

APPLICATION OF TOTAL QUALITY MANAGEMENT STRATEGIES ON PERFORMANCE OF KENYA TEA DEVELOPMENT AUTHORITY FACTORIES IN KISII COUNTY, KENYA

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Abstract: Total Quality management is an important tool in the management of organizations in the world. The purpose of this study was to establish the application of TQM strategies in management of performance of tea factories in Kisii County, Kenya. The objectives of the study were: to determine how application of quality leadership influences the performance of tea factories in Kisii County, to find out how application of strategic planning influences the performance of tea factories in Kisii County, to establish how application of customer and market focus influences the performance of tea factories in Kisii County, and to establish how application of supplier focus influences the performance of tea factories in Kisii county. The study employed descriptive survey design. The area of study was Kisii County. The target population of this study included top managers and senior supervisors of Kiamokama, Rianyamwamu, Ogembo, Eberage, Nyamache, and Itumbe tea factories. A total of 96 respondents were targeted. They include: 6 factory unit managers, 6 production managers, 6 production assistant managers, 6 field service managers, 6 assistant field managers, 6 factory accountants, 6 assistant factory accountants, 6 Data managers. 6 factory mechanics, 6 assistant factory mechanics and 36 senior supervisors in each section of each KTDA factories. Data was collected using a questionnaire and analyzed using frequencies, percentages, mean and standard deviation. Data was analyzed using percentage distribution and frequency distribution using SPSS. The findings show that top management encouraged the core team to set high performance goals and provide appropriate resources, involved senior management in creating the organization mission, vision, values and implementation strategies, maintain close and direct contact with the key customers, engage in the change management, engage senior management to make decisions and require others to make the decisions based on the data effectively, and empower employees to take action effectively in an effort to improve performance. There was application of strategic development supported, developed and implemented based on data concerning customers' requirements, the firm's capabilities and customers' needs. There was application of customer knowledge through: frequent close contact with customers, actively and regularly seeking customer inputs to identify their needs and expectations. Information of customers' current and future needs and expectations was effective in improving performance. Finally, the study found that the application of quality supplier system ensures quality of their products and/or services through emphasis on quality and delivery performance rather than price in selecting the supplier

Keywords: Application of Total Quality Management Strategies on Performance of Kenya Tea Development Authority Factories.

LIST OF ABBREVIATION AND ACRONYMS

CQC -company quality control)

CQC-Statistical quality control)

CWQC-Companywide quality control

MAFAP -Monitoring Africa Agricultural Policies

KTDA-Kenya Tea Development Agency

TQCM-total quality control quality management)

TQM- Total Quality Management

QFD-Quality function deployment)

QIDW-quality in daily work)

1. INTRODUCTION

World over, organizations are struggling for effective management in order to increase their output and thus improve performance. This has brought into light the utilization of Total Quality Management (TQM) principles in many of these organizations across the globe. Total Quality Management is an extensive and structured management approach which focuses on continuous quality improvement of products and services using the principles; focus on customer, employee involvement, process centered, integrated systems, strategic and systematic approach, decision making based on facts, communication, continuous improvement and practical approach to Total Quality Management (Van, 2009).

Total quality management (TQM) is therefore an important factor for the long term accomplishment of an organization's objectives. Its implementation has been an important aspect for improving organizational efficiency. In examining the relationship between TQM and performance, specialists have used different performance types such as innovative, financial, quality performance and operational. TQM focuses on continuous process improvement within organizations to provide superior customer value and meet customer requirements. TQM a popular guideline for organizational management is implemented for developing strategic info maps and info charts for organizational information (Syed, Iliyas&Iliyas Ali, Syed &Khatoun, Suebha. 2016).

Anvari, (2011) observes that TQM is an integrated management philosophy and set of practices that emphasize: continuous improvement, reducing rework, long-range thinking, increased employee involvement and teamwork, process design, competitive benchmarking, team-based problem solving, constant measurement of results, closer relationships with suppliers and meeting customers' requirements;

Ngambi, (2015) said that the impact of TQM on organizational performance focus on TQM practices, top management, customers focus benchmarking, employee focus, process improvement, and quality measurement was significant on financial performance, corporate social responsibilities, leadership commitment, social control and inspection. However, none of the TQM practices appear to have a significant effect of customer satisfaction he further conceptualizes that to withstand new global challenges, most manufacturing business have adopted new philosophy such as concurrent engineering, lean production, just in time strategies, TQM, business process re-engineering (BPR) and others to become more effective in the way they conduct business. The main driver behind this philosophy is the optimization of the organization is performance both internally and externally within respective markets.

The tea industry in the world has grown rapidly and it is estimated to reach\$67,751 million by 2023 from \$ 46, 392 in 2016.The major countries growing tea in the world include China, India, Kenya and Syri Lanka (Sinha, 2017) India and China are the leading tea producers in the world, however, India's domestic tea prices are higher than the global ones and thus it is not the leading exporter of tea because its production costs are higher. Therefore, to compete in the world, the production prices must be reduced (Talukdar&Hazarika, 2017). Sinna (2017) said that the rapid growth of the tea industry had witnessed the highest point at 6.0% in the global market. This was recorded in Asia-Pacific because of the dominance of China and India which are the leading produces.

In Kenya tea was introduced in 1903 from India by the English settlers and as at that time it was mainly grown by the large-scale farmers and the multinational companies. After independence in 1963, the government introduced a policy to allow small-scale farmers to start growing tea. Since then production has increased from 21,500 hectares of land and 18,000 tons of tea leaves to 120,000 hectares of land and 350,000 tons of tea leaves per year today making Kenya the third largest producer after China and India. Tea production in Kenya is more advantageous than China and India and this favoured its faster growth (Talukdar&Hazarika, 2017). Monitoring Africa Agricultural Policies (MAFAP) (2013), indicates that the tea sector in Kenya is divided into production systems: smallholder farmers and multinational companies. The multinational companies process their own tea through 66 factories whereas smallholder farmers are integrated under the Kenya Tea Development Agency(KTDA) which groups, coordinates, processes and market the entire smallholders' production.

Kagira, Kimani and Kagwathi, (2012) indicated that factories under the management of KTDA had been facing the challenges of increases in cost of operations. This has led to KTDA having all factories under its management to adopt various TQM. Quality means different things to different people. Quality has different meanings to different people in different institutions public, or private depending on their specific perspectives, for those who focus on quality control quality is a way of measuring efficiency and effectiveness, for those with a focus on customer quality, quality is a way of measuring customer expectations, quality is first defined as meeting customer expectation and finally as anticipating customer needs. Phu Van Ho, (2011) notes that quality is both a problem and an opportunity to KTDA managed factories and tea companies may offer products and services that may be superior in quality and with a better price. In recent years the TQM program appears to continue to maintain its strong presence in several public organizations of modern times (Van Seaton 2010).

Tea is one of the leading foreign exchange earners in Kenya as well as a source of income for rural populations in the tea growing zone (World Bank 2013). Inadequate performance of the factories and poor payment of tea annual payout to tea growers may be due to several reasons: fluctuating foreign exchange rates and tea prices, climate change, rising cost of production (farm inputs, taxes/levies, fuel, labor, decreasing small holder farm sizes, land policy, multiple levies from counties, political instability in some key markets like Yemen and Russia changing customer's tasks and preference, and global over production and competition. KTDA (2015), notes that absence of modern machines and spare parts, deficient institutional arrangement and poor management capability, hawking of green leaf and lack of coordination among different units are reasons for fluctuating performance.

Table1: Total income in Billions (Kshs.)

Year	2014	2015	2016	2017	2018
Net Revenue	52.97	63.53	83.97	78.31	85.74

SOURCE: KTDA 2018

KTDA (2013) confirms from the year 2011, production cost in tea factories in Kenya have decreased by 11% contributing to low revenue hence low payment to farmers. Maeba (2013) notes that workforce efficiency is greatly affected by improper scheduling processes, alongside many internal challenges in most KTDA managed factories. These internal challenges discourage farmers because of low returns of revenue specifically in the western part of Kenya.

