# INFLUENCE OF ISO 9001: 2008 STANDARDS CERTIFICATIONS TRAINING ON THE PERFORMANCE OF PUBLIC UNIVERSITIES IN KENYA

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#### Abstract

ISO standards make a positive contribution to the world and facilitate trade, spread knowledge, disseminate innovative advances in technology, and share good management and conformity assessment practices. However, despite the number of benefits in favor of ISO certification, whether the standard actually improves business performance and profitability remains debatable. Thus, this study investigated the effect of training on ISO 9001-2008 Standards Certification on the performance of public universities in Kenya. This study adopted a descriptive research design. The target population for this study comprised all the 22 public universities in Kenya. The target population was 450 respondents. The study adopted stratified, simple random sampling and purposive sampling technique. The sample size comprised of 135 respondents. Questionnaires and interviews were used as tools to collect primary data while, analysis was done using both quantitative and qualitative approaches. Data was analyzed through descriptive (frequency and percentages) and inferential statistics (person product correlation coefficient). There was a positive relationship between the ISO 9001: 2008 standards certifications training [r=.453, n=120, p<.05] and the performance. From the study training employee on ISO 9000 performance is the most important factor when it comes to improving quality in any university and training has provided evidence of the critical factors for the successful implementation of QMS and the improvement of its performance. Poor training/non present a major obstacle in the development and implementation of a quality programme and insufficient training programmes have been found to be barriers in implementing ISO 9000 standards in institutions. The study will make recommended on the need of public universities should adopt the ISO 9001:2008 certification standards to improve their performance.

Keywords: 9001: 2008, Standards, Certifications, Training, Performance

#### 1. INTRODUCTION

ISO 9001 specifies the basic requirements for a quality management system (QMS) that an organization must fulfill to demonstrate its ability to consistently provide products (which include services) that enhance customer satisfaction and meet applicable statutory and regulatory requirements (ISO, 2009). The ISO 9001 family of quality management system standards are meant to enable organizations to set up effective management systems with which they can meet the needs of interested parties and assure sustained success. The evaluation tool preferred by many organizations for feedback on system effectiveness has been third party audit with success and certification taken as an indicator of management system effectiveness (Okwiri, 2013). Since its initial publication in 1987, the number of implementations of ISO 9001

quality systems has increased year after year in the business context and it has led to a growing number of business information services being managed using these standards (Mola, 2007).

The mostly used standard for accreditation is the ISO 9001: 2008, which emphasizes on quality management systems (UNIDO, 2012). The ISO 9001:2008 systems focus on prevention, on quality of product realization and on improvement of customer satisfaction. It provides the framework and the audit requirements for the quality management system (Kawthar & Vinesh, 2011). Quality management has become increasingly present in the life of organizations. Their survival is mainly linked to the quality of their activities. The way in which each organization focuses on quality issues may vary according to the sectors and the environment where it carries out its activities and of course, the organization's own strategies (Mola, 2007). To satisfy the requirement of quality management system an organization needs to demonstrate its ability to consistently provide products that meet legal and statutory requirements and meet customer requirement. Additionally, to satisfy the requirements an organization should enhance customer satisfaction through effective application of the system including continual improvement of the system and conformity to customers and applicable statutory requirements (UNIDO, 2012).

The certification process inevitably requires significant effort with respect to designing; implementing and documenting appropriate processes, entailing both direct and indirect costs associated with consulting and audit fees, employee training (Corbett et al., 2002). Despite the number of benefits in favour of ISO certification, whether the standard actually improves business performance and profitability remains debatable (Lamport et al., 2010). According to UNIDO, (2012) in some countries the role of accreditation is not well understood by the purchasers or by the certified organizations. In addition, a number of certification bodies refuse to provide information about the organizations they certified. This in turn raises doubts about the level of transparency and openness of certification bodies and the ability of the institution to provide quality services.

Universities are responsible for themselves in resources seeking and market seeking. They need to be self-sufficient and be accountable to the stakeholders. Increasing call for accountability to performance but with less financial supports from governments has caused university managers much burden in management control (Wang, 2010). The traditional performance measurement approach by goal rational model may not be able to serve performance measurement in universities. Wang (2010) posits that performance measurement in universities should be by the distinction of academic performance and management performance based on four sub-dimensions, which include quality of education, research, finance and human resources. The four sub-dimensions construct a balanced concept for university managers in management control. In addition, universities also use Key Performance Indicators in performance measurement. There is different high level KPIs in the measurement of institutional performance from a perspective of governors in higher education, covering both financial and non-financial aspects. Academic performance is a primary indicator to most universities in performance measurement. It is an icon that people see how good or bad a university is. As universities differ, emphases on academic performance differ from one discipline to another (Wang, 2010).

