The Role of Human Resource Management in Adoption of Quality Management Systems in Kenya’s Iso Certified State Corporations

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Abstract

Purpose: The general objective of this study was to determine the role of Human Resource Management in the adoption of quality management systems in Kenya’s ISO certified state corporations.

Materials and methods: The proposed research consisted of a descriptive survey. The population comprised a total of fifty nine state corporations that were ISO certified on 9001:2008 series by the Kenya Bureau of Statistics. The study applied a stratified random sampling technique to select a sample size of twenty one state corporations from the fifty nine which was a third of the target population. Purposive sampling technique was further applied to select a total of four respondents in each of the twenty one selected state corporations.

Results: Findings indicate that there is poor leadership in Kenya’s state corporations that Kenya’s state corporation lacks best hiring practices as a result competence is not emphasized in the organizations. Additional results provided showed that State owned corporations in Kenya have not adopted any performance management systems and the few that have adopted have a performance management system that does not meet the required standards. Further findings shows that there is a great interaction among employees of the same gender and to a small extend amongst other employees of the opposite gender which enables them to achieve organizational objectives.

Recommendations: Inferential statistics from the analysis recommends that employees’ interaction and networking is an important ingredient that would fasten the adoption of quality management systems in Kenya’s state owned corporations. Leadership capabilities, competence management performance management and human resource information systems are very important in ensuring adoption of quality management systems.

Key words: Human resource management role, quality management systems, iso certified state corporations
1.1 Background of the Study
Organizational quality which is achieved through employee participation and aims at long term success through customer satisfaction and benefits to all members of the organization and the society is a manifestation of continuous improvement on organizational processes for individuals and organization as a whole (Rao & Ashok, 2007). This recognition has brought the need to institutionalize quality management systems in organizations worldwide. It has further brought wide recognition that Human resource management as one of the internal processes impacts on the organization’s quality in terms of performance and bottom line results, contributing to overall effectiveness; leading to increased interdependency of corporate strategy and human resource management (Guthrie & James, 2008). The cornerstone of a quality organization is therefore concept of the customer and supplier working together for their mutual benefit (Kunst & Lemmink, 2007).

1.1.1 Quality Management Systems
A quality management system (QMS) is a set of co-ordinated activities to direct and control an organisation in order to continually improve the effectiveness and efficiency of its performance (Bunch & Rivers, 2007).

1.1.2 Quality management systems in Kenya
The adoption of quality management systems in Kenya took its roots through the private sector as early as 1950s, this was during the establishment and development of international companies such as Bata Shoe company, Kenya Breweries Company Limited (KBL), Barclays Bank and Kenya Power and Lighting Company (KPLC) among others, which needed to set standards of operations that are in tandem with other similar organizations in the world (Metri, 2007). The private sector in Kenya has over the time acquired certain international standards and has endeavoured to sustain them in ensuring standardization of processes globally.

1.1.3 Quality Management System in Kenya’s Public Service
The adoption of quality management systems in Kenya public service dates back in July 1974 when the Kenya Bureau of Standards (KEBS) was established. The KEBS Board of Directors known as the National Standards Council (NSC) was subsequently established as the policy-making body for supervising and controlling the administration and financial management of the Bureau. The public organizations are required to adopt QMS through certification to the ISO standards currently documented under 9001:2008 series.

1.1.4 Quality management systems in Kenya’s State corporations
According to KEBS, 2011 report on State Corporations standardization there were 60 state corporations certified on the ISO 9001; 2008 series as at December 31st 2011. In Kenya’s state corporations, the role of human resource management in facilitating adoption of quality management systems has not achieved a wide recognition and this has narrowed human resource roles to focus only on general employees’ matters such as recruitment, training and performance management. Key roles of HRM identified as contributing towards achievement of better quality standardization include performance management, core competencies management effective leadership practices and Human resource information system but it is noted that the practices
have not been embraced leading to underutilization of human resource roles towards adoption of quality management systems (KEBS, 2011).

1.1.5 Human Resource Management
Human resource management (HRM) plays a predominant role in management of organizations’ most important asset; the human resource, the people and lifeblood of organizations. HRM is an approach to people management, a distinctive philosophy in carrying out people-oriented organizational activities, (Torrington, Hall, & Taylor, 2008). Armstrong (2010) says that it is the strategic and coherent approach to management of an organization's most valued assets – the people working there who individually and collectively contribute towards the achievement of its goal.

1.2 Objectives of the Study

1.2.1 Specific Objective
The specific objective of this study was to:
I. Determine the effect of human resource information systems in adoption of QMS in Kenya’s ISO certified state corporations

2.0 LITERATURE REVIEW

2.1 Introduction
This study was informed by a comprehensive review of both theoretical and empirical review of the existing literature. The theoretical review helped in building an in-depth understanding of the current body of knowledge on the research topic. The empirical literature review helped in understanding what other related studies have found out and suggested in their recommendations.