Ogechi (2013) said that many farmers in Kenya were abandoning tea production due to low returns. He also conceptualizes that the demand for tea has been rising over the years as consumers have become aware of the health benefits of consumption of this product. Tea production in Kenya contributes to (7%) of world tea in comparison to other countries like Sri Lanka 3%, Bangladesh 24%) and India (11%). Performance of KTDA factories payout to growers in Kisii county is compared in the financial years 2013/2014 and 2014/2015 table 2

Table 2: Kisii County KTDA factories annual bonus payout to farmers

Factory	2013/2014	2014/2015	% Increase
Kiamokama	25.10	33.00	31.47
Rianyamwamu	25.10	33.00	31.47

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Nyamache	26.10	35.90	37.55
Itumbe	26.10	35.90	37.55
Ogembo	22.50	31.50	40.00
Eberege	22.50	31.50	40.00
Average	24.57	33.47	36.34

SOURCE: KTDA 2015

Table 2 shows that the annual bonus payout for Kisii County factories increased in the financial year 2014/2015 compared to the 2013/2014 financial year. This could be attributed to either an improvement in the production or management factors.

2. LITERATURE REVIEW

The concept of total quality management

Goldenberg and Cole, (2002), maintains that quality authorities like, Juran, Stewart, Deming, Taiichi, shigeo, Crosby and Taguchi have put fourth several approaches to improve company performance. These approaches are embodied in a set of quality management practices known as TQM. On the account of these policies different approaches have been adopted for the maintenance of TQM in tea processing industries.

Deming, (1996) a statistician improved shewart's manufacturing approach with a qualitative approach linked to non-manufacturing and human variation. Deming came up with 14 points which are the upside of his philosophy of management where the downside is represented by the seven deadly diseases of management: lack of constancy of purpose to plan product and service that will have market and keep the company in business and provide jobs, emphasis on short term profits, short term thinking fed by fear of unfriendly takeover and push from bankers and owners for individuals, personal review systems, or evaluation of performance, merit rating, annual review, or annual appraisal, by whatever name, for people in management the effect of which are devastating, management by objective, on a go, no- go basis without a method accomplishment of the objective, is the same thing by another by another name management by fear would still be better, mobility of management: job hopping, use of visible figures only for management, with little or no consideration of figures that are unknown or unknowable, excessive medical costs, excessive costs of liability.

Juran (1980,1996) believes that quality must be planned and maintained. According to him key elements in implementing companywide strategic quality planning are: identifying customers and their needs, establish optimal quality goals, creating measurement of quality, planning process capable of meeting quality goals under operating conditions and producing continuous, premium prices. On the other hand, Juran designed quality process: identify the customers; determine the needs of those customers, translate those needs into our language, develop a product that can respond to those needs, optimize the products features so as to meet our needs as well as customer needs, develop a process that is able to produce the product under operating conditions and transfer the process to operation. Finally, Juran came up with for results, establish specific goals to be reached, establish plans for reaching goals and assign clear responsibility for meeting goals.

Pries (2010), supports Crosby who believes that workers should take a prime responsibility for poor quality. Crosby and all great theorist of industrial quality have made it clear that top management must be involved closely with the quality or it is doomed to failure. Crosby came up with four absolutes of quality management: quality is defined as conformance to requirements, not as "goodness" or "elegance", the system of causing quality is prevention not appraisal, the performance standard must be zero defects, not "that's" close enough and, the measurement of quality is the price on nonconformance, not indices, Crosby is best known for the concept of zero defects. Crosby came up with 14 steps to quality improvement which are the way in which the quality improvement process is implemented in an organization: make it clear that management is committed to quality, form quality improvement teams with senior representatives from each department, measure process to determine where current and potential quality problem lie, evaluate the cost of quality and explain its also as a management tool, raise the quality awareness and personal concern of all employees, take actions to correct problems identified through previous steps, establish progress monitoring for improvement process, train supervisors to activity carry out their part of the quality improvement program, Hold a zero defects day to set everyone realize that these

has been a change and to Confirm the management commitment, encourage individual to establish improvement goals for themselves and their groups, encourage employees to communicate to management the obstacles they face in attaining their improvement goals, recognize and appreciate those who participate, establish quality councils to communication in regularly and do it all over again to emphasize that the quality improvement program never ends.

Pries, (2010) quotes Ishikawa who uses the cause-and- effect diagram as a device to assist groups or quality circles in quality improvement. Ishikawa diagrams are useful as systematic tools for funding, sorting out, and documenting the causes of variation in quality and production and variation mutual relationship between them. He emphasizes to making use of technical statistical techniques in attaining in processing industries: use of parents diagrams, cause -and -effect diagrams, control charts, scatter diagrams, binomial probability paper, sampling inspection. The use of Ishikawa principles has the following contributions, product quality is improved and becomes uniform and defects are reduced, reliability of goods is improved, cost is reduced, quantity of production is increased ,and it becomes possible to make rationale production schedules, wasteful work and rework are reduced, expenses for inspection and reduced, expenses for inspection and testing are reduced, contracts between vendor and vendee are rationalized, the sales market is enlarged, better relationship are established between department, false data and reports are reduced, discussions are carried out more freely and democratically, repairs and installations of equipment and facilities are done more rationally, human relations are improved.

Taguchi, (2005) uses quality loss rather than quality. The loss includes not only the loss to the company through costs of reworking or scrapping, maintenance costs, and downtime due to equipment failure and warranty claims, but also costs to customer through poor products performance and reliability leading to further losses to the manufacture as market share declines. In this quadratic model of loss, Taguchi beliefs that a loss will occur even when the product is with the specifications but is optimal when the product is on target. Taguchi breaks off-line quality control into three stages: concept designs: the process of creating design concept, in parametric design: the normal design features or process factor levels selected are tested and determined, tolerance design is employed to reduce variation further if required by tightening the tolerance on those factors shown to have a large impact on variation.

Pries, (2010) quotes Shingo's concept of mistake- proofing (poka – yoke) was designed to eliminate quality problems rather than using more statistical approach of monitoring them using control charts. Other researchers argue that both methods can be complementary and mistake proofing should be implemented when feasible.

Taiichi Ohno, (1988) is responsible for providing the motivation for learn concept: quick change of dies, just in time manufacturing, Kanban system, zero or near zero inventory, automation (automated line stoppage error). Ohno's contributions in TQM are: the five why" problem solving method, identification of seven wastes, over production, waiting, transport or movement, time spent in actual processing, stock on hand inventory, defective products, rework, Andon or visual – light warning system Kanban: pick up /transport information, production information, prevention of overproduction and transport, work attached to good, identifies process when defectives occur, work attached to good (identifies process when defectives occur ,maintain inventory controls and balanced production.

Michael et al, (2006) notes that the deployment and implementations of six sigma requires the management shift from the talk of action, from slogans to data, from opinions to experimentation and control. The six sigma strategy spells out the drivers of the program, the implementers, the quality tools and systems for improvement and underlines the need for reliable measure of progress in various domains: customer satisfaction, organization profitability, human resources and quality. The six sigma solves business problems (not just quality problems) in order to promote profitability are wed to business out puts in an aggressive programs designed to transform the enterprise into a highly aligned, profit, making organization. Below the enterprise level there are six sigma methods: reduce variation, improve product quality, shorten the product development life –cycle, accelerate business transactions, and improve oval service.

Quality Leadership and performance of KTDA factories

Zhang, (2005) cites Dubrin, (1995) who defines leadership as the ability to inspire confidence and support among those need to achieve organizational goals. Anderson et al (1994) explained the concept of leadership as the ability of top management to establish, practice and lead a long term vision for the firm, driven by changing customer requirements, as opposed to internal management role. Leadership thus influenced by the following: clarity of vision, long term

orientation, coaching management style, participative change, employee empowerment and planning and implementing organizational change.

Rai, (2018) found out that quality leaders should, lead and motivate by example rather than fear, teach and counsel rather than judge and supervise, use mistakes to learn from rather than blame, understand the difference between random and special variation (so that people in need of special help are recognized, promote team work and natural trust, provide innovative methods to accomplish improvement. This implies that TQM leaders need to remove barriers that rob the people the pride of workmanship.

Top management leadership

Fielder (1967) developed a contingency theory of leadership of stating it all depends as to what is most appropriate leadership style fielder's model has three important factors: the leaders' power position based on his formal authority in the organization, the structure of the task and the interpersonal relationship between leader and members. Likert (1967) believes that the manager's most important task is to develop a better system of managing human resources of an organization. McGregor (1960) examines organizational theories on the behavior of individuals at work and classifies two basic styles: Theory X where leaders use strong measures to control the behavior of subordinates to ensure that they work towards organizational goals and objectives, and Theory Y in which they develop a participant approach to foster an environment in which subordinates work towards individuals and organizational goals. Theory X is based on the assumption that people do not typically like to work and would only work if they were trusted in some way. Theory Y by contrast views people in a positive way. It is based on the assumption that people are willing to work and are basically honest. They will apply self-control and self-direction in meeting the objectives of the organization without external control and theory of punishment.

