# INFLUENCE OF IMPLEMENTATION OF QUALITY MANAGEMENT SYSTEM ON OPERATIONAL PERFORMANCE OF TECHNICAL TRAINING INSTITUTIONS IN MERU COUNTY: A CASE OF NKABUNE TECHNICAL TRAINING INSTITUTE, KENYA

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International Academic Journal of Information Sciences and Project Management (IAJISPM) | ISSN 2519-7711

Received: 24<sup>th</sup> July 2017

Accepted: 31<sup>st</sup> July 2017

Full Length Research

## **Available Online at:**

http://www.iajournals.org/articles/iajispm\_v2\_i1\_370\_389.pdf

**Citation:** Njenga, E. W. & Kidombo, H. (2017). Influence of implementation of quality management system on operational performance of technical training institutions in Meru County: A case of Nkabune Technical Training Institute, Kenya. *International Academic Journal of Information Sciences and Project Management, 2*(1), 370-389

## ABSTRACT

The purpose of this study is to examine the influence of implementing quality operational management system on performance of technical training institutions. The study's specific objectives were: to establish the influence of Training on operational performance; To establish the influence of Leadership on operational performance; To establish the influence of Employee involvement on operational performance; To establish the influence of Communication on operational performance and to establish the influence of Customer focus on operational performance of technical training institutions in Meru County. The target population of 95 comprising top, middle and low level management staff in Nkabune technical training institute was considered for the study. The study adopted a census sampling method where all the respondents was considered. Data was analyzed using Statistical Package for Social Sciences (SPSS Version 22.0). All the questionnaires received were referenced and items in the questionnaire were coded to facilitate data entry. After data cleaning, which entailed checking for errors in entry, descriptive statistics such as frequencies, percentages, mean score and standard deviation was estimated for all the quantitative variables and information presented inform of tables and graphs. Inferential data analysis was done using Pearson correlation analysis. The study found that there is a greater influence of leadership style on operational

technical training performance of institutions in Meru County. The study revealed training influence operational performance of technical training institutions greatly. Customer focus was found to greatly operational performance of technical training institution. Communication was revealed to greatly performance operational of technical training institution. The study concluded that there is a greater influence of leadership style on operational performance of technical training institutions in Meru County. The study concluded that training influence operational performance of technical training institutions greatly. The concluded that the employee study involvement greatly influences operational performance of technical training institution in Meru County. Customer focus was concluded to greatly operational performance of technical training institution. Communication was further concluded to greatly operational performance of technical training institution. The study recommends that that technical training institution, in order to improve operational its performance, need to be aware that leadership styles are important and specifically transformational and participative leadership styles and these should be implemented in the organisation.

Key Words: quality management system, operational performance, technical training institutions, Meru County, Nkabune Technical Training Institute, Kenya

## **INTRODUCTION**

The application of standardized quality system models in business is considered to be a most important phenomenon in quality management and globalization. According to the latest statistics released by ISO that at the end of 2005,161 countries accounted for 776,608 certifications. Such an impressive number does indeed make ISO 9000 a universal and significant phenomenon (Jan & Lin, 2008). The ISO 9000 family addresses various aspects of quality management and contains some of ISO's best known standards. The standards provide guidance and tools for companies and organizations who want to ensure that their products and services consistently meet customer's requirements, and that quality is consistently improved. Standards in the ISO 9000 family include: ISO 9001:2008 which specifies the requirements of a quality management system; ISO 9000:2005 which covers the basic concepts and language while ISO 9004:2009 focuses on how to make a quality management system more efficient and effective. In addition ISO 19011:2011 sets out guidance on internal and external audits of quality management standards.

Globally, quality management system (QMS) presents a strategic option and an integrated management philosophy for organizations which allow them reach their objectives effectively and efficiently, and to achieve sustainable competitive advantage (Goldenberg & Cole, 2002). Research has been done with regard to the implementation of quality management. Pheng and Jasmine (2014) pointed out that with the adoption of total quality management (TQM) there is the benefit of higher customer satisfaction, better quality products and higher market share. Customer satisfaction is one of the prime objectives of TQM and it is the most widely discussed approach to directing organizational efforts towards the goal of TQM. Nearly 900,000 organizations in 170 countries have adopted the ISO 9001 Quality Management System standard. This is a remarkable figure given the lack of rigorous evidence regarding the standard's effect on organizational practices and performance. Implementing a quality management system that conforms to ISO 9001 entails documenting operating procedures, training, internal auditing, and corrective action procedures. It also requires that procedures to improve existing procedures be implemented. The notion of quality in business focuses on the savings and additional revenue that organizations can realize if they eliminate errors throughout their operations and produce products and services at the optimal level of quality desired by their customers (Dale, 2002)

A survey in the Australia and New Zealand region based on manufactures and Services Companies was carried out by Mei et al (2006). The study demonstrated a positive weak effect on business performance. Moreover the study concluded that ISO 9000 itself does not lead to improvement in business performance. Smite and Brede (2006) concluded in their study that even though a company might be certified in accordance with ISO standard; it doesn't prove successful implementation and usage of the company's quality system. Kumar and Balakrishnan (2011) found few negative impacts in many areas of 100 contractors from UAE responders; more than half of it, found the same level of customer satisfaction before and after ISO certification, as well as documents volume was increased after ISO certification. In the context of ISO 9001

implementation in food manufacturing industry, the effectiveness of ISO 9001implementation still becomes a fundamental issue. This is because there is no measurement instrument of ISO 9001 implementation effectiveness in food manufacturing companies that is widely accepted (Oztas et al 2011). In fact, researchers who propose the measurement instrument of the effectiveness of ISO 9001 implementation in food manufacturing companies are still very limited (Psomas et al 2013).

