among people, machines, and information, stressing a systematic approach to quality. Clearly defined total quality system is a powerful foundation for TQM,

and Quality is the responsibility of everybody in the company (Masood & Mukhtar, 2012).

Ishikawa developed the Japanese style of Total Quality Control (TQC), Company Wide Quality Control (CWQC) means that “Quality control consists of developing, designing, producing, marketing and servicing products and services with optimum cost-effectiveness and usefulness, which customers will purchase with satisfaction. To achieve these aims, all the separate parts of a company must work together” (Meredith & Shafer, 2013). Ishikawa made many contributions to quality, the Ishikawa diagram and the assembly and use of the seven basic tools of quality such as Pareto analysis, Cause and effect diagrams, Histograms etc. (Ishikawa, 2015). There are standardized quality models or formal evaluation models used by firms as a guide for their implementation, or in order to carry out self-assessments of their quality practices.

There are several Quality Awards in the world, but the most accepted domains and demonstrate worldwide activities in this field such as the Deming Prize in Japan, the European Quality Award (EFQM) in Europe, the Malcolm Baldrige National Quality Award in the United States of America, and other similar awards in other countries was the official recognition of the importance of TQM. Each award model is based on a perceived model of TQM. The award models do not focus solely on either product or service perfection or traditional quality management methods, but consider a wide range of management activities, behaviour and processes that influence the quality of the final offering. These models provide a useful framework which firms can evaluate their TQM implementation practices, seek improvement opportunities, and the end results (Meredith & Shafer, 2013).

Joseph Juran’s Theory

This theory was coined by Juran in 1988. Joseph

Juran is responsible for what has become known as the “Quality Trilogy.” The quality trilogy is made up of quality planning, quality improvement, and quality control. If a quality improvement project is to be successful, then all quality improvement actions must be carefully planned out and controlled. Juran believed there were ten steps to quality improvement. These steps are: An awareness of the opportunities and needs for improvement must be created, Improvement goals must be determined, Organization is required for reaching the goals, Training needs to be provided, Initialize projects, Monitor progress, Recognize performance, Report on results and track achievement of improvements (Nekouezadeh & Esmaili, 2013). The European Foundation for Quality Management (EFQM) Model is based upon nine criteria for quality management.

There are five enablers (criteria covering the basis of what a company does) and four results (criteria covering what a company achieves). The result is a model that refrains from prescribing any one methodology, but rather recognizes the diversity in quality management methodologies. The nine criteria as defined by the EFQM Model are: Focus on results – pleasing company stakeholders with results achieved is a primary focus, Focus on customers - it is vital that a company’s quality management leads to customer satisfaction, Constancy of purpose and consistent, Visionary leadership, Process and facts form the management focus – Management breaks down everything into systems, processes and facts for easy monitoring, Training and involving employees – employees should receive professional development opportunities and be encouraged to remain involved in the company (Goetsch, et al, 2013). Continuous learning – everyone should be provided with opportunities for learning on the job, Developing partnerships – It is important to encourage partnerships that add value to the

company's improvement process. Social Responsibility of the Corporation – The Company should always act in a way where it is responsible towards the environment and society at large (James and Williams, 2008, Goetsch, et al, 2013).

Conceptual Framework



Figure 1: Conceptual framework

Quality Assurance and Organizational Performance

ASCE-ACMA (2010) publication defines quality assurance as the administrative and procedural requirements established by the contract documents to assure that the constructed composite components and system is in compliance with applicable standards, contract documents, and manufacturer's quality control program (ASCE-ACMA, 2010). Prior to the quality revolution, most

manufacturers were practicing quality control without quality assurance. Quality assurance today most often finds its manifestation in the form of a quality management system or a quality assurance manual which is the communication of the planned and systematic activities a company adopts in the pursuit of quality.

Bishop (2011) conducted an enquiry of small and medium-scale enterprises (SMEs) involved in the production of reinforced plastics. This enquiry sought to elucidate the extent to which the SMEs concerned had developed quality mindedness. Bishop found that only a few [composite manufacturing companies] indicated that they really apply quality assurance procedures. Bishop found that companies desired guidance relating to quality assurance methods with the function of the manufactured product. This stemmed from the fact that often they either had no customer specifications or on the other extreme had customers demanding complex and expensive tests that the manufacturers considered unnecessary. Bishop concluded that it would be helpful to introduce classification criteria which would correlate the function of the product to the level of quality assurance required for its production.

Javed (2015) conducted a study whose objective was to empirically investigate the impact of top management commitment on the success of quality management. This study was limited to ARL Company in Islamabad. The sample of study consisted of executives and managers who were working under functional heads. The researcher used judgmental sampling in selecting the subjects. The instrument used in the study was a survey questionnaire. The Correlation analysis explained a positive moderate relationship between top management commitment and success of quality management. That is, top management commitment is positively related to the success of

quality management in an organization. In the current study, the researcher used objective sampling method, whereas the above study employed judgmental sampling, which was likely to be biased.

