



Level of utilization of total quality management principles in business operations by entrepreneurs in Anambra state

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Abstract

The study determined the level of small and medium scale owners' utilization of Total Quality Management (TQM) principles in their business operations in Anambra State. Four research questions guided the study and four null hypotheses were tested at 0.05 level of significance. Descriptive survey research design was adopted. The population comprised 2585 operators of small and medium scale enterprises in Anambra State. Using stratified random sampling 783 operators of SMEs in Anambra State were sampled. A structured questionnaire comprising 64 items in seven clusters according to the research questions which was validated by experts in the field was used to collect data. Mean ratings and standard deviation were used to analyze data in order to answer the research questions and determine the closeness of the respondents' mean while Analysis of Variance (ANOVA) was used in testing the null hypotheses at 0.05 level of significance. Findings revealed that operators of SMEs in Anambra State utilized leadership, customers satisfaction, effective communication and team work principles to a moderate level while they utilized benchmarking, strategic planning and employee training principles to a low level. It was also revealed that years of business experience and educational qualification of the respondents did not significantly influence their mean ratings on their utilization of TQM principles in their business operations in Anambra State. Based on these findings, it was recommended among others, that operators of SMEs should make concerted effort towards improving their knowledge of leadership principles in their business operations through the purchase of books and journals on effective leadership principles for successful business operations. It was also recommended that operators of SMEs should endeavour to invest in the training of their employees on current trends in their line of business through consultations with experts to determine the best training programme that best suits their business size.

Keywords: total quality management (TQM), business operations, ANOVA

Introduction

Small and medium enterprises (SMEs) are recognized as important engines of growth and development in both developed and developing countries of the world due to the role they play in generating employment, stimulating growth and creating social cohesion. SMEs are a major part of the industrial economies and play a unique role in most country's industrial development. Their flexibility and quick adaptability to change make SMEs essential instruments capable of responding to the increasing globalization of businesses. According to the Organisation for Economic Co-operation and Development (OECD) (2012) ^[8], small and medium enterprises account for 60 to 70 per cent of jobs. They also account for a disproportionately large share of new jobs. In the United States of America, SMEs employ 50 percent of the workforce and generate more than half of the nation's Gross Domestic Products (Ohachosim, Onwuchekwa & Ifeanyi, 2012) ^[7]. In Nigeria, SMEs make up about 97 percent of businesses and provide on the average 50 percent of Nigeria's employment, and its industrial output (Yusuf, 2012) ^[14]. This information is a representation of the case in Anambra State where the people are known for their love for trading and entrepreneurship. This is evident in the presence of large number of small and medium scale enterprises in the State. SMEs can be defined as business organizations set-up by individuals or group of individuals known as business

operators or entrepreneurs for the main purpose of providing goods and services. The classification of the enterprises into small and medium enterprises depends on the scale or size of business these business operators control. Some of these enterprises engage in different types of activities ranging from construction, agro-allied, information technology, manufacturing, educational establishment, business services, tourism and leisure. The criteria mostly used for the classification of these small businesses in Nigeria include; capital investment (fixed assets), annual turnover, number of employees and gross output (total production before any product is taken away). A small business is an enterprise which has an investment capital of up to one hundred and fifty thousand naira (N150, 000) and employs not more than 50 persons or workers (Oyelaran-Oyeyinka, 2011) ^[9]. Oyelaran-Oyeyinka also defined small businesses as those enterprises with total assets in capital, equipment, plant and working capital that do not exceed N250, 000 and employs not more than 30 full-time workers. A small-scale enterprise on the other hand, is one that has total assets of less than N50 million, with less than 100 employees. Medium-scale enterprises are companies with operating assets less than N200 million, and employ less than 300 persons (Oroka, 2013) ^[10].

SMEs help to promote industrial development through the utilization of local resources, production of intermediate goods and the transformation of rural technology. Their

flexibility, dynamic adaptation to changing market conditions, and ability to respond to technological innovations make them significant systems for technology acquisition and transfer. This is why the development strategies of many governments now factor in that particular attention must be paid to the SME sector as a prerequisite for long term social and technological progress. However, despite the quintessential roles of SMEs to economic development, SMEs in Nigeria in general and Anambra State in particular, they are still performing below expectation. Agbola (2013) ^[2] opined that some of the problems faced by SMEs could be attributed to numerous quality problems like poor product quality, poor business services, lack of top management commitment, poor leadership and lack of customer focus.

