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Barriers to compliance with ISO 9001:2008 standards at Moi University, Kenya

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Abstract
The mushrooming of private and public universities in Kenya as well as pressure from a rapidly transforming labour market has given rise to new concerns about quality in higher education. One of the ways in which universities assure quality and acquire recognition in their home countries and abroad is through accreditation and certification. In addition, universities seek quality certification so as to differentiate themselves from the many institutions that are offering degrees and diplomas which have become commodities in the market economy. Despite being ISO 9001:2008 Certified, previous audit reports indicate various non-conformities across various systems of Moi University. The study therefore sought to investigate systemic barriers to *ISO* compliance in Moi University. This paper, derived from the study, explores the inta-sectional, inter-sectional, intra-departmental, inter-departmental, inter-school and inter-campus barriers to ISO compliance. The study was both qualitative and quantitative in nature. Data were collected by means of semi structured questionnaires supplemented by interview schedule guides. The target population for the study was 1,343 officers drawn from the various systems of the institution. Stratified random and purposive sampling techniques were employed in selecting respondents. The sample size was computed as 404 officers who constituted 30% of the target population. This included top management, Directors, Deans, Heads of Department, lecturers and administrative staff. Cumulative frequencies, percentages means and standard deviation were computed to help derive meaning from quantitative data. Qualitative data from interview schedule guide were transcribed, thematically classified and arranged before being reported in narrations and quotations. Findings were presented in form of tables, charts and graphs. The study established that there are barriers within sections, departments, schools and campuses hindering the effective implementation of ISO 9001:2008 standards. It was therefore recommended that since top management leadership is the backbone of implementing ISO 9001:2008 standards, the top management should be fully committed towards the improvement of services at the University.

Keywords: barriers, compliance ISO 9001:2008, standards Moi University, Kenya

Introduction
Trade in services in Kenya remains the most important sector of the country's economy both in terms of GDP and employment creation. It is estimated to contribute about 60% of GDP and 68% of employment creation. Like elsewhere in the world, the service sector has been the fastest growing sector of the Kenyan economy since the 1980s. Moi University falls in the category of service industry. It plays a key role in the Kenyan economy in terms of capacity building, research and job creation through employment and business opportunities. With increasing competition from private and public universities in the country, potential students now more than ever have many options to choose from. Offering poor quality service would discourage student enrolment resulting in loss of income for the University, reduced job opportunities and loss of business for thousands of people within the community. Any efforts that would improve quality of services at the University should be encouraged.

For a long time, Moi University has enjoyed the monopoly of being the only Public University in North Rift region of Kenya. However, this trend has changed tremendously as it is now faced with an influx of mushrooming private and public universities in town. This means that the University has to up its game if it has to beat the stiff competition. As the business and academic environment becomes increasingly competitive and complex, meeting and exceeding customers' needs are crucial in attaining competitive advantage.

Moi University periodically undertakes both internal and external ISO surveillance audits. Internal audits are carried out by internal auditors while external audits are carried out by the Kenya Bureau of Standards (KEBS). The objective of these audits are to determine continued conformity of Moi University quality management system to the requirements of ISO 9001:2008 and to check continual improvement for the purposes of recommending continued certification. Often, non-conformities are detected in various systems that require corrective action. It is important to note that serious non conformities could result in withdrawal of ISO certification from the University with adverse implications such as irreparable damage to its image and reputation as well as casting doubts as to the quality of its degrees/graduates. No studies have been undertaken to uncover any systemic barriers to ISO compliance in Moi University. The study therefore sought to uncover systemic barriers during implementation of ISO standards.

Systemic barriers to ISO compliance in higher education
A barrier is defined by the Oxford Dictionary as a problem,

rule or situation that prevents somebody from doing something or that makes something impossible. Organizations all over the world face numerous barriers during implementation of ISO standards. In fact, Charantimath (2011) [6] explains that although TQM points appear obvious and make sense, they are in reality difficult to execute and very time consuming. Cloutier and Richards (2014) [7] affirm that measuring customer satisfaction at an educational establishment might be regarded by educators as one of the greatest challenges of the quality movement. Quinn (2009) [20] identifies two major difficulties surrounding quality improvement efforts in higher education: the first being defining higher education's customers and the second being resistance difficulties.

Definition difficulties: Who is the customer in a university?

The term "service quality" and "quality in education" are difficult to define. Perceptions of service quality often differ based on the requirements of the service's individual customer. In the education setting, one customer might consider a certain class, curriculum or university a high quality educational experience while another might find the same experience mediocre (Quinn, 2009) [20]. Secondly, whereas quality techniques from industry typically focus on customer requirements, the setting of higher education makes focusing on the customer difficult.

While students constitute the most obvious customer, many other stakeholders such as parents, government and sponsors also function as customers (Quinn, 2009) [20]. In addition to the competing customers above, different aspects of university operations serve different customers. For example, residential halls cater almost exclusively to students as customers with other stakeholders having little or no interest in this portion of the university. Administrative areas of the university also have specific internal and external customers (Quinn, 2009) [20].

An examination of existing literature indicates that most authors agree that the difficulty of defining higher education's customers is a major barrier to quality improvement efforts. Studies by Helms and Key (2014) [16], on whether students at Wright State University perceived themselves as customers, indicated that they strongly identified themselves as such and denied other groups as possible legitimate customers. Ewell (2013) [13] describe that faculty were hesitant to take seriously students as customers.

Sahney (2014) [22] believes that global changes and competition are making education more like a product with students as its customers. Owlia and Aspinwall (2011) has surveyed 124 people involved in educational quality efforts in the United States, Europe, India and Austalia and found that students were the primary customer, followed by employers, society, faculty and families in descending order or relative importance. To deal with the multiple customers in higher education, Ho and Wearn (2012) recommends that universities consider the relative importance of competing customers in order to balance quality improvement efforts. Pitman (2011) stresses the importance of addressing the needs of different customer groups.