2.2 Theoretical Framework

2.2.1 Total Quality Management (TQM) Model
According to Edward de Bono & Robert Heller, 2010 Total Quality Management (TQM) as one of the QMS models is the process of instilling quality throughout an organization and its business processes. This approach aims at achieving success and customer satisfaction through embedding an awareness of quality all the way through a business planning and feedback. Total Quality Management features centrally the customer-supplier interfaces, (external and internal customers and suppliers). A number of processes sit at each interface. Central also is an organizational commitment to quality, and the importance of communicating this quality commitment, together with the acknowledgement that the right organizational culture is essential for effective Total Quality Management, including the people, processes and systems in the organization (Edward & Robert, 2010).
The model begins with understanding customer needs. TQM organizations have processes that continuously collect, analyze, and act on customer information. Activities are often extended to understanding competitor's customers. Developing an intimate understanding of customer needs allows TQM organizations to predict future customer behavior (Robert, 2010). Kunst, 2007 argued that TQM organizations integrate customer knowledge with other information and use the planning process to orchestrate action throughout the organization to manage day to day activities and achieve future goals. Plans are reviewed at periodic intervals and adjusted as necessary. The planning process is the glue that holds together all TQM activities. Lackritz, 2007 contended that TQM organizations understand that customers will only be satisfied if they consistently receive products and services that meet their needs, are delivered when expected, and are priced for value. TQM organizations use the techniques of process management to develop cost-controlled processes that are stable and capable of meeting customer expectations.

2.2.2 European Foundation for Quality Management Excellent Model

The European foundation for quality management (EFQM) helps organization to establish an appropriate management system to set them on the path to excellence (Steven, 2008). This model explains gaps in performance and helps identify improvements. This model is based on the premise that excellent results with respect to performance, customers’ people and society are achieved through partnership, resources and processes. People play a key role and therefore human resources should be carefully planned managed and improved. People knowledge and competencies should be identified developed and sustained and people should be recognized and cared for (Steven, 2008).

Steven developed a model to show the interrelationship of various inputs and outputs as below:
Figure 2: EFQM model

Other key factors of this model as depicted in the figure above include policy and strategy, partnerships and resources, leadership and key performance results. It is therefore evident in this model that human resource function is an all-round requirement for organizational improvement and success. This model has been used successfully by certain large companies like Renault, Philips and Ciba Geigy. The model is closely related to the TQM model and has successfully been implemented in about 30,000 companies in Europe (Steven, 2008).

2.2 Process Based Model (Approach)

According to this approach, a desired result is achieved more efficiently when activities and their required resources are managed as a process (Dery, 2009). A process is therefore a collection of activities delivering a specific output. These processes are therefore controlled through relevant criteria and methods. Inputs and outputs are determined together with the suppliers and customers (Dery, 2009). The processes are measured and monitored and also analyzed to identify problems and improvement opportunities.
Figure 3: Model of a process based quality management system
The advantage of process approach is the ongoing control that it provides over the linkage between the individual processes within the system of processes as well as over the combination and interaction.

2.2.4 The GAP Model
The GAP model of service quality was developed by Parasuraman, 2006. This model offers an integrated view of the consumer-company relationship. It is based on substantial research amongst a number of service providers. In common with the Grönroos model it shows the perception gap (Gap 5) and outlines contributory factors. In this case expected service is a function of word of mouth communication, personal need and past experience, and perceived service is a product of service delivery and external communications to consumers.
2.2.5 The SERVQUAL (Service Quality Model)

The service quality model is a widely used tool for measuring quality of the service on various aspects. It is used on E-service and is based on five attributes which include reliability, responsiveness, assurance, tangibles and empathy. This model tests for reliability on factual content of information; responsiveness for access and ease of navigation, security and business information; assurance for efficiency, sensation and general information; tangibles for design, flexibility and consumer related information and; empathy for personalization, privacy and security (Rowley, 2006)
2.3 Human Resource Management Theories

2.3.1 The Human Relations Theory
This school of thought therefore emphasizes on the need to give management systems a human touch. It can therefore be assumed that the role on human relations can affect how effective an organization is going to implement its quality management systems.

2.3.2 Systems Theory
According to Miller & Rice (1967) the systems theory in the Human resource management context emphasizes on the need to treat organizations as open systems which are continually dependent upon and influenced by their environments. Katz & Kahn (1964) argued that this theory is basically concerned with problems of relationships, of structure and of interdependence. There is emphasis on the interdependence with the environment and within the different parts of the system in transforming inputs into outputs within the environment.