The consequence is low business expansion, and high mortality rate which in most cases lead to workers retrenchment, unemployment and inability to remain competitive in the market. The survivability of SMEs depends on their ability to remain competitive. For SMEs to remain competitive, quality is a core priority for any organisation to meet its short and long-range plan. Ensuring quality of business products is an important way of maintaining profitability in business. According to Agbola (2013) ^[2] when a business entrenches the principles of total quality management the business thrives and remains competitive.

Total Quality Management (TQM) plays a very significant role in boosting the competitiveness of SMEs by improving the quality of products and services that they offer. It emphasizes a commitment by management to have a company-wide drive toward excellence in all aspects of products and services that are important to the customer (Sullivan in Monday, Argozie, Bello & Unam, 2015) ^[5]. According to Israr and Gangele (2014) ^[11], TQM is a management philosophy, a paradigm, a continuous improvement approach to doing business through a new management model. The TQM philosophy evolved from the continuous improvement philosophy with a focus on quality as the main dimension of business. TQM emphasize on the quality of the product or service predominates. TQM is a philosophy which prioritizes an overall commitment to the satisfaction of customers' needs and, thus, it is regarded as being capable of sustaining the development of a competitive strategy that aligns a firm with its various publics. TQM is a people-oriented, customer-focused, measurement-driven management philosophy, using structured and well-organised operating methodology. These definitions identify seven basic elements of TQM as top management commitment or leadership, customers' satisfaction, benchmarking, strategic planning, employee training, effective communication and team work. This study determined entrepreneurs' level of utilization of total quality management principles because according to Monday, Argozie, Bello and Unam (2015) ^[5], the above TQM principles are essential to successful business operation.

Utilization can be defined as the action of using something or the fact of being used. Utilization can also be seen as the way something is treated or used (Acquiescence, 2011) ^[1]. In the context of this study, utilization can be seen as the way in which entrepreneurs apply top management commitment or leadership, customers' satisfaction,

benchmarking, strategic planning, employee training, effective communication and team work in their business activities. Small and medium entrepreneurs often referred to as 'future captains' of industry need to play a vital role in designing appropriate TQM structure and implementing it successfully. Entrepreneurs need to realize that TQM envisages integrating people with the organization, through continuous system development and a change in attitude. However, business experience seems to influence SMEs entrepreneurs' ability to utilize TQM principles in their businesses. Wanigasekara and Surangi (2011) ^[13] defined experience as the duration in which an individual has been carrying out a job. Toohey (2009) defined experience as knowledge or skill in a particular job or activity. Toohey also revealed that experience takes many guises (for example, industry experience, start-up experience, and so on) and breadth of experience is shown to be an important factor driving the performance of firms, with the number of previous jobs positively related to new firm performance. Wanigasekara and Surangi (2011) ^[13] elaborated that most researchers have found a strong link between business experience and business performance. The likelihood of failure has also been found to be associated with the owner/manager's work experience prior to business launch. For example, businesses where the owners had 10 or more years of work experience and/or four or more years of college/university education are less likely to fail (Boden & Nucci, 2010) ^[4].

In another vein, level of educational qualification is considered another critical factor that could influence entrepreneurs application of TQM principles. Educational qualifications can be defined as the degrees, diplomas, certificates, professional titles an individual has acquired. It is also defined as the official confirmation, usually in the form of a certificate, diploma or degree, certifying the successful completion of an education programme or a stage of a programme (Departmental Standards, 2016). According to Bacon and Hoque (2011), the utilization of TQM principles by SMEs operators depends on their educational qualification. Bacon and Hoque further averred that the educational qualification of the operators of SMEs can influence their ability to succeed. They noted that operators of SMEs with low educational qualification have less opportunity to utilize some TQM principles.