In Kenya, in an effort to have a lasting and sustainable change in the way services are offered and performance managed in the public sector, the government introduced ISO certification policy requirement as a measure of quality standards in all corporations as for improvement on service delivery to Kenyans (Gichohi, 2010). To remain competitive, many Public Universities in Kenya have started the ISO 9001 certification process. ISO 9001 is part of a series generally referred to as ISO 9000 (Okibo and Kimani, 2013). The ISO 9000 family series is currently used by thousands of companies the world over to be more efficient and effective in the delivery of their products and services and ultimately to better satisfy their customers' needs (Lamport *et al.*, 2010). The reputation and sustainability of a University is dependent of its provision of high quality programmes at manageable costs (Wong, 2013).

According to Magutu et al. (2010) university education in Kenya began in 1963 with just 571 students enrolled in Nairobi University College but since then the system has undergone some expansion, and by 1998 there were a total of six public universities and 18 private universities with varying degrees of recognition in the country. Currently in Kenya, there are 22 public universities. Each public university has its own act, dating back to its date of foundation. Because each university derives its powers from its specific legal instrument, co-ordination even in the interest of standardization has not been possible (Mwiria et al, 2007). Out of the 22 public universities in Kenya 16 of them are ISO 9001:2008 certified while the rest six have not been ISO certified. The 21st century has brought challenges and opportunities for higher education in Kenya. The institutions need to understand their resources, capabilities and core competencies, which have a direct link to the institutions' ability to achieve their strategic plans and enhance their performance

(Kinyanjui & Juma, 2014).

In Kenya, studies have established that the unplanned growth of university education without commensurate rise in the level of funding is a threat to quality education at the public universities in Kenya (Gudo et al, 2011) hence; the benefits of ISO certification may not be realized. Most of the public universities in Kenya are ISO certified but their performance has been a question of concern. Student strikes have been witnessed year in and year out in most of the ISO certified public universities with most of them being blamed on poor service delivery and management.

The demand for university education in Kenya exceeds the capacity of public universities to admit all qualified KCSE candidates. The quality of education in public universities has been negatively affected to a larger extent than private universities due to the large number of admitted students against limited available resources (Gudo *et al.*, 2011). Many secondary school graduates and the working class look for opportunities to pursue university education. With the increasing numbers of students seeking places in public universities, the question of quality is critical and requires urgent attention (Gudo *et al.*, 2011). There has been a widespread perception that the quality of education and training in public universities has declined because of increased student enrolment, inadequate and outdated equipment and facilities, frequent university disturbances and low staff morale (Kinyanjui, 2007). Thus, this study aims at establishing whether training on ISO 9001: 2008 Standards Certification influences the performance of Kabianga University.

#### 2. LITERATURE REVIEW

#### 2.1 Effect of ISO 9001: 2008 Standard certifications training on Performance

Most new users of the ISO 9000 family of standards obtain measurable benefits early in the process of implementing the requirements in their operations. These initial benefits are generally due to improvements in their organization and internal communication. The benefits must be strengthened through effective internal auditing and management review of system performance. Like all systems, it either improves or becomes less effective. It does not remain static for long (ISO, 2009). ISO certification helps firms with internal improvements and strategic benefits that accompany the quality tool. An organization that obtains ISO certification fulfills a customer's quality requirements and applicable regulatory requirements, while targeting enhanced customer satisfaction and achievement of continual improvement of its performance (ISO, 2011).

A large body of literature studying the effects of ISO 9000 shares the general assumption that ISO 9001-2008 certification improves performance. A study by Thilakarathne and Chithrangani (2014) established that the principle perceived benefits of implementing ISO 9001: 2008 by certified companies are customer satisfaction, increase quality awareness, reduces the production time and concluded that concluded that there is an impact towards ISO 9001: 2008 quality management systems by certified organizations. Terlaak and King (2004) found out that, ISO certified facilities grow faster after certification, and that operational improvements do not account for this growth. Starke et al. (2012) established that ISO certification was associated with an increase in sales revenues, decrease in cost of goods sold/sales revenue and increase in the asset turnover ratios of the certified firms. In addition, Al-Refaie et al., (2012) found out that ISO 9001 certification has significant effects on quality outcomes, customer satisfaction and business performance.

