



Effect of Employee Participation on the Adoption of Total Quality Management by Multinational Firms in Nairobi City County, Kenya. A Case of General Motors East Africa Limited

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ISSN: 2616-8421

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How to cite this article: Mwololo, J. & Were, S. (2018). Effect of Employee Participation on the Adoption of Total Quality Management by Multinational Firms in Nairobi City County, Kenya. A Case of General Motors East Africa Limited, *Journal of Human Resource & Leadership* Vol 2(2) pp. 28-38.

Abstract

The study examined the effect of employee participation on the adoption of total quality management by multinational firms in Nairobi City County, Kenya. The study focused on multinational firms in Kenya that have adopted Total Quality Management using a case study of General Motors East Africa to determine the effect of employee participation in the adoption of Total Quality Management. The study utilized a descriptive research design. The population for this study constituted all 326 employees and a sample of 176 was used as respondents. Questionnaires were used to obtain quantitative and qualitative data for analysis which was further validated pilot study. Information was sorted, coded and input into the statistical package for social sciences for production of graphs, tables, descriptive statistics and inferential statistics. A multiple odd ratio regression model was used to test the significance of the influence of the independent variables on the dependent variable. The study found that team cohesiveness had a significant effect on adoption of total quality management, consultative committees had a significant effect on adoption of total quality, employee innovation had a significant effect on adoption of total quality management and employee shareholding had a significant effect on adoption of total quality management by multinational firms in Kenya. The study recommends that team be encouraged for better decision making, better customer delivery and creates job satisfaction among the employee. Consultative committee should meet regularly on staff matters, diversity in committee meetings be tolerated and cherished. Employee innovative ideas should be well natured

to improved product development, quality production, application techniques, and operational efficiency.

Keywords: *Total Quality Management, Employee Participation, Team Cohesiveness, Consultative Committees, Employee Innovation, Employee Shareholding, Multinational Firms and General Motors East Africa*

1.0 Introduction

1.1 Background of the Study

Total Quality Management (TQM) implies an organization's obsession with meeting or exceeding customer expectations. It is an approach for continuously improving the quality of goods and services delivered through the participation of individuals at all levels and functions of an organization (Standa, 2008). Many institutions in Kenya are embracing TQM practices and have gone further to attain ISO 9001:2008 certification. The objectives of these efforts are to ensure timely delivery of services, customer satisfaction and improved general performance. Whether the TQM practices adopted by these institutions are related to non-financial performance of such institutions remains unclear (Peat, 2005).

TQM seeks to integrate all organizational functions that is marketing, finance, design, engineering, and production, customer service, to focus on meeting customer needs and organizational objectives (Adam, Flores & Macias, 2001). It views an organization as a collection of processes. It maintains that an organization must strive to continuously improve these processes by incorporating the knowledge and experience of workers. However, the inefficient knowledge and understanding of the concept of TQM is recorded as one of the top difficulties that face TQM (Huang & Lin, 2000). The developing countries suffer from poor quality products. Low product quality is term that has become synonymous with the customer goods manufactured in the developing countries (Lakhe & Mohanty, 2014).

Multinational companies (MNC's) usually formulate their global plans from their international operations offices usually the holding company home country. MNCs strategic plans are usually very broad based and would focus more on the 80/20 rule looking critically at locations that give them 80% of the values and hence evaluate factors that would influence the success or otherwise of strategy implementation. (London & Stuart, 2004). A central characteristic of Multinational Corporation is the predominance of large firms, typically with sales running into millions of dollars, at times exceeding economies of some nations. The market in which they operate is typically dominated by few players. The firms are characterized by the importance of new technologies and special skills, and tend to differentiate their products through intense advertising which sustains and reinforces their oligopolistic nature.