However, these views could be theoretical assumptions and have not been empirically proven to be the case among small and medium scale entrepreneurs in Anambra State. To many of the SMEs, the utilization of TQM remains a question. It therefore becomes imperative to empirically investigate the level of utilization of TQM principles in business operations by entrepreneurs in Anambra State. Small and medium enterprises (SMEs) are the life blood of modern economies. SMEs play unique roles in any country's industrial development in terms of employment creation, income generation and ensuring equitable distribution of limited resources. Unfortunately, while an overwhelming percentage of Nigerian businesses are SMEs, the performance of the SME sector seem to have remained dismal towards the drive for economic development and this has in turn contributed to low performance of larger businesses as well.

In Anambra State, the SME sector's contribution seem to have fallen short of its potential due largely to lack of

effective quality management and coordinated effort to support SME's operations (Ohachosim, Onwuchekwa & Ifeanyi, 2012)^[7]. Some SMEs operators in the State seem to struggle to operate, manage and improve their businesses efficiently in order to consistently deliver quality products and services on time (Osuagwu, 2008)^[12]. These SMEs operators appear to have failed to adopt TQM principles in their businesses and this seem to have affected the level of the business competitiveness. Field observation done by the researcher revealed that some of the SMEs do not engage employees in training programmes that help to update their knowledge of the organizational activities. It was also discovered that some SMEs do not have business strategic plan in their businesses. This seems to have led to cases of financial misappropriation of business funds and problems related to investment in low profit yielding businesses. This situation has led to business failures and wind-up. It is against this background that the researcher empirically investigated entrepreneurs' level of utilization of total quality management principles in their business operations in Anambra State.

Purpose of the Study

The main purpose of this study was to determine the level of utilization of TQM principles in business operations by entrepreneurs in Anambra State. Specifically the study determined the level of utilization of:

1. Leadership principles in business operations by entrepreneurs in Anambra State.
2. Customers' satisfaction principles in business operations by entrepreneurs in Anambra State.
3. Benchmarking principles in business operations by entrepreneurs in Anambra State.
4. Strategic planning principles in business operations in Anambra State.

Research questions

The following research questions guided the study:

1. What is the level of utilization of leadership principles in business operations by entrepreneurs in Anambra State?
2. What is the level of utilization of customers' satisfaction principles in business operations by entrepreneurs in Anambra State?
3. What is the level of utilization of benchmarking principles in business operations by entrepreneurs in Anambra State?
4. What is the level of utilization of strategic planning principles in business operations by entrepreneurs in Anambra State?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

1. There is no significant difference in the mean ratings of entrepreneurs in Anambra State on their level of utilization of leadership principle in their business operations based on business experience.
2. There is no significant difference in the mean ratings of entrepreneurs in Anambra State on their level of utilization of leadership principle in their business operations based on educational qualification.
3. There is no significant difference in the mean ratings of

entrepreneurs in Anambra State on their level of utilization of customers' satisfaction principle in their business operations based on business experience.

4. There is no significant difference in the mean ratings of entrepreneurs in Anambra State on their level of utilization of customers' satisfaction principle in their business operations based on educational qualification.

