TQM PERSPECTIVES UNDER THE COMPETITIVE STRATEGIES AND THE ORGANIZATION PERFORMANCE IN KENYAN MANUFACTURING SECTOR

Wamalwa Lucy Simani, Jomo Kenyatta University of Agriculture and Technology

ABSTRACT

The Kenya manufacturing industry contributes to 10.7% of the country GDP, 26% of the merchandise exported and 12 % of formal employment. The manufacturing industry in Kenya is faced with a number of challenges one of which is competition from local firms as well as well-established multinationals. This necessitates the need for the sector to implement a viable business strategy in order to improve its competitiveness. Generic strategies are widely accepted both academically and practically as sustainable competitive strategies and their influence on performance have been critically examined in a wide range of business settings in countries worldwide. TQM on the other hand establishes quality enhancement as a dominant priority and one that is vital for long-term effectiveness and survival, it focuses on increasing efficiency and improving processes, providing superior customer value and meeting customer needs. The purpose of this study was to examine the mediation effect of TQM practices, on the relationship between competitive strategies and organization performance in the Kenyan manufacturing industry. The study adopted a descriptive research design. The target population for the study was 39 ISO certified, manufacturing firms. The target respondents were the CEO, Strategic managers and Quality Assurance Managers a total of 117 respondents. A pilot test was conducted to assess the questionnaire validity and reliability of the data. Structural equation modeling (SEM) and multiple Regression analysis were used. The finding indicated that TQM partially mediates the relationship between cost leadership strategy and organization performance (organization learning and growth and internal process performance) but TQM fully mediated the relationship between differentiation strategy and the following performance measures internal process performance and organization learning and growth.

Keywords: TQM, Competitive Strategies, Organization Performance

INTRODUCTION

The Kenyan manufacturing sector is faced with a number of challenges one of which is competition (Chege, Ngui & Kimuyu, 2014). The manufacturing industry must compete locally with imports from well-established multinational firms while at the same time try to have a competitive edge in the world (World Bank, 2016). The competitiveness of Kenya manufacturing exports has been slowly declining; traditionally Kenya was the largest exporter of various manufactured goods to the EAC currently its market share has declined from 9% in 2009 to 7% in 2013; Globally its market share has also been on the decline from 0.18% in 1980 down to 0.06% in 1994 and 0.02% in 2013 (World Bank, 2014). (Acar & Zehir 2010) emphasized on the

need for an organization to implement a viable business strategy in order to improve its competitiveness. Porter's (1980) Generic strategy model positive linkage to organization performance has been widely documented over the past three decades (Parnell, 2011; Luoma, 2015; Salavou, 2015). The model stipulates that an organization can attain superior performance over others by either establishing cost leadership position or differentiating its offering from those of its rivals, either of these approaches may be accompanied by focusing efforts on a given market niche. Faezi (2014) envisaged that generic strategies need to be complemented with TQM implementation in order to provide sustenance and achieve high performance.

TQM has become an irrepressible, globally pervasive strategic force in today's business environment (Asif, Bruijin, Douglas & Fisscher, 2009). Organizations that have implemented TQM practices consistently outperform organizations that have not implemented TQM practices (Akgün, Ince, Imamoglu, Kekskin & Kocoglu, 2014). Studies have shown that TQM is positively associated with performance outcome such as; Financial performance and profitability (Chaudary, Zafar & Salman, 2015; Talib, Rahman, & Quresh, 2013); customer satisfaction (Mehra & Ranganathan, 2008) and knowledge management (Ooi, Cheah, Lin & Teh, 2012; Aboyassi, Alnsour & Alkloub, 2011).

The impact of TQM on strategic management research practices still remains unclear and under examined (Nouri, 2013). Scholars (Nouri, 2013; Asif 2009) posit that TQM literature is pretty much divorced from the field of strategic management. A number of researchers (Yunis, Jung & Chen,2013; Escrig-Tena, Bou-Liusar, Beltr`an-Mart`in & Roga-Puig, 2011) have studied the impact of TQM on business strategies performance in different perspective chiefly as a driver to strategic choices; Jung, Wang and Wu (2009) examined the relationship between TQM and business strategies in international projects in USA; Zatzick, Moliterno and Fang (2012) explored how fit organization strategic orientation relates to TQM implementation in USA; Prajogo and Sohal (2006) studied the relationship between organization strategy, TQM and organization performance in Australian firms; Revuelto-Taboada, Canet-Giner and Balbastre-Benavent (2011) investigated the relationship between Quality tools and techniques, EFQM experience and strategy formulation in Spanish service firms. The primary focus of these studies has been on advanced economies. In Kenya, related studies have been carried out by Awino, Muchara, Ogutu and Oeba (2012) to find out the effect of Total Quality implementation on Horticulture Industry Competitive advantage. Other studies (Karani & Okibo, 2012; Kibe & Wanjau, 2014) have focused on the effect of TQM on organization performance. The study examined the Mediating effect of TQM on the relationship between competitive strategies and organization performance in Kenyan manufacturing sector.

Research Hypothesis

H01: TQM practice has no significant Mediating effect on the relationship between differentiation strategy and Organization Performance.

H02: TQM practice has no significant Mediating effect on the relationship between cost leadership strategy and Organization Performance.

LITERATURE REVIEW AND CONCEPTUAL FRAME WORK

Theoretical Review

This study was based on knowledge based theory; dynamic capability theory; resource

based view theory and systems theory. Knowledge Based Theory of the Firm considers knowledge as the most strategically significant resource of the firm. A firm's competitive advantage depends upon what it knows and how it uses what it knows and how fast it can create something new (Duran, Contender & Saehan, 2014). The capability to learn or the ability to create and apply new knowledge is considered a source of sustainable competitive advantage and superior corporate performance (Islam, Low, Kim & Hasan, 2011). TQM and knowledge management constitute and interact in area of continuous improvement and workforce empowerment. Therefore enterprises that have implemented TQM practices are better in the fields of obtaining knowledge from customers and employees participation in dissemination of knowledge. According to Hung, Lien, Fang and McLean (2010) one of TQM greatest benefits is its emphasis on continuous improvement of business processes so that it can improve organizations competitiveness, effectiveness and flexibility. To achieve continuous improvement firms must promote organization learning to create knowledge that can be utilized in future to improve business processes (Islam, et al., 2011). (Hung, et al., 2010) posited that Knowledge Management initiatives have an indirect effect on innovation performance through TQM practice; by focusing on meeting customers' needs and encouraging organizations to continually identify new customer's needs and expectations. Thereby inducing organizations to develop new products.