Further, in Kenya Okibo and Kimani (2013) established that streamlining of processes as a result of ISO certification influences the public universities' service delivery most, followed by curricular development, teaching facilities improvement and adaptability to changing market needs. Khalonyere, (2013) examined the influence of ISO 9001 quality management systems certification on Universities' competitive advantage in Nairobi and established that there is an effect of ISO 9001 quality management systems certification to the competitive advantage of Kenya's Universities. High correlation was established between the predictor's variables, which included customer focus, leadership, involvement of people, process approach, systems approach, factual approach, continuous improvement, and closer supplier relationship, and the response variable, which was competitive advantage.

Implementing quality management system requires far more than defining objectives, planning, documentation and activation. Without proper training for employees, from entry level customer service representative to senior executives, no procedure or system can ensure effective results. Ultimately, it is the employees who put the system to operation. ISO 9001 has requirements for training which include that all employees understand how their role relates to the performance of the QMS and its relevance to them. A trained ISO 9001 implementation project manager will result in a more effective and efficient system and

implementation process. Training is essential not only to increase productivity but also to motivate and inspire workers by letting them know how important their jobs are and giving them all the information they need to perform those jobs, Kelerman (2009).

To promote awareness of the quality system, a well-planned and timely training scheme is essential. Quality training in an organization is an ongoing process. It is required not only when the quality system is first implemented but also after the system is in full operation. New staff is inducted soon after joining the company. Existing staff are also given a refresher course every now and then, especially after major changes have been made to the procedures. The implementation of quality management practices has long been associated with an increase in the provision of employee training. According to McNamara, (2001), training, in the most simplistic definition, is an activity that changes people's behavior. The author lists the following as general benefits from employee training: Increased job satisfaction and morale, increased motivation, increased efficiencies in processes, resulting in financial gain, increased capacity to adopt new technologies and methods, increased innovation in strategies and products and reduced employee turnover.

Firms pursuing a quality strategy have found it necessary to invest in 'human capital- enhancing' activities such as training, in order to enhance performance improvements in productivity and customer satisfaction. Zakuan et al., (2012), explains that employees require some training in order to manage the enlargement of their work role following the delegation of responsibilities for quality, they also require some training in non-technical skills to be able to participate in quality improvement activities and they need a broader range of skills in order to flexibly respond to changing customer and market requirements. Such training is important, not only to ensure the successful adoption of quality practice, but also to ensure the achievement of the broader quality mission of improved firm competitiveness.

Gichohi (2010) examined the factors affecting non ISO certified State Corporation in Kenya in adoption of ISO 9000 management system certification. The study used a descriptive study research design and a questionnaire to collect data, which was analyzed using factor analysis. The study established that the major reasons for not adopting ISO 9000 management system certification were investments cost and management reluctance to change. Further, the study established that the benefits derived from being ISO certified were well known to the respondents. Based on the results, the study recommended that top management of these state corporations be trained on the benefits of a corporation being ISO certified and adequate budgetary allocations to the ISO certification initiative.

Gudo et al., (2011)a explored the perceptions on the quality of service delivery in public and private universities and the opportunities for quality university education in Kenya. Data was collected in May to November 2010 from a sample of 502 university students and 127 lecturers using structured questionnaires. The study found that public universities did not have the necessary physical facilities to effectively offer service to its current student body. The study recommended that to absorb the large number of students in a double intake and offer quality education required careful investment in physical facilities, teaching and research resources, innovative Information Communication Technology and collaboration with the private universities.

Gudo et al., (2011)b investigated how effectively university managers had played their role in quality assurance. The study findings established that private universities performed better than public universities in management of quality education. However, public and private universities suffered from interference by political and religious patronage. The other barrier to provision of effective management for quality assurance among Kenyan public and private universities was found to be negative ethnicity and nepotism. In addition, the study established that Kenyan public universities suffered from insufficient teaching and learning resources and a leadership that did not satisfactorily engage its stakeholders in decision making. The study recommended that managers of the universities should deliberately take short-term leadership courses to boost their managerial skills as a significant step towards delivery of quality education.