In the African perspective, Masejane (2012) in South Africa focused on the application of TQM to improve organizational performance in one of the municipalities. He concluded that TQM can be and is a viable approach of improving productivity and performance in the public sector. Moono and Kasongo (2011) carried out a study in 2011 in Zambia. They found out that top management commitment and availability of resources were some of the factors that lead to successful implementation of TQM in Zambian tourist sector. Locally, Karani and Bichanga (2012) found out that effective management leads to improved performance hence a need to put more emphasis on all TQM principles. Something worth noting is that all the above studies focused more on TQM implementation and relationship of TQM practices and any one of the market strategies. Other scholars such as Maina (2012) concluded that, total quality brings forth competitive advantage. Awino, Maina Ogutu and Kerubo (2012) also observed that total quality has a strong and positive impact on competitive advantage. In the Kenyan context, it is discovered that the level of implementation of total quality is low. However, those implementing total quality are getting benefits similar to those in developed countries. However, there are contradictions in studies conducted in developing countries (Karani & Bichanga, 2012).

The Kenya's Basic Education Act, 2013 gives the Cabinet Secretary the responsibility for the overall governance and management of basic education to all children at national and county levels. According to Teh et al. (2008), senior leaders and the management do guide the organization and assess the organizational performance. Frequent use of effective leadership practices resulted in greater school improvement progress and school effectiveness learning climate (Orr & Orphanos, 2011). Managers must be involved in the effectiveness of TQM and they must provide vision, reinforce values emphasizing quality, set goals, allow free flow of information, ensure training and development of staff, deploy resources for the quality programs and monitor the progress of the same (Harold and Heinz 2010). It is a concern that students in public secondary schools perform poorly in national examinations. Quality management is a source of enhancing organizational performance through continuous improvement in organizations activities (Teh et al., 2009). School management influences how students learn, and good management helps ensure that school adheres to quality.

# **Implementation of Quality Management Standards**

Strong internal motivation or willingness to improve organization's quality helps establish a quality management system that leads to external benefits such as the improvement of the organization's position in the market as well as to internal benefits. Continuous improvement of

processes, people and system, the reward system, team work, the measurement of performance and communication during the post-certification period are all critical success factors for the sustainable quality management system and for successful results of ISO 9000 certification. Quality auditors are in a powerful position to increase the value of certifications. Value-added audit may not only produce data for the use in granting a certificate, for improving documentation or for enforcing conformity, but also for making managerial decisions concerned with economy, staff development, technology, growth, product and processes, because these decisions are based on current performance (Naceur & Abdullah, 2005).

#### **Technical Training Institutions in Kenya**

In pre-colonial Kenya, learning for each generation of youth was through traditional apprenticeship where learners observed masters and gradually developed abilities to execute required tasks. TVET in the early 80s received major focus from the government. The country faced a serious shortage of employment and the leadership felt that skilled training could be the panacea to the problem. In tandem with stimulating the informal sector, the government re-introduced technical education within the newly established 8-4-4 curriculum. This initiative required all schools in the country, both primary and secondary, to establish appropriate facilities through community effort, for the teaching of vocational subjects. These were to be compulsory and would be tested by the Kenya National Examination Council.

Currently, Technical, Vocational Education and Training (TVET) in Kenya is viewed as the kind of education that provides learners with the technical skills that can be used generally in technical fields. The localized term, Technical, Industrial, Vocational, Entrepreneurship and Training (TIVET) is used to describe all the TVET programmes under the Ministry of Higher Education, Science and Technology. These programmes are designed to prepare skilled personnel for various positions in industry and the informal sector. These subjects differ significantly at different levels. However, the main offering of the TVET subjects is at the National Polytechnics, Institutes of Science and Technology (IST), Technical Training Institutes (TTIs) and Youth Polytechnics. National Polytechnics in Kenya offer certificates, diplomas, and higher national diplomas. Those designated as IST were formerly institutions constructed through community efforts and TTIs are the upgraded technical secondary schools. In practice there is little difference in what (IST and TTIs offer which is generally diploma and certificate courses. There is a healthy enrolment of students in these TVET institutions ensuring that they can raise adequate resources to run their affairs. Enrolment is, however, skewed towards more academic programmes such as ICT, human resources, accounting, management and other business courses. Enrolment in the more practical courses such as mechanical, automotives, building construction trades are much lower but in some TTIs technical courses have a high enrolment such as food and beverage courses. Youth Polytechnics have generally admitted post primary school leavers into courses that culminate in a trade certificate.

At the present time TVET is provided by several government departments in addition to the Ministry of Higher Education. These include the Ministries of Defence; Youth and Sports; and Labour. The government has developed a blue print to establish an independent TVET authority that is yet to be approved by the Legislature. The umbrella body would coordinate all TVET activities under one organization to be known as TIVET Authority or in short TIVETA. Clearly there is room for expansion at all levels as increased access to general education has created a large pool of youth looking for training in various fields. Although University education is the preferred choice of the larger proportion of the youth, the sheer number of those completing secondary education with the minimum entry requirement cannot find places in higher education. TVET institutions remain the alternative choice for most. There are also initiatives to improve the Youth Polytechnics (formerly known as Village Polytechnics) to bring them to standards that would enable them to provide training to post-secondary applicants. In the past they catered to mostly primary school leavers.