The resource-based theory builds its assumptions on the basis that strategic resources are heterogeneously distributed across firms and immobile. A firm is said to have a competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors and when these competitors are unable to duplicate the benefits of this strategy (Barney, 1991). According to Addae-Korankye (2013) TQM provides resources that are invisible intangible and extremely difficult for a competitor to copy for example; a company unique culture, transformational leaders, superior customer service hence it has a long lasting competitive advantage. Silva, Gomes, Lages, and Pereira (2014), conceptualized TQM as a set of integrated organizational resources that contribute to achieving and sustaining competitive advantage. Based on the fact that TQM is a unique strategic value creating resource that is inimitable and gives the firm a sustainable competitive advantage. This theory Instigate the following research hypothesis; TQM practice has a significant Mediating effect on the relationship between differentiation strategy and organization performance.

Yusr, Othman and Mokhtar (2012) define dynamic capabilities theory as the total competences/capabilities enabling a firm to come up with new products and processes and to respond to the changing market environment. Dynamic capabilities refer to the organizations ability to constantly integrate, reconfigure, renew and recreate its resources in response to the changing environment to attain and sustain competitive advantage. Dynamic capabilities theory posits that the most significant and enduring source of competitive advantage is constituted by the capability of firm to acquire, integrate and deploy resources in ways that match each firm's environment (Eisenhardt & Martin, 2000). According to Kuei and Lu (2013) business enterprises of all sizes are expected to build capabilities and capacities to offer better and cheaper products, shorter response times and higher service levels to meet customers demand. Dynamic capabilities stresses on management capability and the unique combination of resources throughout the functions such as research and development, product and process development, manufacturing, human resource and organization learning. Applying TQM in the organization provides a good environment and conditions that lead to generate distinctive capabilities in different aspects of the organization (Santos-vijande & Lez, 2007). Successful TQM Implementation requires several

practices transformational leadership, customer focus, employee empowerment, team work, process management, supplier management, and quality data reporting. Implementing these practices lead to generate several capabilities within the organization (Yusr, Othman & Mokhtar, 2012). For example Leadership commitment, employee empowerment and teamwork to achieve quality performance provides an environment that encourages the trust and cooperation among employees which in turn, lead to knowledge flow across the organization as a result the organization develops innovation capabilities (Ju, Lin, Lin & Kuo, 2006); Customer focus orientation enables the organization with the necessary feedback regarding the customers' attitudes, preferences and complaints, these information aid the organization to improve marketing capabilities (Ooi, Teh, Arumugam & Chong, 2009); and the ability to constantly improve current processes and learn new ones is termed continuous improvement capability (Anand, Ward, Mohan & Schilling, 2009). Continuous process improvement Capabilities are valuable because they give firm a lower cost structure or basis of differentiation (Porter, 1980). TQM practices enable the organization to build marketing capabilities (Yusr, et al., 2012), innovation capabilities (Yusr, Mokhtar & Othman, 2014) and process improvement capabilities (Silva, Gomes, Lages & Pereira, 2014). These capabilities enhance the performance of competitive strategies. Conceptualizing TQM as a strategic resource, that enable an organization to acquire and share knowledge within the organization, also as a resource that enables an organization to build different competences/capabilities that enables it to distinguish itself. The theories instigate the following research hypothesis:

$H01a$: TQM practice has no significant Mediating effect on the relationship between differentiation strategy and organization learning and growth

$H01b$: TQM practice has no significant Mediating effect on the relationship between differentiation strategy and internal process performance

System thinking was developed in 1950 as an alternative to traditional management thinking (Mingers and White, 2010). The system school views organizations as complex interrelationship amongst input, throughput (process), output and feedback. According to this theory an organization is an open and complex system with varying degrees of process flexibility and many feedback loops which are used adaptively by an organization for its survival. An organization as a complex system is made up of activities or interrelated elements such as firms activities, policies, structural elements and resources are seen to form of configurations. Some activities in this system are core activities elements; they are tightly connected or interact with other elements in the system. In this way, the system as a whole is characterized by the connections or interactions of its core elements. Siggelkow (2002) introduces the idea of elaborating elements or elements that are added to the system to reinforce existing core elements. (Zatzick, et al., 2012) hypothesized TQM as an elaborating element when added to an organization system; TQM reinforces the core elements over time enabling the organization to achieve cost efficiency. When TQM is implemented the organization engage only in a thickening process of its core elements this eventually can lead to configurations with increasingly tighter interactions and high internal fit (Siggelkow, 2002). When elements in the system achieve internal fit high performance and sustainable competitive advantage can accrue to an organization. The fit among the elements of an organization may be evidenced by the degree to which strategy, structure and systems complement one another leading to efficiency and higher performance. The organization structure is affected by the extent to which total quality management is implemented within an

organization (Yunis, Jung & Chen, 2013). TQM establishes quality enhancement as a dominant priority and one that is vital for long-term effectiveness and survival it focuses on increasing efficiency and improving processes, provide superior customer value and meeting customer needs (Munisu, 2013). Its factors significantly affect the firm's performance with respect to internal procedures, customers, market share, and the natural and social environment (Zakuan, Yusof, Laosirihongthong & Shaharoun, 2010). Visualizing strategy as core elements within the organization and TQM as elaborate elements that enhances cost efficiency (Zatzick et al., 2012) this theory prompts the development of the following research hypothesis.

H02a: TQM practice has no significant Mediating effect on the relationship between cost leadership strategy and internal process performance.

H02b: TQM practice has no significant Mediating effect on the relationship between cost leadership strategy and organization learning and growth.

Empirical Review

The link between organization strategy, structure and performance is a classical theme in strategic management; organization strategy determines organization structure which in turn influences organization performance. Conceptualizing TQM practice (leadership, team work, employee empowerment and customer focus) as an organization culture that enhances the performance and a strategic resource that enables an organization to gain competitive advantage (Yunis et al., 2013) the success of competitive strategies is affected by extend of which TQM implementation influence the effectiveness of the organization structure. Porter (1980) emphasized that each strategy requires different resources and organization arrangements to be successful in achieving the primary goal of strategy. Prajogo and Sohal (2006) identified that TQM is positively related to innovation performance because it establishes a system and culture that will provide a fertile environment for organizations to innovate as a result it enhances the performance of a differentiation strategy.

