

TOTAL QUALITY MANAGEMENT AS A COMPETITIVE ADVANTAGE FOR SMALL AND MEDIUM SCALE ENTERPRISES IN NIGERIA

Evelyn UMEMEZIA¹

*Department of Business Administration, University of Benin,
Benin City, Nigeria.*

Corresponding Author's email: lynamemezia@yahoo.com

Abstract

The purpose of the study is to examine the influence of Total Quality Management (TQM) dimensions on competitive advantage of SMEs in Nigeria. It examined TQM along three popular dimensions: leadership, customer focus and continuous improvement quality. The study adopted a survey design, in which copies of the questionnaire were administered to 200 employees of twelve (12) selected fast food restaurants in Benin City. The data were analysed using Pearson matrix correlation techniques through Ordinary Least Squares (OLS) estimation technique. The findings revealed that a positive and significant relationship exists between leadership, customer focus and competitive advantage. Continuous improvement quality was found to have a negative and non-significant relationship with competitive advantage. Leadership was found to have the most significant influence, followed by customer focus. The study established that leadership and customer focus are key TQM dimensions which the fast food industry should seriously focus on in the quest for continuous quality improvement.

Key Words: Competitive advantage, Continuous quality improvement, Customer focus, leadership, Total quality management.

¹ (Ph.D) & Kingsley N. EDOBOR2

Introduction

As a result of growth and development of the global economy, there has been a continuous increase in the number of businesses around the world. This influx is also due, in part, to the reduced amount of regulation and standardisation in their operations. This upsurge in their population has generated competitive pressure among the operators of SMEs resulting specifically from the continuous increase in customers' demand for quality goods and services. This situation has given rise to the need for small business' product or service uniqueness and competitive strength (Eniola, Olorunleke, Akintimehin, Ojeka, & Oyetunji, 2019; Esiaba, 2016; Gherardini, Renzi, & Leali, 2017; Jabeen, Shehu, & Mahmood, 2015). SMEs now need to engage in operations that line up with customer expectations (Eniola, *et al.*, 2019; Ibidunmi, Salau, Falola, Ayeni, & Ifeanyi, 2017; Imran, Binti, Binti, Shabbir, Salman, & Jian, 2018). They now have to introduce and develop new actions which will differentiate them from their rivals in the given locality where they operate.

Studies have revealed that in order for organisations to be distinctive from competitors, they have to pay adequate attention to their distinctive resources in a more proactive manner (Ibidunmi, *et al.*, 2017; Imran, *et al.*, 2018; Eniola, *et al.*, 2019). Thus, SMEs have to leverage on their competitive gains by raising the productivity level of their employees and other aspects of their operations. They also have to consider those practices which have worked out for many large scale businesses and adapt these to their business in the best way they can.

TQM comprises a set of management practices that can be used for improving organisation performance through the constant improvement of goods, services and business processes by striving to meet or exceed the expectation of customers and ensuring organisational performance (Eniola, *et al.*, 2019; Garcia-Bernal, & Ramirez-Aleson, 2015). It is a

long-term approach that holistically concerns itself with the continuous improvement in all areas of the company (Esiaba, 2016). Its aim is to radically transform an organisation through improvement in its systems, processes, practices and structures (Esiaba, 2016). It has been practised by some large scale businesses with some degree of success (Imran, *et al.*, 2018; Jimoh, Oyewobi, Isa, Waziri, 2019), and researchers are already emphasising the benefits of the practice of TQM to SMEs (Eniola, *et al.*, 2019; Jabeen *et al.*, 2015; Jimoh, Oyewobi, Isa, Waziri, 2019).

Eniola *et al.*, (2019) assert that TQM will enable organisations to attain business success by differentiating their products and gaining competitive position in the industry. It is also affirmed that TQM brings about better, faster, cheaper, safer, easier processing products than that of the competitors with the involvement of all employees under senior management leadership. The notion of TQM in the running of SMEs would be expected to yield positive outcomes. It is in the light of this that this study seeks to investigate the influence of TQM on competitive advantage among SMEs within the fast food industry.

