

QUALITY MANAGEMENT PRACTICES AND PERFORMANCE OF FOOD AND BEVERAGES FIRMS IN PORT HARCOURT

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ABSTRACT

This study is geared towards examining the nexus between quality management practices and performance of food and beverages firms in Port Harcourt. Data were drawn from 162 management staff from a population of 280 using the Krejcie & Morgan table. Three null hypotheses were drawn from the appendages of all the variables. A total of 155 copies of the instrument was retrieved and analyzed. Spearman's Rank order correlation coefficient was used to test for nexus existing between the variable and regression analytical tool was used to ascertain the relationship between the variables. The findings revealed that the elements of the predictor variable significantly influence that of the criterion variable. It was consequently recommended that Management should increase strategic quality planning as this would bring about checks and balances on the conception, production, inspection, and delivery of its products and services. Management should heighten customer focus strategy as this would engender increased profitability and performance of such firms. Management should put much emphasis on quality management practices as it is a critical factor to consider when taking decision to improve survival, profitability, and performance.

Keywords: *Quality Management Practices (QMP), Performance, and Food and Beverages Firms.*

Introduction

The food and beverage industry in Nigeria is a diverse sector as it has a large range of different products and manufacturing processes. Currently, the industries in this sub-sector are so many that they could be sub-divided into several classifications which includes: flour and grain; soft drinks and carbonated water; breweries; starch and miscellaneous food products; meat, poultry and fish; tea, coffee and other beverages; fruit juices; animal feed; sugar; distilleries and blending of spirits; cocoa, chocolates and sugar confectioneries; agricultural and food chemicals and industrial packaging (Ojo, 1998).

Central performance issues are not only associated to the manufacturing itself, but also to upstream and downstream processes and, in particular, to the primary production of raw materials which are mainly agriculture. From a performance perspective, the main actors involved in the value chain of food and beverage products, ranging from the purchase of raw and auxiliary materials (supply chain), through production, distribution, retail, catering and restaurants, to treatment, recycling or disposal of residues (Akapo, 2011). Increased performance of the food and beverage firm is hooked on the eminence, worth, and value of the product and services that are rolled out by such food and beverage firms in this regard. In essence, the heightened strategic quality planning, customer focus, and practical guidelines are quality management practices, and they bring about improved performance of the firm (Dauda, Akingbade & Akinlabi, 2010).

On the other hand, quality management practice is a firm-wide management thinking of continuously enhancing the worth of the products, services, as well as the processes by focusing on the customers' needs and expectations to enhance customer satisfaction and firm routine action. Thus, it is a management approach for a firm centered on quality, established by the participation of all its members and aiming at long term success through customer satisfaction and benefits to all members of the firm and to the society (Flynn, Schroeder & Sakakibara, 1995).

Quality management practice has been described as an integrated organizational effort designed to improve quality at every level, thus as a quest for excellence, fitness for use, value for money, customer satisfaction etc. (Dean & Bowen, 1994).

Flynn, Schroeder and Sakakibara (1995) noted that quality management practices meaningfully influence knowledge and process management practice and this directly and positively affect innovation, manufacturing, and management performance. When a firm has a nominal performance measurement system, it observes data on quality and the processes magnificently, and it gets its current performance data as required, to appropriately manage its inventory.

However, mistakes in the course of production can be figured out and corrected; improved upon, and innovativeness of the firm is accomplished through properly controlling and organizing the processes intermittently and checking the quality data uninterruptedly. With

effective knowledge and process management practices, the food and beverage firm can also introduce innovative products/services frequently and it can increase its sales and profitability.

Numerous academic research (Flynn, Schroeder & Sakakibara, 1994; Hill, Jones & Galvin, 2004) have been carried-out towards surmounting the problems linked with quality management practice using various dimensions, however it is noteworthy that not much has been done on how quality management practice influence performance of food and beverages firms in Port Harcourt. Given the identified knowledge gap, our point of departure from earlier research is to empirically fill this void that has been observed. Hence, we intend to scrutinize any relationship existing between quality management practice and performance in the consumer sector in Nigeria, especially in Port Harcourt.