According to Faezi (2014) TQM content could be divided into two categories customer orientation and process orientation. With customer orientation, an organization focuses on gaining market advantage where they can outperform their competitor in terms of attracting more customers with distinguished products and charge premium prices. This view suggests that under customer orientation TQM is associated with differentiation strategy (Prajogo & Sohal, 2006). On the other hand, under process orientation, companies will pursue process efficiency improvement to eliminate defects and wastes (Zatzick et al., 2012). The concept of continuous improvement elevates the importance of cost reduction through defect preventions, a fundamental premise of TQM is that the cost of poor quality (such as inspection, rework, lost customer and so on) are greater than the cost of developing processes that produce high quality products and services (Chaudary et al., 2015). TQM implementation eventually leads to cost leadership strategy. By focusing process orientation TQM is closely linked to porters cost leadership strategy.

Scholars studying the mediation effects of TQM on competitive strategies findings have been divisive results, some scholars (Prajogo and Sohal, 2006) measuring performance using product quality, product innovation and process innovations study findings shows that TQM partially mediate the relationship between differentiation strategy and organization performance, but it had no significant mediation effects on the relationship between cost leadership and organization performance. These findings were further resonated by a study by Faezi (2014) which

found similar results. (Zatzick et al., 2012) study supported by contingency perspective whereby internal fit serves an overarching contextual factor influencing TQM found inconsistent results; TQM is positively related to performance of cost leaders and negatively related to performance of differentiators. This study therefore intends to fill these pertinent gaps in literature by studying TQM Mediating effect on the performance of the three generic strategies (cost leadership and differentiation strategy) on the performance of manufacturing firms in Kenya. Conceptual Frame work is presented in Figure 1.

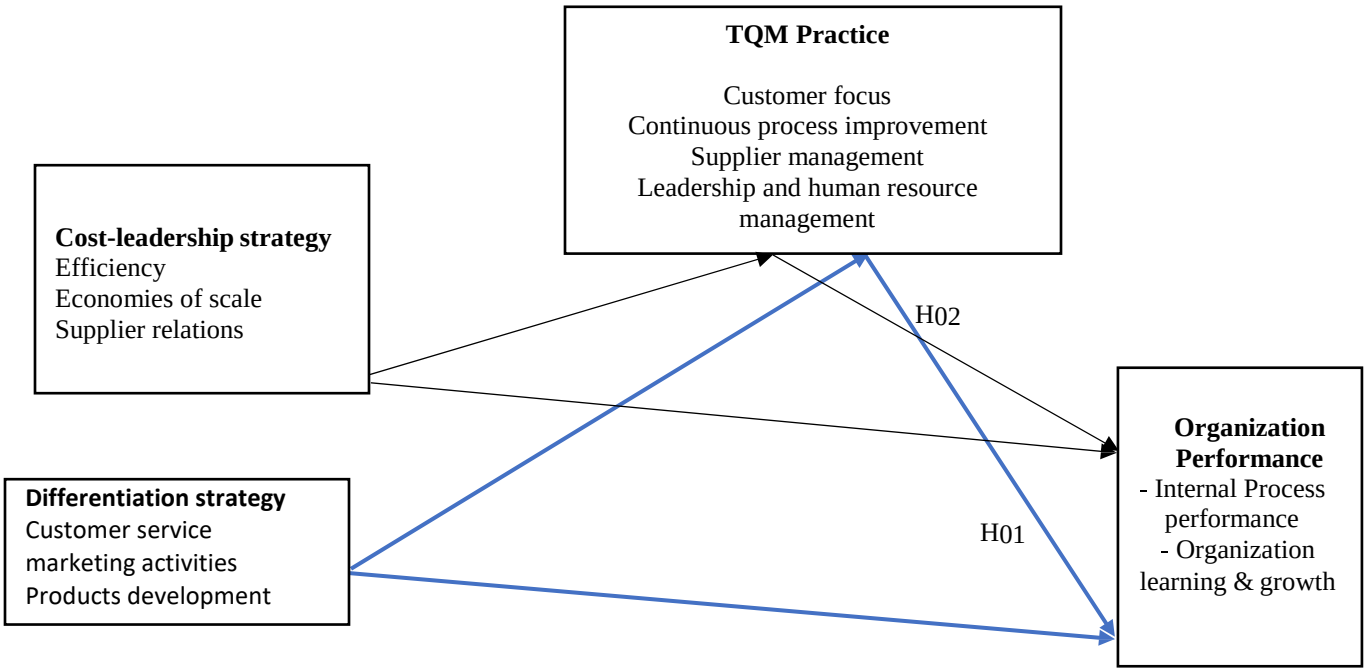

Figure 1
CONCEPTUAL FRAME WORK

Organization Performance

An organization is a voluntary association of productive assets, including human, physical and capital resources for the purpose of achieving a shared purpose (Elisiva & Sule, 2015). Organization performance therefore comprises the actual output or results of an organization as a measure against its intended outputs. The measure of organizational performance is not easy for business organizations with multiple objectives of profitability, employee satisfaction, growth, social responsibility and ability to adapt to the ever-changing environment among other objectives. What constitutes an effective strategy can depend on how one measures performance (Cavalier, Ggaiardelli & Ierace, 2007; Pongatich & Johnson, 2008). Kaplan and Norton (1992) introduced the balanced scorecard approach to measure performance. This framework has been adopted and applied by hundreds of organizations worldwide. The balanced scorecard integrates financial and non-financial based performance measures allowing the manager to measure performance from several perspectives simultaneously. The balanced scorecard metrics includes financial measures that tell the results of actions already taken. It also comprises of three sets of operational measures having to do with customer satisfaction, internal Processes and the organization ability to learn and improve the activities that drives future

financial performance.

