Effects of Supplier Relationship Management Practices on Performance of Quoted Food and Beverage Firms in Nigeria

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ABSTRACT

The study examined the effects of supplier relationship management practices on performance of quoted food and beverage firms in Nigeria. Southwest region of the country remained the study area with a population size of 13 firms. All these firms were considered using total enumeration method. Also, Using stratified sampling technique, each firm was divided into 10 strata and 1 respondent was picked in each strata, leading to 10 respondents from each firm and 130 respondents as the sample size. 130 copies of questionnaire were administered but 103 responses were considered for analysis. Linear and Multiple Regression was used to test the hypotheses. It is evident from the results of the tests that supplier appraisal (F=28.196, p=0.000 <0.05), supplier development (F=20.114, p=0.000 <0.05), and supplier involvement (F=12.444, p=0.000 <0.05) have positive and significant effect on firm performance. Also, the combined effect of supplier appraisal, supplier development and supplier involvement (F=14.035, p=0.000 <0.05) on performance was significantly positive. Based on the findings of the study, it was concluded that for food and beverage industries desiring of more and sound performance, supplier relationship must be well managed through supplier appraisal, supplier development and supplier involvement.

KEYWORDS: *Supplier relationship management, Supplier appraisal, Supplier development, Supplier involvement, and Performance.*

INTRODUCTION

In today's business environment, relationship building becomes unnegotiable for firms' survival, efficiency and competitiveness. Today's firm considered customers as the king and more emphasis is laid on customer relationship management neglecting the importance, contributions and management of other parties in the chain most especially the supplier.

The strategic position of supplier to manufacturer cannot be over emphasized as the relationship that exist between the supplying and the buying firms has a significant effect on the performance of other chain members. Supplier relationship management (SRM) which is also being referred to as strategic supplier partnership (SSP) or vendor relationship management is an important process or practice for manufacturing and service firms to ensure the supply of reliable and frequent deliveries in today's dynamic and competitive environment. It stresses enterprise's interactions with organization that supply goods and services used (Mentzer, DeWitt, Keeble & Zacharia, 2012).

Supplier relationship management entails better understanding of which suppliers are in strategic position to the organisation and which are less important. This implies that assessment of suppliers putting into consideration some vital conditions is germen in managing supplier-buyer relationship. Adding value to supplier capability should also be considered as important practice as the success of the buying firm is associated to the capabilities of its suppliers. This implies that supplier development is critical for the buying firm's survival, efficiency and competitiveness. Furthermore, in managing supplier relationship, it is expected that buying firms get their suppliers involved in co-designing and in new product development (Petersen, Handfield, & Ragatz, 2003). This bring about flexibility, innovation and improve product quality.

There are abundant of literature on customer relationship management with less on supplier relationship management based on the singular reason that customer is considered as the king by all firms. Nevertheless, it is widely recognized that in order to compete and survive, companies must seek, build up and maintain relationships with capable suppliers and realize the maximum value through such relationships (Carr & Sheltzer, 2012). It is therefore against the above premises, the study examine the effect of supplier relationship management practices on performance of quoted food and beverage firms in Nigeria.

Statement of the Research Problem

The survival of many manufacturing firms has been truncated as a result of their care-free attitude towards adoption and implementation of appropriate supplier relationship management practices capable of strengthen their relationship with their suppliers for better firm's performance.

As reviewed and to the best of researchers' knowledge, there is no noticed study on supplier relationship management and firm performance focusing on Nigerian food and beverage sub-sector till date. This created a gap in literature that need to be investigated. Based on this, it would not be out of place to examine how supplier relationship management practices affect the performance of firms with specific emphasis on quoted food and beverage firms in Nigeria.

Research Questions

In order to achieve the set objectives, the following research questions become pertinent:
(i) What is the effect of each identified supplier relationship management practice on performance of quoted food and beverage firms in Nigeria?