## **STATEMENT OF THE PROBLEM**

ISO 9000 certification can deliver business benefits, but the managers of organizations should carefully design the ISO 9000 implementation strategy. In this respect, it is important to realize the necessity to align quality programmes with business strategies to ensure that efforts reflect the long-term goals of an organization. Control-oriented organizations get benefits from ISO 9001 certification (Pivka, 2014). This is the case in TVET programs in Kenya because they have not been able to fully integrate their systems to achieve the benefits of QMS. Terlaak and King (2012) established that, the implementation of practices such as ISO 9000 could raise organizational performance and result in real competitive advantage. Kaynak (2013) found out that there is underlined importance and causal relationship between quality management practices and competitive advantage. These studies suggested positive relationship between quality management system and practices and organizational performance.

Several researchers have reported that TQM implementation has led to improvements in quality, productivity, and competitiveness in only 20-30% of the firms that have implemented it (Benson, 2013; Schonberg, 2012). However, Burrows (2012) reported a 95% failure rate for initiated TQM implementation programs; Eskildson (2014) reported that TQM implementation has uncertain or even negative effects on performance. Longenecker and Scazzero (2013) indicated that achieving high product quality and pursuing successful TQM implementation are highly dependent on top management support. Locally, (Thuo, 2013; Mang'unyi & Chege, 2014; Chepkoech, 2015; Guchu & Mwanaongoro, 2014) did study in relation to quality management. However, none of the above scholars has considered factors affecting implementation of total quality management in the technical training institutions in Kenya.

#### **GENRAL OBJECTIVE**

The study was to examine the influence of implementing quality management system on operational performance of technical training institutions in Meru County.

#### **SPECIFIC OBJECTIVES**

- 1. To establish the influence of training on operational performance of technical training institutions in Meru County
- 2. To establish the influence of leadership on operational performance of technical training institutions in Meru County
- 3. To establish the influence of employee involvement on operational performance of technical training institutions in Meru County
- 4. To establish the influence of communication on operational performance of technical training institutions in Meru County
- 5. To establish the influence of customer focus on operational performance of technical training institutions in Meru County

## THEORETICAL REVIEW

#### Deming's System of Profound Knowledge Model

With deceptively simple concepts and plain language Dr Deming challenges the prevailing style of management. He describes the knowledge necessary for transformation in four parts, all related to each other: Appreciation of a system; Knowledge about variation; Theory of knowledge and Psychology. One need not be eminent in any part nor in all four parts in order to understand it and apply it. The 14 action points for management (as listed below) follow naturally as the application of this knowledge (Deming, 1982). The various segments of the system of profound knowledge proposed cannot be separated. They interact with each other. Thus knowledge of psychology is incomplete without knowledge of variation, appreciating the system and so on.

Deming therefore listed the following as guidelines to guide managers out of a crisis. This action points for management follow naturally as application of the System of Profound Knowledge, for transformation from the present style of management to one of optimization. Create constancy of purpose toward improvement of product and service, with the aim to become competitive and to stay in business, and to provide jobs; adopt the new philosophy. Cease dependence on inspection to achieve quality. Eliminate the need for inspection on a mass basis by building quality into the product in the first place; end practice of awarding business on the basis of price tag, instead minimize total cost. Move toward a single supplier for any one item, on a long-term relationship of loyalty and trust; improve constantly and forever the system of production and service, to improve quality and productivity, and thus constantly reduce costs; institute training on the job; institute Leadership; drive out fear, so that everyone may work effectively for the company; break down barriers between departments; eliminate slogans, exhortations, and targets for work force asking for zero defects and new levels of productivity; eliminate management by objective; remove barriers that rob people of their right to pride of workmanship; institute a vigorous program of education and self-improvement and put everyone to the task (Deming, 1982). Put everyone in the company to work to accomplish the transformation. Transformation is everybody's job. With this model application, management of quality was a reality. Therefore, implementation of QMS in a firm will need to be done systematically in observance of the Deming's 14 points.

## **Institutional Theory**

Several theories have been posited to explain the efficiency of implementing TQM in different settings which can be done through setting a QMS in place. Institutional theory focuses on the deeper and more resilient aspects of social structure. It considers the processes by which structures, including schemas; rules, norms, and routines, become established as authoritative guidelines for social behavior. Different components of institutional theory explain how these elements are created, diffused, adopted, and adapted over space and time; and how they fall into decline and disuse (Conti, 2013). Institution theory, takes in account Feigenbaum's concept, economic accountability, which was introduced through his emphasis on the cost impact of poor performance. He studied the economic effects caused by poor performance and characterized the relationship between widespread quality improvement performance in a nation's leading businesses to quality's long-term economic effect, with a lag of approximately 20 years from the initial conceptual introduction. However, institution theory goes further and dictates that even if the quality improvement effort have a profound effect on overall quality and in fact economy, these effort runs out with time and therefore contributes to a failed QMS implementation.

# **Organization Theory**

Redman et al (1995) define an emerging perspective in organization theory and sociology, which they term the 'new institutionalism', as rejecting the rational-actor models of classical economics. Instead, it seeks cognitive and cultural explanations of social and organizational phenomena by considering the properties of supra-individual units of analysis that cannot be reduced to aggregations or direct consequences of individuals' attributes or motives.

