Determinants of Total Quality Management Implementation in Small and Medium Enterprises in Kenya: A Survey of Small and Medium Bakeries in Nairobi County, Kenya.

Mwathi Samwel Chege[1], Kitur Brown[2]

1. Management University of Africa,
2. Lecturer, Management University of Africa,

Abstract: The study's main objective was to identify the determinants of implementation of Total Quality Management in Small and Medium Enterprises in Kenya. The study specifically sought to ascertain the impact of employee training on the implementation of Total Quality Management in SMEs. Deming's Total Quality Management and Dynamic Capabilities Theories guided the research. With a target population of 75 respondents, the study used a descriptive survey research. From the study findings it was revealed that there was a strong positive correlation between employee training and implementation of TQM. From the finding the researcher recommended staff members in bakeries should be trained regularly and in timely manner in TQM. There should be a constant review of the training needs for Bakeries so as to bridge knowledge gaps which may exist among the staff from time to time. Continuous training helps individuals to remain relevant, cope with challenges and also empowers them to keep abreast with the changes in the work environment. The management should also provide resources for training by factoring in adequate finances for capacity building in their annual budgets.

Keywords: Cost of quality, Employee training, Information system, total quality management

I. INTRODUCTION

1.1 Background

Organisations at present face rising challenges from international competition and increasingly informed consumers about what they want and how their needs are changing. It is critical for businesses to look beyond the current problems and change the evolving circumstances that the changing world is bringing about. As a result, companies have developed and implemented strategic approaches to meet changing needs. (Bragg, 2015). To compete in the marketplace, organizations have begun to implement appropriate quality control techniques, and small businesses are no exception (Ryan, Deane, & Ellington, 2010). According to Islam, Khan, Obaidullah, and Alam (2011), the globalization of markets and operations forces companies to rethink their quality issues and, as a result, their overall organizational competitiveness. Organizations must commit to continuous improvement in order to compete in this global market (Jeppsen, 2015). TQM is a management strategy that aims to depict, coordinate, and manage internal and external stakeholders. These include preparation quality, regulation, assurance, and advancement. It is one of the new strategies that modern businesses are implementing with great success to protect and keep their customers happy indefinitely (Dayton 2011).

Small and medium-sized enterprises (SMEs) not only contribute significantly to raising living standards, creating jobs, and reducing poverty, but they also contribute significantly to creating substantial domestic or local wealth and achieving high levels of productivity and profitability. TQM is widely recognized as an important method of quality assurance in large-scale industries. Nevertheless, awareness and application of TQM techniques in small and medium-sized businesses is growing. They are an important part of promoting the growth of the private sector and joint ventures; therefore, they must remain competitive and deliver high-quality results that are significant not only on a worldwide but also on a local level (McTeer & Dale, 2014).

In any country around the world, the SME sector is critical to economic development. SMEs are critical for the social and economic development of emerging markets in Kenya. These businesses play an important role in the creation of jobs and the generation of income for low-income earners; they promote economic progress and social stability, as well as contributing to the growth of the private sector. SMEs have been identified as a growth engine and a vehicle for achieving the Millennium Development Goals (MDGs). The most critical of these are poverty eradication, wealth formation, and better living standards, which were introduced at the UN Millennium Summit in 2000. Notwithstanding

their significance, three out of every five Small and medium enterprises fall within the first 5 years of operation, according to Kenya National Bureau of Statistics (2017). Within the next four years, four out of every five of those that remain will fail. They are either liquidated, integrated, purchased, changed course, or become a new company. Only 15% of the remaining firms will make a profit, while the remaining 15% will barely survive (SMIDEC, 2010). This threat is attributed to small businesses' lack of quality control (Kenya National Bureau of Statistics, 2017).