Methods

The design that was adopted in this study was the descriptive survey. The study was carried out in Anambra State of Nigeria. Anambra State. The population of the study comprised 2585 managers of small and medium scale enterprises in Anambra State who are registered with the State Ministry of Commerce, Industry and Technology while the sample of this study comprised 783 small and medium scale enterprises operators. Stratified sampling technique was used in line with Nworgu (2015) who stated that stratified sampling technique can be used when a study consists of layers or levels in a population and each layer has some unique characteristics which make it different from the other layers. In this study, stratification was based on size of business (small and medium scale enterprises). Thirty percent was drawn from each stratum as recommended by Burmeister and Aitken (2012) that 30 percent sample size from a large population distribution of above 100 respondents is an appropriate representative of the entire population. Burmeister and Aitken further noted that the minimum sample size for a survey study is 30 respondents. Based on this assumption, the researcher deemed the sample size of 783 respondents appropriate for this study. Instrument for data collection in this study was a structured questionnaire titled "Questionnaire on Entrepreneurs Level of Utilization of Total Quality Management Principles in their Business Operations (QEUTQMPBS)". The instrument has two main sections-A and B. Section A contains two items on respondents' background information covering years of experience and level of educational qualification. Section B contains a total of 64 items arranged in seven clusters of B1, B2, B3, B4, B5, B6 and B7 according to the seven research questions guiding the study. Cluster B1 contains 10 items on leadership principles, Cluster B2 contains eight items eliciting information on customer satisfaction principles, Cluster B3 contains 10 items on benchmarking principles, Cluster B4 contains nine items on strategic planning principles, Cluster B5 contains nine items on employee training principles, Cluster B6 contains nine items on effective communication principles, and Cluster B7 contains eight items on team work principle respectively on a 5-point rating scale of Very High Level (VHL), High Level (HL), Moderate Level (ML), Low Level (LL) and Very Low Level (VLL) (Appendix D on page 136). To establish the instrument's reliability, copies were administered on 20 small and medium sale enterprise operators in Enugu Metropolis of Enugu State who were not included in the area and population of the study. The data collected were analyzed using Cronbach Alpha and coefficient values of 0.84, 0.89, 0.85, 0.78, 0.81, 0.80 and 0.78 for clusters B1 to B7 respectively were obtained. An overall reliability coefficient value of 0.82 was obtained for the instrument. These coefficient values indicated that the instrument was reliable because they are all above 0.70. This is in line with

Nworgu (2015) who stated that research instruments with reliability co-efficient of 0.70 and above are deemed reliable. The researcher administered copies of the instrument to the respondents personally with the aid of six research assistants who were briefed by the researcher on the following issues: (a) the purpose of the research (b) the response pattern and (c) the subject of the study. Direct delivery and retrieval method was employed in the administration of the instrument in order to minimize wastage and achieve a high return rate. The respondents were allowed some time to complete the questionnaire and retrieved the questionnaire on the spot. However, where this was not possible, an appointment was booked and the respondents concerned were revisited for retrieval of the instrument. Out of the 783 copies of the questionnaire administered, 645 were properly filled and successfully retrieved representing an overall return rate of 82%. The

number of questionnaires returned were deemed adequate for the study and thus used for data analysis. The data collected from the respondents was analyzed using mean and standard deviation. For the hypotheses, ANOVA was used to test the null hypotheses at 0.05 level of significance. Where the calculated F value is less than the critical value of F, it means that the variable does not significantly influence respondents' mean ratings and the hypothesis was not rejected. Conversely, where the calculated F value is equal to or greater than the critical F value, it means that the variable has a significant influence on the respondents' mean ratings and the hypothesis was rejected.

Results

Research question 1

What is the level of utilization of leadership principles in business operations by entrepreneurs in Anambra State?

Table 1: Respondents' Mean Ratings on the Level of Utilization of Leadership Principles in Business Operations by Entrepreneurs in Anambra State (N=645)

S/no.	Leadership principles	Mean	SD	Remarks
1.	Treating employees as individuals rather than just as members of a group for enhanced motivation.	3.50	0.94	High level
2.	Regularly holding meetings with employees to discuss issues affecting the business.	2.43	0.81	Low level
3.	Delegating responsibilities to staff to motivate them to work.	2.20	0.88	Low level
4.	Displaying a sense of confidence in carrying out duties	3.62	1.02	High level
5.	Clearly explaining employees responsibility for achieving performance objectives	3.52	0.84	High level
6.	Clearly stating rewards for successfully accomplished work.	2.09	0.76	Low level
7.	Expressing satisfaction when employees do their work well.	3.72	0.78	High level
8.	Regularly supervising employees' job performance	3.85	1.01	High level
9.	Giving employees feedback on their job performance	3.34	0.81	Moderate level
10.	Encouraging critical thinking among staff to make the business better.	2.14	0.76	Low level
11.	Encouraging problem solving among staff to make the business better.	3.58	0.79	High level
	Cluster Mean	3.09		Moderate level

