

## **Influence of Total Quality Management system on Organization Performance in Kenya Power and Lighting Company limited**

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**Abstract:** The present-day competition in the market place is becoming increasingly intense with globalization. As a result, the role of quality management to monitor the effectiveness of strategic orientation and to provide effective feedback for strategy adjustment has therefore become important to both governmental and non-governmental organizations. The purpose of this study was to establish the influence of Total Quality Management system on Organization Performance. The study was anchored on strategic balancing theory and a descriptive research design on 2500 members of staff based in central office, Nairobi west and Nairobi South. Primary data was obtained using self-administered questionnaires and was subjected to validity test through expert review and reliability test through Cronbach alpha coefficient. The study revealed that TQM has a positive significant influence on organizational performance ( $\beta = .643$ ,  $p < .05$ ). The study concluded that Kenya power and lighting company should embrace TQM and its principles in order to attain organization performance. The research findings will enable managers and staff of KPLC and other service institutions in the formulation and adoption of quality management principles and its implementation especially in a multicultural institutions.

**Key word:** Total Quality Management system, Organization Performance

### **I. INTRODUCTION**

Total Quality Management (TQM) is a concept based on continuous improvement in the performance of processes in an organization and in the quality of the products and services that are the outputs of those processes. It is a team activity, demands a new culture, a new philosophy, a new emphasis and it calls for discipline and a profound knowledge (Sila, 2007). Quality has a number of dimensions to be considered when developing products and services to keep the consumer satisfied. The dimensions are: performance, reliability, durability, aesthetics, features, conformance, service ability and perceived quality. Total Quality Management is therefore viewed as a rooted organizational approach in keeping satisfied customers' by meeting their expectations continuously through individuals working with the organization. Total Quality Management mainly aims to satisfy all stakeholders, have a sustained customer focus and apply continuous improvement with facts and database. TQM is also considered as an approach for effective management of an enterprise through focus on its people and processes by the organization with customer driven leadership (Salaheldin, 2009). Previous studies concluded that overall Total Quality Management practices positively affect aggregate firm performance. Total Quality Management success leads to an improved level of employee involvement, communication, productivity levels, quality levels, client satisfaction, reduced costs of operation and overall the organizations' competitive advantage (Prajogo and Brown, 2004). Total Quality management, especially in the form of International Standards of Organization (ISO) certification is applicable to all types of firms, and is widely used in developed countries all over the world (Gado, 2012). Moreover, the same trend is picking in developing countries (Casadesus, M., & Karapetrovic, S. (2005). Organization quality movement, as an organization competitive strategy has its origin in Britain, U.S and Japan in the early parts of the 20<sup>th</sup> Century, and has undergone several modifications from Military standards, TQM and eventually QMS ISO standards to fit in an organization. Using international standards benefits an organization and its stakeholders so its popularity is relevant today.

Zakuan et al. (2012) study on the critical success factors of TQM implementation in Higher Education Institutions in Malaysia, revealed that the success of TQM in an institution depends on its quality management strategy and on how it identifies, classifies, analyzes and reacts to the changes in quality requirements. This study was in support to studies by Zatzick et al. (2012) and Salaheldin (2009) who found a positive relationship between TQM and organization performance. Gulali et al. (2013) study on the effect of implementing QMS on the performance of public universities revealed that QMS implementation had a positive impact student enrolment. The study only focused on one public university and the population was based on the non-teaching personnel. This study was in support to Kimani, A. W., and Bichanga, W. O. (2013) as they were anchored on descriptive research design. Salaheldin (2009), Zatzick et al. (2012) and Faezi (2014) studies were carried out in Taiwan and USA. However,

Salaheldin (2009) study was anchored on structured equation modeling. It is clear that the above studies were conducted on SMEs, Pharmaceutical companies and Higher Education institutions. None of the study had a focus on service institution by use of a descriptive survey. There is no known information about the relationship between Total Quality Management System and Organization Performance

## **II. Empirical literature**

Zakuan et al. (2012) carried out a study on the critical success factors of TQM implementation in Higher Education Institutions in Malaysia, Basing their study on reviewing relevant literatures to success factors of TQM and its implementation in various fields and focusing on implementation, the impacts on the organization's performance and the encouraged indicators to the adoption of TQM in the organization, the study found that the success of TQM in an institution depends on its quality management strategy and on how it identifies, classifies, analyzes and reacts to the changes in quality requirements.