Atkinson (1990) says that leadership is the key ingredient in a promoting commitment to TQM he says without leadership, there is no change in organizational culture requires top leadership involvement in order for organization to be responsive to customer's need and expectations. He argues that understanding that the organization is changing to provide a more streamlined products and services delivery top leadership will determine the measures that are most critical in assuming that the organization is moving to that desired direction.

Yusuf et al, (2009) maintains that top management leadership is an essential factor in TQM implementation because it improves performance through influencing other TQM practices. The lack of commitment in top management levels may lead to some problems in the process of implementing TQM. Top management is completely involved in implementing and stimulating the TQM approach. Leadership is also responsible for the product and services which is offered successful implementation of TQM. TQM requires effective changes in an organizations culture and it is somehow impossible without management leadership. Longhlin, (2008), argues that TQM is a way of life for a company; it has to be introduced and led by top management. Attempts to implement TQM often fail because top management doesn't lead and get committed instead it delegates and pays lip services commitment and personal involvement in creating and deploying clear quality values and goals consistent with objectives of the company, and in creating and deploying well defined systems, methods and performance for achieving those goals. Longhlin, (2008) quotes Europe (2001), "with increasing globalization and global competition, quality management is becoming increasingly important to the leadership and management of all enterprises and organizations." Quality management principles provide understanding of and guidance on the application of quality management.

Top management commitment

As quoted by Zhang, (2005), Juran and Gryna (1993) believe that certain roles of top management commitment can be identified as: established quality goals, provide resources, provide problem oriented training and stimulate improvement.

European Quality Award (1994) and the Malcolm Baldrige Quality Award (1999) recognizes the crucial role of leadership in creating the goals, values and systems that guide the pursuit of confirm performance improvement. Thus the concept of leadership is defined as the ability of top management to lead the firm continuously in pursuing long-term overall business success. This is exemplified by; top management participation, top management encouragement, employee empowerment; top management learning, top management commitment to employee education and training and top and long-term business success.

According to Deming (1986), it is the responsibility of leadership to constitute programs of ongoing training and education since through this programs, organizational members embrace continuous process of learning about their work, as well as the purpose of self-actualization and growth. The aim of leadership is to improve the performance of people and machines, to improve quality to increase output, and simultaneously to bring of workmanship to employees.

Tveite (1989), focusing on Deming's fourteen points argues that leadership must stop focus on results by; eliminating numerical goals and quotas, removing barriers to pride of work and driving out fear.

Organizational leadership in change management

Juran called the considerations of organizations culture the second basic rule of change. He advices managers to discover what will be the social effects of the proposed technical changes in an organization. Organization structure and constructs, culture and informal (or hidden) social groups can be barriers to change (Pries, 2010). Alexandre and Mario (2008) investigated the impact of quality on profitability on 31 firms in Brazil using regression method and found out that there was lack of evidence of improved profitability in Brazilian companies that adopted quality management when comparing a period before and after being recognized by the Brazilian National Quality Award.

Njambi and Nkerukiafu, (2005) investigated the impact of Total Quality Management on organizational performance of firms in the republic of Cameroon using variable, quality control, inspection, employee training, customer focus and benchmarking. They found that only employee training and empowerment had a significant impact on financial performance and corporate social responsibility and that leadership commitment, quality control and inspection had significant impact on cost reduction.

Juran (1995), made several key points about overcoming barriers and influencing change; those who propose change are products of their own history and may not be espousing universal truth, the existing culture already has policies and procedures that provide high level of predictability, often allowing the current participants to wing it. Once an organization embarks on TQM, it faces some obstacles to its successful implementation: lack of management commitment, inability to change organizational culture, improper planning, lack of continuous training and education, incompatible organizational structure and isolated individuals and departments. A study by Nirole (2008) found that behavioral changes had great impact in improving the quality of organizations products and services. These behavioral changes could be instilled in employees through visionary leaders employing TQM skills in the workplace.

Wamathai, (2015) found from a study was conducted to establish the determinants of implementation and the success of KTDA processing industries in Kenya a case of Nyeri County KTDA factories that top management commitment, employees training continues improvement of products and services and communication were critical and had a positive influence in the implementation of TQM.

Strategic Planning and performance of KTDA factories

Berry (1994), defines strategic planning as a management process that combines true basic features; a clear statement of the organization's mission, the identification of the agency's external constituencies or stakeholders, Delineation of the agency's strategic goals and objectives and development of strategic to achieve them. Zirmire and Das (2018) found that India was the world's largest tea producer and consumer of black tea. It is the fourth largest tea exporter and with a compound growth rate of 2.86% during 200-2015.

Literature indicates that the main responsibility of management is to constantly improve the systems so that innovation can materialize more easily. This is not easy because the system covers everything; choice of suppliers, procurement, transport, funding for research, design, engineering. Strategic planning is backbone support of strategic management and it is a major process in the conduct of strategic management (Ongonge, 2013).

According to Wagner (2006) the importance of strategic planning can be explained from four points of view including: environmental scanning, strategy formulation, linking goals to budget, strategic planning as a process. This implies that KTDA requires an understanding of both internal and external environments of their companies and channel this understanding to their plans.

As cited by Ongonge (2013), Drucker (1954) contends that strategic planning is the management by plans, an analytical process and it focuses on making optional strategic decisions. Ansoff (1991) conceptualizes strategic planning as the process of seeking a better match between a firm's product or technology and its increasing turbulent markets. He looks at it in terms of change from familiar environment to an unfamiliar world of strange technologies, strange competitors, new customer attitude, new dimensions of social control and about all, questioning of the firm's role in society.

Wagh, (2014) study on India's Tea industry states in Global scenario, found that the Indian tea production grew steadily due to geographical indications, heavy investments in tea processing units, continuous innovations and strategic expansion.

India employs competent managerial man power and a strong research lacking from and well established research institutions. Its training facilities for plantation managers, supervising staff and workers on continuous up gradation of their skills has seen production grow over 250% (<http://www.agritrade.iift.ac.in>). Perarasu and Seithilmurugah (2014). Their study in Indian Sugar Industries found that there is always failure in machines, hence production output in the sugar industries when total quality management is not employed.

Strategic Development

Kagira Kimani,(2012) quotes Talib and Rahman,(2011) who identifies several challenges facing small scale tea farmers in Kenya: production related challenges old tea gardens, low quality tea, drought and climate change, poor workers-employee relationship, lack of and high costs of labour, high costs, poor access to information, lack of training, use of child labor, marginalization of women in sharing tea income, protection of wildlife, pollution of water catchment areas, planting of eucalyptus trees in water catchments areas, safety and health of workers, and farmers representation.

As cited by Mwangi and Wamathai (2015), Oakland (1995) confirms that TQM is an approach to improve the competitiveness, effectiveness and flexibility of the whole organization. It is eventually a way of planning organizing and understanding each activity and depends on each individual at each level. TQM requires that the company maintains this quality standard in all aspects of its business. This requires ensuring that things are done right the first time and that the defects and wastes are eliminated from operation. He also quotes Dale (2003) who believes that changing the lifelong behavior, customs practices and prejudices of an organization is not easy. This implies that strategic thinking and its subsequent deployment is mandatory for the required changes in processing industries. Brah Tee & Rao, B.M (2002). The study that was carried in Singapore found that the size of the company and the company's adoption of TQM, and duration of a company's experience with TQM affect the rigor of implementation and resulting level of quality performance or production. Prajogo, I.D and Alan, B (2018) there are strong links between TQM practices and quality performance and that there is no significant difference between organizations implementing formal TQM programs and those organizations simply adopting TQM practices in Australian Companies.

Strategic Deployment

As cited by Mwangi and Wamathai (2015), Oakland (1995) confirms that TQM is an approach to improve the competitiveness, effectiveness and flexibility of the whole organization. It is eventually a way of planning organizing and understanding each activity and depends on each individual at each level. TQM requires that the company maintains this quality standard in all aspects of its business. This requires ensuring that things are done right the first time and that the defects and wastes are eliminated from operation. He also quotes Dale (2003) who believes that changing the lifelong behavior, customs practices and prejudices of an organization is not easy. This implies that strategic thinking and its subsequent deployment is mandatory for the required changes in processing industries.

Strategic Collaborations.