Ellen (2010) indicates that, in order to survive, organizations must conform to the rules and belief systems prevailing in the environment, because institutional isomorphism, both structural and procedural, will earn the organization legitimacy. Service organizations operating in different regions of a country with varying institutional environments will face diverse pressures. Some of those pressures in host and home institutional environments are testified to exert fundamental influences on competitive strategy (Janakiraman & Gopal, 2012) and human resource management (HRM) practices such as employee involvement and human resource development.

Further, pursuance of total quality in a bid to win competitive advantage is geared mainly in offering better satisfaction to the customers. Crosby encouraged the pursuit of zero defects and application of Feigenbaum's cost of poor quality indicator as the business measurement standard to assess nonconformance to customer requirements (Womack & Roos, 2010). In relation to organizational theory of total quality management, Deming contributed to the quality body of knowledge through his advocacy of quality principles to help management achieve profound knowledge of business processes using statistical tools to enhance quality in their firms (Deming, 1982). In fact, Deming's indicated that improving quality will reduce expenses while increasing productivity and market share.

## **Invitational Theory**

Briefly, invitational theory advocates for personal and professional practices that transform and energize the people, places, programs, processes and policies involved in educational and other types of helping relationships that is needed in any quality improvement exercise. Its goal is to establish environments that intentionally invite people to realize their full potential through training. Invitational education is the specific application of this theory of practice in settings where new processes and techniques of doing things are required (Purkey & Schmidt, 2009). The invitational approach encourages empowerment, growth and development by invitations, which are defined as the process of extending positive messages to oneself and others (Combs, Avila & Purkey, 2010). As such, it rejects the psychoanalytic belief that behavior is the result of unconscious forces, as well as the traditional behaviorist view that behavior is caused by stimulus, response, reinforcement and reward. Invitational approaches operate according to four fundamental assumptions common to helping relationships as well as the beliefs of perceptual psychology and self-concept theory: trust, respect, optimism and intentionality (Purkey & Schmidt, 2009). These four characteristics provide a consistent "stance" by which people create and maintain environments that encourage the optimal development of competence that are needed in quality improvement. Therefore, it can be viewed that invitation theory proposes development of systems to invite professionals into building quality. Drucker emphasized management based systems to improve manufacturing performance and business practices to maintain and build quality.

## SUMMARY AND RESEARCH GAPS

According to the literature reviewed here, it is evident that implementation of QMS is a factor of good training. Trained worker is a better informed worker who will improve on quality. He will make less operational mistakes hence help in implementation of Quality standard in the technical training institution. Training increases the level of performance of workers hence increased productivity. Training helps workers implement a new technique that requires new skills like QMS. Training addresses a performance gap in work place. Training reduces waste and improves on quality. It reduces accidents and makes workers multitask hence making them a cushion for the organization in case an employee exits.

QMS processes are aimed at ensuring that organizations meet and exceed customer needs, by continuous improvement of processes, which leads to higher quality products and services. Various studies previously have been done in relation to quality management. Thuo (2013) studied adoption of ISO 9001 quality management standard and operational performance of service organizations in Kenya. Mang'unyi and Chege (2014) studied factors affecting implementation of total quality management in the soft drink industry in Kenya: a case study of Nairobi bottlers limited. Chepkoech (2015) investigated factors influencing implementation of total quality management in manufacturing firms, Guchu, and Mwanaongoro (2014) studied ISO quality management system implementation for small to medium manufacturing firms Kenya, Kimani (2014) studied total quality management and product differentiation in agricultural state corporations in Kenya, Mang'ira (2014) assessed the application of quality management in the provision of information services in libraries in today's information age while Mokamba (2015) also studied the influence of quality management system on the relationship between internal factors and performance of Kenyan public universities. However, none of the above scholars has considered factors affecting implementation of total quality management in Nkabune Technical Training Institute, Kenya creating a research gap that this study seeks to fill.

## **RESEARCH METHODOLOGY**

The study adopted a descriptive research design. A descriptive design is concerned with determining the frequency with which something occurs or the relationship between variables (Sekaran, 2011). The target population of the study was 95 top middle level and low level management staff in Nkabune technical training institute. This study adopted a stratified and simple random sampling technique. Stratified random sampling is unbiased sampling method of grouping heterogeneous population into homogenous subsets then selecting within the individual subset to ensure representativeness. Primary data was obtained using self-administered questionnaires while secondary data was obtained using data collection sheet. The questionnaire was made up of both open ended and closed ended questions were used so as to encourage the respondent to give an in-depth and felt response without feeling held back in illuminating of any information and the closed ended questions allow respondent to respond from limited options that had been stated.

The researcher obtained an introduction letter from the university which was presented to each manager so as to be allowed to collect the necessary data from the respondents. The drop and pick method was preferred for questionnaire administration so as to give respondents enough time to give well thought out responses.

Data was analyzed using Statistical Package for Social Sciences (SPSS Version 22.0). All the questionnaires received were referenced and items in the questionnaire were coded to facilitate data entry. After data cleaning which entailed checking for errors in entry, descriptive statistics such as frequencies, percentages, mean score and standard deviation was estimated for all the

quantitative variables and information presented inform of tables. Inferential data analysis was done using Pearson correlation analysis. Pearson correlation coefficient was used to determine the strength and the direction of the relationship between the dependent variable and the independent variable. The analysis using Pearson's product moment correlation was based on the assumption that the data is normally distributed and also because the variables are continuous.