Quality control and Organizational performance

Mungara (2010) indicated that Quality control was to all activities (processes) and techniques that are used to achieve or maintain the quality of a product or service. It includes finding and eliminating source of defects and monitoring the manufacturing process. The main purpose of quality control is to ensure that the requirements (specifications) of the customers are met when manufacturing the product. Quality control activities are most of the time in-processing activities that are used to guarantee manufacturing specification are met.

Kagumba and Gongera (2013) conducted a study to establish the effectiveness of ISO certification on firm performance, employee productivity, inflow of revenue and internal procedures and processes in Kenyatta University. The study established that appreciation and participation in ISO certification resulted in improved firm performance, improved organizational outcomes and, accordingly, increased revenue inflows for development. As a result, the university management has greatly enhanced the internal processes in the institution. However, the study did not consider other constructs like continuous improvement and mediating variables such as organizational capability, which the current study intends to take into account.

Anyango, Wanjau and Mageto (2010) in their study noted that financial resource management, firm performance and non-conformance are major contributors of organizational performance. The study adopted a descriptive survey design and self-administered questionnaires. Data were analyzed

using frequency distribution, percentage and mean. Pearson Correlation Coefficient was used to illustrate the significance of the association between quality management practices and performance. The study found that there was increased performance after the adoption of ISO certification. The study established that quality management practices influenced positively the financial resource management and firm performance. The study concluded that quality management practices had a positive impact on manufacturing firms' performance through financial resource management and firm performance. This research focused on financial measures of performance, whereas the current study focused on perceptual measures of performance, namely, increased productivity, effectiveness, employee satisfaction and firm performance.

Quality Improvement and Organizational Performance

Terziovski (2011) noted that no quality management system could succeed without top management commitment; it is the management that invests in the processes, creates corporate culture and also selects suppliers and develops long-term relationships. Terziovski's Quality Improvement Theory provides business with a plan to eliminate poor quality control issues through effective managerial techniques. It's a fact that management's behavior shapes the corporate attitude and defines what is important for the success and survival of the firm.

Oakland (2014) stressed that the responsibilities of top management should take the lead in changing processes and systems. Leadership plays a crucial role in ensuring the success of quality management because it is the top management's responsibility to create and communicate the vision to move the firm toward performance improvement. Top management is responsible for most quality

problems; it should give employees clear directions on what is considered acceptable work, and provide the methods to achieve it. These methods include an appropriate working environment and climate for work that is free of fault finding, blame or fear and instead provide clarity of issues, communicate effectively and provide appropriate environment for work to enhance performance (Lampont *et al.*, 2010).

Chi and Gursoy (2014) noted that there is a relationship between employee satisfaction and firm performance and it has a bearing on the success of a firm's financial performance. The study utilized service-profit-chain framework as the theoretical base and explored four major relationships: the direct relationship between firm performance and financial performance; the direct relationship between employee satisfaction and financial performance; the direct relationship between firm performance and employee satisfaction. The study data was collected from employees, customers and managers, and a structural equation modeling (SEM) with a two-step approach was utilized to empirically test the proposed hypotheses and the relationships between the constructs. The study found out that a firm's performance had positive significant impact on financial performance and that employee satisfaction has no significant direct impact on financial performance. This research used linear and multiple regression analysis to establish relationships between study variables. This study relied on perceptual measures of performance.

Visionary leadership and Organizational Performance

Previous research in SQM practices emphasizes the critical role of top-management commitment in driving overall SQM implementation in the organizations (Zakuan *et al.*, 2010). Teh *et al.* (2013) noted that senior leaders and management guide

the organization and assess the organizational performance. Further, studies showed that top-management commitment significantly affects the quality performance (Prajogo & Brown, 2014).

Kanji (2011) asserted that top-management commitment is the fundamental driver of business excellence. Silva *et al.* (2005) studied world class companies in Japan and Brazil and explored excellent management practices. The study concluded that the practices that foster quality culture include exemplary leadership, respect for individual, strategic approach, open communication, effective human resources management (HRM) and customer focus.

Jaafreh and Al-abadallat (2013) also concluded that there is a significant relationship between quality management dimensions (leadership, strategic planning, customer focus, and employee relation) and organizational performance. This means the managers should be concerned about these dimensions to enhance the organizational performance of the organization.