Statement of the Research Problem

Due to increasing competitiveness across industrial sectors globally, organisations need to maximise quality, innovation, benchmarking, delivery dependency, etc., if they are to be successful. Moreover, going by the mounting pressure from customers for better value from their purchase, organisations cannot but adopt management practices that would help them deliver on quality, swifter delivery and lower cost (George, 2002). As a management technique, TQM plays a crucial role in influencing competitive advantage of organisations (Reed *et al.*, 2000).

Ironically, a few studies have related TQM to competitive advantage and these studies did not fully explore an integrative suite of TQM activities on competitive advantage. (Addae-Korankye, 2013; Al-Qudah, 2013;

Esiabe, 2016; Genaparapu, & Prathigadapa, 2015; Jabeen, Shehu, & Mahmood, 2015).

This study seeks to bridge the existing gaps by investigating the relationship between three popular TQM dimensions such as leadership, customer focus and continuous improvement quality on competitive advantage of small businesses (within the fast food industry) in Nigeria.

Objectives of the Study

The broad objective of the study is to investigate the relationship between TQM practices and competitive advantage of fast food restaurants in Benin City. The specific objectives of the study are to:

1. determine the extent to which leadership influences the competitive advantage of fast food restaurants in Benin City;
2. ascertain the extent to which customer focus influences the competitive advantage of fast food restaurants in Benin City; and
3. investigate the extent to which continuous improvement quality influences competitive advantage of fast food restaurants in Benin City.

Research Hypotheses

The hypotheses in the null forms are stated as follows:

H₀₁: There is no significant relationship between leadership and competitive advantage of fast food restaurants in Benin City;

H₀₂: There is no significant relationship between customer focus and competitive advantage of fast food restaurants in Benin City; and

H₀₃: There is no significant relationship between continuous improvement quality and competitive advantage of fast food restaurants in Benin City.

Competitive Advantage

Competitive advantage provides distinctive competencies that differentiate one organisation from other similar organisations in the industry. According to Porter, (1985) as cited in Al-Qudah, (2012:63), “competitive advantage refers to the comparative positional superiority in the marketplace that leads a firm to outperform its rivals”. This implies that in order to attain competitive advantage, a small business should be able to add value to its offerings more than what the rivals are doing in the locality where the business is operating. Genaparapu, and Prathigadapa, (2015) identify the sources of competitive advantage to include the ability of an organisation to provide cost leadership, product differentiation, and effective people management.

Total Quality Management (TQM) Dimensions for Competitive Advantage

TQM is a management philosophy that holistically ensures continuous improvement by all employees under the leadership of effective top management for the purpose of ensuring superior customer satisfaction through the provision of quality products, and ensuring improved performance as end results (Jabeen, *et al.*, 2015). Similarly, Shankar (2012) defines TQM as a management approach that focuses on quality, predicated on the participation of all its members, which seeks a long term achievement through customer satisfaction and benefits to the members of the organisation as well as the public. It can be inferred from the definitions that TQM is a set of laid down principles and culture that guides management in the running of a business. This is based on constant learning, adaptation to changes in customer demand and satisfaction through continuous improvement. Genaparapu, and Prathigadapa, (2015) outline the TQM dimensions to include customer focus, leadership, team of people, process management, security/system

approach to management, continuous improvement, reliability and supplier's management.

Leadership and Competitive Advantage

The leadership demonstrated by the entrepreneur is arguably the most dominant among the TQM dimensions (Jabeen, *et al.*, 2015). This is because the entrepreneur plays a crucial role in ensuring that there is requisite commitment from organisational members. Effective teamwork, empowerment and participation in decision making have been traced to creating a competitive advantage for organisations whose leadership ensures that such practices become part of the organisation's approach towards solving problems (Jabeen, *et al.*, 2015). One of the ways of ensuring that the leadership is effective for competitiveness is by aligning all organisational members to the visions, goals and objectives of the organisation for the purpose of strategic fitness. Genaparapu, and Prathigadapa, (2015) suggest that management should establish unity of purpose and direction if they must attain competitive advantage.