## **RESEARCH FINDINGS**

## **Pearson Correlation Analysis**

According to Ward (2013), correlation technique was used to analyse the degree of association between two variables. Pearson correlation coefficient was used to determine the strength and the direction of the relationship between the dependent variable and the independent variables. The analysis using Pearson's product moment correlation was based on the assumption that the data is normally distributed and also because the variables are continuous.

|                          |                        | Operational<br>Performance | Leadership<br>Style | Training | Employee<br>Involvements | Customer Focus | Communication |
|--------------------------|------------------------|----------------------------|---------------------|----------|--------------------------|----------------|---------------|
| Operational              | Pearson                | 1                          |                     |          |                          |                |               |
| Performance              | Correlation            | 1                          |                     |          |                          |                |               |
| <b>.</b>                 | Sig. (2-tailed)        | •                          |                     |          |                          |                |               |
| Leadership<br>Style      | Pearson<br>Correlation | 0.646                      | 1                   |          |                          |                |               |
|                          | Sig. (2-tailed)        | 0.023                      |                     |          |                          |                |               |
| Training                 | Pearson<br>Correlation | 0.744                      | 0.513               | 1        |                          |                |               |
|                          | Sig. (2-tailed)        | 0.027                      | 0.026               |          |                          |                |               |
| Employee<br>Involvements | Pearson<br>Correlation | 0.522                      | 0.423               | 0.0.327  | 1                        |                |               |
|                          | Sig. (2-tailed)        | 0.028                      | 0.012               | 0.018    |                          |                |               |
| Customer Focus           | Pearson<br>Correlation | 0.734                      | 0.533               | 0.520    | 0.431                    | 1              |               |
|                          | Sig. (2-tailed)        | 0.042                      | 0.009               | 0.002    | 0.014                    |                |               |
| Communication            | Pearson<br>Correlation | 0.623                      | 0.533               | 0.420    | 0.321                    | 1              | 1             |
|                          | Sig. (2-tailed)        | 0.037                      | 0.009               | 0.002    | 0.014                    |                | -             |

#### Table 1: Correlation Matrix

The study computed into single variables per factor by obtaining the averages of leadership style, training, employee involvements, customer focus and communication. Pearson's correlations analysis was then conducted at 95% confidence interval and 5% confidence level 2-tailed. The

table above indicates the correlation matrix between the factors (leadership style, training, employee involvements, customer focus and communication) and operational performance of technical training institution.

As per the Table there is a positive relationship between operational performance of technical training institution and leadership style as shown by coefficient of 0.646, a positive relationship between operational performance of technical training institution and training as shown by coefficient of 0.744, a positive relationship between operational performance of technical training institution and employee involvements as expressed by coefficient of 0.522, a positive relationship between operational performance of technical training institution and customer focus as illustrated by a coefficient of 0.734 and a positive relationship between operational performance of technical training institution as shown by of magnitude 0.623. This shows all variable were significant in determining the influence of implementation of quality management system on operational performance of technical training institutions in Meru County.

# DISCUSSION

# Leadership style

The study found that there is a greater influence of leadership style on operational performance of technical training institutions in Meru County. It was further indicated that visionary leadership, that delegation of duties and that provision of leadership greatly influence operational performance of technical training institutions in Meru County. This is in line with Kumar (2012) who claim that the leader is the one that promotes the importance of quality in the organization, provides conditions for continuous education and training of employees, as well as maintaining constant contacts with the employees, customers and suppliers.

Further it was revealed that inspiring, empowerment and recognizing staff contribution, that quality Vision, that management support, managerial enthusiasm and that provision of resources greatly influence operational performance of technical training institutions in Meru County. It was also showed that encouraging team work and performance appraisal bureaucracies and that role modelling moderately influence operational performance of technical training institutions in Meru County. These findings are similar to Dennis (2013) who commenting on the role of leadership said that the top management has to lead the way in propagating the reasons for the implementation and the organizational benefits that can be expected by a QMS.

# Training

The study revealed training influence operational performance of technical training institutions greatly. It was also revealed that employee's autonomy to develop their skills, that career development opportunities, that relevance of training and that setting goals and monitoring employees' achievement influence operational performance of technical training institutions

greatly. This is in line with Curtis (2013) who defined training as a systematic process of changing the behavior, knowledge and motivation of present employees to improve the match between employee's characteristics and employment requirements.

They also illustrated that induction and orientation, that having quality circles and improvement groups for channelling suggestions and that form of training (on job or off job) influence operational performance of technical training institutions in a great extent. However, the participants indicated that career progression and that training policy influence operational performance of technical training institution in a moderate extent. This concur with Frederick (2009) who argue that training refers to the process of passing along the skills, knowledge and attitude or know how through carefully selected methods according to a well-conceived plan by comment and well prepared people, in a suitable learning environment to help equip a trainee for his assigned job or responsibility.