Hwang and Teo (2011) [17] recommend Juran's Triple Role concept to identify and clarify the roles of multiple customer groups. Reavill (2008) outlines a product/process model where education of undergraduates is a process that produces a product namely graduates. This model suggested that the customers of higher education are the future employers of the students. An alternative is the service/process model that assumes education is a service and the students are customers who wish to improve their level of education. Reavill (2008) rejects both models as too simplistic and suggests that a more robust and comprehensive model is needed and should be identified by asking who pays for and benefits from education (Reavill, 2008).

While many other organizations struggle with competing customer demands, other aspects of confusion further complicate the higher education setting. Ewell (2013) [13] points out that in the instructional area, faculty most often view students as raw materials. Mazur (2015) [18] agrees that instructors do not view students as customers, rather as raw materials being developed into a product for the ultimate customers – industry and society.

Helms and Key (2014) [16] note that students could be classified as a raw material, customer, or even as employees. As a raw material, students move through a process and become the end product. As customers, students purchase the service of education. Helms and Key (2014) [16] note that students must be engaged in their studies, must be motivated to perform, and are evaluated, making them much like employees. In addition, quality of student performance is important to a university in much the same way that quality of employee performance is important in the business setting. Further analysing the differing roles of students, Helms and Key (2014) [16] point out that different educational settings provide different roles for students.

In large introductory classes the students are very much like customers; however, in specialized graduate research settings students are more like employees.

Resistance Difficulties

Other researchers have compared the application of quality techniques between higher education and industry. Owlia and Aspinwall (2011) have found that while industry quality techniques often suggest studying the market (the real needs of customers) and focusing quality to meet these needs, the motives of many academics are independent of the market. Ewell (2013) [13] pointed out that the sceptical nature of the academy makes "fashionable" industry quality techniques suspect. Ewell (2013) [13] further elaborated that the concept of service to 'anyone – whatever their label – directly threatens the academy's core myth of independent inquiry, conducted on its own terms and for its own sake' (Ewell, 2013) [13]. Management influence over academic areas is significantly less than in administrative and auxiliary areas. However, even in the more business-like administrative and auxiliary areas, differing strategies and customers make university-wide quality improvement efforts difficult to implement and sustain (Ewell, 2013) [13].

Karapetrovic (2010) suggest that faculty will be weary of structure approaches requiring additional documentation and recommend implementing only quality systems that can be tied to specific benefits to each person involved. Walker (2010) believes that faculty's high level skills in narrow

domains become barriers that restrict communication and that the university environment can easily lead to intellectual arrogance and disdain of that which has to do with real world engagement.

Edler (2015) [11] notes that there is a fundamental problem with applying corporate quality techniques to educational settings, specifically stating: 'although educational institutions are corporate-like entities, the primary activity of these educational institutions is teaching and learning which is not in itself a business activity'. Unlike industry's production and consumption of products or services, teaching and learning are different, and cannot be 'torn apart into two halves: teaching on the one hand and learning on the other' (Edler, 2015) [11].

Quinn (2009) [20] points out that higher education provides a unique setting in which to study service quality in that while administrative and auxiliary service areas of higher education often function in ways similar to typical service businesses, academic/instructional areas are unlike the business world. The idea of shared governance, for example, makes institution-wide implementation of policies and practices more difficult. In addition, the concepts of academic freedom and tenure set apart the academic areas of higher education from typical service business operations (Quinn, 2009) [20].

Quinn (2009) [20], in a research on quality in higher education, has concluded that for institutions looking to improve quality, separate efforts are needed in academic, administrative and auxiliary areas of the institution, where customers may differ; adding that techniques should be used that allow for and prioritize different customer voices. The study attempted to fill this gap in knowledge by designing different customer feedback forms for the different customers of Moi University, that is, students, administrative and academic staff. This will assist the University to focus quality improvement efforts directly to their different customers.

Other common barriers

Studies indicate that one barrier which may inhibit the pursuit of quality is systems and procedures as most organizations have long established processes and organizational systems with a certain bureaucratic process. When adding a new organizational system, such as QMS, organizations have to change or adapt their original systems and procedures to the new one. It is likely that the original systems and procedures will conflict with the new ones as QMS implies standardized procedures (Quinn, 2009) [20]. Beckford (2010) [2] affirms that when introducing new requirements for specific procedures the pressure for change and adaptation may cause resistance from those in charge of the procedures.

Beckford (2010) [2] gives organizational culture as another barrier. Adopting a QMS brings changes to existing organizational culture. In any organization there are entrenched norms of behaviour as well as certain values and beliefs to which employees conform. Changing this culture can be a long lasting task for organizations and is most often met with resistance, which makes the barrier of culture one of the most difficult tasks. Another barrier presented by Beckford (2010) [2] is the design of the organization. Design include hierarchical structure of the organization, interaction between units, the information and management systems; and their inter-relationships. Beckford (2010) [2] states that design barriers include departmental conflicts for example between quality manager and production manager over quality related issues. The second issue is the design of organizational information system.

Beckford (2010) [2] posits that the activities of generating and processing information have to contain the right information, in the right format, at the right time and delivered to the right person if the information is to be of value. This research will critically study the area of information system since the organization under study handles a lot of sensitive information that requires utmost precision. The final issue of the design barrier according to Beckford (2010) [2] are the irrelevant or inappropriate activities. Irrelevant procedures are those which have lost purpose, which employees often complain about but no one addresses them. Such procedures may contain unique peculiarities and unnecessary methods that have been unconsciously accepted just because they have been forgotten and not evaluated. This study will determine if and how these barriers are issues that Moi University should worry about.