2.4. Human Resource Management Models

2.4.1 The Matching Model of Human Resource Management
Human resource systems must be managed in tandem with other systems of the organizations. According to Fombrun (1984) HR systems and organization structures should be managed in a way which is congruent with organizational strategy (hence the name matching model). This model therefore emphasizes on the role of competence management which include functions such as selection, performance management, reward and human resource development. These HR processes can be described in the HR cycle as shown below:-
2.4.2 Harvard Model
Guest, 1991 modified the Harvard framework of HRM by defining four policy goals which he believes can be used as prepositions. He advocated for strategic integration, the ability of an organization to integrate HRM issues into its strategic plans, ensuring that various aspects of HRM cohere and provide for line managers to incorporate a HRM perspective into their decision making. He further advocated for high commitment to pursue organizational goals, high quality in regard to aspects of managerial behavior which bear directly on the quality of goods and services and investment in high quality employees; and flexibility which include functional flexibility and existence of an adaptable organization structure with capacity to manage innovation.

2.5 Conceptual Framework
3.0 RESEARCH METHODOLOGY

This research consisted of a descriptive survey study on the role of human resource management in adoption of quality management system in ISO certified state corporations in Kenya. This study used survey design and a descriptive research approach. The target population was fifty nine (59) state corporations in Kenya which are ISO certified by Kenya Bureau of Standards (KEBS, 2012). Probability sampling design involved the use of stratified random sampling technique, to select a sample size of twenty (20) state corporations which was the unit of analysis. Primary data was collected at source while secondary data was collected from published
reference materials such as reports and journals. The Cronbach's alpha coefficient was used to assess the reliability of the constructs and to validate the questionnaire. These recommendations were then incorporated into a second draft of the instrument which was then given to a small sample of five respondents, each respondent randomly picked from the selected sample. The feedback collected during the pilot study was used to adjust or modify the questionnaire accordingly in order to improve the level of clarity. The data generated both quantitative and qualitative data. Descriptive statistics analysis method was applied to analyze numerical data gathered using closed ended questions. The Statistical Package for Social Sciences (SPSS) computer software was used for analysis to generate data array that was used for subsequent analysis of the data. Linear regression analysis was applied to show the relationship between the research variables. Pearson’s Correlation was used to test the association and strength of the variables by use of a significance level of 0.05 while the Goodness of fit through ANOVA was tested on how weak or strong the variables were fitting.

4.0 DATA ANALYSIS AND DISCUSSION

4.1 Response Rate
Initially the administered questionnaires to the respondents were 80 in number. However, the duly filled and returned questionnaires were 69 which is equivalent to 86% successful response rate.

4.2 Respondents’ Level of Education
Results shows that majority of the respondents are university graduates as they constitute of 87%. Thirteen percent (13%) of the respondents have attained education up to the PhD level. These results imply that majority of the top management in State Owned Corporations have satisfactory background in education.

Figure 7 Level of Education
4.2.1 Job Titles of the Respondents
Results in Figure 8 shows that majority 32% of the respondents were in the position of the head of human resource, 28% were heads of internal audit, 21% were head of technical services while another 10% were board directors. These results imply that the information gathered for the study was objective enough as the targeted respondents participated reasonably in the survey.

![Figure 8 Respondents’ Job Titles](image)

4.3 Adoption of Quality Management Systems in State Corporations
The study sought to establish the role of Human Resource Managers in the adoption of Quality Management Systems in State owned corporations. Figure 9 below indicate that seventy four percent of the respondents indicated that state owned organizations have not maintained their quality management system since it was ISO certified.

![Figure 9 Adoption of Quality Management Systems](image)
4.3.1 Normality of Adoption of Quality Management Systems

Figure 10 shows the results on the normality test of adoption. From the graph it is evident that the adoption as the dependent variable of the study was normally distributed and the outliers were few. These results imply that majority of the responses were closer to the normality line as a result of effective data which was suitable for all type of statistical analysis including parametric and regression analysis.

![Normal Q-Q Plot of Adoption of Quality Management System]

**Figure 10: Normality Plot of Acceptance of Adoption**

4.4 Human Resource Information Systems and Adoption of QMS

Seventy eight percent of the respondents indicated that State Corporations’ does not apply a human resource information system in automation of the human resource processes.
4.5 Relationship between Human Resource Information Systems and Adoption of QMS
Results show that there is a positive relationship between HRIS and adoption of quality management systems thus an increase in effectiveness in HRIS will positively increase the adoption of quality management systems.