Customer Focus and Competitive Advantage

Customer focus, which brings about customer satisfaction, is the ultimate goal of the TQM philosophy (Al-Qudah, 2012; Jabeen, *et al.*, 2015). This is because small businesses exist because of the customers, and TQM is a customer-oriented approach which places emphasis in ensuring customer loyalty through repeat purchase.

Continuous Improvement Quality and Competitive Advantage

An SME that pays adequate attention at improving the process and procedure of its activities is no doubt ahead of other small businesses that do not. Continuous improvement is possible by ensuring Just-In-Time (JIT) management for competitive advantage. JIT facilitates the improvement of quality and management of time. It helps in eliminating

wastes and unnecessary inventory and scrap in production. Another way of ensuring continuous improvement for competitiveness is through the organisation's Total Productive Maintenance policy. This is a production driven improvement procedure that is intended to optimise equipment reliability and guarantee proficient management of plant assets through employee participation and empowerment, by linking manufacturing, maintenance and engineering functions (Ahuja & Khamba, 2008).

Methodology

The study utilised the survey research design. The population of study is made up of 500 employees of 12 selected fast food restaurants in Benin City. They include Mat Ice, Chicken Republic, Mr Biggs, Glad Tidings, Omega and Bar restaurant, Kaydees, Mama Ebo, Kada Plaza, Sizzlers, Great foods, Mc Jerry foods, and Debbies Kitchen. The restaurants were chosen based on accessibility and level of knowledge of TQM. The Taro Yamane formula of sample size determination was used to get a sample size of 200. The questionnaire was conveniently administered based on proportional allocation of number of employees in each restaurant. Out of the 200 questionnaires administered, 160 (which constitutes 80% response rate) were considered valid, hence useful for analysis. The data were sourced in August 2020.

The questionnaire used for the data collection employed a five points modified form of Likert type scales with 5 = Strongly Agree (SA), 4= Agree (A), 3 = Undecided (U), 2= Disagree (D) = agree (A), 1 = Strongly Disagree(SD) to measure all the items. The criterion for agreement to the statement is based on an average mean value 3.0. Collected data was analyzed through descriptive and inferential statistics. All data were coded and the test analyses were done at 5% level of significance using the Statistical Package for the Social Sciences (SPSS) version 22.0.

Validity and Reliability of the Research Instrument

To ensure validity of the questionnaire prepared, copies of the questionnaire were given to colleagues in the research area to critically examine the applicability of the questions. Pilot study was conducted by testing and pre-testing the questionnaire with 20 randomly selected employees of the selected restaurants. Feedbacks were incorporated and questions were then revised. The final version of the questionnaire consisted of 28 closed-ended statements. To test reliability of the research instrument, the researchers used Cronbach's alpha as a diagnostic measure. It assesses the consistency of the entire scale. The results of the reliability analysis shown in Table 1 revealed that all the variables are above 0.7 or 70% , indicating that the questionnaire is a strong research instrument for the study.

Table 1:Cronbach Alpha

Variables	Number of Items	Cronbach Alpha
leadership	6	0.876
Customer focus	6	0.821
Continuous improvement quality	6	0.709
Competitive advantage	10	0.791

Source: Researchers' computation based on the field survey 2020 using SPSS 22.0

Model Specification

The model for the study was stated functionally as:

$$CAD = f(LDS, CUF, CIQ) \dots\dots\dots (1)$$

Therefore, the model for the study is stated in econometrics term as:

$$CAD = \beta_0 + \beta_1LDS + \beta_2CUF + \beta_3CIQ + E_t \dots\dots\dots (2)$$

Where: β_0 = Constant; β_1 to β_4 parameters of the independent variables;

CAD = competitive advantage; LDS = leadership; CUF= Customer focus; CIQ= Continuous improvement Quality, and E_t = error term. Apriori expectation is stated as: $\beta_1 > 0$, $\beta_2 > 0$, and $\beta_3 > 0$.