The fifth and final barrier presented by Beckford (2010) [2] is the costs of quality. Costs of quality can be classified into direct costs and invisible costs. Direct costs can be products with errors that require rework and rectification. Invisible costs can be dissatisfied customers who move to a competitor for an alternative product/service.

Studies undertaken by Carlsson and Carlsson (2014) [4] on experiences of Swedish organization on ISO implementation affirms Beckford's assertions of resistance to change, resource consumption, ambiguous and too bureaucratic documentation and processes being major barriers. They cited other barriers such as difficulties in interpreting the standards of ISO 9001, setting relevant and SMART quality goals and communicating the message.

Other pitfalls and barriers when working towards quality is presented in Dale (2012) [8]. They include inadequate leadership, resistance to change, conflicting policies, unsuitable organizational structure and poor management of the change process. In a survey conducted by Zeng (2011) [24] five types of obstacles were identified i.e. short-sighted goal for "getting certified, over-expectation on ISO standard, mandatory requirement (not wholehearted commitment) in some industries, following other (the trend) in certification and lack of necessary guidance for certification. Erel and Gosh (2013) [12] cite the most common obstacles as: organizational – lack of understanding of its importance by all departments and unwillingness to change from the existing system; and procedural – difficulty in understanding the ISO requirements.

In order to discover the critical factors for effective implementation of quality management system, Mehfooz and Lodhi (2015) [19] suggest that it is necessary to identify the common barriers or limitation faced during the implementation process. They undertook studies in several service and manufacturing industries in Pakistan and identified the following barriers: lack of understanding of the reason for the ISO certification, lack of understanding of its advantages, lack of awareness among employees, lack of commitment and support from top management, lack of leadership in organization, lack of periodic management reviews, lack of involvement and empowerment of employees,

lack of education and training among employees; lack of commitment, involvement and cooperation from employees; resistance to change, lack of reward and motivation, poor attitude of employees towards the new system, lack of authority and responsibility to personnel, absence of team work between internal departments, lack of cross-functional participation between departments, ineffective performance measurement system, lack of training programs for quality management system, lack of implementation of Plan/Do/Check/Act (PDCA) cycle for continuous improvement; and lack of decision making on the basis of collected data.

Mehfooz and Lodhi (2015) [19] both agree that there are similar barriers in manufacturing and service sector. However, other studies revealed contrary results in that there were significantly higher barriers in the non-manufacturing sector than in the manufacturing sector but gave no reasons for this. This study recommends a comparative study between manufacturing and service sector with the aim of identifying factors that make barriers higher in non-manufacturing sector. The study, however, failed to provide ways to overcome the barriers and maintenance of ISO standards in organizations. This study will attempt to fill this knowledge gap. Similar studies on the subject indicate government regulations as a barrier to ISO implementation through strict and discouraging conditions for licensing. Some governments demand that organizations register with ISO standards to be eligible to tender for contracts or enter the EU market (Wiele, 2011; Brown, 2014) [3].

In other researches, lack of human resources has been identified as a barrier. Factors such as lack of cooperation and good relationship between employees and managers, high employee turnover, insufficient education and training and lack of expertise (Zamany, 2012). Other human resource barriers include lack of recognition, respect and reward for a job well done to achieve quality performance (Ling, 2014).

Moreover, Balzarova (2012) [1] revealed lack of teamwork and team development as barriers of successful QMS implementation. Lack of awareness has been identified as another barrier of ISO implementation. Crosby (2009) states that the purpose of awareness is to get everyone feel that they belong to a quality organization attitude. In addition, awareness means the staff in an organization understand management's quality policy and current status of ISO 9000 quality system and the importance of its maintenance for continued certification (Chin, 2010). Al-Zamany (2012), quoting Wong (1998), indicates that quality programmes implementation in developing countries failed due to the lack of understanding of QMS. Withers and Ebrahimpour (2011) affirm that one of the most common obstacles faced by eleven different European organizations in their study is the difficulty in interpreting ISO 9000 standards.

Motwani (2013), quoting Greene (1991), reports that 60% of difficulties associated with ISO standards implementation are document control, design control, purchasing consistency, process control and inspection, and testing. Lack of process control is a barrier in QMS-ISO 9000 standards implementation (Moser & Bailey, 2012). Other research indicates that organizational culture can be a barrier of ISO implementation. Oakland (2010) defines culture as the beliefs that pervade the organization about how business should be conducted and how employees should be treated and should behave. Culture entails behaviours based on people interactions, norms resulting from working groups, dominant values adopted by the organization, rules and the climate in the organization (Oakland, 2010).

Maull (2011) add that culture includes knowledge, belief, art, morals, law, customs, habits and capabilities acquired by employees in the organization. It is the common link that holds people in groups together. Mallak (2013) add that culture provides the basis for forming and modifying behaviours, attitudes and values deemed very important in the power structure of the organization. Culture is often a barrier to change in quality implementation programs in that it is the necessary ingredient for enhancing desired behaviour in the initial change process. Understanding an organization's culture provide informed guidance for facilitating desired behaviour targeted towards specific outcomes (Mallak, 2014).

Resistance to change has been identified as a barrier to effective implementation of ISO standards. Employees resist change because of lack of understanding of the subject and see it as extra work Tsim (2012). They do not want the challenge of learning new skills, new tasks and responsibilities. Older employees feel threatened by the loss of positions of authority and influence over decision making. Some employees fear committing errors while others see QMS as a tool by management to punch them and consequently develop deep resentment towards the process. Lack of communication has been cited as a barrier to effective implementation of ISO standards. Goetsch and Davis (2012) [15] define communication as transfer of a message (information, idea, emotion, intent and feeling) that is both received and understood. In organizations, effective communication involves maintaining enthusiasm, employees' full involvement, understanding roles and responsibilities in processes and enhancing personnel capabilities (Thiagrayan & Zairi, 2015).