#### 3. RESEARCH METHODOLOGY

The study adopted the descriptive survey research design that involves gathering data, describe events and then organizes, tabulates, depicts, and describes the data collection. The target population of this study was 450 respondents drawn from University of Kabianga and comprises of the university Quality assurance, Quality assurance and compliance supervisors, quality assurance teaching and non-teaching staff. The target population was 450 respondents from 5 departments of University of Kabianga. Simple random sampling was used to select the non-teaching staff for the study. This procedure ensured that all the members of population were given equal chances of being included in the sample. Purposive sampling was used to select the management staff. The researcher used purposive sampling to select all managers and

simple random sampling to select 45 teaching staff and 75 non- teaching staff. From the target population, the researcher used proportionate sampling to select 135 participants. The sample size comprise of 15 management staff, 45 teaching and 75 non-teaching staff respectively. Before collecting data from the respondents in the study area, an introductory letter was given from the University management, and the researcher then proceeds to the University with the documents. Before the actual study, the researcher conducted a pilot study at the University of Nairobi.

The main research instrument that was used in this study was questionnaire and interview schedule. The researcher constructed closed- ended and open- ended questionnaires, which was administered to employees. This allowed the researcher to draw conclusions based on comparisons made from the responses. The researcher discussed the items in the instrument with the employees of ISO and compliance department. In order to test the reliability of the instrument used in the study, the test- retest method used. Cronbach's Coefficient Alpha was used to determine the reliability of the research instrument. So a reliability coefficient of 0.8 or over, was assumed to reflect the internal reliability of the instruments (Fraenkel & Wallen, 2000). The entire questionnaire deemed as straightforward and reliable; after several typographical errors and omissions detected are corrected in the instrument, confirming that it is sufficient to be used in the main study.

After all data had been collected, the researcher conducted data cleaning, which involved identification of incomplete or inaccurate responses, thus correct to improve the quality of the responses. The research yielded both qualitative and quantitative data. The correlation analysis was used to establish the relationship between two variables. Pearson product moment Correlation Coefficient was employed to establish the relationship between training and performance of ISO 9000. After analysis, data was presented in tabular form using frequencies and percentages alongside inferential statistics.

#### 4. RESULTS

#### 4.1 Training related factors affecting the performance of ISO 9000

The objective was to establish the ISO 9001: 2008 Standards Certifications Training on the Performance in University of Kabianga. This was found to be important in determining the effect of training on performance of ISO 9000. The researcher sought to find information on the respondent's views on the training factors that may influence performance of ISO 9000 as presented in the Table 1. This was done by establishing the weighted averages and it showed that all the statements used to answer the time related factors were all above 3.6. This showed that the respondents rated the all the statements very highly in performance of ISO 9000. From the study the highest weighted average was 4.38 that training employee on ISO 9000 performance is the most important factor when it comes to improving quality in any university as well as 4.31 that training acts as a vehicle for communication, it raise skills of employees to take part in the improvement process. From the study the lowest weighted average was 3.61 that poor education and training present a major obstacle in the development and implementation of a quality programme and that the university has a clear relationship between training investment and the achievement of strategic objectives.

From the study training employee on ISO 9000 performance is the most important factor when it comes to improving quality in any university and training has provided evidence of the critical factors for the successful implementation of QMS and the improvement of its performance. Poor education and training present a major obstacle in the development and implementation of a quality programme and insufficient training programmes have been found to be barriers in implementing ISO 9000 standards in institutions.

Training of both the top management and the other personnel in the university should be appraised regularly and the university had a clear relationship between training investment and the achievement of strategic objectives towards performance of ISO 9000. Training as an important factor to the QM change process and provides initial awareness of the fundamentals of ISO 9000 and acts as a vehicle for communication, it raise skills of employees to take part in the improvement process. Training helps the employees in the university to reform their attitudes towards attaining the set quality standards and performance of ISO 9000.