(ii) What is the combined effect of the identified supplier relationship management practices on performance of quoted food and beverage firms in Nigeria?

Study Objectives

Broadly, the study aimed to examine effects of supplier relationship management practices (SRMPs) on performance of quoted food and beverage firms in Nigeria. Specifically, the study attempt to:

(i) examine if each identified supplier relationship management practice has any effect on performance of quoted food and beverage firms in Nigeria; and

(ii) examine the combined effect of the identified supplier relationship management practices on performance of quoted food and beverage firms in Nigeria.

Research Hypotheses

The following hypotheses have been drawn in a null form to guide the study.

H_o1: Each identified supplier relationship management practice has no significant effect on performance of quoted food and beverage firms in Nigeria;

  H_o1a: Suppliers appraisal has no significant effect on performance of quoted food and beverage firms in Nigeria.

  H_o1b: Supplier development has no significant effect on performance of quoted food and beverage firms in Nigeria.

  H_o1c: Supplier involvement has no significant effect on performance of quoted food and beverage firms in Nigeria.

H_o2: The identified supplier relationship management practices have no significantly combined effect on performance of quoted food and beverage firms in Nigeria.

Framework of the Study

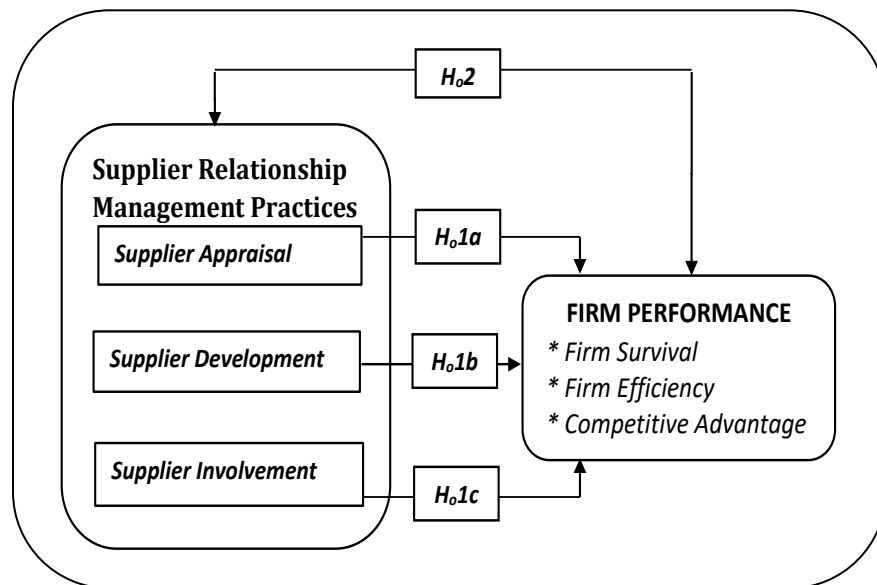As discussed above, figure 1 presents the framework of the study.

Figure1: Framework of the study
Source: Author's Initiative, 2019

LITERATURE

Theoretical Review

In a study like this, it is pertinent to review relevant theories guiding the variables under study. As observed, there are numerous theories associated with supplier relationship management such as Dua theory, Social Exchange Theory (SET), Grey Theory, Evolutionary Game Theory (EGT), Intellectual Capital (IC) Theories, Resource De-pendence Theory (RDT), Transaction cost analysis (TCA), Game Theory to mentioned but a few. This study was guided by social exchange theory.

Social exchange theory was propounded by Homans (1958) with the sole aim of establishing inter-organisational relationship. According to West and Turner (2007), SET assumes that relationships are interdependent. The theory was developed based on the notion that a relationship between two parties is created through a process of cost benefit analysis. The theory does not measure relationship by emotion or feelings but by the reward each party will get in return at the end of the deal. This corroborate the view of Grefen and Riding (2002) that human only take part in exchange relationships with rewarding expectation. SET, therefore assist the buying organization to select the most rewarding supplying firms for a profitable relationship.