Kagira and Kimani, (2012) suggests that in order to increase yield in poorly managed farms, strategic decisions and value chain modifications are required. This can aim to enhance their yields production as well as the quality of the tea. He further proposes that farmers should be encouraged to form strategic alliances among themselves in order to improve performance. He concludes that where such alliances are started equipment and mechanization is possible which will end in saving cost and overcoming poor land management and plucking inefficiency. Strategic business performance consists of annual sales, sales growth, profits, market share and export change (Zhang, 2000).

China statistical year book (1998) defines annual sales are the total volume of industrial products sold in currency terms within one year, even though finished products were made in a different year. Annual sales include the value of sold finished products, sold semi-finished products, industrial services; industrial services rendered to other firms, products provided for firm's own construction or wellbeing department, self-made production equipment among other items. Annual sales 'growth refers to the ratio of annual sales difference between this year and the previous year divided by the annual sales volume in the total profit grounded by the firm, market share refers to the percentage of a firm's product output compared with the same kinds of product output produced by all firms located in a currently.

Njeri (2016) carried a study to establish the influence of Total Quality Management practices on the performance of SACCOS in Kiambu Sub County using descriptive technique and simple random sampling technique. The study found that TQM utilization increased SACCO assets, customer base, market share and profits.

Customer focus and performance KTDA factories

Customer focus can be defined as the degree to which a firm continuously satisfies customer needs and expectations. A successful firm recognizes the need to put the customer first in every decision made. The key to quality management is maintaining a close relationship with the customer in order to fulfill the customer's needs as well as to receive feedback on the extent to which those needs are met. The customer should be closely involved in the product design and development processes, with inputs at every stage, so that there is less likelihood of quality problems once full production begins.

Rai, (2018), gives a broader sense of quality as; description of customer wishes, observance of terms of delivery, good documentation, available at a reasonable price and a product meeting laid down specifications. This implies that quality takes into account customer requirements and needs, its customer oriented and customer specifications are paramount. An important consideration from the customer's perspective of product quality is the product or service price. From the producer's perspective an important consideration is achieving the quality of conformance at an acceptable cost. Product cost is also an important design specification. Studies show that if products or service, cannot be produced at a cost that results in a competitive price, the final product will not have acceptable value. The price is more than the customer is willing to pay given the product's quality characteristics. A basic concept of TQM is an unwavering focus on customers, both internal and external. An external customer is the one who purchases the product or service, or the one who influences the sale of the product or service. An external customer exists outside the organization and generally falls into three categories: current, prospect and lost customer.

Customer knowledge & market

Rai, (2018) quotes Professor Mizuno in his quality function deployment (QFD) system focuses on customer expectations and requirements who believes that QFD is a planning tool used to fulfill customer expectations. It is a disciplined approach to product design, engineering and production and provides in-depth of evaluation of a product. It is often referred as the voice of customer. Mizuno illustrates that QFD is employed to translate customer expectations, in terms of specific requirements into directions and actions, in terms of engineering or technical characteristics that can be deployed through the following: Product planning, part development; process planning, product planning and service industries. This implies that QFD is used to drive the product development process to suit the customer specification. The driving force behind QFD is that the customer dictates the attitude of a product. The sources for determining customer expectation are; focus groups, surveys, complaints, consultants, standards and federal regulations. Qualities function deployment begins with marketing to determine what exactly the customer desires from a product (customer knowledge).

Ali (1997) argues that there are many different products that score the same need as tea. The competing alternatives for tea could be classified at three different levels: first of all, there competing product classes that serve the same generic need as tea, such as hot beverages, cold beverages and alcoholic beverages. Second, there are competing product forms within product class, such as within the hot beverage class there are tea, coffee, cocoa, chocolate etc. thirdly, there are competing suppliers (or types of tea) within a product form such as Kenyan tea, Indian tea, orthodox tea, CTC tea, tea bags and loose tea in packets.

Customer relationship

Whitely and Hessen, (1997) emphasizes a customer oriented approach which places a customer at the center of the business operations and listen to their needs. Customer listening is a continuous process, but in many aspects is usually not well interpreted in many organizations. The idea is to find a way to create an atmosphere of cooperation throughout the organization. Therefore, in this cooperative environment, employees are encouraged to stay focused on the needs of the customers. The focus on the customer will improve the organization's image in a way that would enhance its profits and success.

Gitomer, (1998) emphasizes that improving customer satisfaction leads to customer loyalty. He believes that loyalty is a big set up from mere satisfaction, because loyal customers make voluntary referrals. The difference between a satisfied customer and a royal customer is that one may do business with them again as may refer others to them; the other will do business with them again and voluntarily promote the business by proactively talking about their positive experiences. Studies by Talib and Rahman (2011) found out that the following customer relationship elements increased customer responsiveness: complaints handling, customer satisfaction, and long-term relationship establishment, close partnership with customer, customer service management and customer needs.

Customer satisfaction and orientation

Anderson et al (1994), defines customer satisfaction has the degree to which a firm's customers continuously perceive that their needs are being met by the firm's products and services. He further gives two different conceptualizations on how customer satisfaction can be distinguished, transaction, specific and cumulative. From a transaction specific perspective, customer satisfaction is viewed as a post-choice evaluative judgment of a specific purchase occasion while cumulative customer satisfaction is an overall evaluation based on total purchase and consumption experience with product or service or time. Thus, overall customer satisfaction is more fundamental indicator of the firm's past, current and future performance. Customer satisfaction is a customer's feeling of pleasure or disappointment resulting from comparing a product's perceived performance (or outcome) in relation to his or her expectations.

Total quality management is a management framework based on the belief that an organization can build long term success by having all its members from low level works, to the highest ranking executive improvement and thus delivering customer satisfaction. Aresearch by Depaak and Maheshwari (2007) on the impact of total quality management on profitability and efficient of Baldrige Award Winners indicated that increase in earnings and sales growth for Baldrige Award Winner was closely related to the Total Quality Management. Vesna(2014) researched on the impact of TQM on implementation of the financial performance of hotels in Serbia. He found that Hotels practiced TQM at high level on customer orientation and teamwork but there was no evidence that TQM impacted positively on financial performance of Hotels. Naumann and Giel (1995) argue that if performance falls short of expectations, the customer is dissatisfied. If the performance matches the expectations, the customer is satisfied. If the performance exceeds the expectations, the customer is highly satisfied or delighted. He also believes that besides quality of products and services customers can also be influenced by price.

Ongonga and Ochieng (2013), and Narver and Slater, (1990) contended that some researchers considered customer orientation as important and as competition focused the international coordination, while, Despande et al (1993) considered customer orientation as the most fundamental aspect of corporate culture. A study by Chan (2010) found that small scale tea farmers who sell their green leaf to tea collectors, plantations or process face the main challenge of low farm prices, poor extension services, and poor access to credit. The study sought to find at how tea firms were performing after ISO reunification by employing descriptive research design. The findings indicate that leadership focus, customer focus, employee involvement continuous improvement, innovation and learning, supplies quality management, statistical quality techniques and standards and awards, had a positive influencing costs, market share, order processing, product and service quality, profitability and product reliability.

A study by Juneja, Ahmad and Kumar (2011) about adaptability of Total Quality Management to service sector indicated that there was increasing acceptance and use of TQM and this improved quality of service provided. A study by Talib, Rahman andAzam (2010) on Total Quality Management Implementation in the health care industry, found that the frame work of TQM Implementation led to higher business performance of the health care industry as well as higher employee, customer and personal satisfaction.

Supplier focus and performance of KTDA factories

Kathata (2011) conducted a study and found out that other than quality the forces of demand and supply determines the price of tea in the market. Rai, 2018 indicates that treating suppliers as partners is important. On average 40% of the sales dollar is the purchase of product or service, therefore supplier quality should be outstanding. A partnering relationship rather than adversarial one should be developed. The focus should be on quality and life – cycle costs rather on price. Supplier should be few in number so that true partner can occur. Chen et al., (2004), argues that to remain competitive in customer oriented economics, the major parties in the supply chain, including suppliers, contract manufacturers, distributors and retailers, must synchronously participate in designing, manufacturing, distributing, marketing and even standing. All these parties thus should be integrated and managed effectively to respond to customer needs and contribute the profit to the whole supply chain. Members of the supply chain thus are critical determinants of supply chain behavior. He further argues that partner selection thus becomes one of the key steps in constructing the supply chain.