Salaheldin (2009) study on the critical success factors of TQM implementation and their effect on the organizational performance of small and medium-sized enterprises in the Qatari industrial sector using the structured equation modelling. The study found that the higher the degree of employee empowerment, employee training, quality suppliers, and employee involvement displayed by SMEs, the greater their influences on operational performance and consequently, the higher the likelihood of the success of TQM implementation. This was in agreement with an empirical study by Yu Chu & Wang (2001) on critical factors affecting the implementation decisions and processes of ISO quality management systems in Taiwan's public sectors.

Zatzick et al. (2012) study in USA conceptualized an organization as a system of interrelated activities and that TQM acting as an elaborate element that achieves internal fit; when the core activities are oriented towards cost rather than differentiation strategic position. The study findings showed that TQM is positively related to performance for cost leaders and negatively related to performance of differentiators. This is in line with Faezi (2014) study that investigated the relationship between criteria of differentiation strategy and cost leadership with TQM in pharmaceutical companies in Iran. The study found that TQM has a significant relationship with differentiation strategy. On the other side result did not show any positive relationship between TQM and cost control.

Gulali et al. (2013) study on the effect of implementing QMS on the performance of public universities revealed that QMS implementation had a positive impact student enrolment. The study only focused on one public university and the population was based on the non-teaching personal. This study was in support to Kimani, A. W., and Bichanga, W. O. (2013) that established that streamlining of processes as a result of ISO certification influences the public universities' performance. Further, Kimani, A. W., and Bichanga, W. O. (2013) and Gulali et al. (2013) studies were anchored on descriptive research design.

Zakuan et al. (2012) study on the critical success factors of TQM implementation in Higher Education Institutions in Malaysia, revealed that the success of TQM in an institution depends on its quality management strategy and on how it identifies, classifies, analyzes and reacts to the changes in quality requirements. This study was in support to studies by Zatzick et al. (2012) and Salaheldin (2009) who found a positive relationship between TQM and organization performance. Gulali et al. (2013) study on the effect of implementing QMS on the performance of public universities revealed that QMS implementation had a positive impact student enrolment. The study only focused on one public university and the population was based on the non-teaching personal. This study was in support to Kimani, A. W., and Bichanga, W. O. (2013) as they were anchored on descriptive research design. Salaheldin (2009), Zatzick et al. (2012) and Faezi (2014) studies were carried out in Taiwan and USA. However, Salaheldin (2009) study was anchored on structured equation modeling. It is clear that the above studies were conducted on SMEs, Pharmaceutical companies and Higher Education institutions. None of the study had a focus on service institution by use of a descriptive survey. There is no known information about the relationship between Total Quality Management System and Organization Performance

## **III. Methodology**

### **Findings**

The study targeted a total of 333 respondents from sampled employees of Kenya Power Ltd Kenya headquarters. A total of 333 questionnaires were administered to the respondents in various departments in Kenya Power Ltd Kenya. A total of 328 duly filled questionnaires were returned by the respondents. Yielding a response rate of 98.49%. Bryman (2016) and Walliman (2016) suggest that a response rate of 85% and above is excellent, 70%-85% is very good, 60%-69% is acceptable, 50%-59% barely acceptable, while below 50% is not acceptable. The response rate of 98.49% in this study was therefore excellent

According to the findings in table 4.2, the study found that most of the respondents as indicated by 38.11% had an a total work experience between 6-10 years, followed by 34.45% of the respondents who had a work experience of more than 11 years, 17.68% of the respondents had a work experience of between 2-5 years, while 9.75% of the respondents had a work experience of less than 2 years.

This information implies that most of the respondents were well versed with the competitive intelligence in Kenya Power LTD companies as most of them (72.56%) had a total work experience of over 6 years

**Table 1 Employment Period**

Employment Period	F	%
more than 11 years	113	34.45
6-10 years	125	38.11
2-5 years	58	17.68
less than 2 years	32	9.75
Total	328	100.0

**Source:** Researcher 2021 data

**Organizational Performance**

The study dependent variable was organizational performance which was measured using a five point Likert scale using various statements and the findings presented as shown in Table 2 using means and standard deviations.