Results

Table 2: Leadership

S/N	Variables	SA	A	U	D	SD	Mean	DR
1	Management influences employees for superior performance	31 19.4%	30 18.8%	42 26.3%	33 20.6%	24 15%	3.07	Agree
2.	Management supports communication in an effective way.	11 6.9%	15 9.4%	19 11.9%	64 40%	51 31.8%	2.19	disagree
3.	Management ensures that all workers are fully engaged at work	33 20.6%	28 17.5%	31 19.4%	42 26.3%	26 16.3%	3.00	Agree
4.	Everyone is carried along in the decision making process	31 19.4%	24 15%	45 28.1%	47 29.4%	13 8.1%	3.08	Agree
5.	Top management is committed in ensuring that employees are well trained on best practices.	30 18.8%	25 15.6%	60 37.5%	20 12.5%	25 15.6%	3.09	Agree
6.	Decision making by management is timely and effective	32 20%	69 43.1%	24 15%	24 15%	11 6.9%	3.54	Agree
Grand mean							3.00	

Source: Researchers' computation based on the field survey (2020).

Table 3: Customer focus

S/N		S	A	U	D	SD	Mean	DR
7	The restaurant strives to keep the customers highly satisfied	36	17	77	20	10	3.31	Agree
		22.5%	10.6%	48.1%	12.5%	6.3%		
8.	Customers are placed first when engaging in product development	33	40	40	37	10	3.31	Agree
		20.6%	25%	25%	23.1%	6.3%		
9.	This restaurant has an effective avenue for customers' feedback on service quality	21	61	20	25	33	3.08	Agree
		13.1%	38.1%	12.5%	15.6%	20.6%		
10.	This restaurant maintains good relationship with its customers	30	31	30	49	20	3.01	Agree
		18.8%	19.4%	18.8%	30.6%	12.5%		
11.	This restaurant pricing policies is the best in the industry	25	15	60	54	6	2.99	Disagree
		15.6%	9.4%	37.5%	33.8%	3.8%		
12	This restaurant provides discount for individual customers.	20	20	55	25	40	2.72	Disagree
		12.5%	12.5%	34.4%	15.6%	25%		
	Grand mean						3.07	

Source: Researchers' computation based on the field survey 2020

Table 4: Continuous improvement quality

S/N	S	A	U	D	S	D	Mean	DR
13.	Equipment maintenance is carried out regularly	13	17	11	59	62	2.16	Disagree
		8.1%	10.6%	6.9%	36.9%	38.8%		
14.	Continuous maintenance reduces the breakdown of equipment	12	24	54	20	50	2.55	Disagree
		7.5%	15%	33.8%	12.5%	31.3%		
15.	There is timely and dependable delivery of products to customers	27	21	18	44	50	2.57	Disagree
		16.9%	13.1%	11.3%	27.5%	31.3%		
16.	The workforce is highly motivated through adequate empowerment and training	44	10	13	49	44	2.76	Disagree
		27%	6.3%	8.1%	30.6%	27.5%		
17.	Workers have a feeling of ownership of the organisation	46	9	15	50	40	2.82	Disagree
		38.3%	7.5%	9.4%	12.5%	25%		
18	The restaurant keeps striving for efficiency and effectiveness.	43	44	27	20	26	3.36	Agree
		26.9%	27.5%	16.9%	12.5%	16.3%		
	Grand mean						2.70	Disagree