Fuentes (2011) [14] cite lack of information and communication routes where necessary information could flow as a barrier to implementation of ISO standards. Lack of integration between quality information system and existing management information system in organizations is a major barrier in ISO standards implementation. Lack of trust between employees and managers causes communication breakdown from top to bottom and vice versa. Similarly lack of coordination between departments/sections is a barrier to ISO implementation. In both cases employees experience difficulty in sharing and discussing issues that would assist them in meeting ISO standards.

Lack of time has been cited as a barrier to implementation of ISO standards. Cole (2009), as cited in Dory and Schier (2002), supports this argument by stating that organizations need sufficient time to successfully implement the quality methods and processes that are necessary to achieve significant improvements. Quick fixes that satisfy only the minimum requirements for certification pose the danger of important changes not occurring that would essentially improve internal organizational procedures. Equally employees who are already bogged down with work would find it overwhelming to find time for new methods and

processes of work, when the old system that they are accustomed to has worked perfectly for them over the years.

Another barrier affecting successful implementation of ISO standards in organizations according to Dickenson (2013) [10] is the high cost of certification. Such costs include consultation, implementation and third party certification fees. Additionally, the cost of upgrading the infrastructure such as technology to meet international standards and the initial and development costs of certification is a big problem in implementation of ISO standards.

Fuentes (2011) [14] adds that lack of financial capacity to meet implementation costs and maintenance of a QMS is one of the barriers affecting implementation of ISO standards. Poor or lack of documentation in organizations has been cited as a barrier of implementation of ISO standards. Yahya and Goh (2011) mentioned that 80% of the failure of organizations in certification audit is caused by barriers such as improper documentation and poor control of documents and data as required by ISO standards. The difficulty of setting up a quality manual and the difficulty of writing up procedures and work instructions is a barrier in certain organizations.

Measurement of customer satisfaction is an important factor in determination of effectiveness and implementation of ISO standards. However, studies undertaken by Casadesus and Karapetrovic (2013) highlighted the difficulty to analyse customer satisfaction data as the biggest problem facing organizations. Similar studies by Quazi (2012) and Fuentes (2011) [14] add that lack of commitment to satisfy customers, lack of integration of customer satisfaction in a firm's goals, vision and knowledge of customer needs and expectation and lack of usage of customer feedback, and lack of responsiveness to customer complaints are major problems in implementation of ISO standards. Lack of good organizational structure and procedures are common difficulties in implementing ISO. Lucas (2014) opines that the greatest challenge of applying the QMS is managing cultural change.

Statement of the problem

The service industry in Kenya remains the most important sector of the economy both in terms of GDP and job creation. It has been the fastest growing sector in Kenya since the 1980s. The most important sectors in the service industry in Kenya over the years have been tourism, transport, travel, communications, insurance and education. Moi University falls under the education sector of the service industry in Kenya. The service industry was chosen for the study because of its significant contribution to Kenya's economy. The industry provides crucial inputs for the rest of the economy, thus having a significant effect on the overall investment climate, which is an essential determinant of growth and development. It also contributes directly to achieving social development objectives.

The speed at which the University has expanded coupled with the double intake of students has overstretched its resources in terms of human capital, finance and infrastructure. Centralized systems such as Examinations, Estates and Finance have to provide services that accommodate the new demands. This situation often causes delays in service delivery. Cases of misplaced documents such as letters, memos, imprests and medical claims are quite common. Lecturers have to traverse the country to offer teaching services in satellite campuses in addition to offering part time teaching often resulting in delayed or missing marks. Overcrowded classrooms are fertile grounds for examination cheating.

These challenges combined with poor sanitation, lighting, repairs and grounds become barriers to quality service delivery. There is need therefore to assess how this rapid expansion has affected the quality of services offered by the various University systems to their customers. One of the fourteen principals for quality management, according to Deming (YAER?), is to break down barriers between departments. However, he failed to substantiate how this can be achieved. Consequently, there is need to establish the best methods of breaking down barriers between the various systems of the University. Deming (YAER?) proposed that employees in all organizational functions must work together as a team to foresee and solve problems of production. Therefore, it would be necessary to break down any barrier between all systems in the University in order to achieve University quality objectives for continued ISO certification and to remain as the University of choice in the region.

Materials and Methods

The study adopted a mixed method and applied a descriptive survey research design. In the study, the population consisted of academic, administrative, and clerical officers of Moi University, Main Campus. These categories were chosen because they actively participate in service delivery and ISO audits hence determining the status of ISO certification in the Institution. To determine inter-campus barriers to ISO compliance, top officials of the town campuses formed part of the population for this study. The target population for this study was 1,343 senior employees of Moi University in Academic and Administrative sections. Those from the Academic Division comprised 16 Deans, 8 Directors, 43 Heads of Departments, 549 Academic Staff, 94 Administrative Staff, 75 Secretarial Staff and 44 Clerical Staff. Those from the Central Administration composed of 93 from the Vice Chancellor's office, 163 from the office of the Deputy Vice Chancellor for Administration, Planning and D, 79 from the office of the Deputy Vice Chancellor for Finance, 50 from the office of the Deputy Vice Chancellor for Students' Affairs, and 129 from the office of the Deputy Vice Chancellor for Academics, Research and Extension.