As per survey carried by the Federation of Kenya Employees, the majority of small and medium-sized businesses die within one to five years, as opposed to western countries, where the death gap is between five and ten years or more. The high mortality rate of the country's small and medium-sized businesses indicates poor performance and lack of competitiveness (Kenya National Bureau of Statistics ,2017). The contribution of the SME sector in Nairobi fell short of its potential, owing to a lack of meaningful quality management. Most SMEs struggle to conduct business and manage their businesses effectively in order to continue delivering high-quality products and services on time (Osuagwu,2018). Quality issues in SMEs are among the most important factors in retaining a competitive advantage. It is also the yardstick for determining how well an organization can meet and exceed its customers' expectations. Quality initiatives have been shown in research to have competitive advantages, including increased market share and return on investment (Phillips, Chang, & Buzzell, 2013), lower production costs, increased efficiency (Garvin, 2017), and improved strategic performance (Zhang, 2010). Over time, there has been a gap in SMEs' performance as they have faced problems such as poor organizational structure, lack of strategic management, poor customer focus, and lack of coherent teamwork, all of which contribute to the trend of SMEs' poor performance. According to numerous reports, only 20-30percent of the businesses that have adopted TQM has seen improvements in performance, quality, and productivity (African Review, 2017).

Nonetheless, Eskildson (2014) reported a 95% failure rate for TQM implementation programs initiated, and reported that TQM implementation had unknown or even negative effects on results. As per Longenecker and Scazzero (2013), achieving high product quality and effectively implementing TQM are highly dependent on top management support. Implementing QMS had a positive impact on student enrolment and infrastructure growth at public universities, according to GulaliIndiya etal. (2013).The study only examined one public university, and the population consisted of non-teaching employees.Thuo (2013) investigated how the implementation of ISO 9001QMS standards affects the performance of service industries. The findings imply that ISO 9001 implementation is beneficial in terms of improving operational efficiency, and that external and internal integration were the most significant considerations that controlled the implementation efforts, both internally and externally inspired institutions, the study only focused on organizational effectiveness and QMS. Furthermore, Mang'unyi and Chege (2014), Chepkoech (2015), and Guchu and Mwanaongoro (2014) investigated quality management though, neither of these researchers regarded factors that influenced the execution of overall quality management in bakeries in Kenya.

This study, therefore, sought to fill the existing information gap in the Sector in Kenya regarding S bakeries. The aim of the research was to analyse the determinants that influence the implementation of the overall quality control system in small and medium-sized enterprises in Kenya: a survey study of small and medium-sized bakeries in Nairobi County.

1.2 Specific Objective

The specific objective was:

i. To examine the influence of employee training on the implementation of Total Quality Management in SMEs.

1.3 Research Question

i.What is the extent to which employee training affect the implementation of total quality management in SMEs?

II. LITERATURE REVIEW

2.2.1 Total Quality Management Theory

In 1931, Deming and Juran proposed Deming's theory. The TQM and its successor quality management systems are built on this principle. Deming argues that adhering to good management practices can help the business maximize productivity while decreasing costs by reducing waste, turnover, and litigation while also rising customer loyalty. Deming Theory is the guiding principle for TQM implementation, and it is credited with the introduction of quality systems that contributed to Japan's industrialization following World War One.It establishes a collection of management practices to help companies improve their quality and productivity(Javed, 2015).For someone who wishes to adopt and

implement fearless leadership, the company can also include job training as well as a rigorous education and self-improvement program (Arumugam, Ooi, & Fong,2018).

This study puts the theory into practice by examining how small and medium-sized companies can increase customer loyalty by focusing on employee training. Employees with the requisite expertise and experience, and vice versa, are more likely to perform well and effectively

2.2.2 Dynamic Capabilities Theory

The Dynamic Capabilities Theory was developed by Teece et al. (1997) as an extension of the firm's resource-based view theory. The theory looks at how businesses incorporate, develop, and realign their internal and external firm-specific competencies into new competencies that are suitable for their unpredictable circumstances (Olepein, 2015). The model assumes that firms with high dynamic capabilities perform better than firms with lower dynamic capabilities, according to Otwoma (2016). Dynamic skills, on the other hand, emphasize resource development and regeneration, while the resource-based approach emphasizes resource selection or the collection of sufficient resources. Many of the attributes of dynamic capabilities may be available in the resource, making it especially useful for companies that operate in a fast-paced environment (Otwoma 2016).