Statement of the Problem

The survival, growth, and performance of the consumer sector in Nigeria have indicated increased development to the Nigerian economy. Despite this positive overall outlook, consumption has somewhat constrained in the recent past. With recent crisis in Nigeria, natural disasters such as floods, climate change, and communal problems, and terrorist attack which taken a toll on food producing areas has resulted into food shortages, food-borne illnesses which has contributed to decreased worker productivity on the part of the farming communities has resulted into high cost of food items thereby affecting the quality and quantity of the products of food and beverages firms in Nigeria, especially in Port Harcourt. Consequently, the food and beverage quality and safety system in Nigeria is largely weak, fragmented, and not well harmonized; and thus are not effective enough to sufficiently protect the health of consumers and to enhance the competitiveness of experts in the regard (Kaynak, 2003).

In order to forestall the eventual collapse of the consumer sector, this study intends to investigate whether the appropriate harnessing of quality management practices within the sector could help leverage the continuous unsustainable performance practices especially in Port Harcourt and place the sector on the fast revival.

Aim and Objectives of the Study

General purpose and exact objectives are as follows: The overall drive is to examine if there exist any relationship between quality management practices and performance. Precisely, the objectives are:

- i. To examine if there exist any relationship between strategic quality planning and performance of food and beverage firms in Port Harcourt.
- ii. To ascertain if there exist any relationship between customer focus and performance of food and beverage firms in Port Harcourt.

Research Questions

In an attempt to realize the drive for this study, the research question below will be adopted.

- i. What is the relationship between strategic quality planning and performance of food and beverage firms in Port Harcourt?
- ii. What is the relationship between customer focus and performance of food and beverage firms in Port Harcourt?

Research Hypotheses

To derive answer to the research questions that are stated above, this research work is guided by the following propositions stated in a null form:

H₀₁: There is no significant relationship between strategic quality planning and performance of food and beverage firms in Port Harcourt.

H₀₂: There is no significant relationship between customer focus and performance of food and beverage firms in Port Harcourt.

Significance of the Study

The study aid the understanding of the concept of quality management practice in order to adequately develop a framework for the measurement, management, and recording of the possible ideals that can be derived through the proper management of performance behaviors in the firm. It also provides a clear analysis of the different elements of the constructs and their measurements; this will help scholars who intend to carry further study on the constructs.

This work provides an outline for better integration of strategic quality planning and customer focus, into the everyday operations of food and beverages firms. With appropriate management of quality management practice and performance behaviors, food and beverages firms will be able to derive more benefits through employees, customers' loyalty, and other stakeholders' collaboration.

To the practitioners and business managers, this study will be of great benefits as food and beverages firms require increased performance behaviors to survive in the ever-changing environment.

Review of Literature

Quality Management Practices

Ojo (1998) opined that quality management practices include revolves around the vision, mission, and values of the firms. They are formed by taking into account the quality concept. Employees make effective quality management practices efforts as inputs in developing the vision, mission, strategies, and objectives of the firm. Successful quality management

practices efforts also take into account the possible side effects of the plan to the environment prior to the production. This will manifest and improve social responsibility of the firm.

It was however observed that most researches on quality management practices and performance relationship focused on organization's profitability, market share, earnings per share, net asset, working capital, expansion, etc. as the performance measurement (Ojo, 1998).

The pointers in the business sector are applicable to the food and beverage sector; therefore, quality management practices seem to appreciation of the concept of quality management practices by the stakeholders of this sector, especially the employees.

Strategic Quality Planning

Strategic quality planning represents a progressive activity that managers should envisage and take part in the availability and implementation of the strategic plan is vital to the firm's free flow ability in managing external changes (Jaafreh, 2011). The survival of businesses is traceable to the ability to successfully operate within environmental forces that are unstable and intense and which can seriously affect the process of decision making. Firms get used to these environmental forces as they plan and carry out strategic actions. It is through strategic quality planning that a firm can predict changes in the environment and act proactively (Miller & Cardinal, 1994).