Stratified random sampling technique was used to identify subgroups in the population and proportions selected from each sub-group to form a sample. Simple random sampling was then used to select the respondents. Purposive sampling was used to select categories of staff to study lived experiences of a specific population. Top management staff at the Main Campus as well as those in town campuses were selected purposively. Thus from the target population, a sample of 30% (403) was computed and from each sub-group, proportionate samples drawn. This comprised of 185 staff members from the Academic division and 218 from the Central Administration section.

Questionnaire and interview schedule guide were the tools used to collect data for this study. The questionnaire tool was administered to the middle and junior staff members while interviews were conducted with the senior staff members or

their representatives. Both descriptive and inferential statistics were used in data analysis. Cumulative frequencies, percentages, means and standard deviation were computed to help derive meaning from quantitative data. Qualitative data from interview schedule guide were transcribed, thematically classified and arranged before being reported in narrations and quotations. Further, the themes emerging from secondary data were identified to augment primary data. The researcher used data condensation mode of analysis to extract, abridge or abstract the most important themes from data collected from the interviews. Themes were identified and organized into coherent categories that summarized and brought meaning to the data. The researcher interrogated the themes in light of the objectives of the study and upheld to the definition of the natural meaning units as stated in the reviewed literature.

Results and Discussion

Barriers to ISO 9001:2008 Standard Compliance

The study sought to identify the intra-sectional, inter-sectional, intra-departmental, inter-school and inter-campus barriers to IISO 9001:2008 standards compliance at Moi University. This was done by analysing the responses presented by participants on implementation of ISO 9001:2008 principles, compliance with ISO 9001:2008 quality standards, barriers related to QMS implementation, barriers related to organizational culture and barriers related to organizational performance when implementing QMS. On implementation of ISO 9001:2008, Table 1 summarizes the responses. The responses were coded on the following scale: Strongly Agree-5; Agree-4; Undecided-3; Disagree-2; Strongly Disagree-1. The responses for this item were received from the academic and administrative staff.

Table 1: Implementation of ISO 9001:2008 principles (N=349)

Statement on implementation	5	4	3	2	1	Mean
All systems in the University work together effectively towards a common unity of purpose	10	77	0	249	13	2.49
All departments/sections focus on customer requirements and expectations	31	154	0	144	20	3.09
All employees are fully empowered and actively involved in the provision of quality service	42	138	0	100	69	2.95
All University interrelated processes are managed as a system	2	7	0	289	51	1.91
The University has a strategic objective for continuous improvement of overall performance	32	56	0	161	100	2.31
Decisions are made based on analysis of relevant data and information	36	43	0	242	28	2.48
The University and its suppliers have a mutually beneficial relationship	3	11	0	235	100	1.80
Aggregate mean						2.43

From Table 1, an aggregate mean of 2.43 is indicative of the fact that majority of the respondents viewed the implementation of the principles of ISO as being low. On the Likert scale, this finding indicates that majority of the respondents disagreed with the fact that ISO 9001:2008 were being implemented as required. Of notable significance is the fact that majority of the respondents (mean, 1.80) disagreed that the University and its suppliers have a mutually beneficial relationship. Besides, majority of the respondents (mean, 1.91) disagreed with the fact that all University interrelated processes are managed as a system.

It is clear from literature reviewed in this study that a systemic view of organizations is fundamental in implementation of ISO standards and that majority of respondents indicate that all University interrelated processes are not managed as system is a cause for worry. Deming (as cited in Ravichandran & Rai, 2011) [21] built a case for treating the organization as a total system and attribute the variations in observed quality performance to the capability of the organizational system. They argued that factors unique to individual workers or specific technology account for a minimal proportion of the variation in quality performance and that most performance variations are due to system factors. They added that managerial attention should be focused on designing a total system capable of achieving the desired level of quality performance. Such a system is much broader than work processes; it includes management processes and structural arrangements created to steer the organization toward its quality goals.

Besides, Stupak and Leitner (2011) [23] explain that the responsibility for quality within an organization is not related to one individual or division, but belongs to everyone. In a larger context, it emphasizes the interdependence of the parts of an organization. They further opine that failure to recognize and fully understand interrelatedness results in many of the problems an organization encounters.

Further analysis was done on the extent to which respondents agreed with statements on the University's compliance with ISO 9001:2008 quality standards. The findings for this component are summarized in Table 2.

Table 2: Compliance with ISO 9001:2008 Quality Standards (N=349)

University's compliance	5	4	3	2	1	Mean
Management provides the necessary resources and training to ensure compliance with ISO quality standards	11	17	0	311	10	2.16
The systems for corrective action focuses on identifying root causes of non-conformities and preventive actions	36	176	0	100	37	3.21
University ISO champions have the competence to effectively audit all academic and administrative functions	141	138	0	49	21	3.21
All processes are frequently analysed to determine their effectiveness to facilitate continuous improvement	4	12	0	273	60	1.93
Aggregate mean						2.63

From Table 2, it can be deduced that an average proportion of respondents (aggregate mean, 2.63) were of the opinion that the University's compliance with ISO 9001:2008 quality standards was still wanting. Important to note is the fact that majority of the respondents (mean, 1.93) disagreed with the fact that all processes in the University are frequently analysed

to determine their effectiveness to facilitate continuous improvement. However, there seem to be notable progress on matters pertaining putting in place systems for corrective action that focus on identifying root causes of non-conformities and preventive actions (mean, 3.21) and the University ISO champions having the competence to effectively audit all academic and administrative functions (mean, 3.21).

The administrative staff, academic staff as well as the secretaries and those who attend to clerical jobs were asked to indicate the barriers related to the implementation of quality management systems. This was done by analysing the level of agreement of respondents with statements that indicate barriers related to QMS implementation at the University. Table 3 presents a summary of the findings derived from responses of administrative and academic staff.