Organizational Performance

Psomas and Kafetzopoulos (2012) argue that performance contributes to providing the competitive advantage to the firms in cut-throat competition in the market. The company takes advantage over its competitors and performs better in business. Their study was carried out using 140 respondents, on the basis of emailed questionnaires from the ISO certified and non-certified manufacturing firms in Greece. The study findings indicated that ISO certified manufacturing firms significantly outperformed the non-certified ones with regard to product quality, firm performance, operational, market and financial performance. The study used financial and non-financial measures of performance and it was done in a developed country. The current study focused on perceptual

(non-financial) measures of performance and it was carried out in a developing country, Kenya.

Ikay and Aslan (2011) in their study on 255 SMEs in Turkey measured the difference between ISO-certified and non-certified firms on performance. 892 questionnaires were emailed to SME representatives, and the response rate was 32.9 percent. The differences between certified and non-certified firms in terms of performance and quality practices were examined by one-way analysis of variance (one-way ANOVA). The results showed no statistically significant difference between certified and noncertified firms in terms of performance. Certification showed no direct effect on performance. This study used both financial and non-financial criteria to measure performance, according to Kaplan and Norton (2012). The current study used regression analysis to analyze the data and establish the relationship between ISO certification and performance in Kenya, and results implied that there was significant relationship between variables, thus addressing the methodology gap.

METHODOLOGY

The research used descriptive survey design. According to Mugenda and Mugenda (2010), descriptive research design is preferable, as it tries to answer the 'who', 'what', 'when', 'where' and sometimes 'how' questions. It also enabled researchers to summarize and organize the data in an effective and meaningful way. According to Eriksson and Kovalainen (2015), descriptive research involves producing data that is holistic, contextual and one that is rich in details to test hypothesis or answer questions concerning the current status of the subject of the study. Churchill and Brown (2014) also observe that descriptive research design is appropriate where the study seeks to describe the characteristics of certain groups, estimate the proportion of people who

have certain characteristics and make predictions.

The study also employed inferential statistics to determine the influence of strategic quality management on organizational performance of food processing companies. Specifically, the study used Spearman correlation to establish this relationship. The regression equation was:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$$

Where:

Y is the dependent variable (organizational performance),

β_0 is the regression constant,

β_1 , β_2 , β_3 and β_4 are the coefficients of independent variables

x_1 is Quality assurance

x_2 is Quality control

x_3 is Quality improvement

x_4 is Visionary Leadership

RESULTS

Quality Assurance

Table 1 illustrated the finding of the study on the extent to which aspects of quality assurance influences organizational performance. From the findings, majority of the respondents agreed to a very great extent that the organization focuses on quality assurance as a proactive approach and applies quality control for quality verification as indicated by a mean of 4.36, respondents also agreed to a very great extent that quality assurance practices lead to benefits such as improved efficiency, streamlined operations, reduced wastage and improved business performance as depicted by mean of 3.30. Further respondents agreed that the main motivator for seeking quality management certification was to improve efficiency and achieve the firm's performance. Also, quality records were very important for reference, training, problem solving and performance measurement as depicted by the mean score of 4.20 and 4.06 respectively.

On the other hand, most of the respondents agreed to a great extent that the organization has quality assurance integrated within all its functions that contribute to quality end product delivery to the customers. In addition, the respondents also confirmed that a solid relation with suppliers ensured quality materials at the right time and assures quality at source through supplier development plans as depicted by the mean score of 3.90 and 3.43 respectively.

These results are in agreement with Anyango et al.

Table 1: Quality Assurance

Statement	Mean	STDev
The organization focuses on quality assurance as a proactive approach and applies quality control for quality verification	4.36	0.999
Quality assurance practices lead to benefits such as improved efficiency, streamlined operations, firm performance, reduced wastage and improved business performance.	4.30	0.986
A solid relation with suppliers ensures quality material at the right time and assures quality at source through supplier development plans	3.43	1.381
The organization has quality assurance integrated within all its functions that contribute to end product delivery to the customers	3.90	1.446
The main motivator for seeking quality management certification is to improve the efficiency and to achieve a firm's performance.	4.20	1.323
Quality records are very important for reference, training, problem solving and performance measurement	4.06	1.142
Quality assurance components are part of performance measure for everyone within the organization's manufacturing functions.	2.93	1.412

Quality control

Table 2 illustrated the findings from of the study on the extent to which aspects of Quality Control influences Organizational Performance. From the findings, most of the respondent agreed to a very great extent that the company uses statistical techniques to establish process capabilities and improve processes and that all in-coming materials must pass through a series of steps before they are accepted into the processing as indicated by the mean score of 4.63 and 4.36 respectively. The respondents further agreed to a great extent that

(2010) findings that quality assurance has a positive effect on performance of manufacturing firms. The findings also concurred with Singels et al. (2002) view that quality assurance leads to better performance. The results also concurred with the findings of Chi and Gursoy (2008) that quality assurance leads to superior performance. The RBV theory by Barney, (2007) heavily supports the findings that quality assurance is unique and difficult to imitate, thus leading to superior performance.

when adequate defect control was implemented, strict compliance to specification, proper identification and acceptance of raw material and finished products, good relationship with vendors and customers, and effective reporting system, good performance was observed as shown by the mean score of 4.16. Additionally, the respondents agreed to a great extent that the company inspected and tested the incoming, in-process and final products and quality control practices influenced positively the financial resource management and firm performance as depicted by the mean score of 4.13 and 4.02 respectively.