## **Employee Involvement**

The findings showed that employee involvement greatly influences operational performance of technical training institution in Meru County. It was indicated that much more responsibility on the side of employees, that cooperation, division of labour and that increased job satisfaction greatly influence operational performance of technical training institution. This conforms to Yang (2013) who claim that gain sharing plans, profit sharing plans, and employee ownership can provide employees with a strong motivation for making suggestions that can contribute to the kind of quality and customer satisfaction oriented culture that is necessary for QMS programs to be successful

The participants also indicated that involvement in decision making, that individual job enrichment through employee involvement, that information sharing and consultations and that teamwork/ collaboration greatly influence operational performance of technical training institution. The participants also indicated that intrinsic motivation and that high skill acquisition moderately influence operational performance of technical training institution. This concurs with Rad (2010) who said that most large corporations have a program that incorporates some of the practices and principles of total quality management.

It was also indicated that employee participates in organization decision making and that staff establish quality improvement teams, corrective action teams and suggestion schemes greatly influence operational performance of technical training institution. From the same results, it was also indicated that management empower employee and encourage innovation and that employee involvement leads to intrinsic motivation and job satisfaction greatly influence operational performance of technical training institution. This is similar to Taylor and Wright (2013) who noted that, it, too, is becoming increasingly popular. One possibility, as suggested by QMS programs, is that employee involvement is best thought of as an activity which supports a QMS program.

Finally, the findings showed that the institution uses participative management approach moderately influence operational performance of technical training institution. This concur with Huq (2010) who argue that it is quite possible that some of the reward system practices which are advocated by employee involvement programs can improve QMS efforts.

#### **Customer Focus**

Customer focus was found to greatly operational performance of technical training institution. The participants revealed that complaint handling enhances customer satisfaction and that modernity of the office equipment influence operational performance of technical training institution greatly. The study also revealed that timely services helps to achieve organizational excellence, that effective communication enhances employee satisfaction and that service credibility ensures customer satisfaction greatly influence operational performance of technical training institution. The study showed that customized services moderately influence operational performance of technical training institution. The participants revealed that in a great extent management focuses QMS Implementation on customer satisfaction and management ensures continual improvement in implementation of QMS influence operational performance of technical training institution. They also showed that organization establishes and understands current and future customer needs, that management response to customers' complaints in timely manner and that management measures customer satisfaction and rectifies where necessary greatly influence operational performance of technical training institution. These findings are in line with Huq (2010) who argue that every employee, at every level, in every function, is totally involved with continuous improvements and focused on customer satisfaction to attain total quality management it is important for an organisation to implement a QMS. They finally illustrated that organization ensures that it communicates and balances the needs and expectations of all customer's moderately influence operational performance of technical training institution. These were according to ISO (9001: 2008) which claim that standard customer focus means putting your energy into satisfying customers and understanding that profitability comes from satisfying customers. Expectations are created by the market place or a dominant supplier. According to this management principle, it is important to research, establish and understand current and future customer needs and expectations, ensure objectives of the organization are linked to customer needs and expectations, communicate customer needs and expectations throughout the organization, measure customer satisfaction and act on result, systematically manage customer relations and ensure a balanced approach between satisfying customers and other interested parties.

## Communication

Communication was revealed to greatly operational performance of technical training institution. The participants revealed that external communication and those personal relationships influence operational performance of technical training institution greatly. The study also revealed that level of interaction greatly influences operational performance of technical training institution

while creativity and innovation moderately influence operational performance of technical training institution. The participants revealed in a great extent communication serves the purpose for which it was planned or designed and dissipating communication provides possibilities especially when an organization is in crisis and solving the problems requires innovation and creativity influence operational performance of technical training institution. They also showed that communication occurs when a desired effect is the result of intentional or unintentional information sharing and that integrating communication is closely connected with traditional quality thinking. They finally illustrated that communication is a central phenomenon in all business activities, interaction between people, and also in nature moderately influence operational performance of technical training institution. They finally illustrated that organization ensures that it communicates and balances the needs and expectations of all customers' moderately influence operational performance of technical training institution. These findings were according to ISO 9001:2015 standard, which claims that an organization shall determine internal and external communication relevant to the QMS including on what to communicate, when to, with whom, how and who to communicate to.

## CONCLUSIONS

The study concluded that there is a greater influence of leadership style on operational performance of technical training institutions in Meru County. It was deduced that visionary leadership, that delegation of duties and that provision of leadership greatly influence operational performance of technical training institutions in Meru County. Further it was revealed that inspiring, empowerment and recognizing staff contribution and that provision of resources greatly influence operational performance of technical training institutions in Meru County. It was also showed that encouraging team work and performance appraisal bureaucracies and that role modelling moderately influence operational performance of technical training institutions in Meru County.

The study concluded that training influence operational performance of technical training institutions greatly. It was deduced that employee's autonomy to develop their skills, that career development opportunities, that relevance of training and that setting goals and monitoring employees' achievement influence operational performance of technical training institutions greatly. They also illustrated that career progression and that training policy influence operational performance of technical training numbers of technical training institutions and that training policy influence operational performance of technical training institutions.

The study concluded that the employee involvement greatly influences operational performance of technical training institution in Meru County. It was deduced that much more responsibility on the side of employees and that increased job satisfaction greatly influence operational performance of technical training institution. The study also deduced that intrinsic motivation and that high skill acquisition moderately influence operational performance of technical training institution. It was also indicated that employee participates in organization decision making and that staff establish quality improvement teams, corrective action teams and suggestion schemes greatly influence operational performance of technical training institution. The study also deduce that management empower employee and encourage innovation and that employee involvement leads to intrinsic motivation and job satisfaction greatly influence operational performance of technical training institution. Finally, the study deduced that the institution uses participative management approach moderately influence operational performance of technical training institution.