Source: Researchers' computation based on the field survey 2020

Table 5: Competitive advantage

S/N		SA	A	U	D	SD	Mean	DR
19	The restaurant offers competitive prices	25	24	57	44	10	3.06	Agree
20	The restaurant is able to offer prices lower than its competitors	31	26	59	21	25	3.14	Agree
		19.4%	16.3%	36.9%	13.1%	15.6%		
21	The restaurant is able to compete based on quality	12	16	51	62	19	2.62	Disagree
		7.5%	9.4%	31.8%		11.9%		
22	The restaurant offers high quality products to its customers	31	33	45	25	26	3.11	Agree
		19.4%	20.6%	28.1%	15.6%	16.3%		
23	The restaurant delivers the kind of products needed by customers	29	60	33	25	12	3.41	Agree
		18.1%	43.1%	15%	15.6%	7.5%		
24	The restaurant delivers customer order on time	39	26	40	31	24	3.31	Agree
		24.4%	16.3%	25%	19.4%	15%		
25	The restaurant responds well to customer's demand for "new" features	20	59	25	25	31	3.08	Agree
		12.5%	36.9%	15.6%	15.6%	19.4%		
26	The restaurant is first in the market in introducing new products	27	16	52	59	6	2.99	Disagree
		16.9%	9.4%	32.5%	36.9%	3.8%		

27	The restaurant provides dependable delivery of products	15	20	10	62	53	2.26	Disagree
		9.4%	12.5%	6.3%	38.8%	33.1%		
28	The speed in service delivery makes our restaurant unique in the industry.	31	25	15	40	49	2.68	Disagree
		19.4%	15.6%	15.6%	25%	31.3%		
29	The restaurant's quest for efficiency/effectiveness is among the highest in the industry	29	33	27	25	46	3.36	Agree
		18.1%	20.6%	16.9%	15.6%	28.9%		
Grand mean								3.00

Source: Researchers' computation based on the field survey 2020

Table 6: Pearson's Correlation Coefficient for All Variables

	Mean	CAD	LDS	CUF	COQ
CAD	3.000	1.000	0.841	0.815	0.603
LDS	3.000	0.841	1.000	0.778	0.589
CUF	3.070	0.815	0.778	1.000	0.813
CIQ	2.700	0.603	0.589	0.813	1.000

Source: Researchers' computation based on the field survey 2020 using SPSS 22.0

Testing of Hypotheses

Table 7: Regression Analysis Using Least Square

Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Hypothesis	Decision
		Std. Error	Beta						
1	Constant	.829	.124			6.688	.000		
	LDS	.448	.047	.511		9.447	.000	Significant	Accept Ha
	CUF	.440	.065	.509		6.774	.000	Significant	Accept Ha
	CIQ	-.091	.048	-.111		-1.905	.058	Not-significant	Accept Ho
Predictors: (constant), Leadership, customer focus, continuous improvement quality: Dependent Variable: Competitive advantage. P-values are significant at 0.05.									
Model summary ^b									
Model	R	R ²	Adjusted R ²	Std error of the estimate	F-change	Prob.			
1	0.881 ^a	0.777	0.773	0.1533	227.528	0.000			

Source: Researchers' computation based on the field survey 2020 using SPSS 22.0

Discussion of Results

In Table 2, there is consensus by majority on the statements on leadership in fast food restaurants as a TQM practice. Respondents however disagree largely on two statements, hence their means are below the average of 3.0. The mean value of leadership (3.00) indicates that leadership in the fast food industry is only at the average.

Table 3 reveals responses on customer focus as a TQM practice. Respondents agreed on all but two of the items on customer focus. Its mean value of 3.07 is slightly above the mean criterion of 3.0 indicating that the customer focus in the fast food industry is on the average and more attention needs to be given to it in order to align effectively with the demands of TQM.

Table 4 shows the responses on items on continuous quality improvement. Respondents responded in the negative to all but one of the items. The mean value of continuous quality improvement (2.07) is below the mean acceptance mean of 3.0.

In Table 5, respondents were undecided on the items on Competitive Advantage with a mean value of 3.00.

Table 6 shows the correlation statistics values which are positive. This indicates that leadership, customer focus and continuous quality improvement are moving in the same direction as competitive advantage. It further reveals that there is positive and significant correlation between competitive advantage with leadership, customer focus and continuous quality improvement at 5% level of significance. The results also shows that there is multicollinearity between the dependent and independent variables. This is evident by the correlation values which do not exceed 0.90 as suggested by Dwivedi (2008).

Table 7 reveals the results of the estimated multiple regression. The R-square of 0.777 shows that based on the current period during which the study was conducted, and with respect to the data collected, leadership, customer focus, and continuous improvement quality jointly explain 77.7% of the systematic variations in competitive advantage of firms in the fast food industry in Nigeria. This shows a goodness of fit for the model, and can be used for statistical prediction.