On the other hand, most of the respondents agreed to a great extent that quality control included finding and eliminating source of defects and monitoring the manufacturing process; quality control practices influenced positively the financial resource management and firm performance and appreciation and participation in quality management results in improved firm performance,

improved organizational outcomes and increased revenue inflows for development in the organization as shown by the mean score of 3.80, 3.63 and 3.10 respectively. These findings conform with Feng et al. (2008) that quality control lead to improved firm's performance. The findings concur with study findings by Magd (2008) that quality control had effects on performance.

Table 2: Quality control

Statement	Mean	STDev
Quality control includes finding and eliminating source of defects and monitoring the manufacturing process.	3.80	1.374
Quality control activities are most of the time in-processing activities that are used to guarantee manufacturing specification are met.	2.93	1.436
When adequate defect control is implemented, strict compliance to specification, proper identification and acceptance of raw material and finished products, good relationship with vendors and customers, and effective reporting system, good performance can be observed.	4.16	1.416
All in-coming materials must pass through a series of steps before they are accepted into the processing	4.36	1.542
Appreciation and participation in quality management results in improved firm performance, improved organizational outcomes and increased revenue inflows for development in the organization	3.10	0.994
Quality control practices influences positively the financial resource management and firm performance.	3.63	1.033
Processes are planned and controlled to assure quality	4.02	1.257
The company inspects and tests the incoming, in-process and final products	4.13	1.041
The company uses statistical techniques to establish process capabilities and improve processes	4.63	0.614

Quality Improvement

Table 3 illustrated the finding of the study on the extent to which aspects of Quality Improvement influences Organizational Performance. From the findings, most of the respondent agreed to a very great extent that the company trained its workers regularly to improve competences and gaps for improvement were identified using different approaches where one of them was benchmarking which was a continuous search and application of

better practices of organizations with superior competitive advantages as indicated by the mean scores of 4.63 and 4.50 respectively. The respondents further agreed to a great extent that the company demonstrated its commitment to customers; The Company made use of customer feedback for future improvement and assigning workers responsibility for design and performance of a task helped quality improvement process in an organization as workers feel more like part of the team rather than an automaton as shown by the

mean scores of 4.46, 4.43 and 4.00 respectively.

On the other hand, most of the respondents agreed to a great extent that quality improvement started by paving the way for active participation of customers, suppliers (vendors) and employees and customer satisfaction was the base for any quality improvement activity as their needs must be integrated into the business mission and the overall quality objectives as indicated by the mean scores of 3.53 and 3.46 respectively. Further, most of the respondents agreed to a great extent that the organization audited (internal or external) its activities to establish improvement opportunities; traditional improvement approaches had a number of rises and falls before the target point is achieved such as high cost, process disruptions, negative effect on employees and loss of customer trust and instigating quality concepts like that of Total Quality Management, which advocates a continuous improvement for both the product and process, was used to identify gaps as shown by the mean scores

of 3.40, 3.13 and 3.10 respectively.

The findings of this study were in line with the cited studies which indicated that for there to be quality improvement under ISO certification, systems measurement, continuous quality audit, total involvement of employees, benchmarking and training play a crucial role. Psomas et al. (2012) and Kaziliunas (2010) argue that benchmarking against quality improvement raises the performance of organizations, leading to competitive advantage. The observation was also supported by quality Improvement Theory (Deming, 1986), which assumes that continuous improvement idea is a universal quality improvement idea whose aim is to constantly improve on performance. The researcher believes that quality improvement results provide an additional important contribution to the study of management systems diffusion, aimed at providing more fact-based insights and understanding on ISO certification, leading to firm's performance.

Table 1: Quality Improvement

Statement	Mean	STDev
Quality improvement starts by paving the way for active participation of customers, suppliers (vendors) and employees.	3.53	1.195
Customer satisfaction is the base for any quality improvement activity as their needs must be integrated into the business mission and the overall quality objectives.	3.46	1.166
Assigning workers responsibility for design and performance of a task helps quality improvement process in an organization as workers feel more like part of the team rather than an automaton.	4.00	0.909
Gaps for improvement can be identified using different approaches where one of them is Benchmarking which is a continuous search and application of better practices of organizations with superior competitive advantages	4.50	0.776
Instigating quality concepts like that of Total Quality Management, which advocates a continuous improvement for both the product and process, can also be used to identify gaps.	3.10	1.093
Traditional improvement approaches have a number of rises and falls before the target point is achieved such as high cost, process disruptions, negative effect on employees and loss of customer trust.	3.13	1.332
The organization audits (internal or external) its activities to establish improvement opportunities	3.40	1.037