Customer focus was concluded to greatly operational performance of technical training institution. The study deduced that complaint handling enhances customer satisfaction and that modernity of the office equipment influence operational performance of technical training institution greatly. The study also deduced that timely services helps to achieve organizational excellence and that service credibility ensures customer satisfaction greatly influence operational performance of technical training institution. Finally, the study deduced that customized services moderately influence operational performance of technical training institution. They study also deduced that organization establishes and understands current and future customer needs, that management response to customers' complaints in timely manner and that management measures customer satisfaction and rectifies where necessary greatly influence operational performance of technical training institution.

Communication was further concluded to greatly operational performance of technical training institution. The study deduced that external communication and those personal relationships influence operational performance of technical training institution greatly. The study also deduced that in a great extent communication serves the purpose for which it was planned or designed and dissipating communication provides possibilities especially when an organization is in crisis and solving the problems requires innovation and creativity influence operational performance of technical training institution. It was also deduced that communication occurs when a desired effect is the result of intentional or unintentional information sharing and that integrating communication is closely connected with traditional quality thinking. They study also deduced that communication is a central phenomenon in all business activities moderately influence operational performance of technical training institution.

## RECOMMENDATIONS

The study recommends that that technical training institution, in order to improve its operational performance, need to be aware that leadership styles are important and specifically transformational and participative leadership styles and these should be implemented in the organisation. This will ensure all those who are management participate in decision making as well as planning in the institution.

This study also recommends that organizations should use the various leadership styles characteristics of participative and transformational leadership. These characteristics are, among others, establishing direction, developing a culture that encourages excellent performance and

providing forums for strategic formulation and ownership. This will in turn greatly influence the operational performance of technical training institution with regard with achieving its set goals.

The study revealed that employees' involvement is a factor in operational performance and that employees' involvement positively influences operational performance of technical training institution. The study therefore recommends that delegating authority and empowering employees should be introduced. This will empower those who are young in management as well as enabling leadership practice.

Also, there is a need to develop better human resource integration to improve corporate strategy by creating links between organizational and employee development. Further, enhanced communication with employees is recommended. However, this should not only apply to the strategy managers, but also to other managers, particularly line managers who must be aware of using appropriate communication skills to encourage and even criticize their immediate staff, for purposes of quality improvement.

Further the study recommends that the senior management should be requested to continue keeping junior staff aware of the operational performance within the technical training institution and the quality policy in terms of its contents and impact on their work environment as well as to review management commitment in terms of role model behavior and effective communication of quality initiatives within the organization.

Finally the study recommends that that a proactive awareness programme should be developed and implemented to educate all employees that quality is their responsibility, as it is everyone's responsibility. Additional awareness needs to be conducted to communicate to the staff that the functional quality units exist in the organization, only to provide specialist skills to assist employees in making quality their own responsibility.

# REFERENCES

- Audretsch, D. B., Falck, S. O., Heblich. &Lederer. (2011). *Handbook of Research on Innovation* and Entrepreneurship. Cheltenham, UK: Edward Elgar.
- Awino, Z., Muchara, M., Ogutu, M. & Oeba, L. K. (2012). Total quality and competitive advantage of firms in the horticultural industry in Kenya, *Prime Journal of Business Administration and Management (BAM)*, 2(4), 521-532
- Benson, T. (2013). TQM: A child takes a first few faltering steps. Industry Week, 242(7), 17.
- Bridget, F. & Lewin, T. (2011). *Research Methodology. Methods and Techniques*. (2nd ed.) New Delhi: New Age International.
- Chepkoech, K. (2015). Service quality and customers' behavioral intentions: Class and mass banking and implications for the consumer and society. *Asia Pacific Journal of Marketing and Logistics*, 27(5), 735-757.

- Conti, T. (2013), From standard based quality to total quality, International Conference on Total Quality, Athens,
- Dahlgaard, J.J., Kristensen, K., Kanji, G.K. (2013) TQM –leadership, Total Quality Management: proceedings of the first world congress, London: Chapman & Hall.
- Deming, W. E. (1950). Lecture to Japanese Management. Translation by Teruhide Haga. Accessed: 2012-11-10.
- Edwards, J. R. (2014). Person-job fit: a conceptual integration, literature review, and methodological critique. *International Review of Industrial and Organizational Psychology*, 6,283–357.
- Ellen, U. (2010). American quality foundation, international quality study: The definitive study of the best international quality management practices. Cleveland, OH: Ernst & Young.
- Eskildson, L. (2014). Improving the odds of TQM's success. Quality Progress, 27(4), 61-63.
- Feigenbaum, A. V. (1983). Total Quality Control, 3 Ed., McGraw-Hill.
- Frederick, J. (2009). Managing Quality, The Free Press, New York
- Guchu, G. & Mwanaongoro, Z. (2014). Iso Quality Management System Implementation for Small to Medium Manufacturing Firms Kenya. In Proceedings of Sustainable Research and Innovation Conference (pp. 140-143)
- Harold K. B. & Heinz V. R. (2013). Quality awards and the market value of the firm: An empirical investigation. *Management Science*, 42(3), 415-436.
- Huq, Z. (2010). Managing change: a barrier to TQM implementation in service industries, Managing Service Quality, 15(5), 452-469
- Jagdeep, S. & Singh, H. (2012). Continuous improvement approach: state-of-art review and future implications, *International Journal of Lean Six Sigma*, 3(2), 88 111
- Janakiraman, B. & Gopal, R. K. (2012). *Total Quality Management Text and Cases*, New Delhi, PHI Learning Pvt. Ltd.
- Karani, S. R. & Bichanga, W. O. (2012). Effects of Total Quality Management implementation on business performance in service institutions: A case of Kenya Wildlife Services. *International Journal of Research Studies in Management*, 1(1)
- Kaynak, H. (2013). The relationship between total quality management practices and their effects on firm performance. *Journal of operations management*, 21(4), 405-435.
- Kiggundu, M.N. (2009), *Managing Organizations in Developing Countries*, Kumarian Press, West Hertford, CT,