Data in Table 1 show that small and medium scale enterprises operators in Anambra State utilized items 1, 4, 5, 7, 8 and 11 to a high level with mean ratings of 3.50, 3.62, 3.52, 3.72, 3.85 and 3.58 and standard deviations of 0.94, 1.02, 0.78, 0.84, 1.01 and 0.79 respectively. They also utilized items 9 to a moderate level with mean rating of 3.34 and standard deviation of 0.81 while they rated items 2, 3, 6 and 10 to a low level with mean ratings of 2.43, 2.20, 2.09, 2.14 and standard deviations of 0.81, 0.88, 0.76 and 0.76 respectively. The cluster mean of 3.09 indicates that small

and medium scale enterprises operators in Anambra State to a moderate level utilized leadership principles in their business operations. The standard deviations show that small and medium scale operators' rating for each item is closely related.

Research question 2

What is the level of utilization of customer satisfaction principles in business operations by entrepreneurs in Anambra State?

Table 2: Respondents' Mean Ratings on the Level of Utilization of Customer Satisfaction Principles in Business Operations by Entrepreneurs in Anambra State (N=645)

S/No.	Customer satisfaction principles	Mean	SD	Remarks
12.	Ensuring that products are of standard quality	4.01	1.03	High level
13.	Making sure that employees are courteous to customers	3.30	0.81	Moderate level
14.	Being swift to deliver products/services to customers	3.43	0.76	Moderate level
15.	Understanding customers needs	3.03	0.76	Moderate level
16.	Eliciting feedbacks from customers on product quality	3.15	0.83	Moderate level
17.	Availing trade discounts to customers	3.31	0.79	Moderate level
18.	Carrying out sales promotions	3.28	0.92	Moderate level
19.	Ensuring that customers complaints are promptly treated	3.25	0.75	Moderate level
	Cluster Mean	3.35		Moderate level

Results in Table 2 indicate that small and medium scale enterprises operators in Anambra State utilized item 12 with mean rating of 4.01 and standard deviation of 1.03 to a high level. They also utilized items 13 to 19 with mean ratings ranging from 3.03 to 3.43 and standard deviations ranging from 0.75

to 1.03. The cluster mean of 3.35 indicates that small and medium scale enterprises operators in Anambra State to a moderate level utilized customer satisfaction principles in their business operations. The standard deviations show that small and medium scale operators' rating for each item is closely related.

Research question 3

in business operations by entrepreneurs in Anambra State?

What is the level of utilization of benchmarking principles

Table 3: Respondents’ Mean Ratings on the Level of Utilization of benchmarking Principles in Business Operations by Entrepreneurs in Anambra State (N=645)

S/No.	Benchmarking principles	Mean	SD	Remarks
20.	Identifying SMEs that adopt best management practices in your area of business	2.20	0.68	Low level
21.	Visiting business sites of competing enterprises to study their mode of operations	2.01	0.71	Low level
22.	Eliciting information from employees of competing enterprises on management innovations at their place of work.	1.98	0.70	Low level
23.	Putting a benchmarking standard in place	2.11	0.72	Low level
24.	Reviewing current technologies relevant to business progress.	2.09	0.69	Low level
25.	Using forecasting techniques to determine existing breakthroughs in technologies	1.80	0.72	Low level
26.	Ensuring that benchmark aligns with organizational objectives	2.07	0.74	Low level
27.	Setting realistic time frame for the benchmark	2.11	0.68	Low level
28.	Collecting adequate data for the benchmarking process.	1.80	0.67	Low level
29.	Providing funds for the benchmarking process.	2.20	0.68	Low level
	Cluster Mean	2.04		Low level

Results in Table 3 indicate that small and medium scale enterprises operators in Anambra State utilized all the items (20-29) related to benchmarking principles to a low level with mean ratings ranging from 1.80 to 2.20 and standard deviations of 0.68 to 0.74. The cluster mean of 2.04 indicates that small and medium scale enterprises operators in Anambra State utilized benchmarking principles in their business operations to a low level. The standard deviations

show that small and medium scale operators’ rating for each item is closely related.

Research question 4

What is the level of utilization of strategic planning principles in business operations by entrepreneurs in Anambra State?