In Kenya, General Motors East Africa Limited which is a MNC offers after sales support through seven approved dealerships as part of the overall strategy of taking services closer to the customer. The Company is certified ISO 9001:2008 (Quality Management System) and ISO 14001:2004 (Environment Management System) as a mark of its world class quality and environmental standards respectively. General Motors East Africa Ltd has a comprehensive human resource management policy named "work place of choice" which is applied across the General Motors Corporation subsidiaries worldwide. The policy is based on five major pillars, i.e. good remuneration, safety at work place, career development, fairness and mutual trust amongst staff.

This is intended to make the employee ‘feel at home’ and encourage them to commit to the work place.

1.2 Statement of the Problem

A pre-eminent for the private sector, which today contributes more than 75% of Kenya’s total GDP, represents the main thrust of Kenya’s ongoing market-based reforms (Kenya National Bureau of Statistics (KBS), 2016). Kenya National Bureau of Statistics figures show that about 87 % of GDP contribution in 2016 came from private sector. From a private sector perspective, the five biggest contributors are the agriculture, wholesale and retail trade, manufacturing, transport and communication, and financial services industries with their collective contribution accounting for about 59.6 % of GDP in 2016 (KNBS, 2017). The role of TQM is widely recognized as being a critical determinant in the success and survival of both manufacturing and service organizations in today’s competitive environment. TQM is also seen as a source of competitive advantage (Douglas and Judge, 2001); innovation (Singh & Smith, 2004); and new organizational culture (Irani *et al.*, 2004).

Any decline in customer satisfaction due to poor service quality would be a serious cause of organizational failure. Accordingly, all manufacturing firms seek to adopt and implement a set of operations management practices that have been successful elsewhere and that will help them to identify changes in their environment and to respond proactively through continuous improvement (Fassoula, 2006). One form of operations management practices is TQM which has received great attention in the last two decades (Jung & Wang, 2006)

Despite the growing importance of TQM, no further attempts have been made to comprehensively study effect of employee participation in the adoption of Total Quality Management practices by Multinational firms in emerging economies such as in Kenya. Therefore, a buildup of literature in the Kenyan setting is needed. This study attempted to explore the effect of employee participation in the adoption of Total Quality Management practices by Multinational firms in Kenya. However; it was a new subject for research in Kenya. Looking towards all research studies completed in Kenya, it was observed that there was insignificant research work done on this topic in Kenya hence creating a knowledge gap that this study seeks to fill.

1.3 Specific Objectives

- i. To determine the effect of team cohesiveness on the adoption of total quality management by multinational firms in Kenya
- ii. To assess the effect of consultative committees on the adoption of total quality management by multinational firms in Kenya
- iii. To find out the effect of employee innovation on the adoption of total quality management by multinational firms in Kenya
- iv. To examine the effect of employee shareholding on the adoption of total quality management by multinational firms in Kenya

2.0 Literature Review

2.1 Theoretical Review

This section focuses extensively on theoretical review of literature on constructs on employee participation and their effect in the adoption of TQM from scholars in the school of human resource management.

2.1.1 Institutional Theory

The theory recognizes the embedment of institutional actors in an environment of formal and informal rules. Institutional theorists suggest that organizational actions and processes are driven by their actors in order to justify and plausibly explain their actions. In other words, an organization is composed of three pillars: the cultural-cognitive, normative, and regulative elements that together with associated activities and resources provide stability to social life. Organizations try to fit in with the norm by adopting strategy implementation that validates them as part of the organizational field. In essence, traditional institutional theory believes that organizational fields become structured by powerful influences among organizations.

Institutions are also carried by individuals, and provide accounts of the social and legal constructions of individual identity (Friedland & Alford, 1991). Institutional theory is relevant to this study as it explains the variable team cohesiveness. It argues that all organizations take the shape they do because they “draw from the culture around them value-based notions of how things should be organized” (Tolbert & Zucker, 1996).

2.1.2 Juran’s Theory of Total Quality Management

Juran defined TQM as a system of activities directed at achieving delighted customers, empowered employees, higher revenues, and lower costs (Juran & Gryna, 1993). Juran believed that main quality problems are due to management rather than workers. The attainment of quality requires activities in all functions of a firm. Firm-wide assessment of quality, supplier quality management, using statistical methods, quality information system, and competitive benchmarking are essential to quality improvement.