Lynn A. Fish, (2011) in Supply Chain Quality Management, the six Total Quality Management factors that are related to supply chain performance are leadership, strategic planning, human resources management, supplier quality management, customer focus, and process management Azar *et al.*, (2010), With respect to leadership and in keeping with W. Edwards Deming, it is top management's responsibility to provide support, commitment and accept responsibility for quality. Similarly, Juran noted that top management is responsible for quality delivery, but he related its impact to the financial impact. As companies move toward supply chain quality management, leadership is essential in order to direct processes, overcome cultural issues, and manage human resources that differ between companies along the supply chain. Leadership has a critical role in Supply Chain Quality Management to guide and direct individual planning and supplier management, build supply chain linkages toward improving quality and performance, and encourage and promote supply chain quality management through collaboration, communication and integration. Strategic planning involves developing a clear mission, long-term strategy, and long and short-term goals. With respect to supply chain quality management, top management is responsible for developing the supply chain linkages that will positively impact upon quality, and for bridging the gap between the various organizational levels with respect to their quality expectations. To improve quality and supply chain performance, strategic plans are currently focused on supplier evaluation and supply base rationalization. Supply chain partners need to jointly create missions, strategies and goals as well as share values.

Kuei *et al.*, (2008) believes that organizations need to transit from the traditional supply chain model where quality is built through quality in purchasing and processes through a paradigm shift to an integrative, competent supply chain quality management model that leads through design and management of an innovative, quality supply chain. This process requires managers to navigate four distinctive stages to eliminate gaps: emphasis on supply chain strengths by all members, critical success factors need to be identified to develop competencies, emphasis by members on infrastructure and supply chain climate, and continuous improvement through supply chain quality practices. To bridge these gaps, four drivers of supply chain quality are identified: supply chain competence, critical success factors, strategic components, and supply chain quality practices.

Quality of supplier

Monczka *et al.*, (2009) through performance reviews which include relevant quality measures, buyers should provide suppliers any necessary education and technical assistance. Best practices in supply chain quality management includes Strategic Supply Management which entails quality management, encourages continuous improvement throughout the supply chain, and includes suppliers in new product development and process development.

Azar *et al.*, (2010) notes that strategic supply management can be seen as a simultaneous, bilateral effort between buyer and supplier firms to improve procurement, supply, and distribution processes. Strategic Supply Management initiatives that positively impact upon quality and performance include: Reducing supply bases and establishing closer relationships with their suppliers, buyers working closely with suppliers and potentially launching joint strategic projects, earlier supplier involvement and joint problem-solving efforts, leading to the early discovery of quality problems, inter-firm production scheduling breaks down barriers between organizations, and resulting in shorter production runs.

Guangshu Chang, (2009) argues that the focus of modern quality view is the process quality management but not the product itself of traditional quality view. It is the requirement of the quality management system of ISO9004:2000 and the

essential difference of modern and traditional quality view. In each step of supply chain, there are many correlative processes, such as procurement, logistics, production, inventory, selling, service, etc. These processes have their own independent objectives and programs. There are usually conflicts among the objectives and programs. Therefore, the processes and their mutual effects should be identified and managed to ensure the harmonious operation of supply chain. Then, all the processes, especially the key processes, can realize high quality, i.e. small variation, small waste, and more increment, through the continuous improvement and total quality control in all the nodes of supply chain system

Capability of supplier

Bosibori R, K (2014) quotes (Nordling et al., 2010) and Lysons et al., (2008), who argues that a supplier in the current market often needs to fulfill requirements other than just those concerning material and service, such as requirements that prove the supplier's capability and suitability to live up to a company's long-term requirements and needs. It is vital to assure that the supplier can guarantee sustained continuity of supply and to be aware of its performance, strengths and weaknesses. As Chen and Paulraj (2004) argued, suppliers have a profound and direct impact on cost, quality, time, and responsiveness of the buying firms and the management of relationship with other members of the supply chain. SCM has become increasingly popular, especially within the context of broader cooperation, vertical disintegration, and the viewpoint of a networked supply chain in the manufacturing industry (Zuo, Potangroa, Wilkinson & Rotimi, 2009). Through the governance of integration, the supply chain becomes a network where a series of relationship form to ensure that the end customer receives value from an efficient and effective process that delivers the best products and services (Fawcett & Magnan, 2004). The success level of SCM depends on various key factors. For example, Tracy et al. (2005) propose three types of SCM capabilities to the success of an SCM approach: outside-in capability, which includes inbound transportation, material warehousing, inventory control-inbound, and production support, inside-out capability, which includes packaging, finished goods, warehousing, inventory control-outbound, and outbound transportation; and spanning capability, which includes purchasing, customer order processing, strategy development, and information dissemination.

Daniel (2010) argued that a successful SCM must develop some key capabilities, such as purchasing activities, materials management, transportation, warehousing, operation management of product and service, information technology, customer service, and coordination with finance, marketing, accounting, and human resource management. According to the above literature, we know that no single metric or approach can serve all purposes and all kinds of organizations. Thus, we conducted in-depth interviews with five managers and three chief executive officers of ISO 9000- certified manufacturing companies in Taiwan in order to know the key factors of SCM capabilities. Through these expert opinions, this research adopted Tracy et al. (2005) indicators.

Supplier relationship

(Fernandez, 1995) states that supplier selection; supplier development and supplier integration can be regarded as forming an SQM system, with management responsibility seen as the driver of the system. The concepts of SQM can be viewed as an integration of strategic practices, and such practices need to stretch across inter-organizational boundaries to satisfy both existing and new customers (Harland et al., 1999). Accordingly, Yeung and Lo (2002) view SQM in terms of the managerial efforts necessary for creating an operating environment in which a manufacturer can integrate its supplier capabilities into its operational processes. These managerial efforts can be clustered into several components, namely management responsibility, supplier selection, supplier development, supplier integration, quality measurement and conducting supplier audits.

A supplier can provide value for its customers in several ways. This value is essentially created through the supplier-customer relationship. Functions of business relationships can be basically classified into direct and indirect functions (Walter and Ritter 2000). Direct functions describe the immediate cost and revenue effects of a supplier relationship for the customer. Indirect functions are more difficult to ascertain as their impact is realized through the linkages of the supplier-customer dyad to other actors. Two recent contributions help us to understand the dimensions of value and value generation in a more refined fashion.

3. RESEARCH METHODOLOGY

Research Design

This study employed descriptive survey design. This is a design which involves a brief interview and collection of information or data in its original form. The design is able to collect views from a large population using a single questionnaire (Cress well& Plano, 2011). This method was appropriate in this study to gather a lot of information on the correlation between total quality management and performance of tea factories in Kisii County. The questionnaire collected information from the respondents within a short time. The information obtained by this approach was abroad; thus it could be used to generalize results to the population and then focus, on detailed qualitative structured interviews on the key informants to collect detailed views from participants an idea shared by (Creswell, 2003).

Data Collection Instrumentation

Primary data was collected regarding to the factors affecting the application of TQM. The respondents for this study were selected employees from various functional areas in the organization. The study used one types of data collection instruments namely- the questionnaires. The questionnaire has the advantage of allowing for minimal contact between the researcher and the participants, using multiple avenues to administer such as: hand delivery, snail mail, e-mail and online; participants' answers were readily recorded on prescribed forms. Therefore, the participants were independent when answering the questions.

Pilot Study

A preliminary test was done on the data collection tools and procedures to identify likely problems. The researcher took necessary actions in time before the actual data collection. This test was conducted at two factories from the neighboring Kisii County. The respondents were 2 factory managers, 1 factory unit manager, 1 production manager, 1 assistant production managers, 1 field service coordinator, data manager and chief accountant.

Validity of Data Collection Instrument

Validity in educational field is the degree to which a measurement tool measures what it claims to measure (Mugenda& Mugenda, 2013). In this study, the face, construct and content validity of the data collection instruments was determined by the experts from the faculty of education and the two supervisors. Construct validity refers to the extent to which operationalization of a construct do actually, measure what the theory says they do. Content validity is a non-statistical type that involves systematic examination of the test content to determine whether it covers a representative sample of the behaviour domain to be measured (Brains, Willnat, Manheim and Rich, 2011). To determine the validity of these instruments, the tools were piloted and the data collected analyzed. From the analyzed results, construct validity obtained by looking at the test items to ascertain that each came at the correct place in the questionnaire and that it covers a representative sample of the behavior domain to be measured. Face and construct validity, was ascertained by the experts and supervisors, looking at the items and giving their opinions if they appeared to be accurately measuring what they were to measure and if the construct measured could be generalized. Then improvements were made on the items that deviated from the intended measurement before they were used in the field.

Reliability of Data Collection Instrument

The reliability of the research instruments is defined as the extent to which a research tool is internally consistent and yields the same results upon repeated testing (Orodho, 2012). While Mugenda & Mugenda, (2003) said that the degree to which a measurement technique can be depended upon to secure consistent results upon repeated application is the reliability.