Conceptual Review

Supplier Relationship Management Practices (SRMPs)

The desire of the buying firms to receive raw materials in right quantity, right quality and at the right time to satisfy their customers profitably lies on their ability to assist, develop and establish a close relationship their suppliers. Supplier relationship management is the act of planning, implementing, developing and monitoring company relationship with the current and potential supplier (Akamp & Muller, 2013). It involves motivating supplying firms to act in such a way that organizational need will be met; identifying suppliers that are really important to the firm operation; and providing guidelines on how to work with different types of supplier (Schuh *et al*., 2014). In a simply form, SRM is a comprehensive approach of managing organization's interactions with supplying firms on a win-win relationship where both parties benefit from the relationship. This relationship enhances firm's efficiency in terms of goods and service acquisition, inventory management and material processing (SAP, 2003).

As reviewed, there are numerous practices encompasses the relationship between the buying and supplying firms for desired result. Examples of these practices are trust, supporting suppliers to improve their processes, sharing information, involvement of supplier in new products development, and long-term relationships (Langfield-Smith & Greenwood, 1998); Supplier segmentation, SRM governance, supplier performance management, and supplier development (Zimmermann, *et al*., 2015; Lysons and Farrington 2006). As no study can examine the whole practices of supplier relationship management in a single study, this study therefore examine supplier appraisal, supplier development and supplier involvement as practices of SRM. These practices were briefly discussed.

Supplier Appraisal

One of the strategies of getting the right supply chain is through appraising the suppliers (BCG, 2011). Supplier appraisal is all about assessing potential supplier's capability to meet the terms and conditions specified in a contract agreement (Jessop & Compton, 2006). Supplier appraisal is expected to be carried out putting into consideration the requirements of the procuring entity (Lysons & Farrington, 2006). However, the authors stressed that, criteria such as potential supplier's human resources, quality systems, finance, production capacity and facilities, organizational structure, information technology, environmental and ethical considerations are highly important when intention of appraising supplier is created.

In addition, Monczka *et al.,* (2005) stressed that supplier can be appraised quantitatively and qualitatively. Quantitative appraisal criteria include delivery performance, quality performance and cost reduction while the qualitative criteria include suppliers' problem resolution ability, technical ability, ongoing process reporting, corrective actions response, supplier cost reduction ideas. Viewing from the grey system theory, Muhammad *et al.,* (2012) identified quality, delivery, risk factor, quality standards and sustainability factor as supplier appraisal criteria.

Relaying the importance of supplier appraisal, Darren (2006) affirmed that the practice enables the procuring entity to identify the weaknesses of the supplier; need for new suppliers; and basis for continuous improvement. From another perspective, the author stressed that the practice may require time and resources cost of carrying out; assessing only objective or only subjective criteria could lead to skewed results; the weightings and the actual scores given to suppliers can be influenced by a biased buyer.

Supplier Development

Supplier development can be defined as any effort of a buying firm on a supplying firm to increase the performance and capabilities of the firm to meet the buying firm's short and /or long-term supply needs (Krause & Ellram, 1997). From the buying firms' perspective, SD is an enhancing force responsible for the capabilities and supplier's performance to meet buyers' requirements (Rodriguez, Hemsworth & Martínez-Lorente, 2005; Li, Humphreys, Yeung & Cheng, 2007).

As reviewed, numerous practices of supplier development abound. These include: communication (Rajput & Bakar, 2012; Obal & Lancioni, 2013), knowledge transfer and training (Modi & Mabert, 2007), Supplier's site visit (Justice, 2006), capital and technical support (Wager, 2006; Modi & Mabert, 2007; Tungjitjarurn, Suthiwartnarueput & Pornchaiwiseskul, 2012), collaboration for improvements (Rajput and Bakar, 2012; Yan & Dooley, 2014).