Juran’s approach is an emphasis on team (QC circles and self-managing teams) and project work, which can promote quality improvement, improve communication between management and employee and improve coordination between employees. He also emphasized the importance of top management commitment and empowerment, participation, recognition and rewards.

Juran considered quality management as three basic processes (Juran, 1993): Quality control, quality improvement, and quality planning. In his view, the approach to managing for quality consists of: The sporadic problem is detected and acted upon by the process of quality control; the chronic problem requires a different process, namely, quality improvement; such chronic problems are traceable to an inadequate quality planning process. This theory therefore links the variable employee innovation in solving organizational problems.

2.1.3 Theory of Complementarities of Involvement and Incentives

The prescriptive literature on organizational design emphasizes the importance of aligning decision making rights with incentives to make good decisions. If undertaken seriously, the use of greater employee involvement involves substantial changes in decision making rights when frontline employees collect and analyze more data and suggest and implement improvements. In these circumstances, it makes sense to structure incentives in ways that reward quality and improvement and align frontline workers’ goals with their new authority (Milgrom & Roberts, 2005). The more the incentives the greater the employees level of participation and involvement.

This theory relates well with employee shareholding because workplaces with greater employee involvement in terms of holding shares and other incentives like paid for holidays serve to enhance their commitment and therefore participation in adoption of various processes. This theory also supports the view of complementarities between involvement and incentives plans like pay

practices such as gain sharing, profit sharing, and stock ownership plans. Without incentives therefore, the employee's levels of involvement decline.

2.2 Empirical Review

Xu, and Cooper Thomas, (2011), conducted a study on how leaders achieve high employee engagement. Three factors emerged: supports team, performs effectively, and displays integrity. Correlation and regression results showed that supports team was the strongest predictor of engagement; semi-partial correlations showed that the three leadership factors overlapped in their relationships with engagement, with supports team predicting most unique variance. Employee engagement can increase the understanding of organizational policies. It involves processes such as lower levels of decision making, adopt the experience, knowledge and the ideas for the advancement of the organization. Employees should be given due recognition for their contributions and their ideas. It is a psychological process to develop confidence between the members of the organization and encourage them to make decisions and solve problems with each other.

Powell (2015), study on total quality management as competitive advantage considered empowered work teams as a major part of an open organization. Some also used 'teamwork' instead of the open organization concept. Teams should have authority to implement the changes and to motivate employees to participate into the change processes. The main issues influencing on team effectiveness in an open organization are diversity and cohesiveness. Diversity is generally considered as one of the sources of the fundamental advantage that teams offer compared to individual efforts. One of the primary sources of TQM team diversity comes from the inclusion of front-line employees in decision making teams.

Leavengood and Anderson (2011), investigated best practices in quality management for innovation performance in Technology Management in the Energy Smart World (PICMET) USA firms. Their analysis results showed that quality oriented firms are not innovative. Their findings claim that firms focus on quality lean to be reactive to the customers' needs which will lead to firms to be derived by customers. Innovation oriented firms are proactive to the customers' needs.

Hollandts, Aubert, Abdelhamid and Prieur (2017), conducted a study titled Beyond Dichotomy: The Curvilinear Impact of Employee Ownership on CEO entrenchment. Results drawn from a longitudinal analysis of a sample of 230 French firms over the period 2000–2005 provide support for an inverted U-shaped relationship between employee ownership and accounting-based performance measures. However, the relationship was not supported when a market-based performance measure was used. The study also found that the inflection point of the inverted U-shaped relationship between employee ownership and firm performance does not depend upon the level of employee representation on the board.

According to Rahman, Shokshok & Wahab (2011), TQM offers many benefits when properly implemented, such as reduced scrap and rework, the elimination of defects, reduced levels of cost, increased levels of productivity & efficiency and better employee morale. Chin & Pun (2002), stated that successful TQM implementation will result in improved products and services, more satisfied employees and customers, reduced costs and an improvement in the organizational financial improvement.