Data Collection Procedures

The researcher obtained a consent letter from the school of post-graduate studies, and then proceeded to the National Council of Science and Technology to obtain a research permit. The researcher then prepared the data collection instruments. The instruments were administered by the researcher himself during the data collection process. Some of the completed questionnaires were collected the same day and those who had not completed filling were given one week after which the researcher went round to collect them.

Methods of Data Analysis

The data collected was coded and analyzed through SPSS version 17 using descriptive statistics. Descriptive statistics such as frequencies, percentages, mean and standard deviation were used to descriptive various factors in the study.

4. DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION

Quality leadership and performance of tea factories

The first objective was to determine how quality leadership influenced the performance of tea factories in Kisii County and answered the question: How does application of quality leadership influence the performance of tea factories in Kisii County?

The findings indicate that: the top management trains the members of the core team on group jobs, is actively involved in recognition and appreciation of individual’s efforts, and encourages the core team to set high performance goals and provide appropriate resources towards the achievement of the goals. They involve senior management in creating the organization mission, vision, values and implementation strategies effectively, visit the other locations to monitor TQM working, maintain close and direct contact with the key customers, engaged in the change management by measuring the TQM performance and the associations between TQM and organizational accomplishment in order to gain competitive organizational advantage, engage senior management to make decisions and require others to make the decisions based on the data effectively, and empower employees to take action effectively. The results are shown in Table 3

Table 3: Quality leadership influence on performance

Variable	N	Min	Max	Mean	Std.
The top management trains the members of the core team on group jobs	54	2	5	3.73	.935
The top management actively involved in recognition and appreciation of individual’s	54	3	5	3.95	.722
The top management encourages the core team to set high performance goals and provide appropriate resources	54	2	5	3.59	1.182
Senior Management creates the organization mission, vision, values and implementation strategies effectively.	54	2	5	3.77	.922
Senior Management visit the other locations to see TQM is working effectively	54	2	5	3.82	1.053
Senior Management maintain close and direct contact with the key customers effectively	54	1	5	4.00	1.069
TQM process performance and the associations between TQM and organizational accomplishment are measured in order to gain competitive organizational advantage	54	3	5	3.59	.796
Senior Management make decisions and require others to make the decisions based on the data effectively	54	2	5	3.86	.990
Organizations empower employees to take action effectively.	54	1	5	3.55	1.262

Key 1- strongly disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly agree

From table 1 clearly shows that; the top management trains the members of the core team on group jobs (M=3.73, STD=.935), is actively involved in recognition and appreciation of individual’s efforts (M=3.95, STD=.722), and encourages the core team to set high performance goals and provide appropriate resources towards the achievement of the goals (M=3.59, STD=1.182).

Equally, the top management was committed in assisting senior management create the organization mission, vision, values and implementation strategies effectively (M=3.77, STD=.922), visit the other locations to see to it that TQM is working effectively (M=3.82, STD=1.053), and maintained close and direct contact with the key customers effectively (M=4.00, STD=1.069).

Finally, all the respondents agreed that top management was engaged in the change management. The TQM process performance and the associations between TQM and organizational accomplishment are measured in order to gain competitive organizational advantage (M=3.59, STD=.796), top management engage senior management make decisions and require others to make the decisions based on the data effectively (M=3.86, STD=.990), and empower employees to take action effectively (M=3.55, STD=1.262).

The findings indicate that: the top management trains the members of the core team on group jobs, is actively involved in recognition and appreciation of individual’s efforts, and encourages the core team to set high performance goals and provide appropriate resources towards the achievement of the goals. This is in line with Longhlin, (2008) who argued that TQM was a way of life for a company; it has to be introduced and led by top management: that attempts to implement TQM often fail because top management doesn’t lead and get committed instead it delegates and pays lip services commitment and personal involvement in creating and deploying clear quality values and goals consistent with objectives of the company, and in creating and deploying well defined systems, methods and performance for achieving those goals.

Njambi and Nkerukiafu (2005) investigated the impact of Total Quality Management on organizational performance of firms in the republic of Cameroon using variable, quality control, inspection, employee training, customer focus and benchmarking. They found that only employee training and empowerment had a significant impact on financial performance and corporate social responsibility and that leadership commitment, quality control and inspection had significant impact on cost reduction. This supports the findings of this study as it is indicated that the top management’s committed in assisting senior management create the organization mission, vision, values and implementation strategies effectively visit the other locations to see to it that TQM was working effectively, and maintained close and direct contact with the key customers effectively, had impacted positively in the performance of tea factories.

Finally, all the respondents agreed that top management was engaged in the change management by measuring the TQM performance and the associations between TQM and organizational accomplishment in order to gain competitive organizational advantage, engage senior management to make decisions and require others to make the decisions based on the data effectively, and empower employees to take action effectively. Niolo (2008) supports these study findings as he observed that behavioral changes had great impact in improving the quality of organizations products and services. These behavioral changes could be instilled in employees through visionary leaders employing TQM skills in the workplace

Hypothesis testing for Application of Quality leadership influence on the performance of tea Factories in Kisii County

H₀: Application of Quality leadership has no influence on the performance of tea Factories in Kisii County

Table 4: Chi –square testing on Application of Quality leadership influence on the performance of tea Factories

	f	f_e	f_d	(f_d)²	(f_d)²
Very great extent	5	13.2	-8	64	7.23
Great extent	3	13.2	-10	100	7.69
Average extent	10	13.2	-3	9	0.69
Low extent	23	13.2	10	100	7.69
Very low extent	25	13.2	12	144	11.1
					$\sum(f_d)^2 / f_e =$ 33.3

X² c = 33.3 > x²_{0.05} = 9.488 at 4 degrees of freedom and 5 % level of confidence.

Since the calculated Chi-square value of 33.3 is greater than the critical Chi-square value at 5% level of confidence, we accept the alternative hypothesis. Thus Application of Quality leadership has a significant influence on the performance of tea Factories in Kisii County

Strategic planning influences the Performance

The second objective sought to find out how strategic planning influenced the performance of tea factories in Kisii County and answered the question: How does application of strategic planning focus influence the performance of tea factories in Kisii County?

The findings indicate that application of strategic development was supported, developed and implemented based on data concerning customers' requirements and the firm's capabilities, customers' needs; planned using design of a strategic proposal that integrates quality as a principal constituent, setting stretch objectives for improvement along the critical lines like cost, time, strategic collaboration as witnessed in the engagement in the application and accreditation of a quality management system which was a regular strategy i.e. ISO 9000 certification, and the selection of a few critical processes, and assign a senior manager personal accountable.

Table 5: Strategic Management

Variable	N	Min	Max	Mean	Std.
We have a mission statement which has been communicated throughout the firm and is supported by our employees	54	2	5	3.73	1.032
We develop and implement our strategies and plans based on data concerning customers' requirements and the firm's capabilities	54	3	5	4.05	.722
Customers' needs are taken into account when establishing objectives	54	3	5	4.27	.883
Our quality strategies affect all organizational areas and managerial activities	54	2	5	4.00	.976
Strategic planning comprises the design of a strategic proposal that integrates quality as a principal constituent	54	3	5	3.86	.774
Organization set stretch objectives for improvement along the critical lines like cost ,time ,and defects for each targeted process effectively	54	2	5	3.77	1.193
Evaluating critical success factors of TQM application for best practice	54	2	5	3.41	1.008
engagement in the application and accreditation of a quality management system is a regular strategy i.e. ISO 9000 certification	54	2	5	3.86	.834
Our organization selects a few critical processes ,and assign a senior manager personal accountable	54	1	5	3.73	1.316

Key 1- strongly disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly agree

From table 5 it clearly shows that; the respondents agreed that there was application of strategic development since there was a mission statement which had been communicated throughout the firm and was supported by the employees (M=3.73,STD=1.032), developed and implemented strategies and plans based on data concerning customers' requirements and the firm's capabilities(M=4.05,STD=.722), customers' needs were taken into account when establishing objectives (M=4.27,STD=.883), and quality strategies affected all organizational areas and managerial activities (M=4.00,STD=.976).

Equally, the respondents agreed that there was strategic deployment since there was strategic planning comprising the design of a strategic proposal that integrates quality as a principal constituent (M=3.86, STD=.774), setting stretch objectives for improvement along the critical lines like cost, time, and defects for each targeted process effectively

(M=3.77, STD=1.193), and evaluating critical success factors of TQM application for best practice (M=3.41, STD=1.008).