Table 3: Barriers to implementation of ISO 9001:2008 (N=349)

Barrier	5	4	3	2	1	Mean
Management attitudes and purposes focuses on marketing rather internally driven improvement efforts	118	125	0	56	50	3.59
Top management views compliance to ISO 9001:2008 as a documentation task rather than a chance to adapt an improved and systematic management style	132	158	0	41	18	3.98
The process lacks corporate commitment with inconsistency in management action and decision making	121	148	0	57	13	3.79
Lack of effective management response to address staff grievances and needs	134	153	0	37	25	3.96
Tendency for last minute preparations for internal/external audits	145	156	0	29	19	4.09
Management and staff perceive QMS as just a matter of fulfilling internal/external requirements	132	141	0	40	36	3.84
Failure to communicate QMS requirements across all organizational levels is a common occurrence	130	151	0	39	29	3.8
Lack of incentives such as training, development and promotion, or financial bonus for employees to adapt the QMS values	134	153	0	37	25	3.96
Misunderstanding due to lack of communication between management and staff and amongst staff	121	148	0	57	13	3.79
Aggregate mean						3.88

An aggregate mean of 3.88 is indicative of the fact that respondents agreed that there were numerous barriers hindering the implementation of ISO 9001:2008 at the University. Notable of the barriers mentioned by respondents were: tendency for last minute preparations for internal/external audits (mean, 4.09); top management viewing compliance to ISO 9001:2008 as a documentation task rather than a chance to adapt an improved and systematic management style (mean, 3.98); lack of effective management response to address staff grievances and needs (mean, 3.96) and lack of incentives such as training, development and promotion, or financial bonus for employees to adapt the QMS values (mean, 3.96).

This finding was buttressed by responses obtained from secretarial and clerical staff on barriers against quality service provision at the University. These respondents were asked to indicate whether their respective work environments enable them to deliver quality service. Majority of these respondents (83.3%; 30) indicated that their work environments were not conducive to enable them deliver quality service for the University as indicated in Figure 1.

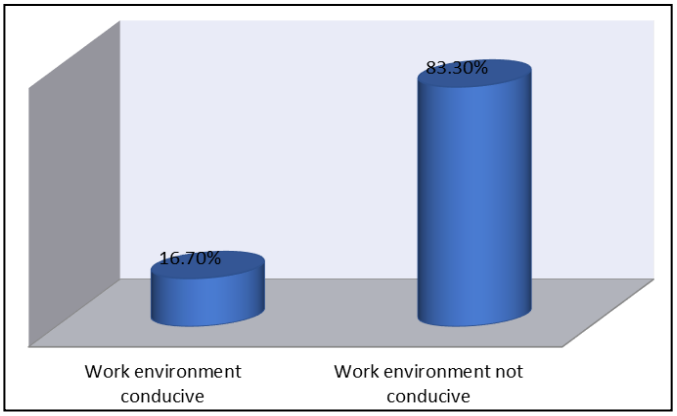

Fig 1: Conduciveness of work environments for quality service provision

The specific aspects of their work environment that reflected their situations are illustrated in Table 4.

Table 4: Barriers against Quality Service Provision (N=36)

Barrier	Frequency	Percentage
Poor sanitation	3	8.3
Poor lighting	22	61.1
Lack of office space	24	66.7
Insufficient training in ISO awareness and implementation	35	97.2
Lack of rewards for exemplary service	35	97.2
Requests for maintenance and repairs not promptly addressed	30	83.3
Requisitions for stationery and supplies not timely and insufficiently addressed	32	88.9
Lack of training on quality records management	32	88.9
Inequality in career progression considerations	33	91.7

Among the barriers mentioned by respondents, notable ones were insufficient training in ISO awareness and implementation (97.2%) and lack of rewards for exemplary service (97.2%). Responding to the component on rewards for employees that deliver exemplary service, a secretary indicated as follows:

…I have not gone through rigorous training on matters ISO implementation but from a layman's perspective, I suppose ISO advocates for rewarding employees that perform too well beyond expectations…this has not been happening in this University…even when you sacrifice time and work beyond your normal working hours, nothing is done…it is sad because it compromises quality service provision in the long run….

Clearly, from this finding, there are a number of barriers that impede the provision of quality service at Moi University. The study further established barriers related to organizational culture that impede the implementation of ISO 900:2008 standards. Table 5 presents a summary of the findings.

Table 5: Organizational culture barriers to implementation of ISO 9001:2008

Organizational culture barrier	5	4	3	2	1	Mean
Lack of unity of purpose among units/departments/schools in the system	118	125	0	56	50	3.59
Schools with large numbers of students and faculty are considered more important than those with less	132	158	0	41	18	3.98
There is infighting for the right to offer programs among different schools	121	148	0	57	13	3.79
Employees are not competitive and results oriented	25	37	0	153	134	2.04
Promotion of staff is applied selectively without regard to qualifications or experience	29	19	1	144	156	1.91
There is gender discrimination in appointments for top management positions	40	111	2	160	36	3.84
Aggregate mean						3.19

Although the aggregate mean is indicative of the fact that majority of respondents were undecided of the components evaluated on organizational culture barriers to implementation of QMS, specific items attracted negative responses. For instance, majority of respondents (mean, 3.59) indicated that there was lack of unity of purpose among units/departments/schools in the system and that schools with large numbers of students and faculty were considered more important than those with less (mean, 3.98), thereby perpetuating discrimination among units/departments/schools. Besides, majority of responds (mean, 3.79) were in agreement that there was infighting for the right to offer programs among different schools and that there was gender discrimination in appointments for top management positions (mean, 3.84). These are impediments that can obviously scuttle the process of implementing ISO 9001:2008 standards.

Respondents from the secretarial and clerical sections were further asked to indicate the impediments they face in discharging quality service to the customers of the University. They were asked to indicate whether they experienced some problems regarding action files. The findings are summarized in Figure 2.