Supplier development as one of the practices of supplier relationship management assist in cost reduction (Sako, 2004), operation improvement (Sánchez-Rodríguez, Hemsworth, & Martínez-Lorente, 2005), buyer performance improvement (Saccani & Perona, 2007), improvement in quality (Avery, 2008; Talluri, Narasimhan, & Chung, 2010), optimal resource utilization (Talluri *et al.,* 2010) and improve supplier's deficiency (Rajput & Abu Bakar, 2012).

Supplier Involvement

Supplier involvement refers to the extent to which the buying firms jointly work with supplier in co-designing and in new product development (Petersen, Handfield, & Ragatz, 2003). Corroborating this, Van Weele (2014) affirmed the importance of getting suppliers involved in the product development process as a number of innovations come from suppliers.

Supplier involvement is beneficial to both the buying firm and the supplying firm. From the buying firm perspective Lau *et al.,* (2010) affirmed that supplier involvement as a practice reduces lead time and risk, enhances flexibility and improve product quality. From the supplying firm perspective, supplier involvement promotes innovation, boost financial performance, and improve product quality (Chung & Kim, 2003).

Performance

Performance is an outcome of activities carried out by an organisation over a period of time often with reference to past or projected cost efficiency, management responsibility or accountability or the like. Mahapatro (2010) described performance as firms' ability to fulfill its mission through sound management, strong governance and a persistent rededication to achieving results.

As reviewed, there are no universal acceptable measures of performance, thus, this study considered firm survival (FS), firm efficiency (FE), and competitive advantage (CA) as measures of performance.

Empirical Review

Al-Abdallah, Abdallah and Hamdan (2014) studied the impact of supplier relationship management on competitive performance of manufacturing firms. The study conceptualized supplier relationship management with supplier quality improvement, trust-based relationships with suppliers, supplier lead time reduction, supplier collaboration in new product development, and supplier partnership/development while competitive performance was captured by cost, quality, flexibility, delivery, and on time product launch. The findings of the study shows that supplier partnership/development and supplier lead time reduction affect the competitive performance of the buying firms positively and significantly.

Nyamasege and Biraori (2015) studied to examine the effect of supplier relationship management (SRM) on the effectiveness of supply chain management in Kenya Public Sector: A case of Ministry of Finance. The study identified supplier collaboration, supplier development, quality goods, and customer care service as elements of SRM. Descriptive research design was adopted giving room for both quantitative and qualitative data to be sourced for. 60 respondents representing the study sample size were randomly selected from the population size of 120 management staff. The findings of the study revealed that to a large extent, supplier collaboration, supplier development, quality of goods and services and customer care service affected supply chain effectiveness.

Kosgei and Gitau (2016) conducted a study on effect of supplier relationship management on organizational performance using Kenya Airways Limited as a point of reference. The study

considered trust, mutual goals, communication, and commitment as elements of supplier relationship management. Using stratified sampling technique, 82 respondents out of 272 KQ employees were selected as the study sample size since the population in different departments at KQ was considered to be heterogeneous. The study relied on primary data collected through the use of questionnaire. The study revealed a strong positive linking relationship between supplier relationship management and organizational performance.

Mumelo, Selfano and Onditi (2017) investigated the influence of supplier relationship management (SRM) on performance of small scale enterprises in Bungoma Town, Kenya. The study captured SRM by information sharing, lead time, and relationship duration. The population of the study comprised of 1011 owners of SSEs in Bungoma Town, Kenya. Using stratified random sampling technique, 287 respondents were selected while data was collected from both secondary and primary sources. The findings of the study shows that there is a strong significant positive relationship between information sharing, lead time, relationship duration and organizational performance of small scale enterprises in Bungoma Town, Kenya.