The aim of the theory is to understand how companies use dynamic capabilities to gain and sustain a competitive advantage over their competitors by adapting to and creating environmental change (Wong & Ahmed, 2017).This theory is relevant to this study because it explains how small and medium-sized companies can increase their operational productivity by educating workers and introducing automated processes to boost production and performance, reducing quality costs.

2.3 Empirical review

Employees are a company's true assets; they are the ones that directly contribute to its performance. When making TQM decisions, management must keep staff informed at all times, which should promote commitment and make the change easier. It has been shown that providing adequate training reduces the abuse of resources and techniques. All workers benefit from on-going education and training, which helps in the pursuit of quality (Otunga,2017).

Training is a significant factor in strengthening employees' growth efforts, according to Zakuan et al. (2012). According to him, quality training involves informing and training workers at all levels of the company about quality concerns and programs, as well as providing them with relevant data on the organization's task, vision, and overall direction. One of the most critical requirements for successful TQM implementation, according to Jamali et al. (2010), is employee readiness. Management, supervisors, and other staff, as well as positions in the TQM implementation, need skills and experience in service quality and management. The organization must ensure on-going workforce growth and quality control training because business quality demands are continuously evolving (Boidoun,2013).

As claimed by Ginsberg (2017), successful training takes place in an environment where workers can bring what they've learned into practice. Relevant training standards for teams working on quality assurance should be considered. Employees should be able to network with and communicate with local role models during and after training. The use of methods and equipment should be performed in a methodical way. Managers should be motivated to understand the issues, and consistent policies should be enforced to ensure that no one strategy or tool will solve all problems. During training, facilitators may promote the use of methods and strategies in everyday work processes. Since different people learn new knowledge, behaviours, and abilities at different rates, patience and determination are essential virtues to consider during training. Employees should also be empowered to take an active role in monitoring and measuring the performance of the company's processes in which they participate.

In an empirical study of crucial TQM variables in Palestinian organisations, Baudion (2013) discovered a strong association between employee training and education and successful TQM implementation. It linked employee empowerment and increased performance in their quality managerial positions to employee training and education.

2.4 Conceptual Framework

A conceptual model is an analysis model in which the investigator graphically or diagrammatically displays the relationship between the variables in the sample. It gives and describes the concepts which try to explain the research problem of the study with a focus on the study parameters. The conceptual structure shows a well-defined connection between employee training (independent variable) and implementation of total quality management (dependent variables)
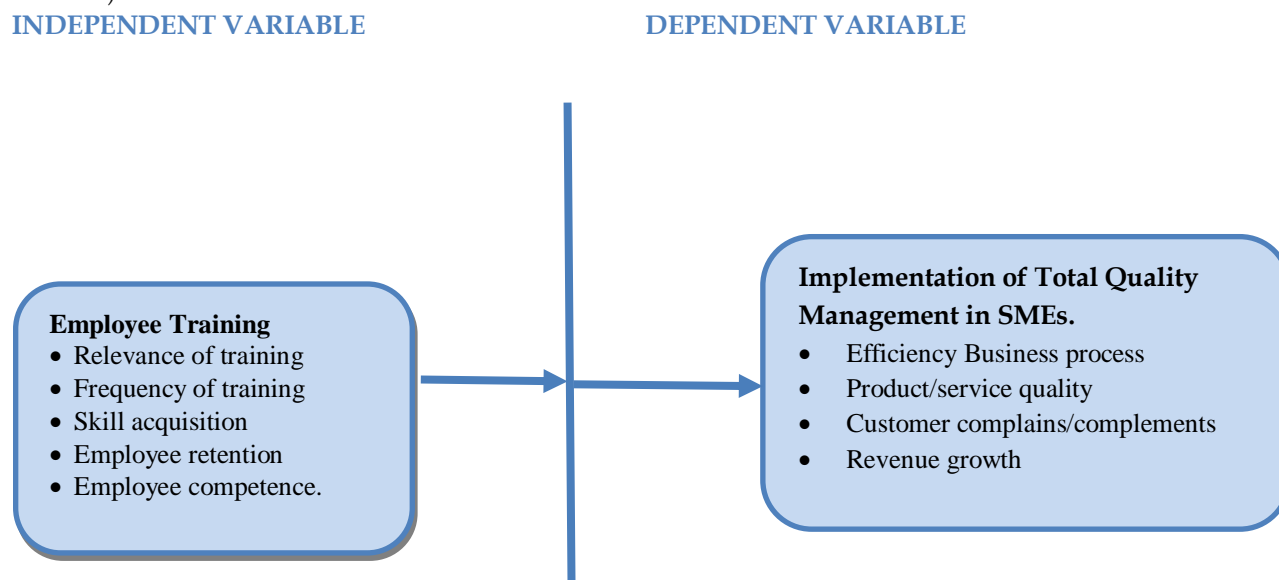
INDEPENDENT VARIABLE   **DEPENDENT VARIABLE**