There was also general agreement that there was strategic collaboration as witnessed in the engagement in the application and accreditation of a quality management system which was a regular strategy i.e. ISO 9000 certification (M=3.86, STD=.834), and the selection of a few critical processes, and assign a senior manager personal accountable (M=3.73, STD=1.316).

The findings indicate that the respondents agreed that there was application of strategic development since there was a mission statement which had been communicated throughout the firm and was supported by the, developed and implemented strategies and plans were based on data concerning customers’ requirements and the firm’s capabilities, customers’ needs were taken into account when establishing objectives and quality strategies affected all organizational areas and managerial activities. This is in line with Dale (2003) who believes that changing the lifelong behavior, customs practices and prejudices of an organization is not easy. This implies that strategic thinking and its subsequent deployment is mandatory for the required changes in processing industries.

Prajogo, I.D and Alan, B (2018) observed that there were strong links between TQM practices and quality performance and that there is no significant difference between organizations implementing formal TQM programs and those organizations simply adopting TQM practices in Australian Companies. Therefore, there must be strategic deployment since there was strategic planning comprising the design of a strategic proposal that integrates quality as a principal constituent, setting stretch objectives for improvement along the critical lines like cost, time, and defects for each targeted process effectively and evaluating critical success factors of TQM application for best practice.

Kagira and Kimani, (2012) suggested that to increase yield in poorly managed farms, strategic decisions and value chain modifications are required. This could aim to enhance their yields production as well as the quality of the tea. He further proposed that farmers should be encouraged to form strategic alliances among themselves in order to improve performance. He concluded that where such alliances were started equipment and mechanization was possible which would end in saving cost and overcoming poor land management and plucking inefficiency. On the other hand, there was a general agreement that strategic collaboration as witnessed in the engagement in the application and accreditation of a quality management system which was a regular strategy.

Hypothesis testing for Application of strategic planning influence on the performance of tea factories in Kisii County

H₀ Application of strategic planning has no influence on the performance of tea factories in Kisii County

Table 6 Chi – Square testing objective two

	f	f _c	f _d	(f _d) ²	(f _d) ² / f _c
Very great extent	4	13.2	-8	64	4.92
Great extent	4	13.2	-8	64	4.92
Average extent	10	13.2	-3	9	0.69
Low extent	23	13.2	7	49	3.77
Very low extent	25	13.2	12	144	11.1
					$\sum(f_d)^2 / f_c =$ 25.4

$X^2_c = 25.4 > x^2_{0.05} = 9.488$ at degrees of freedom and 5% level of confidence.

Since the calculated Chi-Square value of 25.4 is greater than the critical chi- square value at 5% level of confidence, we accept the alternative hypothesis. Thus, Application of strategic planning has influence on the performance of tea factories in Kisii County

Customer focus influence on performance

The third objective sought to establish how customer and market focus influences the performance of tea factories in Kisii County and answered the question: How does customer and market focus influence the performance of tea factories in Kisii County?

The findings show that the respondents agreed that there was gain of customer knowledge through frequent close contact with customers, actively and regularly seeking customer inputs to identify their needs and expectations, and information of customers' current and future needs and expectations. Customer relationship was cordial through feedback on quality and delivery performance and customer complaints were used as input to improve the processes. Customer satisfaction as measured from effective gatherings and reviews of data from employees, and alignment of the TQM data with the business issues and organizational priorities.

Table 7: Customer Focus

Variable	N	Min	Max	Mean	Std.
We frequently are in close contact with our customers	54	1	5	3.55	1.143
We actively and regularly seek customer inputs to identify their needs and expectations	54	3	5	3.59	.666
We inform customers' current and future needs and expectations to our employees effectively	54	2	5	4.18	1.140
Our customers give us feedback on quality and delivery performance	54	2	5	3.73	1.077
Customer complaints are used as input to improve our processes	54	2	5	3.82	.958
Customers enjoy our after sale services	54	2	5	3.77	1.066
We measure customer satisfaction systematically and regularly	54	2	5	3.27	1.077
Organization gathers and reviews the data effectively from its employees.	54	2	5	3.50	.913
Organization aligns the TQM data with the business issues and organizational priorities effectively	54	2	5	3.73	1.032

Key 1- strongly disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly agree

From table 5 it clearly shows that; the respondents agreed that there was gain of customer knowledge because of frequent close contact with our customers ($M=3.55$, $STD=1.143$), actively and regularly seeking customer inputs to identify their needs and expectations ($M=3.59$, $STD=.666$), and information of customers' current and future needs and expectations to our employees effectively ($M=4.18$, $STD=1.140$).

Equally, the respondents agreed that there was engagement in customer relationship because the customers gave feedback on quality and delivery performance ($M=3.73$, $STD=1.077$), customer complaints were used as input to improve our processes ($M=3.82$, $STD=.958$), and the customers enjoyed the after sale services ($M=3.77$, $STD=1.066$).

Finally, the respondents agreed that there was customer satisfaction as measured from: customer satisfaction systematically and regularly ($M=3.27$, $STD=1.077$), effective gatherings and reviews of data from employees ($M=3.50$, $STD=.913$), and alignment of the TQM data with the business issues and organizational priorities effectively ($M=3.73$, $STD=1.032$).

Whitely and Hessen, (1997) emphasized a customer oriented approach which places a customer at the center of the business operations and listen to their needs. This is in line with the findings of this stud which indicate that gaining customer knowledge because of frequent close contact, actively and regularly seeking customer inputs to identify their needs and expectations, and information of customers' current and future needs and expectations to our employees effectively was vital. Equally, the respondents agreed that there was engagement in customer relationship because the customers gave feedback on quality and delivery performance, customer complaints were used as input to improve our processes, and the customers enjoyed the after sale services.

Finally, the respondents agreed that there was customer satisfaction as measured from: customer satisfaction systematically and regularly, effective gatherings and reviews of data from employees, and alignment of the TQM data with the business issues and organizational priorities effectively.

Hypothesis testing for Application of customer focus influence the performance of tea factories in Kisii County

H₀: Application of customer focus has no significant influence the performance of tea factories in Kisii County

Table 8 chi-square testing Application of customer focus influence the performance of tea factories

	f	f _e	f _d	(f _d) ²	(f _d)/ f _e
Very great extent	20	13.2	7	49	3.8
Great extent	20	13.2	7	49	3.8
Average extent	12	13.2	-1	1	0.1
Low extent	8	13.2	-5	25	1.9
Very low extent	6	13.2	-7	49	3.8
					$\sum (f_d)^2 /f_{e=1}$ 13.4

X² c= 13.4 > x² 0.05 = 9.488 at 4 degree of freedom and 5% level of confidence.

Since the calculated Chi-Square value of 13.4 is greater than the critical Chi-Square value at 5% level of confidence, we accept the alternative hypothesis. Thus, Application of customer focus has a significant influence on the performance of tea factories in Kisii County

Supplier focus influences the performance

The fourth objective sought to establish how supplier focus influences the performance of tea factories in Kisii County and answered the question: To what extent does application of supplier focus influence the performance of tea factories in Kisii County?

The findings show that the respondents agreed that quality supplier was an effective system to ensure quality of their products and/or services, emphasis on quality and delivery performance rather than price in selecting suppliers, and suppliers were involved in quality training.

Equally, the respondents agreed that use of capability of supplier to identify and fulfill TQM needs for facilities and equipment effectively, identify and fulfill TQM needs for the financial support effectively, and in the extensive use of statistical techniques to determine the capability of a supplier. Finally, the respondents agreed that supplier relationship were actively involved in new product development process, to work closely with suppliers to improve each other’s processes, and in quality training.

Table 9: Supplier Focus

Variable	N	Min	Max	Mean	Std.
Our suppliers have an effective system to ensure quality of their products and/or services	54	1	5	3.05	1.174
We emphasize quality and delivery performance rather than price in selecting suppliers	54	2	5	3.73	.767
Our suppliers are involved in our quality training	54	3	5	4.32	.839
Organization identify and fulfill TQM needs for facilities and equipment effectively	54	2	5	3.82	.853
Organization identify and fulfill TQM needs for the financial support effectively	54	2	5	3.91	.811
We make extensive use of statistical techniques to determine the capability of a supplier	54	2	5	4.05	1.046

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Our suppliers are actively involved in our new product development process	54	2	5	3.55	.858
We work closely with suppliers to improve each other's processes	54	3	5	4.09	.811
Our suppliers are involved in quality training	54	1	5	3.86	1.207

Key 1- strongly disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly agree

From table 7 it clearly shows that; the respondents agreed that quality supplier was an effective system to ensure quality of their products and/or services (M=3.05, STD=1.174), emphasis on quality and delivery performance rather than price in selecting suppliers (M=3.73, STD=.767), and suppliers were involved in quality training (M=4.32, STD=.839).