It is without doubt that corporate performance has is greatly and positively influenced by strategic quality planning (Dansoh, 2005). It is worthy of note that the implementation proves to be the most uneasy fragment of the strategic arrangement that is to put into play the planning being proactive enough to identify greater opportunity which may be actualized plan and modifying the plan to suit the surfaced event; while evaluation and review is the final stage. This phase ends to captures monitoring, evaluation, feedback, and review of the arrangements. This is vital for the stability between implementation and planned tactical guidelines.

Customer Focus

Quality management practices in firms focuses on serving the external customers. They first should know the customers' expectations and requirements and then should offer the products/services, accordingly. By the aid of successful customer focus efforts, production can be arranged with respect to the customers' needs, expectations, and complaints. This encourages firms to produce high quality and reliable products/ services on time with increased efficiency and productivity. When customer expectations are met, their satisfaction will be increased, and the firm's sales and the market share will increase (Nmadu, 2007).

Focusing on customers is stressed by most authors of quality management practices literature to be an important part of quality management practices.

Dansoh (2005) define a customer as the person or group who receives the work that one carries out, and asserts that a business function without a customer should not be performed. Dansoh (2005) stress the importance of customer focus, and imply that any business has four goals: to satisfy its customers, to achieve higher customer satisfaction than its competitors, to retain customers in the long run and to gain market shares.

Performance

Performance is assumed as organizational accomplishment affiliated with the set goals. It encompasses firm's set goal through coordinated individual or firm's team work. Performance as a concept embraces behavioral outcomes and economic achievements. Performance management explains the manner in which employees are methodologically handled in order to bring about productivity, revolution, satisfaction and goal motivation in the organization. It is a consistent strategy that brings about a positive achievement. It is passionate about making sure all managers excel. i.e. all team members who are genuinely part of, and neck deep into the planning and implementation process. The manager's feat is revealed through the organization's mission statement in terms of accomplishing its set goal (Samson & Terziovski, 1999).

Performance administration is perpetually twisted and ties together numerous processes such as performance planning, managing performance through the year, capturing the potentials and performance of a manager. It also covers identification and excellence appreciation at year long. Performance control bonds these processes in such a manner that distinct managers' performances are goal oriented. Performance management builds constructive goal driven task and is geared towards the minimization of conflicts within the firm (Samson & Terziovski, 1999).

Methodology

The population for this study involves all the employees of the food and beverages firms in Port Harcourt metropolis. Record from the human resources disk of the various firms shows a total of two hundred and eighty (280) management staff and subordinates among the four (4) firms. The simple random sampling technique was used, in other to confirm that each affiliate of the subset has an equivalent probability of being selected.

Krejcie and Morgan (1970) sample size determination table was used for this study which gave a sample size (S) of 162 employees of the population size (N) 280 of the four in food and beverages firms selected. These institutions include the following: Nestle Food Nigeria Plc, Cadbury Nigeria Plc, Nigeria Bottling Company Plc, and Dangote flourmill Plc. The instrument for this study was proportionally distributed according to the number of staff of the various firms. The Statistical Package for Social Science was used to conduct the analyses.

Results and Data Analysis

Table 1 Spearman Correlation Coefficient (Spearman's rho): Test of Association between the variables

Correlations					
			Strategic Quality Planning	Customer Focus	Performance
Spearman's rho	Strategic Quality Planning	Correlation Coefficient	1.000		
		Sig. (2-tailed)	.		
		N	155		
	Customer Focus	Correlation Coefficient	.784**	1.000	
		Sig. (2-tailed)	.000	.	
		N	155	155	
	Performance	Correlation Coefficient	.911**	.877**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	155	155	155
**. Correlation is significant at the 0.01 level (2-tailed).					

Source: SPSS Output Version 20

The Spearman rank correlation table above measures the strength of association between the variables as follows;

The result reported a very strong positive correlation between strategic quality planning and performance ($\rho = .911$, $n = 155$, $p < 0.01$), also a strong positive correlation value was reported between customer focus and performance ($\rho = .877$, $n = 155$, $p < 0.01$). The dimensions are statistically significant having p values of .000 each which is less than 0.01 thus resulting to the non-acceptance of previously stated null hypotheses.