Employee Training
- Relevance of training
- Frequency of training
- Skill acquisition
- Employee retention
- Employee competence.

Implementation of Total Quality Management in SMEs.
- Efficiency Business process
- Product/service quality
- Customer complains/complements
- Revenue growth

Fig 2.1: Conceptual Framework

III. RESEARCH METHODOLOGY

3.1 Research Design

Research design is defined as the planning, taking into account the research aims and the accessibility of personnel, time, and resources, of approaches to data collection and methods used in their analysis. (Schindler and Cooper, 2013). A descriptive survey design was adopted. This design is designed for information collection, description, display, and clear assessment. According to Ordo (2009), a descriptive survey study design can provide accurate data to many participants across a wide sample field. It is used to study relations between variables and generalize population-wide (Saunders, Lewis & Thornhill ,2011).

3.2 Target Population

A population is a well-defined category of individuals, resources, components and events, groups of objects or households under investigation according to Kothari (2014). The population target is a large or distinct community of people or elements that the researcher draws conclusions about the population in question from within the sampling group. The study based on 75 bakeries in the county of Nairobi. In particular, it focused on bakery owners and managers

3.3 Sampling size and Sampling technique

A sample is a subject selected from the population as a representation of population characteristics, according to Kothari (2014). The research was adopted one owner or manager of each of the 75 bakeries. As a result, there were a total of 75 participants as a sample size.

The researcher used a census sampling technique. The census guarantees the representativeness of the population and the achievement of the goals of the report (Sarantakos, 2018). The approach is suitable because it offers all respondents equal opportunities to participate.

3.4 Data collection Instrument.

In the analysis, questionnaires administered by researchers were used as instruments for data collection. The use of questionnaires has many benefits, including privacy, time savings and decreased interviewer bias. They also have the advantages of low costs, quick access and physical interaction with widely distributed samples (Sarantakos, 2018).

3.5 Data analysis and presentation.

According to Zikmund (2010), data analysis is a logical approach for interpreting collected data in order to establish a coherent pattern and to summarize the relevant data found during the study. Data processed were edited, coded, classified and tabulated.

 The data was entered and analysed with statistical software SPSS version 25. The data collected was presented in tables to make the details presented easier to understand. Means and standard deviations were used in descriptive statistics, while inferential statistics used linear correlation and multiple linear regression. The researcher subsequently used multiple regression analysis for the following statistical model;

Y= β0+β1X1 +ε

Where;

Y - Represents implementation of TQM

β0 - represents Constant

X1– represents Employee training

B1 -is the coefficient of the variables to be determined by the model

ε   - Represents the estimated error of the regression model

IV.   RESEARCH FINDINGS AND DISCUSSION

4.1 Response Rate

Of the 75 questionnaires distributed to interviewees, 60, the results of the study 80 per cent response rates were effectively finalized and returned for review. This rate of response was considered to be sufficient for the analysis. As per Mugenda and Mugenda (2019), a 50% success rate is sufficient, a 60% response rate is good and over 70% is very well evaluated.

 4.2   Descriptive Analysis

The study further assessed participants' views on the effect of factors affecting the implementation in Kenya of the Total Quality Management system for SMEs. In this segment, the data collected and analysed using on a 5-point Likert scale rated from 1 to 5 [5= Strongly Agree(SA), 4= Agree(A), 3= Undecided(U), 2= Disagree(SD) and 1= Strongly Disagreed(SD)].