Figure 11: Organization Application of Human Resource Information System

Figure 12: Scatter Graph Relationship between HRIS and Adoption of QMS
Table 2: Relationship between Human Resource Information System and Adoption of QMS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Adoption of Quality Management system</th>
<th>Human Resource Information System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adoption of Quality Management system</td>
<td>Pearson Correlation</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Human Resource Information System</td>
<td>Pearson Correlation</td>
<td>0.404</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.001</td>
<td></td>
</tr>
</tbody>
</table>

Figure 13 presents graphical representation of the linear relationship between human resource information system and adoption of quality management systems. The results show that there is a positive relationship between the two.
Table 3 presents the goodness of fit for the independent variable; human resource information system in determining adoption of QMS. Regression was done to analyze the significance of the independent variable (human resource information system) in the adoption of quality management systems. This is supported by the R square of 0.163 which indicates that 16.3% of the variances in the adoption of quality management systems are explained by the variances in human resource information system. The correlation coefficient of 40.4% indicates that the combined effect of human resource information system have a strong and positive correlation with adoption of QMS.

**Table 3: Model Fitness for HRIS**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>0.404</td>
</tr>
<tr>
<td>R Square</td>
<td>0.163</td>
</tr>
<tr>
<td>Std. Error of the Estimate</td>
<td>0.54143</td>
</tr>
</tbody>
</table>

Table 4 provides the analysis of variance of the independent variable; human resource information system. Results indicate that the overall model was significant as indicated by a probability value of 0.001. The probability value is lower than the conventional value of 0.05 which determines significance. The significance was further supported by an F statistic of 13.043
Table 4: Analysis of Variance for Human Resource Information System

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>3.824</td>
<td>1</td>
<td>3.824</td>
<td>13.043</td>
<td>0.001</td>
</tr>
<tr>
<td>Residual</td>
<td>19.641</td>
<td>67</td>
<td>0.293</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>23.465</td>
<td>68</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5 displays the regression coefficients of human resource information system which is the independent variable. The results reveal that HRIS is statistically significant and has a positive relationship with the adoption of quality management systems. This is supported by a significant value of 0.001 and a positive beta of 0.356.

Table 5: Human Resource Information System Regression Coefficients

<table>
<thead>
<tr>
<th>Variable</th>
<th>Beta</th>
<th>Std. Error</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.358</td>
<td>0.228</td>
<td>5.945</td>
<td>0.000</td>
</tr>
<tr>
<td>Human Resource Information System</td>
<td>0.356</td>
<td>0.098</td>
<td>3.612</td>
<td>0.001</td>
</tr>
</tbody>
</table>

5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary
Findings indicate that Kenya State Corporations’ human resource information systems are not automated, this means the HR processes in such corporations are still manual. Further findings indicate that all employees have not received enough training thus they have little familiarity with the human resource information systems. State Corporations in Kenya have no proper integration of HRIS which has limited the adoption of QMS in the organizations. Inferential statistics indicated that HRIS is very important in ensuring adoption of quality management systems in organizations. Increase in effectiveness in HRIS will positively increase the adoption of quality management systems.

5.2 Conclusions
Further conclusions from the study are that State Corporations in Kenya have not automated their HR business processes and still operating manually. Employees lack support from the top management leading to lack of knowledge on the Human Resource Information Systems. The results imply that an improvement in human resource information systems will directly improve their competitiveness and fasten the adoption of quality management systems.

5.3 Recommendations
Quality management systems are in many instances adopted by state corporations to satisfy performance contract targets leading to mechanical implementations and use of QMS systems. This nature of QMS implementation creates a lot of operational opaqueness on the side of management and staff in regards to the value of a QMS system. It is therefore recommended to
QMS experts to conduct content and construct review of QMS systems with a view to ensure that implementation rigidities are resolved in order to achieve value for money in such systems. Indeed most state corporations have QMS systems in place which do not demonstrate return on investment to customers and by extension to the citizens. The study provides recommendation to the government as the owners of some companies in the country. There should be change in leadership and board members in companies where the top management do not offer support to the employees and lack commitment in implementation of strategies that focus on organizational development. Further recommendation is for the government to ensure that all business processes are automated to facilitate ease in operations and efficiency. In addition, the government should facilitate sufficient training to the relevant staff on HR automation which is important in adoption of QMS.

5.4 Suggested Areas for Further Research
Recommendations for further research arise from the gaps that the study did not address. A replica study is recommended in private owned organizations in order to test whether the conclusions of this study will hold true. Otherwise, another study could examine the same in a company that was once state owned but underwent privatization such as Kengen among others. Further studies could also incorporate other factors that define the role of HR’s in adoption of quality management systems. These factors may include; availability of financial resources and technology infrastructure.

REFERENCES