There are a number of barriers that face the process of TQM implementation. Ustadh (2012) has identified them as follows; competitive markets, bad attitudes/abdication of

responsibility/management infallibility, lack of leadership for quality, deficiency of cultural dynamism, inadequate resources for total quality management, lack of customer focus, lack of effective measurement of quality improvement, poor planning, lack of management commitment, resistance of the workforce and lack of proper training.

2.3 Conceptual Framework

According to Kombo and Tromp (2009), a concept is an abstract or general idea inferred or derived from specific instances. The conceptual for the study established the relationship between team cohesiveness, Adoption of TQM, Consultative Committees, Employee Innovation and Employee Shareholding.

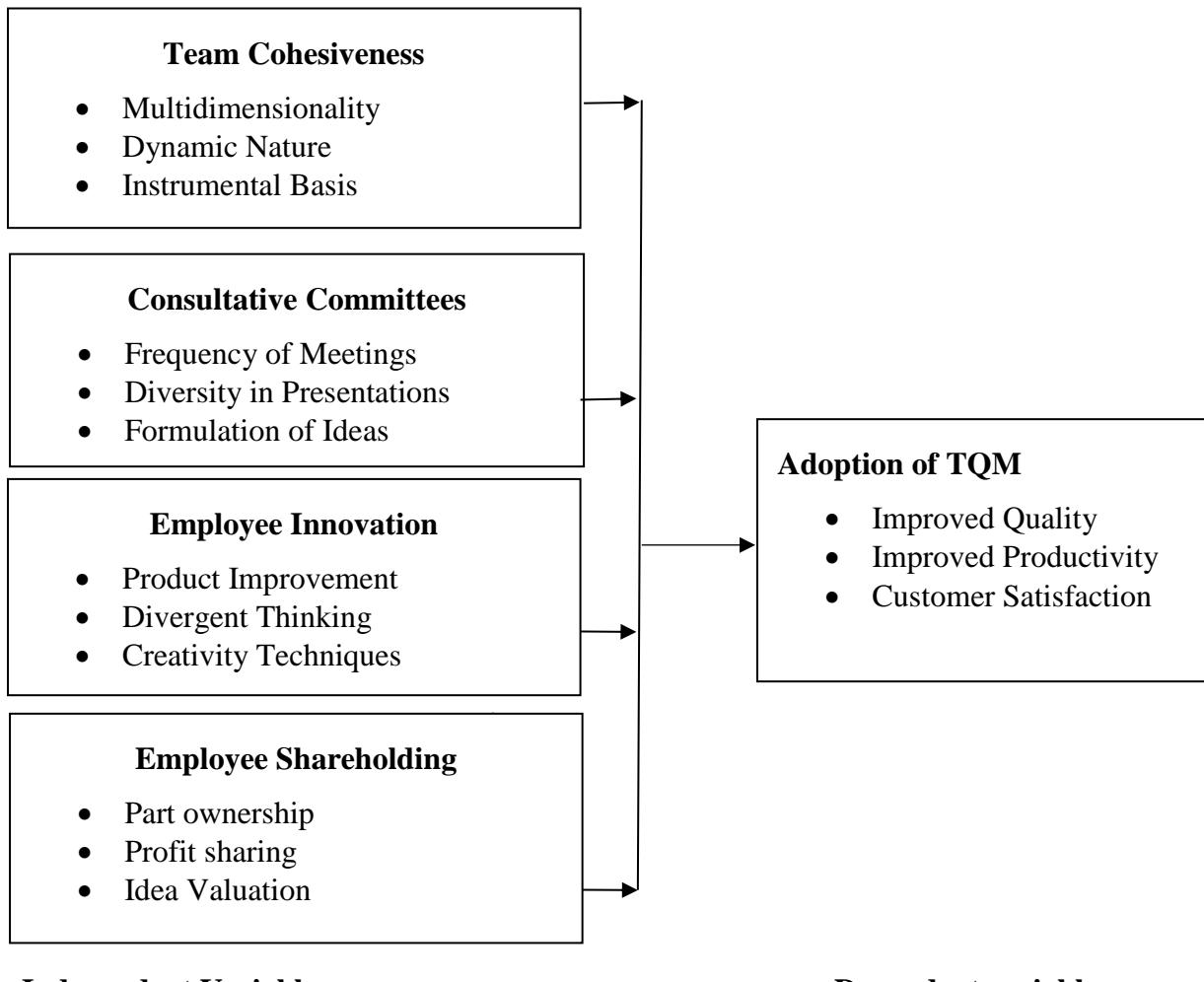


Figure 1: Conceptual Framework

3.0 Research Methodology

The study employed descriptive research design. The population of study were all General Motors employees totaling 326 employees. Stratified random sampling method was used for the selection of respondents of the study in which the population was divided into homogeneous subgroups before sampling. Cochran (1973) formulae was used to derive the sample to be 176 respondents. Since the population is relatively small then the sample size can be reduced slightly using:

$$n = \frac{n_0}{1 + \frac{(n_0 - 1)}{N}}$$

Where n is the sample size and N is the population size. For a population of 326, the sample size that would now be;

$$n = 385 / (1 + ((385-1)/326)) = 176$$

Questionnaires were used to collect information from the respondents. Data was analyzed using descriptive statistics and inferential statistics. The specific descriptive statistics included percentages and frequencies while the inferential statistics included multiple linear regression model and Pearson correlation. The multiple linear regression models were used to measure the relationship between the independent variables and the dependent variable which were explained in the model. The regression model helped explain the magnitude and direction of relationship between the variables of the study through the use of coefficients like the correlation, coefficient of determination and the level of significance.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

Y = Adoption of TQM

$\{\beta_i; i=1,2,3,4\}$ = The coefficients for the various independent variables

X_1 = Employee Cohesiveness