4.2.1Employee training and implementation of total quality management system in SMES

The study examined the effect of employee training and implementation of total quality management system in SMES. The relevant findings are as shown 4.1.

Table 4. 1: Employee training and implementation of total quality management system in SMEs

Statement	N	SA (%)	A (%)	U (%)	D (%)	SD (%)	Mean	Std. Dev
Staff members in our firm are regularly trained in Total Quality Management programmes.	60	(0)	(5)	(0)	(70)	(25)	1.85	0.659
Top management has committed adequate resources for employee training and education	60	(2)	(12)	(0)	(63)	(23)	2.03	0.938
Trainings on total quality management to the employees has been relevant to their work.	60	(2)	(3)	(0)	(42)	(53)	1.58	0.809
Trainings on total quality management to the employees has helped to improve on quality of work	60	(40)	(52)	(0)	(5)	(3)	4.20	0.935
Trainings on total quality management to the employees is done in timely manner	60	(3)	(7)	(0)	(67)	(23)	2.00	0.902

From the results in Table 4.1 that most (95%) of the respondents disagreed that staff members in our firm are regularly trained in Total Quality Management programmes (Mean = 1.85; Std. Dev. =0.659). As per the findings, employee training is one of the most important criteria for effective TQM implementation, as stated by Jamali et al. (2010). Management, supervisors, and other employees require skills and expertise in service quality and management, as well as positions in the TQM implementation

Besides, majority (86%) of the respondents disagreed that the top management has committed adequate resources for employee training and education (Mean = 2.03; Std. Dev=0.938). Sadikoglu and Olcay (2014) accept that allotting firm resources to quality training pays off as skilled workers are familiar with advanced statistical methods, quality principles, core industrial influences, and the structure and systems of the enterprise.

On the other hand, the majority (95%) of participants disagreed that all total quality management trainings provided to employees were relevant to their work (Mean = 1.58; Std. Dev. =0.809). In his investigation Mwangi (2015) found that workers are more involved with quality management initiatives, have a positive attitude and decreased staff resistance when timely and effective training in quality programs is provide.

Additionally, most (92%) of the respondents disagreed that trainings on total quality management to the employees has helped to improve on quality of work (Mean = 4.20; Std. Dev. =0.935). The findings conflict with Sadikoglu and Olcay (2014), who say trained workers, would increase the quality, reliability and timeliness of products/services.

However, majority (90%) of the respondents disagreed that trainings on total quality management to the employees is done in timely manner (Mean = 2.00; Std. Dev. =0.902). The results also correspond to those from previous Kosillei

and Kwasira (2014) study, in which most respondents reported that training programs were not routine or intended to overcome deficiencies in staff skills.

4.3 Inferential Statistical Findings

This section documents and discusses the inferential statistical findings analyzed from the data collected in respect of the influence of Employee Training on Implementation of TQM. The results are illustrated in Tables 4.2,4.3 and 4.4.

4.3.1 Influence of Employee Training on Implementation of TQM.

The purpose was toinfluence of employee training on implementation of TQM . The results are shown in Table 4.2

Table 4.2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.811a	.658	.652	.539

The study sought to examine relationship between training and implementation of TQM. The regression analysis showed that training(R=.0.811) and implementation of TQM are related .The R^2=0.658 which means that 65.8% of variation in implementation of TQM shift in unit can be clarified in training as indicated in table 4.3.

Table 4.3: ANOVA Results for Employee Training

		ANOVAa				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.481	1	32.481	111.629	.000b
	Residual	16.876	58	.291		
	Total	49.357	59			

a. Dependent Variable: Implementation of TQM

b. Predictors: (Constant), Training

From value in table 4.3 F=111.629 established that training is statistically and significantly affects implementation of TQM which means the regression model is a good fit of the data. Thus, training significantly influences implementation of TQM at SMEs. The significance level is 0.000 which is less than 0.01 thus the regression model significantly predicts the independent variable as shown in table 4.4.

