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Total Quality Management and Performance of Small and Medium Enterprises: A Study of Selected Small and Medium Scale Industries in Anambra State

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Abstract:

The objective of this research is to determine if the degree of implementation of TQM principles is associated with financial performance of selected SMEs in Anambra state as well as determine the specific TQM principles that propel successful financial and non-financial performance of SMEs in Anambra State. The research method used in this study is descriptive survey. The source of data was primary data. In order to solve the envisaged problem in this research, some research questions were formulated. The findings revealed the degree of implementation of TQM principles is associated with financial performance of selected SMEs in Anambra state as well as determine the specific TQM principles that propel successful financial and non-financial performance of SMEs in Anambra State. The study recommends that SMEs should initiate and implement companywide and customer centered TQM programmes to attain and sustain customers satisfaction and performance, TQM requires 100 percent commitment from everyone so SMEs should apply relevant mix capable of motivating all categories of staff for quality concern and optimum productivity and also ensure hiring right caliber of staff that possess the required know how, All stakeholder of quality control should ensure that the expenditure on quality control is justified through proper monitoring, checks and inspection of forestall customers complaint, defective and returned products, loss of goodwill and ultimately boosts performances of SMEs.

Keywords: Total Quality Management (TQM), Performance, financial performance, Small and Medium Enterprises (SME) productivity and stakeholders

1. Introduction

Total Quality Management (TQM) is a philosophy and a set of guiding principle that represents the foundation of an excellent organization that ensure survival of industrial organization in the competitive economy of today (Besterfeild, 1999). TQM is a technique that underscores the continuous improvement of goods and service quality to satisfy customers and enhance productivity. In a competitive environment which arises from world globalization and liberalization, firms survive with much difficulty unless they create a competitive advantage over their competitors (Adam, Flores & Macia, 2001; Samson & Terziowski, 1999). With the increasing competition, business survival, pressure and dynamic, changing as well as customer-oriented environment has been recognized as one of the important issues that have generated substantial amount of interest among managers and researchers in the business world (Benson, Seraph & Schoroeder, 1991; Flynn, Schroeder & Sakakibara 1995; Powell 1995).

Eng and Yusof (2003) argued that quality holds the key to the competitiveness in today's global market and TQM has been widely considered as an effective management tool to provide business with stability, growth and prosperity (Isaac, Rajenddran &

Anatharaman, 2004). Related to this, the increasing emphasis is on need for a private sector driven economy through entrepreneurship, which SMEs operators have continued to embrace in Nigeria. With the rising unemployment, most Nigerians are compelled to setup SMEs. This is even truer among the people of southeast, Nigeria who are naturally known for their high entrepreneurial drive (Olise, Nkannebe, Ukena and Okoli, 2013).

2. Statement of the Problem

Noticeably, a lot of SMEs are fast springing up in most strategic areas in Anambra state and many have survived the tide of competition. Thus SMEs is now a commonplace in almost all metropolitan areas and given the longevity of their existence, it could be somewhat inferred that they could be implementing TQM. It is evidenced that SMEs often implement TQM in response to external pressures rather than the result on internally generated initiatives to improve qualities or reduce costs (Spendlove, 1997; Guilhon, Martin & Weill 1998; Sun & Cheng, 2002). Shea and Gobelli (1995) looked at whether TQM was worthwhile investment and based on interviews with ten SMEs owners, concluded that TQM could be used to improve small business performance.

The problem that triggered the present study is the somewhat dearth of empirical evidence revealing that the TQM principle to adopt or emphasize by SMEs in Anambra State in order to make them more competitive and sustainable. This is against the backdrop that most previous TQM studies explored SMEs generally; however finding in a particular SME business area (IT) may not be true or generalized to another SME business area. Many of the studies that have examined the relationship between TQM and performance, however, have focus on large organization, manufacturing organization and the service sector (e.g Nilsson, Johnson & Gustafson, 2001; Sun, 2001; Solis, Raghu-Nathan, Chen & Pan, 1998; Singh, Feng & Smith, 2006; Powell 1995; Ronnback & Witell, 2010) and the literature recognizes that TQM studies on SMEs are limited (Parkin & Parkin 1996; Walley, 2000). In addition, the few TQM studies within the SME domain are generalized, wherein no effort was made in those studies to explore specific business areas of an SME.

3. Objective of the Study

The broad objective of this study is to explore the nature of relationship that exists between TQM and business performance of SMEs in selected SMEs in Anambra State. Specifically, this study is guided by the following objectives:

1. To determine if the degree of implementation of TQM principles is associated with financial performance of selected SMEs in Anambra state.
2. To determine the specific TQM principles that propel successful financial and non-financial performance of SMEs in Anambra State.