Equally, the respondents agreed that use of capability of supplier to identify and fulfill TQM needs for facilities and equipment effectively (M=3.82, STD=.853), identify and fulfill TQM needs for the financial support effectively (M=3.91, STD=.811), and in the extensive use of statistical techniques to determine the capability of a supplier (M=4.05, STD=1.046).

Finally, the respondents agreed that supplier relationship were actively involved in new product development process (M=3.55, STD=.858), to work closely with suppliers to improve each other's processes (M=4.09, STD=.811), and in quality training (M=3.86, STD=1.207).

Bosibori, (2014) quotes (Nordling et al., 2010) and Lysons et al., (2008), who argues that, a supplier in the current market often needs to fulfill requirements other than just those concerning material and service, such as requirements that prove the supplier's capability and suitability to live up to a company's long-term requirements and needs. It is vital to assure that the supplier can guarantee sustained continuity of supply and to be aware of its performance, strengths and weaknesses. The findings of this study upholds the same as it indicates that the respondents agreed that quality supplier was an effective system to ensure quality of their products and/or services, emphasis on quality and delivery performance rather than price in selecting suppliers, and suppliers were involved in quality training.

Equally, the respondents agreed that use of capability of supplier to identify and fulfill TQM needs for facilities and equipment effectively, identify and fulfill TQM needs for the financial support effectively, and in the extensive use of statistical techniques to determine the capability of a supplier. This is in line with Chen and Paulraj (2004) who argued that suppliers have a profound and direct impact on cost, quality, time, and responsiveness of the buying firms and the management of relationship with other members of the supply chain.

Finally, the respondents agreed that supplier relationship were actively involved in new product development process, to work closely with suppliers to improve each other's processes, and in quality training. As such a supplier can provide value for its customers in several ways. This value is essentially created through the supplier-customer relationship. Functions of business relationships can be basically classified into direct and indirect functions (Walter and Ritter 2000).

Hypothesis testing for Application of supplier focus influence the performance of tea factories in Kisii County

H₀: Application of supplier focus has no influence the performance of tea factories in Kisii County

Table 10 Chi- Square testing for Application of supplier focus influence the performance of tea factories in Kisii County

	f	f _c	f _d	(f _d) ²	(f _d) ² / f _c
Very great extent	5	13.2	-8	64	4.92
Great extent	3	13.2	-8	64	4.92
Average extent	10	13.2	-3	9	0.69
Low extent	23	13.2	7	49	3.77
Very low extent	25	13.2	12	144	11.1
					$\sum(f_d)^2 / f_c = 25.4$

$X^2_c = 25.4 > x^2_{0.05} = 9.488$ at degrees of freedom and 5% level of confidence.

Since the calculated Chi-Square value of 25.4 is greater than the critical chi-square value at 5% level of confidence, we accept the alternative hypothesis. Thus, Application of supplier focus has influence the performance of tea factories in Kisii County

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary of findings

The summary of the findings included; relationship between level of qualification, influence of experience, effect of leadership skills, and attitude of leaders and participants on public service delivery.

The findings indicate that: the top management trains the members of the core team on group jobs, is actively involved in recognition and appreciation of individual's efforts, and encourages the core team to set high performance goals and provide appropriate resources towards the achievement of the goals.

Equally, there was agreement that: the top management was committed in assisting senior management create the organization mission, vision, values and implementation strategies effectively visit the other locations to see to it that TQM is working effectively, and maintained close and direct contact with the key customers effectively. Finally, all the respondents agreed that top management was engaged in the change management by measuring the TQM performance and the associations between TQM and organizational accomplishment in order to gain competitive organizational advantage, engage senior management to make decisions and require others to make the decisions based on the data effectively, and empower employees to take action effectively.

The findings indicate that the respondents agreed that there was application of strategic development since there was a mission statement which had been communicated throughout the firm and was supported by the, developed and implemented strategies and plans were based on data concerning customers' requirements and the firm's capabilities, customers' needs were taken into account when establishing objectives and quality strategies affected all organizational areas and managerial activities.

Equally, the respondents agreed that there was strategic deployment since there was strategic planning comprising the design of a strategic proposal that integrates quality as a principal constituent, setting stretch objectives for improvement along the critical lines like cost, time, and defects for each targeted process effectively and evaluating critical success factors of TQM application for best practice.

On the other hand, there was also a general agreement that there was strategic collaboration as witnessed in the engagement in the application and accreditation of a quality management system which was a regular strategy i.e. ISO 9000 certification, and the selection of a few critical processes, and assign a senior manager personal accountable.

The findings show that the respondents agreed that there was gain of customer knowledge because of frequent close contact with our customers, actively and regularly seeking customer inputs to identify their needs and expectations, and information of customers' current and future needs and expectations to our employees effectively. Equally, the respondents agreed that there was engagement in customer relationship because the customers gave feedback on quality and delivery performance, customer complaints were used as input to improve our processes, and the customers enjoyed the after sale services.

Finally, the respondents agreed that there was customer satisfaction as measured from: customer satisfaction systematically and regularly, effective gatherings and reviews of data from employees, and alignment of the TQM data with the business issues and organizational priorities effectively.

The findings show that the respondents agreed that quality supplier was an effective system to ensure quality of their products and/or services, emphasis on quality and delivery performance rather than price in selecting suppliers, and suppliers were involved in quality training.

Equally, the respondents agreed that use of capability of supplier to identify and fulfill TQM needs for facilities and equipment effectively, identify and fulfill TQM needs for the financial support effectively, and in the extensive use of statistical techniques to determine the capability of a supplier.

Finally, the respondents agreed that supplier relationship were actively involved in new product development process, to work closely with suppliers to improve each other's processes, and in quality training.

Conclusion

The top management encourages the core team to set high performance goals and provide appropriate resources, involve senior management in creating the organization mission, vision, values and implementation strategies, maintain close and direct contact with the key customers, engage in the change management, engage senior management to make decisions and require others to make the decisions based on the data effectively, and empower employees to take action effectively in an effort to improve performance.

Application of strategic development was supported, developed and implemented based on data concerning customers' requirements and the firm's capabilities, customers' needs; planned using design of a strategic proposal that integrated quality as a principal constituent, setting stretch objectives for improvement along the critical lines like cost, time, strategic collaboration as witnessed in the engagement in the application and accreditation of a quality management system which was a regular strategy i.e. ISO 9000 certification, and the selection of a few critical processes, and assign a senior manager personal accountable.

Application of customer knowledge through frequent close contact with customers, actively and regularly seeking customer inputs to identify their needs and expectations, and information of customers' current and future needs and expectations was effective in improving performance. Customer relationship was cordial through feedback on quality and delivery performance and customer complaints were used as input to improve the processes. Customer satisfaction as measured from effective gatherings and reviews of data from employees, and alignment of the TQM data with the business issues and organizational priorities was effective.

There was application of quality supplier system to ensure quality of their products and/or services, emphasis on quality and delivery performance rather than price in selecting suppliers, and suppliers were involved in quality training. There was application of capability of supplier to identify and fulfill TQM needs for facilities and equipment effectively, identify and fulfill TQM needs for the financial support effectively, and in the extensive use of statistical techniques to determine the capability of a supplier, and supplier relationship was developed as they were actively involved in new product development process, to work closely with suppliers to improve each other's processes, and in quality training.

Recommendations

Top managers are encouraged to set high performance goals and provide appropriate resources, involve senior management in creating the organization mission, vision, values and implementation strategies, maintain close and direct contact with the key customers.

All KTDA factories are encouraged to develop strategic plans to guide their operations while seeking customer inputs to identify their needs and expectations.

All KTDA factories are encouraged to apply quality supplier system to ensure quality of their products and/or services, emphasis on quality and delivery performance rather than price in selecting suppliers, and suppliers were involved in quality training.

Suggestions for future studies

This study suggests the following: further studies may be done to explore other factors other than quality leadership, strategic planning, customer focus and supplier focus and their application on the performance of KTDA factories. Further studies may be done to relate these factors to other variables like information management, human resource focus, process management and organizational specific results. Further studies may also be done on qualitative management initiatives like ISO standards and statistical quality control. In addition, similar studies may have done in other sectors especially the public sector.

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