To measure organization performance, the study adopted a balance scorecard performance metrics. According to Madsen and Stenheim (2014) financial metric is the ultimate measure of a firm's performance as it helps to determine whether a firm's strategy and execution are supporting the overall mission of the firm. However, financial measures are short term while other perspectives are long-term. Total Quality management emphasizes on continuous process improvement, employee empower, teamwork and sustainable relationship with suppliers and customers the effects of this practices on performance of the organizations are expected to be long-term. Hence TQM impact is expected to be greater on other dimension (internal process performance and organization learning and growth) of performance rather than short term financial performance (Mehralian, Jamal, Nooriparto & Hamid, 2017). The study measured performance using internal process improvement and organization learning and growth. To measure internal process performance the study focused on activities that enhance customer satisfaction, innovation and learning as recommended by Bose and Thomas (2007). Learning and growth perspective is particularly important for strategic management to identify, improve and better the performance of intellectual capital and is critical to develop innovative product design, product, distribution and promotion and to improve the market value of an organization beyond the value of intangible asset base.

RESEARCH METHODOLOGY

This study adapted a descriptive research design. The target population for the study was 39 ISO Certified manufacturing firms. The study adapted a census approach. Primary data was collected from the respondents using self-administered questionnaires. The study targeted three senior managers (CEO/Human resource manager, Strategic manager's/marketing managers and Quality Assurance Managers) in each organization. Prior arrangements were made on how to get the managers out of their busy schedule to fill the questionnaires. Four trained research assistants were engaged to assist in data collection. The study utilized 117 questionnaires to collect data from 39 ISO certified manufacturing firms.

RESEARCH FINDINGS AND DISCUSSION

The study administered 117 questionnaires to (CEO/Human resource managers, strategic mangers/Marketing managers and quality assurance managers in 39 ISO certified manufacturing firms. 102 questionnaires were properly filled and returned the overall response rate was 87%.

Testing the Assumptions of the Study Variables

The assumptions of linear regression models were validated to ensure that the ordinary least squares (OLS) provide reliable estimates of the parameters. A normality test determines if the data set is well-modeled by a normal distribution. Kolmogorov-Smirnova and Shapiro-Wilk test were conducted. The P value for the factors was greater than 0.05 for both Kolmogorov-Smirnova and Shapiro-Wilk test. Hence the study assumed that the data was normally distributed. The presence of outliers was detected by the use of Mahalanobis D-square test. The results of mahalanobis D-square test show that the distribution ranges from 8.554 to 39.092 with P^2 values being greater than 0.01 hence suggesting incidents of multivariate outliners were not existent. Heteroscedasticity was tested by performing the Breuch-pagan/Cookweisberg test. The result

shows Prob>Chi-square=0.0179 since the Prob>Chi-square value is less than 0.05 the study therefore accepts the null hypothesis the variance in the error term was constant. Multicollinearity existence was examined using the variance of inflation (VIF) for independent variables. The VIF indicates whether a predictor has a stronger linear relationship with the other predictors. The VIF values in this case ranges from 2.070 to 3.293 which suggest that problems of multicollinearity are unlikely to occur. Related to the VIF is the tolerance statistics which is a reciprocal of VIF (1/VIF) values below 0.1 indicate serious problems of multicollinearity in this study the value ranges from 0. 304 to 0.482 indicating multicollinearity does not exist.

Convergent validity is used to ensure the measurement items for relevant constructs actually measure that particular construct. Discriminant validity measures the uniqueness of the constructs to each other in the model. Convergent validity ensures that constructs that are expected to be related are in fact related while discriminant validity test that constructs that should have no relationship do in fact not have any relationship. Discriminant validity can be assessed by comparing the amount of the variance capture by the construct (AVE) and the shared variance with other constructs thus the AVE for each construct should be greater than the squared correlation involving the constructs. The AVE values were all above 0.5 and the squared correlations among are less than AVE values this indicates that the measuring scale exhibited adequate convergent and discriminant validity.

Reliability test was conducted as a test of whether data collecting instrument yield the same results on repeated trials. The measurement of the reliability of a data instrument helps the researcher to gauge the goodness of the variable of the measurement. The widely used Cronbach coefficient alpha was employed to assess internal consistency. The entire alpha coefficient ranged from above 0.731 to 0. 895 as shown in the Table 1. Based on the coefficient values the items tested were deemed reliable for this study.

Table 1
CRONBACH ALPHA RELIABILITY RESULTS

Variable	Number of Items	Reliability Cronbach's alpha	Comment
Total quality management	9	0.786	Accepted
Cost leadership strategy	10	0.800	Accepted
Differentiation strategy	8	0.791	Accepted
Internal process performance	9	0.807	Accepted
Learning and growth	9	0.895	Accepted

Factor Analysis

The study conducted a structural equation; modeling using the analysis of moment structures (SPSS AMOS) to construct a conceptual modeling linking the variables understudy. The study employed confirmatory factor analysis to construct the linkage between the dimension of competitive strategies, TQM and dependent variables. The also study followed two step approaches for SEM. The first phase involved confirmatory factor analysis (CFA) that involved evaluation of measurement model on multiple criteria. Prior to CFA, exploratory factor analysis (EFA) that involve computation of factor loading matric, communality and principle component

analysis (PCA) was conducted.

To test whether the items were associated with specific factors, exploratory factor analysis (EFA) was used. To assess the factorability of items, two indicators were examined that is Kaise Meyer-Olkin measure of sampling adequacy and Barlett test of sphericity. KMO & Bartlett's Test of Sphericity was used to measure of sampling adequacy that is recommended. The Bartlett's Test of Sphericity relates to the significance of the study and thereby shows the validity and suitability of the responses collected to the problem being addressed through the study. For Factor Analysis to be recommended suitable, the Bartlett's Test of Sphericity must be less than 0.05 in this study the Bartlett test of sphericity is less than 0.01 for all the variables used in the study this shows the data was suitable for factor analysis. Kaiser-Meyer-Olkin (KMO) Test was used to measure the suitability of data is for Factor Analysis and shown in Table 2.