4. Hypothesis

The study is further hypothesized as follows;

- Ho: The degree of implementation of TQM principles is not associated with financial and non-financial performance of SMEs in Anambra State.
- Ho: TQM principles do not propel successful financial and non-financial performance of SMEs in selected SMEs in Anambra state.

5. Methodology

In this study, the descriptive research design was used. The study also adopted quantitative research methodology through the administration of copies of questionnaire of selected small and medium scale industries in Anambra state.

The population is the aggregate of all Managers and Supervisors of the selected SMEs in Anambra state. The entire population will be used as the number of Managers and Supervisors are manageable for this study, hence using a sample from it becomes unnecessary. Based on these facts, the population, therefore remains the sample.

The data collected was analyzed using mean ratings, and t-test inferential statistics. The mean ratings was used in analyzing the research questions while the t-test was utilized in analyzing the hypotheses. Five Likert type response categories was used to score the respondents' respective responses.

6. Analysis and Discussion of Data

The data generated in this survey are presented herein and the research questions formulated for this study were analyzed using tables and percentage scores while the formulated hypotheses were tested using t-test statistical tool. Out of the 25 copies of questionnaire administered, 24 of them were properly filled and returned. Below is the presentation of data in the frequency table.

- Test of Hypotheses
 - Re-statement of hypothesis one (t-Test)
 - H_{01} : The degree of implementation of TQM principles is not associated with financial and non-financial performance of SMEs in Anambra State.

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
The degree of implementation of TQM principles is associated with financial and non-financial performance of SMEs in Anambra State.	24	3.83	1.229	.088

Table 1

One-Sample Test						
	Test Value = 0					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
The degree of implementation of TQM principles is associated with financial and non-financial performance of SMEs in Anambra State.	43.414	23	.000	3.830	3.66	4.00

Table 2

The z-test (one-sample test) with the t-value of 43.414 and a Sig. (2-tailed) of .000 indicate stronger differences between the Mean. Since the test value significance is less than .05, we conclude that there is statistically significant difference. In this case, we reject the null hypothesis and state that the degree of implementation of TQM principles is associated with financial and non-financial performance of SMEs in Anambra State.

- Re-statement of hypothesis two (Z-Test)
 - H_{02} : TQM principles do not propel successful financial and non-financial performance of SMEs in selected SMEs in Anambra state.

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
TQM principles propel successful financial and non-financial performance of SMEs in selected SMEs in Anambra state	24	3.74	1.232	.088

Table 3

One-Sample Test						
	Test Value = 0					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
TQM principles propel successful financial and non-financial performance of SMEs in selected SMEs in Anambra state	42.296	23	.000	3.742	3.57	3.92

Table 4

The z-test (one-sample test) with the z-value of 42.296 and a Sig. (2-tailed) of .000 indicate stronger differences between the Mean. Since the test value significance is less than .05, we conclude that there is statistically significant difference. In this case, we reject the null hypothesis and state TQM principles propel successful financial and non-financial performance of SMEs in selected SMEs in Anambra state.

7. Findings and Conclusions

As mentioned earlier that the objective of this study is to determine if the degree of implementation of TQM principles is associated with financial performance of selected SMEs in Anambra state as well as determine the specific TQM principles that propels successful financial and non-financial performance of SMEs in Anambra State. The problem identified in this study is the somewhat

dearth of empirical evidence revealing that the TQM principle adopted or emphasized by SMEs in Anambra State are not competitive and well sustained. This is against the backdrops that most previous TQM studies explored SMEs generally; however, finding in a particular SME business area may not be true or generalized to another SME business area. Many of the studies that have examined the relationship between TQM and performance, however, have focus on large organization, manufacturing organization and the service sector. However, the result of the study shows that the degree of implementation of TQM principles (such as leadership, customer focus, training, teamwork, process management and continuous improvement) is associated with financial performance (such as profit, sales and cost) of selected SMEs in Anambra state. The study also revealed that the specific TQM principles (such as leadership, customer focus, training, teamwork, process management and continuous improvement) that propels successful financial and non-financial performance (such as customer satisfaction, market share) of SMEs in Anambra State.

On the issue of total quality management and performance for the selected SMEs, it was revealed that quality control is one of the indispensable elements of TQM which improves the performance of SMEs, thus organizations should understand current and potential need of the customers, meet their expectations and know that commitment of everyone in an organization should be geared towards improving the quality of goods and services it offers to its target customers.

8. Recommendation

The study recommends that SMEs should initiate and Implement Companywide and customer centered TQM programmes to attain and sustain customers satisfaction and performance, TQM requires 100 percent commitment from everyone so SMEs should apply relevant mix capable of motivating all categories of staff for quality concern and optimum productivity and also ensure hiring right caliber of staff that possess the required know how, all stakeholder of quality control should ensure that the expenditure on quality control is justified through proper monitoring, checks and inspection of forestall customers complaint, defective and returned products, loss of goodwill and ultimately boosts performances of SMEs.

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