Table 4.4: Regression Coefficient for Employee Training

	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	1.661	.233		7.137	.000	1.195	2.127
Training	1.005	.095	.811	10.565	.000	.815	
							1.196

a. Dependent Variable: Implementation of TQM

V.   CONCLUSION

From the regression analysis employee training and TQM implementation have a good relationship. A difference in employee training may explain a variation in unit change in TQM implementation. As a result, the study concludes that top management commitment affects TQM implementation statistically and significantly, suggesting that the regression model is a good fit for the results. As a result, employee training affects how TQM is implemented in small and medium businesses. Furthermore, the regression analysis showed a clear positive relationship between employee training and TQM implementation.

VI.   RECOMMEDATIONS

The study recommends that bakery employees should be trained in TQM on a regular and timely basis. Bakery training requirements should be checked on a regular basis in order to close any information gaps that may arise among the workers. Individuals who receive on-going training are better able to stay relevant, deal with problems, and keep up with shifts in the workplace. Management can also include training tools by including sufficient funding for capacity building in their annual budgets

VII.   ACKNOWLEDGEMENTS

REFERENCES

[1]   Bragg, S. M.,*review of cost-cutting opportunities*. (Hoboken, New Jersey: John Wiley & Sons Inc,2015).
[2]   Ryan, C., Dean, R.& Ellington, N. In small to medium-sized manufacturing companies, quality control is taught. *Journal of Quality Management, 8(2),2011*, pp 44-52.
[3]   Islam, M. A., Khan, M. A., Obaidullah, A. Z. M. & Alam, M. S. Influence of entrepreneur and firm characteristics on the business performance of small and medium enterprises (SMEs) in Bangladesh.,*International Journal of Business and Management, 6(3),2011*.pp 289-299.
[4]   Jeppesen, S. Can small, micro, and medium-sized enterprises (SMEs) help boost productivity and ensure equitable development? ,*Development in Practice, 15(¾),2015*,pp.463-474.
[5]   Dayton, N.A. Essential success factors in total quality management: a study of the United Kingdom and the United States. *Total Quality Management, 12 (3),2011*. pp.293-298.
[6]   McTeer, M. M., & Dale, B. G .Are indeed the ISO 9000 sequence of quality management systems result oriented for small companies? *European Journal of Purchasing and Supply Management, 1(4)*,2014,pp.227-235.
[7]   Kenya Bureau of Statistics,*report on the economic survey*. (Nairobi:KBS,2017).
[8]   SMIDEC.*annual report of SMIDEC for the Year 2008*.(Kuala Lumpur. 13, 103,2010)
[9]   Osuagwu, L . Conceptualization, dimensions, and research agenda for political marketing.*Marketing Intelligence & Planning. 26.,2018 ,793-810.*
[10]   Phillips L, Chang D and Buzzell R . A test of some primary hypotheses about product quality, cost position, and market performance. *J Market 45*,2013 ,26–43.
[11]   Garvin, T.N. ,Training, Growth, Education, and Learning: What's the Difference?. *Journal of European Industrial Training, 21,2017*, 39-50
[12]   Zhang,J..The challenge of funding private businesses and the order in which they are funded..*Economy Research, 4 ,2010.*
[13]   Africa Review.Kenya's economy is rising thanks to SMEs. Retrieved from http://www. africanreview. com/finance/business/smes-are-growing-kenya-s-economy-3,2017
[14]   Eskildson, L. Increasing TQM's chances of success. *Quality Progress, 27(4),2014, 61-63.*
[15]   Longenecker, C. O. & Scazzero, J. A. A case study of total quality management from theory to implementation. *International Journal of Quality & Reliability Management, 10(5), 2013,24-31.*
[16]   GulaliIndiya .D, Odoyo.O, Obura.M, Abong'o.M & Ondoro.C,The Impact of a Quality Management System on the Performance of Kenyan Public Universities: A Case Study of Maseno University. *American Journal of Business, Economics and Management. 3(3), 2015, 145-151.*
[17]   Thuo, C. M. ,*Malaysian service institutions' operational success and the iso 9001 quality management standard*,doctoral dissertation, Universityof Nairobi,2013.
[18]   Mang'unyi, M. S. & Chege, K. A Survey of Private Primary Schools in Busia County, Kenya, on the Challenges Facing the Implementation of Corporate Social Responsibility Programs in the Education Sector.*International Journal of Innovative Research and Development,2014.*