Table 2
FACTOR ANALYSIS

Construct	Items	Loading	Cronbach alpha
Cost leadership strategy	Supplier relationship (CL1)	0.811	0.800
	Economies of scale (CL2)	0.904	
	Improved efficiency (CL3)	0.852	
Differentiation strategy	Customized customer service (DS1)	763	0.688
	Marketing services (DS2)	886	
	Product development (DS3)	717	
Total Quality Management	Leadership and human resource management (T1)	0.771	0.786
	Customer focus (T2)	0.904	
	Continuous improvement (T3)	0. 930	
Internal process Performance	Efficiency in supply chain management (PM1)	835	0.807
	Customer value chain management (PM2)	895	
	Operation efficiency (PM3)	846	
Organization learning and growth	Knowledge acquisition (KN1)	952	895
	Knowledge sharing (KN2)	875	

HYPOTHESIS TESTING

Before testing for mediation effect the study established that the models used to measure mediation effects were fit**.** To ascertain that the model provided adequate fit for the data the study considered both absolute fit indices and incremental fit indices. The fit indices were used to verify that the models use test the hypothesis were adequate. All the Model Fit indices are given in Table 3.

Table 3
MODEL FIT STATISTICS

	CLS>TQM>IP	CLS>TQM>LG	DS>TQM>IP	DS>TQM>LG	Recommended value
RMSEA	0.031	0.059	0.073	0.069	<0.08
GFI	0.973	0.966	0.932	0.947	>0.9
AGFI	0.930	0.910	0.873	0.892	>0.9
CFI	0.997	0.987	0.962	0.952	>0.9

CLS (Cost Leadership Strategy), DS (Differentiation Strategy), LG (Learning and Growth), IP (Internal Process). Recommended value of fit index by Hair et al., 2010.

TQM Practice has No Significant Mediating Effect on the Relationship between Differentiation Strategy and Internal Process Performance.

To test the mediating effect of TQM on relationship between differentiation strategy and internal process performance. Baron and Kenny (1986) procedures were used. First the independent variable (differentiation strategy) should relate to the dependent variable (Internal Process Management) such that Beta in equation one is significant. The study findings as shown in the Table 4 show that there was a positive significant relationship between differentiation strategy and process management performance (β=0.400 and P-value<0.003) therefore a unit increase in differentiation strategy index led to an increase in manufacturing firm internal process performance index by 0.400 since the p-value was less than 0.05. This fulfills the first condition for measuring mediation effects. The second condition involves testing if the independent variable (differentiation strategy) is relate to the mediator variable (TQM) such that (β) in equation is significant. This condition establishes the first stage of the mediation effect. The findings as shown in the Table 4 shows that there was a positive significant relationship between differentiation strategy and TQM (β=0.643 and P-value <0.01). Since the p-value was less than 0.05. This fulfills the second condition for measuring mediation effects.

Lastly the mediator variable TQM should relate to the dependent variable such that its β is significant. This condition establishes the second stage of the mediation effect. The findings as shown in Table 4 shows the regression coefficients for TQM is (β=0.419 and the P-value is 0.010). The P-value for regression coefficient for TQM on internal process performance is significant at 95% confidence interval. Meeting the second mediation condition. The direct effects of differentiation strategy on internal process improvement is (β=0.192 and the p-value is 0.194) this is insignificant at 95% and 90% confidence interval. Hence the study concludes that TQM completely mediates the relationship between differentiation strategy and internal process performance. This indicates that TQM completely mediates the relationship between differentiation strategy and internal process performance. Complete mediation implies that the differentiation strategy does not at all affect internal process performance after TQM has completely controlled it.

Table 4
DIFFERENTIATION STRATEGY, TQM AND INTERNAL PROCESS PERFORMANCE

	Relationship	Regression Weights	Standardized Regression Weights	S.E.	P
Before TQM mediation effects	IP<DS	0.761	0.4	0.255	0.003
	TQM<DS	0.79	0.643	0.199	0.01
After TQM mediation effects	TQM<DS	0.8	0.633	0.198	0.01
	IP<DS	0.409	0.192	0.315	0.194
	IP<TQM	0.407	0.419	0.253	0.01

IP (Internal Process Performance), DS (Differentiation strategy)

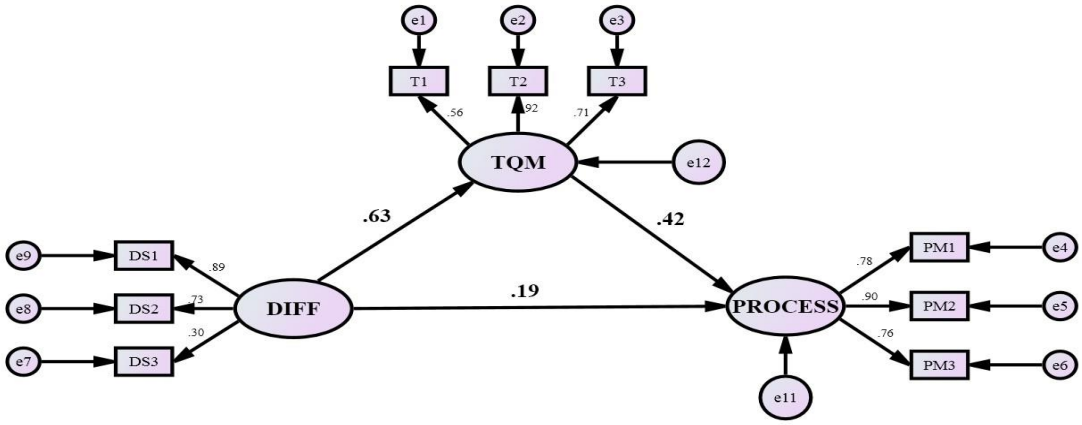

Figure 2
DIFFERENTIATION STRATEGY, TQM, INTERNAL PROCESS PERFORMANCE

The significance of this indirect effect was further tested using bootstrapping procedures. The standardized indirect effects were computed for each 5000 bootstrapped samples. The results of the indirect (mediation) effect based on bootstrap approximation obtained by constructing two-sided percentile- based confidence interval shows that of the indirect (mediation) effect of TQM on the relationship differentiation strategy and internal process performance was significantly different from zero at the 0.01 confident level (P=0.010 two-tailed). The study concludes that TQM completely mediates the relationship between differentiation strategy and internal process performance. This study therefore rejects the null hypothesis and accepts alternative hypothesis. TQM mediates the relationship between differentiation strategy and internal process performance. Consistent with this study are findings are Prajogo and Sohal (2006) and Faezi (2014) shows that TQM have significant effect on the relationship between differentiation strategy and organization performance. TQM is generally associated with internal process improvement and cost reduction, customer focus, team work and continuous process improvement. Hence TQM implementation enhances their efficiency of this process in Figure 2.