X_2 = Employee Consultative Committee

X_3 = Employee Innovation

X_4 = Employee Shareholding

ε is the error term which is assumed to be normally distributed with mean zero and constant variance.

4.0 Research Results and Discussion

4.1 Response Rate

The number of questionnaires that were administered was 176. A total of 138 questionnaires were properly filled and returned as shown in Table 1. Table 1 presents an overall successful response rate of 78.41%. Babbie (2004) asserted that return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good. Based on these studies assertions, 78.41% response rate is adequate for the study.

Table 1: Response Rate

Response	Frequency	Percent
Returned	138	78.41%
Unreturned	38	21.59%
Total	176	100.00%

4.2 Pilot Testing Results

The purpose of the reliability test was to refine the questionnaire so that respondents had no problems in answering the questions. The Cronbach alpha was calculated in a bid to measure the reliability of the questionnaire. Cronbach alpha is expressed as a coefficient between 0 and 1.00. The higher the coefficient, the more reliable is the test. Table 2 presents reliability results. The findings show that all the variables were reliable since their Cronbach alpha was above 0.7, a cut-off of reliability for the study.

Table 2: Reliability Test Results

Variable	No of Items	α =Alpha	Comment
Team Cohesiveness	6	0.751	Accepted
Consultative Committee	10	0.825	Accepted
Employee Innovation	8	0.726	Accepted
Employee Shareholding	6	0.731	Accepted
Adoption of TQM	9	0.801	Accepted

4.3 Regression Analysis

The conducted a regression analysis to establish the statistical significance on the relationship between the independent variables notably, team cohesiveness, consultative committee, employee innovation and employee shareholding on the dependent variable which was adoption of TQM. Green and Salkind (2003) define regression analysis as a statistics process of estimating the relationship between variables. Regression analysis aids in generating equation that describes the statistics relationship between one or more predictor variables and the response variable. The results of the regression were presented using regression model summary tables, Analysis of Variance (ANOVA) table and beta coefficients table.

4.3.1 Model Summary

The results presented in Table 3 show that team cohesiveness, consultative committee, employee innovation and employee shareholding explain 74.9% of the variations in the dependent variable which is the adoption of TQM.