OLS analysis reveals that leadership has a positive coefficient (0.829) and a significant influence on competitive advantage at 5% level of significance. These findings indicate that a unit increase in leadership results in approximately 82.9% increase in the competitive advantage of firms in the fast food industry in Nigeria. This also indicates that an effective leadership in the fast food industry influences their competitive advantage. Therefore, the management of SMEs should practice a pragmatic leadership approach that ensures that TQM practices are sustained in solving both present and future problems of their organisations.

The results of the analysis reveal that customer focus (0.448) is positively and statistically significant with competitive advantage at 5% level of significance. A unit increase in customer focus results in approximately 44.8% increase in the competitive advantage of firms in the fast food industry in Nigeria. This indicates that putting emphasis on customer focus in the fast food industry influences their competitive advantage. Customers are often not given enough focus because of the SMEs tendency of getting too busy with the present demands of their customers and fail to pay adequate attention to the future requirements of these customers.

Furthermore, the results reveal that continuous quality improvement has a negative coefficient (-0.091) and a non-significant influence on

competitive advantage at 5% level of significance. These findings indicate that continuous quality improvement is a weak determinant of competitive advantage of firms in the fast food industry in Nigeria. The insignificant nature of continuous quality improvement is consistent with the findings of Jabeen, *et al.*, (2015).

Considering the extent to which the independent variables affect the dependent variable, the coefficient results reveal that leadership has the most significant effect on competitive advantage ($\beta_1=0.829$, $p<0.05$), followed by customer focus ($\beta_2=0.448$, $p<0.05$), and the variable with the lowest significant effect on competitive advantage is continuous improvement quality ($\beta_3=-0.091$, $p>0.05$). This indicates that continuous improvement quality may not be a strong indicator of competitive advantage when compared with the other two dimensions. Hence, leadership and customer focus are stronger and more significant predictors of competitive advantage. This result validates the findings of Jabeen, *et al.*, (2015) who revealed that management leadership is the most important TQM dimension that enhances SMEs performance. The results are however inconsistent with the findings of Mahmood *et al.*, (2014) who revealed that continuous improvement quality has the most significant influence on performance. Al-Qudah (2012) on the other hand revealed that customer focus has the most significant influence on competitive advantage.

Conclusion

The objective of this paper was to examine the influence of three popular TQM dimensions on the competitive advantage of SMEs. The findings have revealed that the leadership role of the management of SMEs is key to enhancing competitive advantage. It also revealed that other TQM practices are important to achieving competitive advantage in the industry.

Implications of the Study

This study has implications for performance in service-based and manufacturing industry especially in the areas of developing and implementing strategies that align with the TQM dimensions. Based on the findings of this study SMEs need to focus on leadership and customer focus as key TQM dimensions. This is because it is the firm's proven ability to provide leadership and customer satisfaction that could help them achieve continuous improvement quality. In other words, there cannot be continuous improvement of quality in the absence of the right leadership and without a focus on customer's satisfaction.

Recommendations

Based on the study's data analysis and empirical findings, it is recommended that SMEs should emphasise on TQM practices that include leadership, customer focus and continuous improvement quality in ensuring superior competitive advantage. First, the right leadership should be provided which would help in strengthening customer focus and continuous quality improvement.

Continuous improvement programmes should be adequately planned and implemented by ensuring that the organisational members are fully involved. This should be installed as a culture in the organisation. For this to be possible, SMEs should continuously train and empower their employees through seminars, workshop and conferences which will keep them abreast of current happenings in the industry.