TQM Practice has No Significant Mediating Effect on the Relationship between Differentiation Strategy and Organization Learning and Growth

To test the mediating effect of TQM on relationship between differentiation strategy and organization learning and growth performance index. Baron and Kenny (1986) procedures were used. First the independent variable (differentiation strategy) should relate to the dependent variable (organization learning and growth) such that Beta in equation one is significant. The study findings as shown in the Table 5. Showed that there was a positive significant relationship between differentiation strategy and organization learning and growth. (β=0.564 and P-value<0.01) therefore a unit increase in differentiation strategy index led to an increase in manufacturing firm knowledge performance index by 0.564. Since the p-value was less than 0.05. This fulfills the

first condition for measuring mediation effects. The second condition involves testing if the independent variable (differentiation strategy) should relate to the mediator variable (TQM) such that (β) in equation is significant. This condition establishes the first stage of the mediated effect.

The findings as shown in Table 5 showed that there was a positive significant relationship between differentiation strategy and TQM (β=0.643 and P-value<0.01). Since the p-value was less than 0.05 as indicated in the Table 5? This fulfills the second condition for measuring mediation effects. Finally, the mediator variable TQM should relate to the dependent variable organization learning and growth such that its beta is significant. This condition establishes the second stage of the mediation effect. The regression coefficients for TQM is (β=0.622 and the P-value was 0.01). Which shows that TQM predicts organization learning and growth performance in the organization, and the regression coefficient for differentiation strategy is (β=0.124 and the P-value is 0.415). The p values for regression coefficient differentiation strategy are insignificant at 95% and 90% level of confidence. However, the P value for TQM is significant at 95% level of confidence; hence this satisfies the last condition TQM predicts the values of organization learning and growth. However, the direct effect of differentiation strategy on organization learning and growth is insignificant. This indicates that TQM completely mediates the relationship between differentiation strategy and organization learning and growth. Complete mediation implies that the differentiation strategy does not at all affect organization learning and growth after TQM has completely controlled it. The study rejects the null hypothesis and accepts the alternative hypothesis TQM have significant mediation effects on the relationship between differentiation strategy and organization learning and growth.

Table 5
DIFFERENTIATION, TQM AND ORGANIZATION LEARNING AND GROWTH PERFORMANCE

	Relationship	Regression Weights	Standardized Regression Weights	S.E.	P
Before TQM mediation effects	TQM<DS	0.790	0.643	0.199	0.010
	OLG<DS	0.969	0.564	0.228	0.010
After TQM mediation effects	TQM<DS	0.944	0.695	0.210	0.010
	OLG<DS	0.214	0.124	0.263	0.415
	OLG<TQM	0.794	0.622	0.211	0.010

DS (Differentiation Strategy), OLG (Organization Learning and Growth)

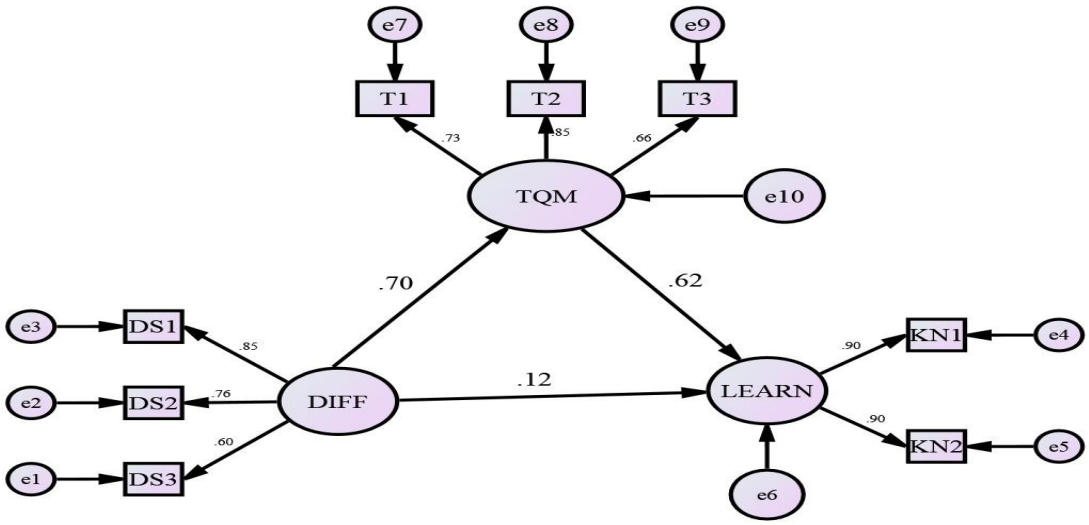

Figure 3
DIFFERENTIATION, TQM AND ORGANIZATION LEARNING AND GROWTH PERFORMANCE

To test the significance of this indirect effects. Standardized indirect effects were computed for each 5000 bootstrapped samples. The results based on bootstrap approximation obtained by constructing two-sided percentile-based confidence intervals show that the indirect (mediation) effect of TQM on the relationship between differentiation strategy and Organization learning and growth is significantly different from zero at the 0.01 confident level (p=0.010 two-tailed).

The Figure 3 shows there is a strong significant relationship between differentiation strategy and organization learning and growth. Firms that focus on differentiation strategy rely on product customization and developing unique products. This mainly depend on innovations based on organizations ability to learn acquire and share knowledge. The study shows that TQM mediates the relationship between differentiation strategy and organization learning and growth. The findings are closely related to (Hung, Lien, Fang and Mc Lean, 2010; Zwain, et al., 2017) which indicates a positive relationship between TQM and Knowledge management. TQM as a tool motivate the culture of learning in the organization, employees in the organization are encouraged to continuously learn from within and outside the organization in order to improve internal processes and meet customers demand. (Aboyassi et al., 2011) study revealed there exist a link between KM processes and the principles of TQM. There is significant correlation between knowledge management processes (diagnosis, acquisition, generation, sharing, storing and application) and TQM principles (adaptation of quality and commitment of senior staff; focus on customers; continuous improvement, training and education, and employee participation this explains the mediation. (Akgun et al., 2014) study also revealed the same TQM principles enables a firm to acquire, interpret, translate and deploy the knowledge, skills and attitude of people throughout the organization to establish learning capability. TQM practice has no significant Mediating effect on the relationship between cost leadership strategy and internal process performance.