Table 3: Model Fitness for the Regression

Indicator	Coefficient
R	0.865
R Square	0.749
Adjusted R Square	0.726
Std. Error of the Estimate	0.389095

4.3.2 Analysis of Variance (ANOVA)

Table 4 indicate that the independent variables were good predictors of adoption of TQM as supported by an F calculated of 211.006 which is greater than F critical of 3.826 and also supported by the reported p=0.00 which was less than the conventional probability of 0.05 significance level.

Table 4: Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	6.665	4	1.666	211.006	.000
Residual	20.135	133	0.151		
Total	26.801	137			

4.3.3 Beta Coefficients

Regression of coefficients results in table 5 indicates that team cohesiveness had a positive and a significant effect on adoption of TQM and ($\beta=0.200$, $p=0.012$). This implies that a unit improvement in team cohesiveness will lead to a 0.200 improvement in adoption of TQM. The results also indicated consultative committee had a positive and a significant effect on adoption of TQM at ($\beta=0.215$, $p=0.007$). This implies that a unit improvement in consultative committees will lead to a 0.215 improvement in adoption of TQM. Further the results showed that employee innovation had a positive and a significant effect on adoption of TQM at ($\beta=0.136$, $p=0.008$). This implies that a unit improvement in employee shareholding will lead to a 0.136 improvement in adoption of TQM. Lastly the results show that employee innovation had a positive and a significant effect on adoption of TQM ($\beta=0.240$, $p=0.003$). This implies that a unit improvement in employee shareholding will lead to a 0.240 improvement in adoption of TQM.

Table 5: Regression of Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.378	0.244		9.745	0.000
Team Cohesiveness	0.200	0.038	0.110	2.541	0.012
Consultative Committee	0.215	0.047	0.131	2.763	0.007
Employee Innovation	0.136	0.039	0.107	2.720	0.008
Employee Shareholding	0.240	0.038	0.214	3.037	0.003
Dependent Variable: Adoption of TQM					

The specific model is;

$$\text{Adoption of TQM} = 2.378 + 0.200X_1 + 0.215X_2 + 0.136X_3 + 0.240X_4$$

Where;

X_1 = Employee Cohesiveness

X_2 = Employee Consultative Committee

X_3 = Employee Innovation

X_4 = Employee Shareholding

5.0 Conclusion

The study found a team cohesiveness has a significant effect on adoption of total quality management by multinational firms in Kenya. It can be concluded that an improvement in team cohesiveness will lead to a positive improvement in total quality management by multinational firms in Kenya. Similarly, it was concluded that firms attach equitable treatment of consultative committees since these contribute directly to adoption of total quality management and employee innovation enhances adoption of total quality management. Further, it can be inferred that even

when organizational performance takes place, total quality management can only be enhanced in a sustained manner if employee innovation is natured in the firms.

6.0 Recommendation

This study finding on significant relation between team cohesiveness and adoption of TQM recommends that multidimensionality existence in the organization for relationship between group-level task, social cohesion and group effectiveness. Multidimensionality availability in team cohesiveness is necessary for longitudinal changes in cohesion and performance of staff. Work relations and team important for your work performance for better decision making, better customer delivery and creates job satisfaction among the employee.

The study recommends that consultative committee should meet regularly on staff matters, diversity in committee meetings be tolerated and cherished. Ideas that improve staff welfare be formulated from the consultative meetings. Similarly, the study recommends that operational level employees be encouraged to highly contribute ideas during quality meetings and ideas previously generated by employees in quality circles be implemented for the beneficial to the organization.

The study also recommends that employee innovative ideas should be well natured to improved product development, quality production, application techniques, and operational efficiency. These can be achieved by highly committed managers and adequate rewards. Lastly the study recommends that employees should be made part shareholders since the finds showed that being a part owner motivate staff to be better at your work, customer focused, improve loyalty and commitment to the organization. The study also found that being a part owner make staff employ best quality improvement ideas to the organization hence commitment to adoption of TQM.

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