[19] Chepkoech, K. , Factors affecting TQM implementation at Bidco Oil Refineries Limited Manufacturing. *Asia Pacific Journal of Marketing and Logistics, 27(5), 2015,735-757.*

[20] Guchu, G. & Mwanaongoro, Z. (2014). Implementation of an ISO Quality Management System for Kenya's Small and Medium Manufacturing Firms. *In the Proceedings of the Conference on Sustainable Research and Innovation,2014*, 140-143.

[21] Javed, S. Involvement of top management effect on quality *management'International Journal of Scientific and Research Publications, 5(8,)2015.*

[22] Arumugam, V., Ooi, K. & Fong, T. C., TQM Processes and Quality Management Performance – An investigation of their relationship using Malaysian ISO:2000 data. *Magazine TQM 20, (6),2018, 636-650*

[23] Teece, D. J., Pisano, G., and Shuen, A. ,Capabilities in action and critical management. *Vital Management Journal, 18(7),2007, 509– 533.*

[24] Olepein, R. E. ,*organizational performance and quality management systems* .masters thesis. Kenyatta University,2015

[25] Wang, C. L., & Ahmed, P. K. A study and research agenda for dynamic capabilities.*International Journal of Management Reviews, 9(1)*,2017, 31-51

[26] Otwoma, D. H. *system performance and quality systems*. MBA Thesis, Kenyatta University,2016.

[27] Otunga,Trends in Kenyan curricula and their transformation. *The Educator journal. 1(2)*,2017, 107-116

[28] Zakuan, N. M., Yusof, S. M., Laosirihongthong, T. & Shaharoun, A. M, Using formal equation modeling, a relationship between TQM and organizational performance. *Total Quality Management, 12*,2010. 185-203.

[29] Baidoun S., The Palestinian Organization's Critical TQM Factors: An Empirical Study TQM in Palestinian Organizations: Critical Factors. *Logistics Information Management 16 (2),2013*, 156-171

[30] Cooper,.D,&Schindler.S,*techniques of business research 12th edn.*(Newyork:McGraw-Hill Education,2013)

[31] Orodho, J. A. *in education and the social sciences, methods for writing research proposals and studies*.(Nairobi. Kanezja publishers,2009).

[32] Saunders, M. N. K., P. Lewis and A. Thornhill,*research methodology for business students 2edn*. (London: Person Education Limited,2011).

[33] Kothari, C.R. ,*methods and techniques of research methodology fourth edition*(New Delhi: New Age International Publishers,2014).

[34] Sarantakos, S. *social science research ,2nd edition*(New York; Palgrave,2018)

[35] Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. ,*methods of business analysis*(Mason: South Western Cengage Learning,2010).

[36] Mugenda, O.M & Mugenda, A.G,*research methods, quantitative and qualitative approaches*(Nairobi: ACT Press,2019).

[37] Jamali G., Ebrahimi M and Abbaszadeh A. M. , TQM Implementation: An Investigation of Critical Success Factors. *International Conference on Education and Management Technology,2010*

[38] Sadikoglu, Esin & Olcay, Hilal. The Impact of Total Quality Management Practices on Performance in Turkey, as well as the Reasons for and Barriers to TQM Practices. *Advances in Decision Scienc*es,2014, 1-17.

[39] Mwangi,W. *the factors that influence total quality management implementation in kenya's KTDA processing industry: a case study of KTDA factories in Nyeri County*, Masters Thesis.University of Nairobi.,2015.

[40] Kosilei R.& Kwasira.J ,Employee Engagement In Commercial Banks In Nakuru Central Business District, Kenya: The Impact Of Total Quality Management *Practice.International Journal of Economics, Commerce and Management, United Kingdom.5(6)*,2017,674-702.