The company makes use of customer feedback for future improvement	4.43	1.072
The company demonstrate its commitment to customers	4.46	1.188
The company trains its workers regularly to improve competences	4.72	1.158

Visionary Leadership

Table 5 illustrated the finding of the study on the extent to which aspects of Visionary Leadership influences Organizational Performance. From the findings, most of the respondent agreed to a great extent that the organization's top management takes responsibility for quality and has objectives for quality performance; the top management and middle management have quality related key performance indicators on their objectives and there was a positive moderate relationship between top management commitment and success of quality management as shown by the mean scores of 4.63, 4.56 and 4.23 respectively.

Further, most of the respondents agreed to a great extent that the Company's top management provides personal leadership for quality products and quality improvement; the company's top

management was evaluated for quality performance; department heads within the company participated in the quality improvement process and quality issues are discussed in the company's management review meetings as shown by the mean scores of 3.84, 3.67, 3.63 and 3.62 respectively.

This is in line with Ralph's (2014) findings, which indicated that if top management provides necessary resources, these are major factors to continuous improvement, leading to high performance. Wahid and Corner (2009) agree with the current findings that top management commitment contributes to higher performance through proper utilization of resources. Furthermore, the findings of Magd (2008) support the current study findings in concluding that there is a positive and significant relationship between top management commitment and performance.

Table 2: Visionary Leadership

Statement	Mean	STDev
The organization's top management takes responsibility for quality and has objectives for quality performance	4.63	0.971
There is a positive moderate relationship between top management commitment and success of quality management	4.23	1.131
The company's top management provides personal leadership for quality products and quality improvement	3.84	0.948
The company's top management is evaluated for quality performance	3.67	0.913
Department heads within the company participate in the quality improvement process	3.63	0.308
Quality issues are discussed in the company's management review meetings	3.62	1.133
The top management and middle management have quality related key performance indicators on their objectives.	4.56	0.808
The success and sustainability of a quality management system is influenced by top management	3.48	0.746

Inferential Analysis

Table 6: Coefficient of Correlation

		Organizational performance	Quality assurance	Quality control	Quality improvement	Visionary leadership
Organizational performance	Pearson Correlation Sig. (2-tailed)	1				
Quality assurance	Pearson Correlation Sig. (2-tailed)	.523	1			
Quality control	Pearson Correlation Sig. (2-tailed)	.6140	.3421	1		
Quality improvement	Pearson Correlation Sig. (2-tailed)	.7460	.1240	.0621	1	
Visionary leadership	Pearson Correlation Sig. (2-tailed)	.5210	.3420	.0000	.1660	1

Coefficient of Determination

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.913	0.834	0.751	0.4538

Table 8: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.764	4	1.941	11.692	.01b
	Residual	15.281	91	0.166		
	Total	23.045	96			

a. Predictors: (Constant), Quality assurance, Quality Control, Quality improvement, Visionary Leadership

b. Dependent: Organizational Performance

Table 9: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.308	1.342		1.623	0.357
Quality assurance	0.558	0.310	0.172	4.342	.0276
Quality control	0.731	0.156	0.210	3.532	.0285
Quality improvement	0.785	0.322	0.067	3.542	.0202
Visionary leadership	0.620	0.245	0.148	3.458	.0249

As per the SPSS generated, the equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$) becomes:
 $Y = 1.308 + 0.558X_1 + 0.731X_2 + 0.620X_3 + 0.785X_4$

The regression equation above has established that taking all factors into account (quality assurance, quality control, quality improvement and visionary leadership) constant at zero, organizational performance will be 1.308. The findings presented also shows that taking all other independent variables at zero, a unit increase in quality assurance will lead to a 0.558 increase organizational performance; a unit increase in quality control will lead to a 0.731 increase of organizational performance; a unit increase in quality improvement will lead to a 0.785 increase in organizational performance and a unit increase in visionary leadership will lead to a 0.620 increase in organizational performance. This infers that quality assurance is the most significant variable with a t-value of 4.342 contributes the most to organizational performance followed by quality improvement then quality control while visionary leadership contributed the least to organizational performance.

From the regression results, the study established that adaptation quality assurance had a significant effect on organizational performance in food

processing companies in Kenya as $r = 0.523$, $p = .0275 < 0.05$, $t = 4.342$. The findings support those of Diris, Iyola and Ibadunni, (2013) that quality assurance as a tool of strategic quality management optimizes organizational performance. From the regression results, the study found that quality control had a significant influence on organizational performance as $r = 0.6140$, $p = .0285 < 0.05$, $t = 3.532$. The study implied that adaption of quality control would significantly lead to increase in achieving organizational performance. The results failed to support Basheer and Tarabieh (2011) that quality control contributes positively to organizational performance by providing quality control.