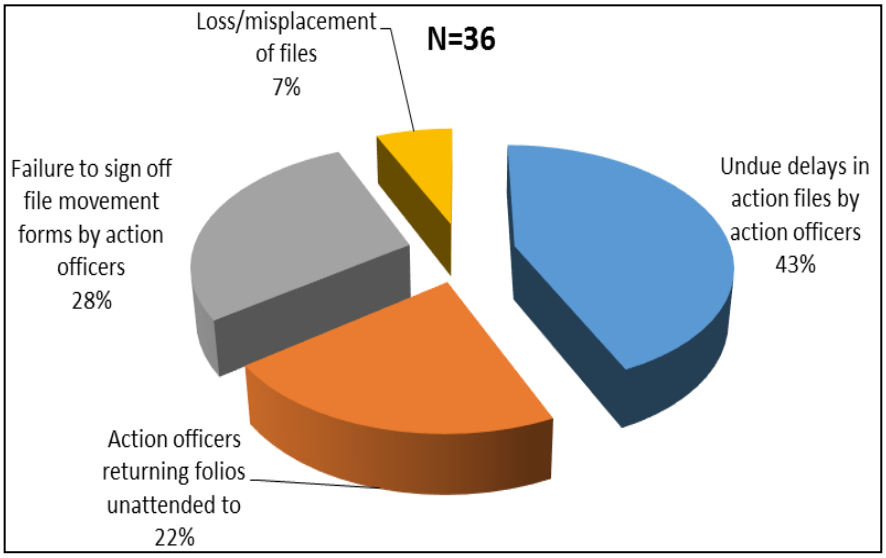

Fig 2: Problems encountered in handling sectional action files

From Figure 2, it can be observed that the greatest impediment emanating from departments to implementation of QMS is undue delays in action files by action files (43%). This is followed by failure by action officers to sign off file movement (28%) thereby making it difficult to track such files. These impediments certainly impede the provision of quality services.

When asked whether the University provides quality filing materials, majority of the respondents (88.9%; 32) indicated that the University does not provide good quality filing materials. Expressing discontent in the manner in which such materials affect the quality of records, a senior clerical officer opined as follows:

…indeed, there are problems in filing…when the quality of filing materials is poor, they are easily exposed to frequent wear and tear compromising the quality of record keeping. Besides, the entire filing system makes the supervising officers to view us as disorganized and those who do not pay attention to detail when in essence, the problem lies with the kind of materials we are provided with….

Buttressing this claim on the quality of filing and general record keeping, a secretary indicated that:

In the wake of ISO 9001:2008, it is not amusing that the University has not taken bold steps in training us in the key tenets of the quality management system…we actually urgently require training in the management of electronic records because the system basically advocates for digital management of records…this way, the idea of poor quality filing materials may not arise….

The academic and administrative staff respondents were further asked to indicate barriers that are related to organizational performance when implementing ISO 9001:2008 regulations. Figure 3 presents the findings.

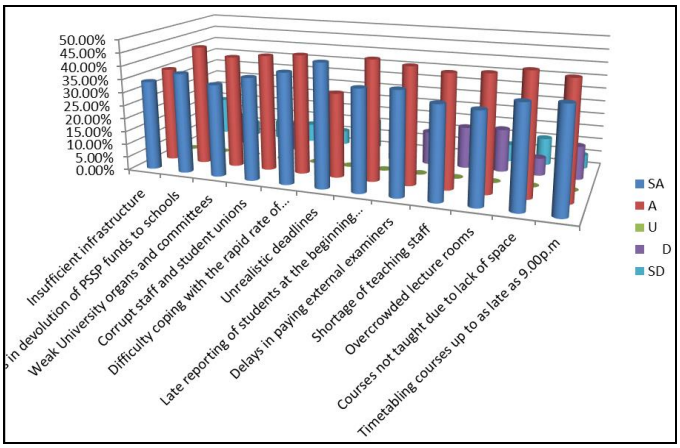

Figure 3: Barriers related to organizational performance

From Figure 3, it can be observed that majority of the respondents were in agreement with the fact that numerous organizational performance issues were impeding the implementation of the QMS. Clearly, from the findings, there are a number of barriers that are impeding the implementation of ISO 9001: 2008 standards at Moi University.

Some of these barriers are inherent within the system while others are external, mainly emanating from the customers that the University serves. Buttressing this findings, Ewell (2013) [13] agrees that the concept of service to 'anyone – whatever their label – directly threatens the academy's core myth of independent inquiry, conducted on its own terms and for its own sake'. Ewell (2013) [13] further opines that management influence over academic areas is significantly less than in administrative and auxiliary areas. However, even in the more business-like administrative and auxiliary areas, differing strategies and customers make university-wide quality improvement efforts difficult to implement and sustain.

Karapetrovic (2010) concurs by suggesting that faculty will be weary of structure approaches requiring additional documentation and recommend implementing only quality systems that can be tied to specific benefits to each person involved. Walker (2010) believes that faculty's high level skills in narrow domains become barriers that restrict communication and that the university environment can easily lead to intellectual arrogance and disdain of that which has to do with real world engagement and quality systems implementation.

In addition, Edler (2015) [11] also concurs by noting that there is a fundamental problem with applying corporate quality techniques to educational settings, specifically stating: 'although educational institutions are corporate-like entities, the primary activity of these educational institutions is teaching and learning which is not in itself a business activity'. Unlike industry's production and consumption of products or services, teaching and learning are different, and cannot be 'torn apart into two halves: teaching on the one hand and learning on the other'.