METHODOLOGY

The study adopted survey design which assist researcher in obtaining information that describes the existing phenomenon directly from concerned individuals. As at date, there are 13 quoted food and beverage firms in Southwest Nigeria. Using stratified sampling technique, each firm was divided into 10 strata (Purchasing department, store department, production department, marketing department, sales department, transportation/Logistic department, quality control department, customer service department, account department, and others). Also, using random sampling technique, 1 respondent was picked in each strata, leading to 10 respondents from each firm and 130 respondents as the sample size.

The study relied heavily on primary data and questionnaire was used as data collection instrument. The questionnaire was divided into five sections (Section A-E). Section A contains questions relating to respondent's profile while section B-D solicits answers to questions relating to supplier appraisal, supplier development, and supplier involvement respectively. Section E demands answers to questions relating to firm performance. Response structure for section B-D follows Rensis Likert's summated rating scale of 1 to 6 points (1= Strongly Disagree; 2= Disagree; 3= Disagree to some extent; 4= Agree to some extent; 5= Agree; 6=Strongly Agree) while response structure for section E follows Rensis Likert's summated rating scale of 1 to 6 points (1= Very Low; 2= Low; 3= Fairly Low; 4= Fairly High; 5= High; 6= Very High).

Responses were coded, entered into the Statistical Package Software for Social Science (SPSS) version 20 for analysis. Linear and multiple regression method of analysis was used to test the hypotheses formulated for the study.

Models Specification

The generalized multiple regression model employed in the study is presented below:
$P = f$ (SRMPs)………………………………………………………………………………….(8.1)

Model 1a: P = f (SA) …………………………………………………………………………(8.2)
Model 1b: P = f (SD) …………………………………………………………………………(8.3)
Model 1c: P = f (SI) …………………………………………………………………………..(8.4)
Model 2:   P = f (SA, SD, SI) …………………………………………………………....(8.5)

Where:
P = Performance;   SRMPs = *Supplier Relationship Management Practices*
SA = *Supplier Appraisal*; SD = *Supplier Development*; SI = *Supplier Involvement*
f = Functional Notation

Objective 1
To examine if each identified supplier relationship management practice has any effect on performance of quoted food and beverage firms in Southwest Nigeria, the linear regression estimation technique of the models specified in equation 8.2 to 8.4 was presented as follows:

$P = \beta_0 + \beta_1 SA_V + \varepsilon$………………………………………………………………………… (8.6)
$P = \beta_0 + \beta_1 SD_V + \varepsilon$………………………………………………………………………… (8.7)
$P = \beta_0 + \beta_1 SI_V + \varepsilon$………………………………………………………………………….. (8.8)

Where:
β_0 = Constant (intercept)
β_1 = Coefficients of independent variable
ε = Error term

Objective 2
To examine the combined effects of identified supplier relationship management practices on performance of quoted food and beverage firms in Southwest Nigeria, the multiple regression estimation technique of the models specified in equation 8.5 was presented as follows:

$P = \beta_0 + \beta_1 SA_V + \beta_2 SD_V + \beta_3 SI_V + \varepsilon$………………………………………………………..(8.9)

Where:
$\beta_1 - \beta_3$ = Coefficients of independent variable

FINDINGS

Preliminary Findings
In line with the chosen sample size, 130 questionnaire were administered out of which 106 were returned. Response from 3 respondents were discarded for picking more than one option per question. This implies that response from 103 top and middle management staff were considered for analysis. From the findings, 79 respondents representing 76.37% were male while 24 respondents representing 23.3% were female. This indicates that more male top and middle management staff participated in the study than the female staff. Also, the findings of age distribution of the respondents shows that there is no respondent whose age is less than 29 years, 24 respondents (23.3%) were between 30-39 years, 43 respondents (41.7%) were between 40-49 years, 36 respondents (35%) were between 50-59, while no respondent is 60 years. From the finding, it shows that, majority of the respondents (41.7%) were in the age bracket of 40-49 years.