CONCLUSIONS AND RECOMMENDATIONS

From the study findings, that quality assurance practices lead to benefits such as improved efficiency, streamlined operations, firm performance, reduced wastage and improved business performance; the main motivator for seeking quality management certification was to improve the efficiency and to achieve a firm's performance and quality records were very important for reference, training, problem solving and performance measurement.

In regard to quality control, the study found out

that the company uses statistical techniques to establish process capabilities and improve processes and that all in-coming materials must pass through a series of steps before they are accepted into the processing. Further, when adequate defect control was implemented, strict compliance to specification, proper identification and acceptance of raw material and finished products, good relationship with vendors and customers, and effective reporting system, good performance was observed.

On the influence of quality improvement on organizational performance, the study established that the company trained its workers regularly to improve competences and gaps for improvement were identified using different approaches where one of them was benchmarking which was a continuous search and application of better practices of organizations with superior competitive advantages.

Lastly on the influence of visionary leadership on organizational performance, the study established that the organization's top management takes responsibility for quality and has objectives for quality performance; the top management and middle management have quality related key performance indicators on their objectives and there was a positive moderate relationship between top management commitment and success of quality management.

Performance is a key focus of the company's management. This study investigated the relationship between strategic quality management and firm performance. Based on findings of this study, it is reasonable to conclude that strategic quality management contributed to performance of Unga Holding Limited. Quality improvement was found to be statistically significant in influencing the firm's performance; therefore, managers should look for ways of monitoring and sustaining

performance through training employees and by ensuring continuous quality audits and system measurements of Unga Holding limited.

Unga Holding limited engaged in the implementation of the strategic quality management. However, the implementation process is long and result may not be observed immediately. It will require trainings, involvement of experts from different field of study and a considerable amount of investment. This includes the reduction in cost of production, better relation with customers and suppliers, more committed and motivated workforce, internationally competitive products and manufacturing establishments, the development of reliable and good supply of raw material source, and better utilization of manufacturing capacity.

The study findings established that visionary leadership was statistically significant. Top management are key in determining how the organization's resources are allocated in order to realize performance. It is the role of the top management to define the vision, mission and goals that promote quality culture and establish a set of shared values, leading to improved performance.

Recommendation of the Study

Government play a pivotal role in the strategic quality management. Government bodies such as ministries and research centers are vital in coordinating activities such as raw material supply, nutritional development of food items, food safety, and implementation of quality standards and regulations. These bodies can also be involved in setting up facilities that promote the implementation of quality management systems like laboratories and research and training institutes at county levels. Other areas of intervention for these organizations include assisting farmers in producing high quality raw materials and creating

the market for it. Therefore, the government, in-cooperation with other organizations, should be involved in two inter-related approaches to enhance quality and service excellence that will have a tremendous impact on the performance of industries. First is to establish a quality award program in the country for different categories of food processors. This will create a sense of competitiveness among the industries. The other is to expedite the conditions for actively seeking and obtaining international certification like ISO 9001 for improved quality management systems.

Top management commitment was found to be significant and positively influencing performance of Unga Holding limited. This implies that top management should provide people with the required resources, training and freedom to act with responsibility and accountability to improve performance. The company's shareholders should show that they trust the management of the firms so as to eliminate fear in the latter and foster commitment so that the management can establish

a clear vision for the organization and thus be able to craft strategies to improve performance.

In general, the implementation of strategic quality management requires a change in attitude of the society, to demand quality products and services. This will take a long and frustrating journey. But at the end, the survival of the industries and improved livelihoods of citizens are ensured.

Areas of Further study

The future works to extend the proposed study are as follows:

Firstly, the study was limited to Unga Holding Limited. The researcher thus recommends for further study in the topic of strategic quality management implementation among other food processing industries in the country. Secondly, the study can be conducted with respect to different organizations in the same industry instead of only one organization as implementation of strategic quality management differs in different organizations.

REFERENCES

- Adams, G. & Schvaneveldt, J. (2011). *Understanding Research Methods*. (2nd Ed). New York: Longman.
- Adner, R., & Levinthal, D. (2011). Demand heterogeneity and technology evolution for implications for product and process innovation. *Journal of Management Science*, 47(5), 611-628.
- Al-Ababneh, M. (2010). Implementing total quality management in the Indian hotel industry. *International Journal of Quality & Reliability Management*, 24(6), 617-627.
- Albrecht, K. (2011). *Organizational Performance*. Meeting the Challenges of the New Business Environment.
- Alegre, J., Lapiedra, R. & Chiva, R. (2013). A measurement scale for product innovation performance. *European Journal of Innovation Management*, 9 (4), 333-346.
- Bantilan, I. J. (2012, November 5). *Marketing: Wisdom of Understanding Six Sigma*. Retrieved October 15, 2014, from Wordpress Blog Website:
- Belay, A. M., Helo, P., Takala, J., & Kasie, F. M. (2011). Effects of Quality Management Practices and Concurrent Engineering in Business Performance. *International Journal of Business and Management*, Vol. 6, No. 3.