Finally, Quinn (2009) [20] and Beckford (2010) [2] affirm that one barrier which may inhibit the pursuit of quality is systems and procedures as most organizations have long established processes and organizational systems with a certain bureaucratic process. When adding a new organizational system, such as QMS, organizations have to change or adapt their original systems and procedures to the new one. It is likely that the original systems and procedures will conflict with the new ones as QMS implies standardized procedures. These authors affirm that when introducing new requirements for specific procedures, the pressure for change and adaptation may cause resistance from those in charge of the procedures.

Conclusion and Recommendations

It is apparent that indeed there are barriers within sections, departments, schools and campuses to the effective implementation of ISO 9001:2008 standards at the Moi University. Most of the staff of the University attest to the fact that ISO 9001:2008 standards are not being implemented as required. For instance, they reported that the University and its suppliers do not have a mutually beneficial relationship. Clearly, compliance with ISO 9001:2008 quality standards is still wanting in the University. All the processes in the University are not frequently analysed to determine their effectiveness to facilitate continuous improvement.

There are, however, notable progress on matters pertaining putting in place systems for corrective action that focus on identifying root causes of non-conformities and preventive actions. Moreover, the University's ISO champions have the competence to effectively audit all academic and administrative functions. Nevertheless, these few positives are plighted by barriers such as the tendency for last minute preparations for internal/external audits; top management viewing compliance to ISO 9001:2008 as a documentation task rather than a chance to adapt an improved and systematic management style; lack of effective management response to address staff grievances and needs, and lack of incentives such as training, development and promotion, or financial bonus for employees to adapt the QMS values.

Another sign of serious non-compliance is also the work environments which is not conducive to enable the staff deliver quality service for the University as indicated. There is also the problem of insufficient training in ISO awareness and implementation, lack of rewards for exemplary service. The greatest impediment emanating from departments to implementation of QMS is undue delays in action files by action files. Based on these conclusions, it is recommended that since top management leadership is the backbone of implementing ISO 9001:2008 standards, the top management should show full commitment towards improvement of services at the University.

References

1. Balzarova M. The Factors Affecting Successful Implementation of Process-Based Management in a UK Housing Association Enterprise. 2nd International Conference on Systems Thinking in Management, School of Management, Salford University, 2012.
2. Beckford J. Quality – A Critical Introduction. New York: Routledge, 2010.
3. Brown A. Continuously struggling with TQM. Proceedings of the Annual Quality Congress, American Society for Quality Control, Milwaukee, WI, 2014.
4. Carlsson M, Carlsson D. Experiences of Implementing ISO 9000 in Swedish Industry. International Journal of Quality & Reliability Management. MCB University Press, 2014, 13(7).
5. Casadesus M, Karapetrovic S. ISO 9001:2002 and ISO 9001/2/3:1994: a Comparative Empirical Study of the Benefits and Costs, Business Excellence. Canada, 2015.
6. Charanthimath PM. *Total Quality Management*. New Delhi: Dorling Kindersley, 2011.
7. Cloutier MG, Richards JD. Service Quality in Higher Education. Total Quality Management, Routledge, USA, 2014, 20(2).
8. Dale BG. Managing Quality (3rd ed.). Oxford: Blackwell Publishers Ltd, 2012.
9. Deming WE. Quality, Productivity and Competitive Position. Cambridge, MA: MIT Center for Advanced Engineering Study, 2010.
10. Dickenson R. Quality Management Implementation in Russia: Strategies for Change. International Journal of Quality and Reliability Management. 2013; 17(1):66-81.
11. Edler FHW. How accreditation agencies in higher education are pushing Total Quality Management: a faculty review of the Academic Quality Improvement Program (AQIP) (Unpublished paper). Retrieved from http://commhum.mccneb.edu/PHILOS/AQIP.htm, 2015.
12. Erel E, Ghosh JB. ISO 9000 Implementation in Turkish Industry. International Journal of Operations & Production Management, 2013.
13. Ewell PT. Total Quality Management in Higher Education: Is it working? Why or Why Not? London: Praeger, 2013.
14. Fuentes C. Analysis of the Implementation of ISO 9000 Quality Assurance Systems. *Work-Study*. 2011; 49(10):229-241.
15. Goetsch D, Davis S. Quality Management: Introduction to Total Quality Management for Production, Processing and Services (3rd ed.). New Jersey, USA: Prentice Hall, 2012.
16. Helms J, Key Y. Business Practices in Higher Education: A Guide for Today's Administrators. New York: Routledge, 2014.
17. Hwang HB, Teo C. Translating Customers' Voices into Operations Requirements – a QFD Application in Higher Education. International journal of Quality. 2011; 18(2):195-197.
18. Mazur G. The application of Quality Function Deployment (QFD) to Design a Course in Total Quality Management (TQM) at the University Of Michigan College Of Engineering. Proceedings of International Conference on Quality, Yokoyama, JSUE, 2015, 15-18.
19. Mehfooz N, Lodhi MS. Implementation Barriers of ISO 9001 within Service and Manufacturing Organizations in Pakistan. Journal of Business and Management. 2015; 17:66-77.
20. Quinn F. Service Quality in Higher Education. Total Quality Management, Routledge, USA, 2009, 20(2).
21. Ravichandran T, Rai A. Quality Management in Systems Development: An Organizational System Perspective. MIS Quarterly, 2011.
22. Sahney S. A SERVQUAL and QDF Approach to Total Quality Education: A Student Perspective. International Journal of Productivity and Performance Management. 2014; 52(1/2):143-166.
23. Stupak RJ, Leitner PM. Handbook of Public Quality Management. New York: Marcel Dekker Inc, 2011.
24. Zeng SX. Overcoming barriers to sustainable implementation of the ISO 9001 system. Managerial Auditing Journal. 2011; 22(3):244-254.