The finding further revealed that 82 respondents (79.6%) of the total respondents had MBA/M.Sc. degree, 18 respondents (19.4%) had HND/B.Sc. while 3 respondent (2.9%) had Ph.D. This implies that all the respondents have adequate knowledge in answering questions asked accordingly. As regard years of work experience, 23 respondent (22.3%) had 4-6years work experience, 58 respondents (56.3%) had 7-9years work experience, while 22 respondents (21.3%) had 10 years above work experience.

Hypotheses Testing

Test of Hypothesis One

The first objective of the study sought to examine if each identified supplier relationship management practice (Supplier appraisal [SA], Supplier development [SD], and Supplier involvement [SI]), has any effect on performance of quoted food and beverage firms in Southwest Nigeria. In the light of this, related hypotheses were tested using linear regression analyses and presented in the tables below:

H_o1a: Suppliers appraisal has no significant effect on performance of quoted food and beverage firms in Southwest Nigeria.

Table 1(a): *Model of fit of Supplier Appraisal and Performance*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.467[a]	.218	.211	2.38597
a. Predictors: (Constant), Supplier Appraisal				

Source: Data Analysis (2019), SPSS Version 20

Table 1 (a) reveal that supplier appraisal had an R Square coefficient of 0.218 and adjusted to 0.211. This shows that the independent variable (supplier appraisal) accounts for 21.1% of the variations in performance of quoted food and beverage firms in Nigeria while 78.9% is explained by other variable not fitted in the model.

Table 1(b): *ANOVA on Supplier Appraisal*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	160.515	1	160.515	28.196	.000[b]
	Residual	574.980	101	5.693		
	Total	735.495	102			
a. Dependent Variable: Performance						
b. Predictors: (Constant), Supplier Appraisal						

Source: Data Analysis (2019), SPSS Version 20

Table 1(b) shows the ANOVA test for the regression model. F-test result (28.196) was positive and significant at p= 0.000 < 0.05. This therefore led to rejection of null hypothesis (H_o) and a

conclusion that supplier appraisal has significant effect on performance of quoted food and beverage firms in Nigeria was drawn.

Table 1(c) *Coefficient of Supplier Appraisal and Performance*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.685	2.178		2.200	.000
	Supplier Appraisal	.470	.088	.467	5.310	.000
a. Dependent Variable: Performance						

Source: Data Analysis (2019), SPSS Version 20

$P = \beta_0 + \beta_1 SA_V + \varepsilon$
$P = 15.685 + 0.470 SA_V + \varepsilon$

The equation shows that Supplier Appraisal had a coefficient (β_0) of 0.470. This meant that a unit change in Supplier Appraisal would result in a 47.0% change in Performance. From the analysis, t-value = 5.310 and p value = 0.000. Therefore, at 5 percent level of significance, the null hypothesis was rejected, implying that supplier appraisal had a positive significance effect on performance of quoted food and beverage firms in Nigeria.

H_o1b: Supplier development has no significant effect on performance of quoted food and beverage firms in Southwest Nigeria.

Table 2(a): *Model of fit of Supplier Development and Performance*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.408ᵃ	.166	.158	2.46430
a. Predictors: (Constant), Supplier Development				

Source: Data Analysis (2019), SPSS Version 20

Table 2 (a) shows that the adjusted R^2 = 0.158. That is, supplier development explained 15.8% of the variations in performance of quoted food and beverage firms in Nigeria, while 84.2% of their performance is explained by others variables not fitted in the model.

Table 2(b): *ANOVA on Supplier Development.*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	122.147	1	122.147	20.114	.000[b]
	Residual	613.348	101	6.073		
	Total	735.495	102			
a. Dependent Variable: Performance						
b. Predictors: (Constant), Supplier Development						

Source: Data Analysis (2019), SPSS Version 20

Table 2(b) shows the result of ANOVA test for the regression model. F-test result (20.114) was at p= 0.000 < 0.05. This called for the rejection of null hypothesis (H_o) and a conclusion was drawn that supplier development has significant positive effect on performance of quoted food and beverage firms in Nigeria.