To test for mediation, the study used Baron and Kenny (1986) test. First the independent variable (Cost leadership) should relate to the dependent variable (internal process improvement) such that Beta in equation one is significant. The study findings as shown in Table 6 show that there was a positive significant relationship between cost leadership strategy and internal process performance (β=0.517 and P-value<0.01) therefore a unit increase in cost leadership strategy index led to an increase in manufacturing firm performance index by 0.517 since the p-value was less than 0.05. This fulfils the first condition for measuring mediation effects.

The second condition involves testing if the independent variable (cost leadership) should related to the mediator variable (TQM) such that (β) in equation is significant. This condition establishes the first stage of the mediation effect. The findings as shown in Table 6 showed that there was a positive significant relationship between cost leadership strategy and TQM (β=0.233 and P-value<0.0). Since the p-value was less than 0.046. This fulfills the second condition for measuring mediation effects.

To establishes the second stage of the mediation effect. The mediator variable TQM should relate to the dependent variable (internal process performance) such that β is significant. The findings as presented in Table 6 show the standardized regression coefficients for TQM is (β=0.280 And the P-value is 0.012). which shows that TQM predicts internal process performance of manufacturing firms in Kenya and for cost leadership strategy the regression coefficient is (β=0.447 and the P-value is 0.002) which is statistically significant.

Table 6
COST LEADERSHIP STRATEGY ON TQM AND INTERNAL PROCESS PERFORMANCE

	Relationship	Regression Weights	Standardized Regression Weights	S.E.	P
Before TQM Mediation effects	IP<CL	0.513	0.517	0.123	0.010
	TQM<CL	0.136	0.233	0.099	0.046
After TQM mediation effects	TQM<CL	0.135	0.238	0.068	0.047
	IP<CL	0.431	0.447	0.070	0.002
	IP<TQM	0.475	0.280	0.195	0.012

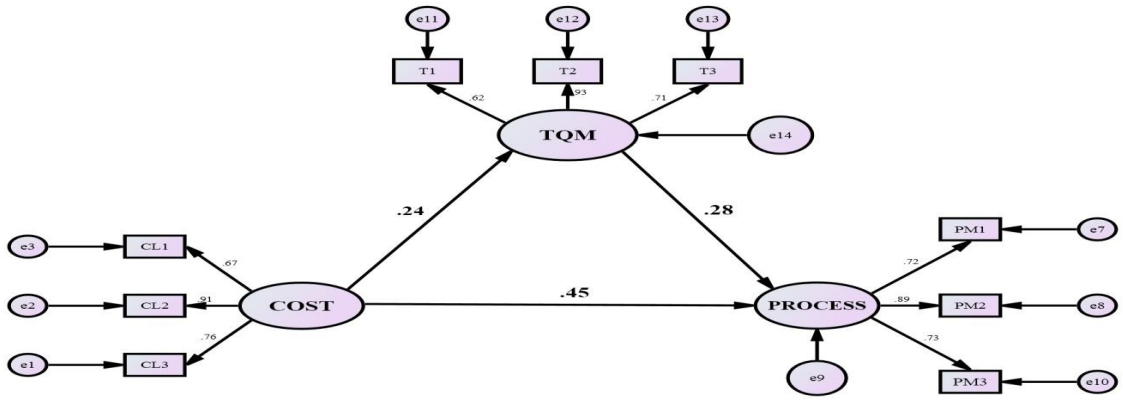

Figure 4
COST LEADERSHIP STRATEGY, TQM, INTERNAL PROCESS PERFORMANCE

Both TQM and cost leadership strategy have a significant effect on internal process performance is shown in Figure 4. However, the direct effects of cost leadership strategy on internal process performance have reduced from 0.517 to 0.447.The study concludes that TQM partially mediates the relationship between cost leadership strategy and internal process performance. This implies that TQM accounts for some but not all the relationship between cost leadership strategy and internal process performance. Partial mediation implies that there is not only a significant relationship between TQM and the internal process performance, but also a direct relationship exists between cost leadership strategy and internal process performance. The significance of this indirect effect was tested using bootstrapping procedures. The indirect effects were computed for each 5000 bootstrapped samples. The results show the P value for the indirect (mediating effect) was 0.042 which was significant at 95% confidence level. The study concludes that TQM partially mediates the relationship between Cost leadership strategy and internal process performance.

The study shows there is positive significant relationship between cost leadership strategy and internal process performance and that TQM partially mediate this relationship. The mediation effects can be explained by the fact that TQM is an organization culture that emphasizes on continuous process improvement and efficiency. When TQM is implemented together with cost leadership strategy it is likely to enhance the performance of processes. The direct effect of cost leadership strategy even after TQM implementation can explained by the fact that Organizations that pursue cost leadership strategy employs several activities that are not incorporated in TQM philosophy like accurate demand forecasting, economies of scales, technological advancement and outsourcing. Even though not integrated in TQM they still enhance the process performance. This thus requires that when organizations are implementing TQM under the dimension of cost leadership in order to improve processes it should be implemented together with this other strategy not incorporated in TQM philosophy. Process improvement allows organization to be more efficient reduces the cost of production and delivery as well as allowing the organization to achieve economies of scale, reducing the cost and gaining market share. These results accentuate the earlier findings of Kaliappen and Hilman (2014) which shows there is a significant relationship between cost leadership strategy and process improvement. Mehralian, Jamal, Nooriparto and Hamid (2017) also hypothesised and proved that strong significant relationship between TQM practice and process improvement. The study therefore rejects the null hypothesis and accepts the alternative hypothesis that TQM mediates the relationship between cost leadership strategy and internal process performance.