- Brun, A. (2010). "Critical success factors of six sigma implementation in Italian companies" *International Journal of Production Economics*, pp 1-7.
- Bryman, A. & Cramer, D. (2011). *Quantitative Data Analysis with SPSS Release 18 for Windows*. London: Routledge.
- Chong, V. K. & Rundus, M. J. (2012). Total quality management, market competition and organizational performance. *British Accounting Review*, 36, 155-172.
- Doane, D. P., & Seward, L. E. (2011). *Applied Statistics in Business and Economics* (3rd Ed.). New York, NY: McGraw-Hill Irwin.
- Ghaith, A & Hamdan, K.B. (2014). The impact of supplier relationship management on competitive performance of manufacturing firms. *International Journal of Business and Management*, 9 (2), 833-854.
- Hardie, N. (2013). The effects of quality management on business performance. *Journal of Quality Management*, 5(2), 65-83.
- Heras, I. S. & Landin, G. A. (2011). The impact of quality management in European companies' performance. The case of the Spanish companies, *Journal of European Business Review*, 18(2), 114-131.
- Ikay, M. S. & Aslan, E. (2011). The effects of the ISO quality management system on the performance of SMEs', *International Journal of Quality and Reliability Management*. Vol. 29 No. 7, pp. 753-778.
- Jaafreh, A. B., & Al-abadallat, A. Z. (2013). The Effect of Quality Management Practices on Organizational Performance in Jordan: An Empirical Study. *International Journal of Financial Research*, Vol. 4, No. 1
- Jung, J., Wang, Y. & Teece, D. (2010). Relationship between total quality management and continuous improvement of international project management. *Journal of project management*, 26 (5), 716-722
- Khalifa, A.N. (2011). Using the competing values framework to investigate the culture of Qatar industries. *Journal of Total Quality Management*, 12(4), 417-428.
- Kibe, E. N. & Wanjau, K. (2014). The effect of quality management systems on the performance of food processing firms in Kenya. *Journal of Business and Management*, 16(5), 61-72.
- Kothari, C. R. (2014). *Research Methodology: Methods and Techniques*. New Delhi: Wiley.
- Krause, D. R. (2012). Supplier development: current practices and outcomes. *International Journal of Purchasing and Materials Management*, 33 (2), 12–19.
- Krumwiede, K. R. & Charles, S. L. (2013). Finding the right mix. How to match strategy and management practices to enhance firm performance. *Journal of Strategic Finance*, 87(3) 37-43.
- Lakhal, F. & Limam, G. (2016). Quality management practices and their impact on performance. *International Journal of Quality & Reliability Management*, 23 (6), 625-646.

- Masood, H. & Mukhtar, A. (2012). Impact of TQM practices on firm's performance of Pakistan's manufacturing organizations. *International Journal of Academic Research in Business and Social Sciences*, 2(10), 232-260.
- McGrath, N. (2044). Drive to expand brings applause. *Journal of Asian Business*, 30(9), 20-30.
- McNeill, P. (2015). *Business Research Methods*. (3rd Ed). London: Routledge.
- Mejza, M. C. & Wisner, J. D. (2011). The scope and span of supply chain management, *International Journal of Logistics Management*, 12, 37-55.
- Meredith, J. A. & Shafer, S. M. (2013). *Operations Management for MBAs*. John Wiley & Sons Inc
- Mugenda, A. G. (2012). *Social Science Research; Theory and Principles*. Nairobi, ARTS press.
- Muturi, P., Maranga, S., & Getecha, C. (2013). *A Survey of Quality Management Practices In the Kenyan Small and Medium Manufacturing Industries*. Nairobi.
- National Learning Consortium. (2013). *Continuous Quality Improvement (CQI) Strategies to Optimize your Practice*. Health Information Technology Research Center (HITRC).
- Nekoueizadeh, S., & Esmaili, S. (2013). A study of the impact of TQM on organizational performance of the telecommunication industry in Iran. *European Online Journal of Natural and Social Sciences 2013*, vol.2, No. 3(s), pp. 968-978.
- Prajogo, D. I., & Sohal, A. S (2013). The relationship between TQM practices, quality performance, and innovation performance. An empirical examination. *International Journal of Quality and Reliability Management*, Vol. 20, No. 8, pp. 901-918.
- Prajogo, D. I., & Sohal, A. S. (2014). The multidimensionality of TQM practices in determining quality and innovation performance- an empirical examination. *Technovation*, Vol. 24 No. 6, pp. 443-453.
- Psomas, E. & Kafetzopoulos, D. (2012). "Performance measures of ISO certified and non-certified manufacturing firms", Benchmarking: *An International Journal of Quality and reliability management I*, Vol .21 No. 5, pp. 756 – 774.
- Psomas, E., Fotopoulos, C. & Kafetzopoulos, D. (2010), "Critical factors for effective implementation of ISO in SME service firms", *Managing Quality management practices*, Vol. 20 No. 5 pp. 440-57.
- Rajaniemi, K. (2015). Framework, methods and tools for acquiring and sharing strategic knowledge of the competitive environment. *Journal of Strategic Management*, 12(5), 89-96
- Ravinchandram, T. & Rai, A. (2010). Quality management in systems development: An organizational system perspective. *Journal of Management Systems*, 24(3), 381-415.
- Reed, J. H., & Tripathi, N. D. (2014). *Net Neutrality and Technical Challenges of Mobile Broadband Networks*.