Table 1: Training related factors affecting the performance of ISO 9000

Statement

Strongly agree

Agree

Undecid Disagree

Strongly disagree

%

55.8

F

67

Training employee on ISO 9000

performance is the most important

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45

%

37.5

F

%

F

3

%

2.5

е

F

5

%

4.2

4.38

					1	1	1	1			
Training has provided evidence of the critical factors	31	25.8	81	67.5					8	6.7	4.06
Poor training present a major	33	27.5	44	36.7	1	11.	21	17.	8	6.7	3.61
obstacle in the development and					4	7		5			
implementation											
Insufficient training programmes have	35	29.2	59	49.2	3	2.5	15	12.	8	6.7	3.82
been found to be barriers in								5			
implementing ISO 9000											
The training of both the top	46	38.3	57	47.5	6	5.0	6	5.0	5	4.2	4.11
management in the university should											
be appraised regularly											
The university has a clear relationship	29	24.2	44	36.7	2	22.	11	9.2	9	7.5	3.61
between training investment					7	5					
Training as an important factor to the	36	30.0	69	57.5	4	3.3	8	6.7	3	2.5	4.06
QM change process and provides											
initial awareness											
Training acts as a vehicle for	51	42.5	60	50.0	4	3.3	5	4.2			4.31
communication, it raise skills of											
employees to take part in the											
improvement process.											
Training helps the employees in the	51	42.5	55	45.8			6	5.0	8	6.7	4.13
university to reform their attitudes											
towards attaining quality											
Performance of ISO 9000 has lead to	50	41.7	35	29.2	1	10.	14	11.	9	7.5	3.86
employee training					2	0		7			

The management established that training related factors affect the implementation of ISO 9000 in the university. Training was required to enhance appraisal of staff and to evaluate for success. Continuous training is required to ensure that there is consistency and training was only done quarterly to create awareness and has led to non-conformities increase as induction done once among the new staff. The sponsorship was done at certain high levels of management leading to marginalization of those who should be part of implementation of ISO 9000. The scheme of service was not fully implemented due to limited offices and recruitment of external staff to steer the programme and introduce new methods of improvement of services.

## 4.2 Influence of ISO 9001: 2008 Standards Certifications Training on the Performance

There was a positive relationship between the ISO 9001: 2008 standards certifications training on the performance [r=.453, n=120, p<.05], (Table 2), indicating a positive correlation between ISO 9001: 2008 standards certifications training on the performance. Thus the longer the employee is training the higher the performance of ISO 9000.

Table 2: Influence of ISO 9001: 2008 Standards Certifications Training on the Performance

		Performance	Training		
Performance	Pearson Correlation	1			
	Sig. (2-tailed)				
Training	Pearson Correlation	.453**	1		
	Sig. (2-tailed)	.000			

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed). N=120

Thus the longer the employee is training the higher the performance of ISO 9000. These results agrees with other empirical studies explaining that employees require some training in order to manage the enlargement of their work role following the delegation of responsibilities for quality. Staff also needs broader range of skills to be able to participate in quality improvements, Zackuan et al., (2012). It agrees with Gader et al., (2009) that highlighted the importance of training and the role of human resources, and they have provided

evidence of the critical factors for the successful implementation of QMS and the improvement of business performance.

The education and training program must be formal and informal. The employee's training programs should start to appreciate the organization's quality initiatives and understand the effects of globalization and competitiveness has on their work and the future of their organization. Training acts as a vehicle for communication, it raise skills of employees to take part in the improvement process. Training and improvement in knowledge and skills enable individuals to achieve objectives such as systematic problem-solving skills and process-conscious approach. Training and education are important in preparing a company for change. Training and education are important for the preparation of an organization for change.

#### 5. CONCLUSION

There was a positive relationship between the ISO 9001: 2008 Standards Certifications Training on the Performance. Poor training/non present a major obstacle in the development and implementation of a quality programme and insufficient training programmes have been found to be barriers in implementing ISO 9000 standards in institutions. Maintaining ISO 9000 does certainly require the involvement of several resources, especially human and financial resources and adequate financial resource is only needed by the institution during ISO 9000 implementation process.

Training employee on ISO 9000 performance is the most important factor in improving quality in university and has provided evidence of a critical factor for the successful implementation of QMS. The success of quality program depended on the university management and culture and university with ISO certification experienced benefits. Performance of ISO 9000 has enabled effective evaluation of lecturers in the university. The study revealed that Staff Training is equally critical and important for adoption of ISO 9001:2008 QMS in the Kenyan Roads Authorities.

#### 6. RECOMMENDATION

The training of both the top management and the other personnel at Kabianga University should be done regularly and continued after certification. Ideally, an organization should have a clear relationship between training investment and the achievement of strategic objectives. Adequate training should be provided to all staff to enable them understand their role in Quality issues. Preference should not only be given to the QMS champions, Auditors and Management representatives only. The trainings should be relevant and timely to ensure the participation of all the staff even during the subsequent surveillance audits.

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