TQM, Cost Leadership Strategy and Learning and Growth

To test for mediation, the study used Baron and Kenny (1986). First the independent variable (Cost leadership strategy) should relate to the dependent variable (organization learning and growth) such that Beta in equation one is significant. The study findings as shown in Table 7 showed that there was a positive significant relationship between cost leadership strategy and organization learning and growth performance (β=0.414 and P-value<0.01) therefore a unit increase in cost leadership strategy index led to an increase in manufacturing firm learning and growth index by 0.414 since the p-value was less than 0.05. This fulfils the first condition for measuring mediation effects. The second condition involves testing if the independent variable (cost leadership) related to the mediator variable (TQM) such that (β) in equation is significant. This condition establishes the first stage of the mediation effect. The findings as shown in the Table 7 showed that there was a positive significant relationship between cost leadership strategy

and TQM (β=0.233 and P-value<0.046). Since the p-value was less than 0.046. This fulfills the second condition for measuring mediation effects.

To establishes the second stage of the mediation effect. The mediator variable TQM should relate to the dependent variable (organization learning and growth) such that β is significant. The results as indicated in Table 7 shows the regression coefficients for TQM is (β=0.600 and the P-value is 0.01). which shows that at 99% confidence interval TQM predicts organization learning and growth in Kenyan manufacturing firms and the regression coefficient for cost leadership strategy is (β=0.254 and the P-value is 0.008) which is statistically significant at 99% confident level.

Table 7
COST LEADERSHIP, TQM AND ORGANIZATION LEARNING AND GROWTH PERFORMANCE

	Relationship	Regression Weights	Standardized Regression Weights	S.E.	P
Before TQM mediation effects	OLG<CLS	0.373	0.414	0.100	0.01
	TQM<CLS	0.136	0.233	0.099	0.046
After TQM mediation effects	TQM<CLS	0.165	0.265	0.075	0.027
	OLG<CLS	0.221	0.254	0.083	0.008
	OLG<TQM	0.833	0.600	0.165	0.01

CLS (Cost Leadership Strategy), OLG (Organization Learning and Growth)

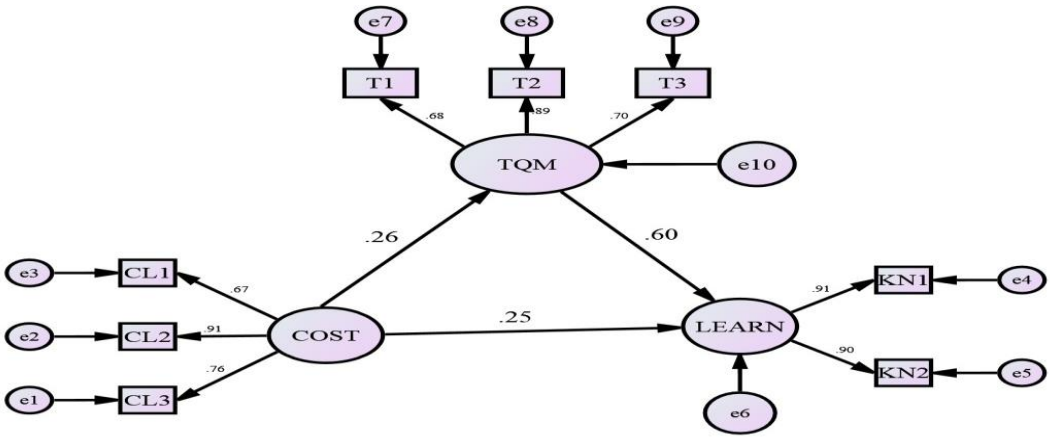

Figure 5
TQM ON COST LEADERSHIP STRATEGY; ORGANIZATION LEARNING AND GROWTH

Both TQM and cost leadership strategy which is mentioned in Figure 5 have a significant effect on organization learning and growth. However, the direct effects of cost leadership on organization learning and growth have reduced from 0.414 to 0.254. Hence the study concludes that TQM partially mediates the relationship between cost leadership strategy and organization learning and growth. This shows there is not only a significant relationship between TQM and organization learning and growth, but also some direct relationship between cost leadership strategy and organization learning and growth. To find out significance of the indirect effects of TQM on the relationship between cost leadership strategy and internal process performance the study used bootstrapping procedures. The indirect effects were computed for each 5000 bootstrapped samples. The findings show the indirect (mediation) effect of TQM on relationship between cost leadership strategy and organization is not significantly different from zero at the 95% confidence level (P=0.060 two- tailed based on a bootstrap approximation obtained by constructing two-sided percentile- based confidence intervals) however, the indirect effects are significant at 90% confidence interval.

TQM partially mediate the relationship between cost leadership and organization learning and growth. There is significant relationship between cost leadership strategy and organization learning and growth and TQM only partially mediates this relation**.** The direct effects of cost leadership strategy on organization learning and growth can be explained by the fact that cost leadership as a strategy emphasizes on a learning atmosphere where by higher learning will be associated with less defects rate lower maintenance cost and increased efficiency within the organization. However, the partial mediation effects of TQM can be explained by examining the strong significant relationship between TQM and organization learning and growth. According to Ooi *et al*. (2012) TQM and knowledge management are related theoretically and practically, TQM practice training, teamwork and customer focus are positively associated with knowledge sharing) in addition their practices are used for improving the organization performance. The findings Accentuate Zwain, Lim and Othman (2017) which provided evidence that TQM core elements have a positive significant impact on knowledge management. (Hung, et al., 2010) study also shows that the higher extent of the TQM core elements implementation would lead to the better Knowledge management processes.

SUMMARY OF FINDINGS

The study shows there were a positive significant relationship between competitive strategies (Cost leadership strategy and differentiation strategies) and internal process improvement; organization learning and growth. It also revealed them was strong significant relationship between competitive strategies (cost leadership strategy and differentiation strategy) and total quality management. On the indirect (mediation) effects of TQM on the relationship between competitive strategies and organization performance. However, it fully mediated the relationship between differentiation strategy and internal process performance and organization learning and growth. TQM practice coupled with competitive strategy enhances the performance of Kenyan manufacturing firms. Regardless of this it can be noted that the rate of TQM adoption amongst manufacturing firms especially SMES Kenya in low this is evidence by the low number of firms that have adopted ISO certification and other related quality standards (Six sigma and Kaizen philosophy). Those SME that implement TQM do not full implement all the TQM practices. This may be contributed to the fact that TQM practice benefits are not directly linked to the firm's financial performance. The study recommends that SME's that are in the manufacturing sector in Kenya be sensitized on the importance of quality as means of attaining competitive

advantages and ensuring their survival in a dynamic competitive environment.

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