Table 2(c) *Coefficient of Supplier Development and Performance*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	16.524	2.389		9.916	.000
	Supplier Development	.457	.102	.408	4.485	.000
Dependent Variable: Performance						

Source: Data Analysis (2019), SPSS Version 20

P= $\beta_0 + \beta_1 SD_V + \varepsilon$
P= $16.524 + 0.457 SD_V + \varepsilon$

The equation as derived from table 2(c) shows that supplier development had a coefficient (β0) of 0.457. This implies that a unit change in supplier development would result in a 45.7% change in Performance. From the analysis, t-value = 4.485 and p value = 0.000. Therefore, at 5 percent level of significance, the null hypothesis was rejected, and a conclusion was drawn that supplier development had a significant positive effect on performance of quoted food and beverage firms in Nigeria.

$H_o1c:$ Supplier involvement has no significant effect on performance of quoted food and beverage firms in Southwest Nigeria.

Table 3(a): *Model of fit of Supplier Involvement and Performance*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.331[a]	.110	.101	2.54624
a. Predictors: (Constant), Supplier Involvement				

Source: Data Analysis (2019), SPSS Version 20

Table 3(a) revealed that adjusted R^2 was 0.101. This implies that supplier involvement explained 10.1% of the variations in performance of quoted food and beverage firms in Nigeria, leaving 88.5% of the variations to be explained by other variable not fitted in the model.

Table 3(b): *ANOVA on Supplier Involvement*

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	80.680	1	80.680	12.444	.001[b]
1	Residual	654.815	101	6.468		
	Total	735.495	102			
a. Dependent Variable: Performance						
b. Predictors: (Constant), Supplier Involvement						

Source: Data Analysis (2019), SPSS Version 20

Table 3(b) shows the result of ANOVA test for the regression model. F-test result (12.244) was positive and significant at 5% level of significance. This called for the rejection of null hypothesis (H_o) and a conclusion was drawn that supplier involvement has significant positive effect on performance of quoted food and beverage firms in Nigeria.

Table 3(c): *Coefficient of Supplier Involvement and Performance*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	20.402	1.939		10.523	.000
	Supplier Involvement	.279	.079	.331	3.528	.001
a. Dependent Variable: Performance						

Source: Data Analysis (2019), SPSS Version 20

P= $\beta_0 + \beta_1 SI_V + \varepsilon$
P= $20.402 + 0.279SI_V + \varepsilon$

The equation as derived from table 3(c) shows that supplier involvement had a coefficient (β0) of 0.279. This implies that a unit change in supplier involvement would result in a 27.9% change in Performance. From the analysis, t-value =3.528 and p value = 0.001. Therefore, at 5 percent level of significance, the null hypothesis was rejected, and a conclusion was drawn that supplier involvement had a significant positive effect on performance of quoted food and beverage firms in Nigeria.

Test of Hypothesis Two

The second objective of the study sought to examine the joint effect of the identified supplier relationship management practices on performance of quoted food and beverage firms in Nigeria. In the light of this, hypothesis two was tested using multiple regression analysis and presented in the tables below:

Table 4(a): *Model of fit of Supplier Relationship Management Practices and Performance*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.546[a]	.298	.277	2.28307
a. Predictors: (Constant), Supplier Appraisal, Supplier Development, Supplier Involvement				

Source: Data Analysis (2019), SPSS Version 20

Above table shows that the model had an R square coefficient of determination of 0.277 which implies that 27.7% of the firm's performance is based on the identified supplier relationship management practices (SRMPs) included in the model while the remaining 72.3% is upon other factors not included in the study model.