Table 2 Model Summary of the Variables

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.976 ^a	.953	.953	.227
a. Predictors: (Constant), Customer Focus, Strategic Quality Planning				

Source: SPSS Output Version 20

The model summary reports a correlation coefficient value of .976^a for all the dimensions of total quality management practices indicating that there exists a positive association between them and performance of the corporations studied; the R square of .953 (95.3%) represents

the coefficient of determination which is the explained variation in performance as accounted for by the dimensions of total quality management (strategic quality planning and customer focus).

Table 3 Regression Output used to test the stated null Hypotheses

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.127	.223		-14.000	.000
	Strategic Quality Planning	.936	.077	.360	12.238	.000
	Customer Focus	1.488	.066	.663	22.542	.000

a. Dependent Variable: Performance

Source: SPSS Output Version 20

The two dimensions of quality management practice: strategic quality planning ($\beta = .360$, $P < 0.01$) and customer focus ($\beta = .663$, $P < 0.01$) exhibited significant positive effect on growth within the organization.

The result provided support for the H_1 test result ($r=.000 < .05$) which indicated that there is a significant relationship between strategic quality planning and performance.

The findings provided support for the result of H_2 ($r=.000 < .05$) which stated there is a significant relationship between customer focus and performance.

Discussion of findings

The study is aimed at examining the influence of quality management practice on performance in food and beverage firms in Port Harcourt.

The results of the correlation analysis involving all indicators of quality management practices revealed positive correlation coefficient values among the variables.

The result provided support for the H_1 which indicated that there is a significant relationship between strategic quality planning and performance. This is in agreement with Samson and Terziovski (1999) view that a two way communication is important to create strong relationship because expectation is generated by one way communication and fulfilled by the two way communication. The findings provided support for the result of H_2 which stated there is a significant relationship between customer focus and performance. This is supported by Samson and Terziovski (1999) assertion that quality management practices is positively related to operational performance, customer loyalty, and market and financial performance, because, if a firm knows the needs and expectations of the customers accurately and on time through frequent communication with and feedback from the customers.

Conclusion

It has been found that total quality management is positively related to operational performance, customer loyalty, and market and financial performance. This is because, if a firm knows the needs and expectations of the customers accurately and on time through frequent communication with and feedback from the customers, the firm can produce high quality, reliable, and timely delivered products or services. Systematic measurement of customer feedback and its use in the product and service or process improvement can increase customer satisfaction and increased performance of the firm. When a firm knows the customers' current and future needs, expectations, and complaints accurately and on time, the firm can invest in profitable areas and improve its sales, market share, and total profitability.

Founded on the results obtained from the analyses, it was concluded that the dimensions of quality management practices have significant influence on performance on food and beverages firms in Port Harcourt metropolis. The following specific conclusions were made:

- i. Strategic quality planning has a positive significant influence on performance of firms in food and beverages industry in Port Harcourt.
- ii. Customer focus has a positive significant influence on performance of firms in food and beverages industry in Port Harcourt.
- iii. Also, quality management practice has a positive significant influence on performance of firms in food and beverage industry in Port Harcourt.

Recommendations

From the research analysis and findings above, the following recommendations were made to aid food and beverage firms in Port Harcourt:

- i. Management should increase strategic quality planning as this would bring about checks and balances on the conception, production, inspection, and delivery of its products and services.
- ii. Management should heighten customer focus strategy as this would engender increased profitability and performance of such firms.
- iii. Management should put much emphasis on quality management practices as it is a critical factor to consider when taking decision to improve survival, profitability, and performance.

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Appendix 1

Questionnaire

The questionnaire for this research work was constructively structured to obtain information on and evaluate the influence of quality management practices on performance of food and beverages firms in Port Harcourt. Please tick the answers that are most appropriate to the questions or statement.