Table 4: Respondents’ Mean Ratings on the Level of Utilization of Strategic Planning Principles in Business Operations by Entrepreneurs in Anambra State (N=645)

S/No.	Strategic planning principles	Mean	SD	Remarks
30.	Having a clearly defined mission statement	2.34	0.72	Low level
31.	Having a vision statement	2.16	0.76	Low level
32.	Identifying the firm’s resources	2.90	0.80	Moderate level
33.	Classifying the firm’s resources	2.43	0.76	Low level
34.	Appraising profit generating potentials of the firm’s resources	2.65	0.77	Moderate level
35.	Selecting a strategy which best exploits the firm’s resources and capabilities relative to external opportunities	2.03	0.61	Low level
36.	Ensuring that the business strategy plan is progressively evaluated	2.16	0.76	Low level
37.	Identifying resource gaps which need to be filled	2.32	0.71	Low level
38.	Investing to replenish the firm’s resource base	2.21	0.78	Low level
	Cluster Mean	2.35		Low level

Results in Table 4 indicate that small and medium scale enterprises operators in Anambra State utilized item 32 with mean rating of 2.90 and standard deviation of 0.80 to a moderate level. They also utilized items 30, 31, 33, 34, 35, 36, 37 and 38 with mean ratings ranging from 2.03 to 2.43 and standard deviations ranging from 0.61 to 0.78. The cluster mean of 2.35 indicates that small and medium scale enterprises operators in Anambra State utilized strategic planning principles in their business operations to a low

level. The standard deviations show that small and medium scale operators’ rating for each item is closely related.

Hypotheses

Hypothesis 1

There is no significant difference in the mean ratings of entrepreneurs in Anambra State on their level of utilization of leadership principle in their business operations based on business experience.

Table 5: Analysis of Variance (ANOVA) of the Mean Ratings of Respondents on their Level of Utilization of Leadership Principles in their Business Operations in Anambra State Based on Years of Experience

Source	Sum of squares	df	Mean square	F-ratio	F-crit	Remark
Between groups	.237	2	.077			
Within groups	243.600	643	.801	0.65	3.01	NS
Total	243.837	645				

Data in Table 5 reveal that f-ratio of 0.65 calculated at 0.05 level of significance and at 2 and 643 degree of freedom is less than 3.01. Since the f-ratio of 0.65 is less than the f-critical value of 3.01, the null hypothesis was not rejected.

Hence, there is no significant difference in the mean ratings of small and medium scale enterprises operators in Anambra State on the level of their utilization of leadership principles in their business operations based on years of experience.

Hypothesis 2

There is no significant difference in the mean ratings of entrepreneurs in Anambra State on their level of utilization

of leadership principle in their business operations based on educational qualification.

Table 6: Analysis of Variance (ANOVA) of the Mean Ratings of Respondents on their Level of Utilization of Leadership Principles in their Business Operations in Anambra State Based on Educational Qualification

Source	Sum of squares	DF	Mean Square	F-ratio	F-crit	Remark
Between groups	.242	2	.087			
Within groups	226.600	643	.856	0.37	3.01	NS
Total	226.84	645				

Data in Table 6 reveal that f-ratio of 0.37 calculated at 0.05 level of significance and at 2 and 643 degree of freedom is less than 3.01. Since the f-ratio of 0.37 is less than the f-critical value of 3.01, the null hypothesis was not rejected. Hence, there is no significant difference in the mean ratings of small and medium scale enterprises operators in Anambra State on the level of their utilization of leadership principles in their business operations based on educational

qualification.

Hypothesis 3

There is no significant difference in the mean ratings of entrepreneurs in Anambra State on their level of utilization of customer satisfaction principle in their business operations based on business experience.