References

- Addae-Korankye, A. (2013). Total quality management: A source of competitive advantage. A comparative study of manufacturing and service firms in Ghana. *International Journal of Asian Social Science*, 3(6):1293-1305.
- Al-Dhaafri, H.S., A-Swidi, A.K., Yusoff, R.Z.B. (2016). The mediating role of TQM and organisational excellence and the moderating effect of entrepreneurial organisational culture on the relationship between ERP and organisational performance. *TQM Journal*, 28(6), 991-1011.
- Al Qudah, K.A.M. (2012). The impact of total quality management on competitive advantage of pharmaceutical manufacturing companies in Jordan, *Perspectives of Innovations, Economics & Business*, 12(3), 76-85, <http://dx.doi.org/10.15208/pieb.2012.17>
- Ahuja, I.P.S. & Khamba, J. S. (2008). Strategies and success factors for overcoming challenges in TPM implementation in Indian manufacturing industry. *Journal of Quality in Maintenance Engineering*, 2, 123-147.
- Duarte, A.L.C.M., Brito, L.A.L., Di Serio, L.C., Martins, G.S. (2011). Operational practices and financial performance on empirical analysis of Brazilian manufacturing companies. *Brazil, Administration Review*, 8(4), 395-411.
- Dwivedi, D. N. (2008). *Managerial economics*, 7th edition. New Delhi: Vikas Publishing House PVT Limited.
- Eniola, A.A., Olorunleke, G.K., Ojeka, J.D., Oyetunji, B. (2019). The impact of organisational culture on total quality management in SMEs in Nigeria. *Heliyon*, 5, 1-10, <https://doi.org/10.1016/j.heliyon.2019.e02293>.
- Esiaba, I. A. (2016). Total quality management practices and competitive advantage in the Aviation industry in Kenya. An M.Sc thesis submitted to the school of business, University of Nairobi.
- Ganapavarapu, L.K., & Prathigadapa, S. (2015). Study on Total Quality Management for Competitive Advantage in International Business, *Arabian Journal Business Management Review*, 5 (3), 1-4.
- Gherardini, F., Renzi, C., Leali, F. (2017). A systematic user-centered framework for engineering product design in small- and medium sized enterprises. *International Journal of Advancement Manufacturing Technology*, 91(5-8), 1723-1746.
- Haffer, M., Al-Karaghoul, W., Djebarni, R., Gbadamosi, G. (2017). Organisational culture and TQM implementation: investigating the

- mediating influence of multi-dimensional employee readiness for change. *Total Quality Management Excellence*, 1-22.
- Ibidunni, A.S., Salau, O.P., Falola, H.O., Ayeni, A.W., & Ifeanyi, O.F. (2017). Total quality management and performance of telecommunication firms. *International Business Management*, 11 (92), 293-298.
- Imran, M., Binti, A.H., Shabbir, M.S., Salman, R., Jian, Z. (2018). The mediating role of total quality management between entrepreneurial orientation and SMEs export performance. *Management Science Review*, 8(6), 519-532.
- Jabeen, R., Shehu, A.M., Mahmood, R. (2015). Total quality management dimensions and SME performance: A quantitative approach. *IPBJ*, 7(1), 21-35.
- Jimoh, R., Oyewole, L., Isa, R., Waziri, I. (2019). Total quality management practices and organisational performance: the mediating role of strategies for continuous improvement. *International Journal of Construction Management*, 19 (2), 162-177.
- Mahmood, S., Qadeer, F., & Ahmad, A. (2014). Relationship between TQM dimensions and organisational performance. *Pakistan Journal of Commerce and Social Sciences*, 8 (3), 662-679.
- Garcia-Bernal, J., Ramirez-Aleson, M. (2015). Why and how TQM leads to performance improvement. *Quality Management Journal*, 22 (3), 23-37.
- Shankar, R. (2012). *Industrial engineering and Management*. New Delhi: Galgolia Publication Limited.
- Sinha, N., Dhall, N. (2018). Mediating effect of TQM on relationship between organisational culture and performance: evidence from Indian SMEs. *Total Quality Management Business Excellence*, 1-25
- Tari, J.J., Claver-Cortes, E., Pereira-Moliner, J., Molina-Azorin, J.F., (2010). Levels of quality and environmental management in the hotel industry: their joint influence on firm performance. *International Journal of Hospitality Management*, 29 (3), 500-510.