SECTION A

1. Name of organization.....
2. Gender of Respondent: Male: Female
3. Age Group: Less than 25 years 26-35 years
36-45 years 46 – 55 years 56 years and above
4. Marital status: Single Married
5. Educational Level and Qualification:
Primary School Secondary School Diploma/NCE
HND/B.Sc. PGD/Masters PhD
6. Position in the organization
7. Duration under the employ of your organization.....
8. Your organization's years in operation:
0-10 11-20 21-30
31-50 51-Above

SECTION B

The statement items below describe quality management practices of your firm in terms of strategic quality planning, and customer focus. Kindly read each statement carefully and show the extent to which you agree or disagree by indicating in the box beneath each on a scale from strongly disagree to strongly agree.

	ITEM					
S/N	Strategic Quality Planning	SD	D	U	A	SA
1.	The strategic quality planning in my firm is to empower the human capital to become highly-trained individuals prepared for increased performance of the firm.					
2.	Employees contribute to the strategic quality planning programmes in my firm and take responsibilities and tasks necessary to complete individual projects of the quality management practices in my organization.					
3.	Strategic quality planning policies in my firm emphasizes employee assurance to meet the objectives of the quality management practices.					
4.	The outline of strategic quality planning programmes in my firm has put a lot of pressure on the quality management practices within my organization.					
S/N	Customer Focus	SD	D	U	A	SA
1.	Customer focus is the breeding ground for an effective quality management practice that enhances quality services.					
2.	Customer focus may be considered bridges to success as it aids the overall performance of the employees and solidifies the quality management practices.					
3.	Customer focus is applied by the medium of indoctrination characterized by strong configuration and development of skills of the employees.					
4.	There is a direct relation between customer focus, competitiveness, productivity and performance as it has increased the services offered and rendered by my firm.					

Scale: SD=Strongly Disagree, D=Disagree, U=Undecided, A=Agree & SA=Strongly Agree.

SECTION C

The statement items below describe performance of your firm regarding Competence and value creation. Kindly read each statement carefully, and then show the extent to which you agree or disagree by indicating in the box beneath each on a scale of 1 (Strongly disagree) to 5 (Strongly agree).

	ITEM					
S/N	Performance	SD	D	U	A	SA
1.	The firms' resources are allocated accordingly to enhance efficiency and effectiveness of the business to changing business environments.					
2.	Special circumstances generate maximum employee drive which results in maximum performance still on the part of the employees.					
3.	Competence and value creation is encouraged by my organization in a bid to ensure the overall performance of the firm.					
4.	Management put resources together to synchronize adeptness of employee and performance in an attempt to prepare for the unknown from the external environment.					

Scale: SD=Strongly Disagree, D=Disagree, U=Undecided, A=Agree & SA=Strongly Agree.

Appendix2

Reliability

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.886	.891	2

Item Statistics

	Mean	Std. Dethroughtion	N
Strategic Quality Planning	4.86	.402	155
Customer Focus	4.87	.466	155

Nonparametric Correlations

[DataSet1]

Correlations

		Strategic Quality Planning	Customer Focus	Performance	
Spearman's rho	Strategic Quality Planning	Correlation Coefficient	1.000	.784**	.911**
		Sig. (2-tailed)	.	.000	.000
		N	155	155	155
	Customer Focus	Correlation Coefficient	.784**	1.000	.877**
		Sig. (2-tailed)	.000	.	.000
		N	155	155	155
	Performance	Correlation Coefficient	.911**	.877**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	155	155	155

****.** Correlation is significant at the 0.01 level (2-tailed).

Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Customer Focus, Strategic Quality Planning ^b		Enter

a. Dependent Variable: Performance

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.976 ^a	.953	.953	.227

a. Predictors: (Constant), Customer Focus, Strategic Quality Planning

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	160.366	2	80.183	1551.979	.000 ^b
	Residual	7.853	152	.052		
	Total	168.219	154			

a. Dependent Variable: Performance

b. Predictors: (Constant), Customer Focus, Strategic Quality Planning

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.127	.223		-14.000	.000
	Strategic Quality Planning	.936	.077	.360	12.238	.000
	Customer Focus	1.488	.066	.663	22.542	.000

a. Dependent Variable: Performance

.886 Cronbach alpha values are above .7 which means the dimensions are reliable. Then the Beta values .360 and .663 shows the effect of the two dimensions on Performance.