Table 4(b): *ANOVA of Supplier Relationship Management Practices (SRMPs)*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	219.468	3	73.156	14.035	.000[b]
	Residual	516.027	99	5.212		
	Total	735.495	102			
a. Dependent Variable: Performance						
b. Predictors: (Constant), Supplier Appraisal, Supplier Development, Supplier Involvement						

Source: Data Analysis (2019), SPSS Version 20

Table 4(b) shows the ANOVA results that at 5 percent (%) confident limit, F – Statistics indicates that the overall regression model is statistically significant in terms of its goodness of fit to determine the joint effect of the identified supplier relationship management practices on performance as evidenced by (F = 14.035, P=0.000 < 0.05). The study therefore rejected the null hypothesis and concluded that the identified supplier relationship management practices jointly and significantly affect performance of quoted food and beverage firms in Nigeria.

Table 4(c): *Coefficients of Supplier Relationship Management Practices (SRMPs) and performance*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	9.788	2.728		3.588	.001
Supplier Appraisal	.298	.101	.296	2.960	.004
1 Supplier Development	.249	.110	.222	2.269	.025
Supplier Involvement	.177	.074	.210	2.396	.018

a. Dependent Variable: Performance

Source: Data Analysis (2019), SPSS Version 20

Above table shows a multiple linear regression of supplier relationship management practices and performance. The table revealed that holding supplier appraisal (SA), supplier development (SD) and supplier involvement (SI) to a constant zero, the performance of quoted food and beverage firms would be at 9.788. A unit change in supplier appraisal would lead to 0.298 change in performance, a unit change in supplier development would lead to 0.249 in performance, while a unit change in supplier involvement would change performance by 0.177. All the predictor variables (supplier appraisal, supplier development, and supplier involvement are significant since they are less than the common alpha of 0.05 ($P<0.05$).

Based on the above and earlier developed model, the fitted model for the study was presented as:
Y = 9.788 + 0.298SA + 0.249SD + 0.177SI + ε

DISCUSSION

The study was to empirically verify the effects of supplier relationship management practices on performance of quoted food and beverage firms in Nigeria.

From the result of the analysis, supplier appraisal (SA) which is the assessment of a potential supplier's capability to meet up with the terms and conditions stipulated in a contract agreement affect firm performance positively and significantly. Whenever organization put into consideration some important factors such as quality system, finance, production capacity and facilities, organizational structure, information technology, environmental and ethical consideration, to mention a few, selection of qualified and reliable supplier is enhanced.

Also, supplier development which is about efforts from the buying firm to increase the capability of the supplying firm was found enhancing buying firm performance. The findings corroborate

the conclusion of Al-Abdallah, *et al*. (2014), Job (2015) and Adedokun, Onikola, and Oke (2017) that supplier development has positive and significant influence on performance.

Furthermore, the findings revealed that involvement of suppliers in some decisions relating to production process improves performance of the buying firm. The finding stands in agreement with the reviewed literature on supplier involvement by Feng and Wang (2013), Melandar, Roselline and Lakemond (2014).

The findings on the joint effects of these practices on performance was also found to be positive and significant. This implies that supplier relationship management through supplier appraisal, supplier development and supplier involvement positively and significantly improves performance. The finding validates the conclusion of Al-Abdallah, *et al.* (2014), Kosgei and Gitau (2016), and Mumelo, Selfano and Onditi (2017) that supplier relationship management practices have significant and positive effect on performance.

CONCLUSION

Based on the results of the regression analysis on supplier appraisal, supplier development, supplier involvement and performance, the study drawn a conclusion that firms in the Nigerian food and beverage sub-sector have been embracing supplier relationship management practices as evident in their performance positively.

FUTURE RESEARCH

The current study considered only the food and beverage sub-sector of Nigerian economy thereby neglecting other sub-sectors such as chemical and pharmaceutical, textile, plastic and rubber products, to mention a few . Therefore, further studies could be carried out in other sub-sectors of Nigerian economy in order to validate the findings and conclusions of the study.

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