**Table 2 Organizational Performance**

Organizational Performance	M	STD
KPLC has adequate monitoring and reporting systems to ensure proper usage of budgeted project funds	2.98	1.41
KPLC funding is adequate for approved projects	3.02	1.36
KPLC has an efficient system in place to manage the scope , budget and schedule of projects	2.95	1.45
KPLC has instituted appropriate monitoring and control systems to ensure adequate control of its projects	2.98	1.45
KPLC has effective safety, health and environment system to ensure safe working place for its Customer safety	2.91	1.37
KPLC has sufficient instruments and equipment to make effective use of technology in the implementation of projects by customers	3.03	1.45

**Source:** Researcher 2021 data

According to the findings in Table 2 shows moderate extend (M=2.98, SD=1.41) on adequacy of KPLC’s monitoring and reporting systems to ensure usage of budgeted project funds. It also emerged that KPLC’s funding is adequate for approved projects (M=3.02, SD=1.36). Based on the rating on the two items, it can be concluded that KPLC’s profit level is moderate. Further findings on performance based on market share are also revealed. KPLC has a system in place for efficiently managing projects scope, budget and schedule as shown by moderate rating (M=2.95, SD=1.45). In addition, the findings indicates that KPLC has instituted appropriate monitoring and control systems to ensure adequate control of its projects as indicated by moderate rating (M=2.98, SD=1.45). The moderate ratings although above small extend confirm that KPLC has average performance in terms of market share. The third measure of performance was Customer Turnover. The findings shows that KPLC has effective safety, health and environment system to ensure safe working place for its Customer safety (M=2.91, SD=1.37) and sufficient instruments and equipment to make effective use of technology in the implementation of projects by customers (M=3.03, SD=1.45). These findings imply that KPLC has good performance in terms of customer turn over.

The study objective of the study sought to determine the influence of Total Quality Management system on Organization Performance in Kenya Power and Lighting Company limited. Total Quality Management system rating were established and later on regression model carried out. Descriptive findings on Total Quality Management system are presented a shown in Table 3 using means and standard deviations.

**Table 3 Total Quality Management system**

QMS	M	STD
KPLC has executed a philosophy of putting customers first	2.98	1.42
Customers are responsible for all activities in product design, production and marketing	3.03	1.42
All the managers demonstrates their seriousness and commitment to quality	3.07	1.43
Employees at all levels are responsible for reviewing and changing their work processes with a view to improving quality of the product.	3.11	1.49
Communication plays a major role in the quality of KPLC problems	2.97	1.41
Employees are committed to achieving, advancing, increasing responsibility, recognition and paying jobs	2.99	1.42

**Source:** Researcher 2021 data

The findings on total quality management system indicates that KPLC has executed a philosophy of putting customers first (M=2.98, SD=1.42). The findings also shows that customers are responsible for all activities in product design, production and marketing (M=3.03, SD=1.42) and all the managers demonstrates their seriousness and commitment to quality (M=3.07, SD=1.43). In addition, the findings indicates that employees at all levels are responsible for reviewing and changing their work processes with a view to improving quality of the product (M=3.11, SD=1.49). It is also clear from the findings that communication plays a major role in the quality of KPLC problems (M=2.97, SD=1.41) and employees are committed to achieving, advancing, increasing responsibility, recognition and paying jobs (M=2.99, SD=1.42). These findings imply that there is a moderate extend of total quality management system which could have an influence on organizational performance.

In order to establish the influence of total quality management system on organizational performance, simple linear regression model was carried out. This achieved by regressing organizational performance against total quality management system. The findings are presented as shown in Table 4.

**Table 4 Influence of QMS on organizational Performance**

<b>Model Summary</b>											
Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	Change Statistics	F Change	df1	df2	Sig. Change	F
1	.643 <sup>a</sup>	.414	.412		.4424485	.414	230.178	1	326	.000	
a. Predictors: (Constant), QMS											
<b>Coefficients<sup>a</sup></b>											
Model	Unstandardized Coefficients			Standardized Coefficients		t	Sig.				
		B	Std. Error	Beta							
1	(Constant)	1.088	.127			8.553	.000				
	QMS	.637	.042	.643		15.172	.000				
a. Dependent Variable: performance											

**Source:** Researcher 2021 data

The findings shows that QMS accounts for 41.4% significant variance in organizational performance, R<sup>2</sup>=.414, F(1, 326)=230.178, p<.05. Besides, it is also clear that QMS has a positive significant influence on organizational performance (β=.643, p<.05).

From the study findings, QMS accounts for a significant variance in organizational performance and with a positive significant influence on organizational performance. From these findings it can be concluded that Quality Management System has an impact on organization performance of Kenya Power and Lighting Company. It can therefore be concluded that if well adopted and implemented, QMS has an intervening impact on strategic orientation and organization performance.

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