- Sadikoglu, E., & Zehir, C. (2010). Investigating the effects of innovation and employee performance on the relationship between TQM practices and firm performance: an empirical study of Turkish firms. *International Journal of Production Economics*, Vol.127, pp. 13-26.
- Sajjad, F., & Amjad, S. (2012). Role of benchmarking in total quality management: Case of telecom services sector of Pakistan. *Business Management Dynamics*, Vol.1, No.8, pp.34-44.
- Salaheldin, S. I. (2010). Critical success factors for TQM implementation and their impact on performance of SMEs. *International Journal of Productivity and Performance Management*, 58 (3), 215-237.
- Salegna, G. & Fazel, F. (2010). Obstacles to implementing TQM. *Journal of Quality Progress*. 33, (7), 53-64.
- Samson, D. & Terziovski, M. (2011). Relationship between quality management practices and operational performance. *Journal of Operations Management*, 17(4):393-410.
- Sharma, D.S. (2015). "The association between ISO 9000 certification and financial performance" *The International Journal of accounting*, Vol.40, No. 2, pp. 151-72.
- Sila, I. & Ebrahimpour, M. (2015). Critical linkages among TQM factors and business results. *International Journal of Operations and Production Management*, 25(11), 1123-55.
- Slack, N., Chambers, S. & Johnston, R. (2010). *Operations Management*. (5th Ed). Prentice Hall.
- Smith, C.B. (2010). *A Guide to Business Research*. Chicago, IL: Nelson-Hall.
- Smith, M. (2015). A Survey of total quality management in Iran barriers to successful implementation in health care organizations. *Journal of Leadership in Health Service*, 18(3),12-34.
- Taylor, W. & Wright, G. (2013). A longitudinal study of quality management implementation. *Journal of Operation management*, 19(2), 101-109.
- Terziovski, M. (2011). The effects of continuous improvement and innovation management practice on small to medium enterprise (sme) performance. *Journal of Operations Management*, 15, 1-18.
- Voss, C., Tsiriktsis, N. & Frohlich, M. (2012). Case research in operations management. *International Journal of Operations and Productions Management*, 22(2), 195–219.
- Waller, M.A (2010). Development and validation of TQM implementation constructs in Africa. *Journal of Decision Sciences*, 27(1), 23-56
- Watts, C. A. & Hahn, C. K. (2016). Supplier development programs: an empirical Analysis. *International Journal of Purchasing and Materials Management*, 24(2), 10–17.
- Wisner, J. (2013). A structural equation model of supply chain management strategies and firm performance. *Journal of Business Logistics*, 24(1), 1–26.
- World Bank (2010). *At the tipping point?* The implications of Kenya's manufacturing revolution. Kenya Economic

Update. (3rd Ed). Nairobi: World Bank.

Wright, P. M., Dunford, B. & Snell, S.A. (2011). Quality management and the resource based view of the firm. *Journal of Management*, 27, 701-721.

Wyckoff, D. (2014). New tools for achieving production quality. *Journal of Production and Operational Management*, 25(6), 78–91.

Yunoh, M. N., & Ali, K. A. (2015). Total Quality Management Approach for Malaysian SMEs: Conceptual Framework. *International Journal of Business and Social Science*, Vol. 6, No. 1

Zakuan, N.M; Yusof, S.M.; Laosirihongthong, T; Shaharoun, A.M. (2010). Proposed relationship of TQM and organizational performance using structured equation modeling. *Total Quality Management*, Vol.21, No.2, pp. 185-203.

Zikmund, W.G. (2011). *Business Research Methods*. (6th Ed). Fort Worth, TX: Dryden Press.