- Kimani, B. M. (2013). Quality Management Systems: Our Hope for the Future By Boniface Mwirigi Kiula.
- Kumar, P., Wadood, A., Ahuja, I.P.S. & Singh, T.P. (2011). Total productive maintenance implementation in Indian manufacturing industry for sustained competitiveness, *Proceedings of the 34th International Conference on Computers and Industrial Engineering*, San Francisco, CA, 14-16, 602-7.
- Kumar, S. (2012). Total Quality Management, New Delhi, Laxmi Publications Ltd.
- Longenecker, C. O. & Scazzero, J. A. (2013). Total Quality Management from theory to practice: A case study. *International Journal of Quality & Reliability Management*, 10(5), 24-31.
- Maina, M. (2012). Total Quality, Operations Effectiveness and Competitive Advantage in Horticultural Industry in Kenya (Doctoral dissertation, University of Nairobi).
- Mang'unyi, M. S. & Chege, K. (2014). Challenges Facing the Implementation of Corporate Social Responsibility Programs in Education Sector: A Survey of Private Primary Schools in Busia County, Kenya. International Journal of Innovative Research and Development.
- Mang'ira, R. (2014). Applying quality management in the provision of information services in libraries in today's information age.
- Masejane, T. P. (2012). Total quality management and organizational performance in the Maluti-A-Phofung municipality in the Free State Province.
- Mokamba, J. A. (2015). Influence of Quality Management System on the Relationship between Internal Factors and Performance of Kenyan Public Universities (Doctoral dissertation, JKUAT).
- Moono, M. & Kasongo, K. (2011). Factors That Lead to a Successful TQM Implementation: A Case Study on the Zambian Tourism Industry.
- Mugenda, O. M. & Mugenda, A.G. (2013). *Research Methods: Quantitative and Qualitative Approaches*, Nairobi: Act Press.
- Naceur, U. & Abdullah, K. (2005). Effect of Service quality management on the financial performance of commercial Banks in Kenya.(Unpublished MBA research project.).University of Nairobi, Nairobi, Kenya.
- Orr, U. & Orphanos, A. O. (2011). ISO 9001 quality management system audit as an organizational effectiveness evaluation tool. *International Journal of Information Technology and Business Management*, 20(1), 25-28.
- Owino A.O. (2014). Quality Management as an Outcome of Management Field Evolution: A Review. *Online Journal of Social Sciences Research*, 3(1), 1-9.

- Oztas, et al. A. O. (2011). Quality management practices adopted by sugar manufacturing companies in western Kenya. (Unpublished MBA project). University of Nairobi, Kenya.
- Pheng, G. & Jasmine, H. (2014). Evaluating the effectiveness of maintenance strategies, *Journal* of *Quality in Maintenance Engineering*, 12(1), 7-20.
- Porter, M.E, (1990). The Competitive Advantage of Nations
- Purkey, S. & Schmidt, M. (2009). A critical examination of the ability of TQM certification to lead to a competitive advantage, *Journal of Quality Management*, 4(1), 51–67.
- Rad, A. M. (2010). The impact of organizational culture on the successful implementation of total quality management, *The TQM Magazine*, 18(6), 606-625.
- Redman, T., Snape, E., Wilkinson, A. (1995). Is quality management working in the UK?, Journal of General Management, 20 (3), 44-60.
- Sekaran, U. (2011). Research Methods for Business-A Skill Building Approach. 4th ed. Singapore, John Wiley & Sons.
- Taylor, W.A. & Wright, G.H. (2013). The impact of senior managers' commitment on the success of TQM programs: an empirical study, *International Journal of Manpower*, 24(5), 535-50.
- Teddlie, C. & Tashakkori, A. (2010). Foundations of mixed methods research., Thousand Oaks, CA, Sage Publications,
- Terlaak, A. & King, A. A. (2012). The effect of certification with the ISO 9000 Quality Management Standard: A signaling approach. *Journal of Economic Behavior &* Organization, 60(4), 579-602.
- Thuo, C.M. (2013). Adoption of ISO 9001 quality management standard and operational performance of service organizations in Kenya. Unpublished MBA project. University of Nairobi, Kenya.
- Vouzas, F. & Psychogios, A.G., (2011). Assessing managers' awareness of TQM, *The TQM Magazine*, 19(1), 62-75.
- Ward, H. (2013) Handbook of Project Management Procedures. TTL Publishing, Ltd, Sidney Australia
- Womack, J. P. & Roos, D. (2010). *The machine that changed the world: Massachusetts Institute of Technology*. New York: Rawson Associates.