Table 7: Analysis of Variance (ANOVA) of the Mean Ratings of Respondents on their Level of Utilization of Customer Satisfaction Principles in their Business Operations in Anambra State Based on Years of Experience

Source	Sum of squares	df	Mean Square	F-ratio	F-crit	Remark
Between groups	.320	2	.090			
Within groups	353.212	643	.921	0.045	3.01	NS
Total	353.532	645				

Data in Table 7 reveal that f-ratio of 0.045 calculated at 0.05 level of significance and at 2 and 643 degree of freedom is less than 3.01. Since the f-ratio of 0.045 is less than the f-critical value of 3.01, the null hypothesis was not rejected. Hence, there is no significant difference in the mean ratings of small and medium scale enterprises operators in Anambra State on the level of their utilization of customer satisfaction principles in their business operations based on years of

experience.

Hypothesis 4

There is no significant difference in the mean ratings of entrepreneurs in Anambra State on their level of utilization of customer satisfaction principle in their business operations based on educational qualification.

Table 8: Analysis of Variance (ANOVA) of the Mean Ratings of Respondents on their Level of Utilization of Customer Satisfaction Principles in their Business Operations in Anambra State Based on Educational Qualification

Source	Sum of squares	DF	Mean square	F-ratio	F-crit	Remark
Between groups	.248	2	.079			
Within groups	302.321	643	.944	0.059	3.01	NS
Total	302.569	645				

Data in Table 8 reveal that f-ratio of 0.059 calculated at 0.05 level of significance and at 2 and 643 degree of freedom is less than 3.01. Since the f-ratio of 0.059 is less than the f-critical value of 3.01, the null hypothesis was not rejected. Hence, there is no significant difference in the mean ratings of small and medium scale enterprises operators in Anambra State on the level of their utilization of customer satisfaction principles in their business operations based on educational qualification.

Summary of Findings

Findings of the study are summarized as follows:

1. Small and medium scale enterprises entrepreneurs in Anambra State utilize leadership principles in their business operations to a moderate level.
2. Small and medium scale enterprises entrepreneurs in Anambra State utilize customer satisfaction principles in their business operations to a moderate level.
3. Small and medium scale enterprises entrepreneurs in Anambra State utilize benchmarking principles in their

- business operations to a low level.
4. Small and medium scale enterprises entrepreneurs in Anambra State utilize strategic planning principles in their business operations to a low level.

Conclusion

Based on the findings of this study, it is right to say that small and medium scale enterprises operators in Anambra state do not adequately apply total quality management principles in their business operations. The small and medium scale enterprise operators did not differ in their opinion of their utilization of TQM principles in their business operations. This could be a major contributing factor to their minimal business success and incessant folding up. It is therefore pertinent that small and medium scale entrepreneurs are made aware of the need to properly utilize TQM principles in their business operations.

Recommendations

Based on the findings of this study, the researcher proffers the following recommendations:

1. Operators of SMEs should make concerted effort towards improving their knowledge of leadership principles in their business operations. They can do this through the purchase of books and journals on effective leadership principles for successful business operations.
2. Operators of small and medium scale enterprises should improve their knowledge in best ways for ensuring customers satisfaction by developing themselves academically through attendance of workshops/seminars on customers' satisfaction techniques and enrolling in business schools where they can learn practical techniques and skills for improving customers' satisfaction.
3. The National Association for Small and Medium Scale Entrepreneurs (NASME) should organize conferences and workshops of her members so as to educate them on the needs for utilizing benchmarking principles in their business operations.
4. Operators of SMEs should ensure improve their knowledge of strategic planning principles in business operations. They can do this by reading business books and journals on effective strategic planning techniques for business operation.
5. Operators of SMEs should endeavour to invest in the training of their employees on current trends in their line of business. The business operators can further consult with experts to determine the best training programme that best suits their business size.
6. Operators of SMEs should always read leadership and communication journals or periodicals that will expose them to methods of effective communications that they can utilize in the management of their business operations.
7. Operators of SMEs should as a business rule encourage employees to work in teams. This can be done by assigning duties to employees in groups.

Suggestions for Further Studies

Areas for further research on the topic include the following:

1. A similar study could be carried out in other States in Nigeria for purposes of comparison.
2. A study can also be carried out on strategies for enhancing TQM principles in Small and Medium Scale Operations in Anambra State.
3. A study can be carried out to determine factors influencing operators of SMEs utilization of TQM principles in Anambra State.

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