Impact of vendor integration on market share and customer satisfaction: Evidence from independent petroleum marketers in Rivers state.

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Abstract

The purpose of this study was to investigate the impact of vendor integration on market share and customer satisfaction of independent petroleum marketers in Rivers State. The study adopted the cross-sectional survey research design. The population of this study consists of the four hundred and fifty (450) independent petroleum marketers in Rivers State. This research design enabled the researcher to collect unbiased data from the study targets and describe the relationship between the variables. The sample size of this study was drawn from the four hundred and fifty (450) independent petroleum marketers in Rivers State. The sample size of this study was determined using the Yamane (1967) formula. This method was adopted to generate an appropriate sample size for the study from which generalization can be made on the entire population because the population is large. Thus, two hundred and twelve (212) independent marketers or their managers constituted the respondents of the study. The respondents include directors, station managers, station supervisors and depot representatives. This study made used of both descriptive and inferential statistics to analyze the data. Thus, bivariate inferential statistics of Pearson Product Moment Correlation (PPMC) was used to test the hypotheses stated in the study. More so, multivariate inferential statistics of Partial Correlation was adopted to determine the moderating influence of competition on the relationship between vendor relationship management and business performance. These analyses were done with the help of the Statistical Package for Social Sciences (SPSS Version 22.0). The study revealed that there is a strong, positive, and significant relationship between the dimensions of vendor relationship management and the measures of business performance. There is also a very strong, positive and statistically significant moderating effect of competition on the relationship between vendor relationship management and business performance. We therefore, concluded that significant relationship exists between vendor relationship management and business performance of independent petroleum marketers. As a result, the study recommends that Independent petroleum marketers in Rivers State should properly identify and choose among the plethora of vendors those that have the capacity to deliver the quality of products at the right time, right place and at the right price.

Keywords: Vendor Integration, Market Share, Customer Satisfaction & Environmental Sustainability

1. Introduction

Managers in most organizations are trying to build and maintain an integrated supply chain where suppliers will demonstrate a track record of on-time delivery, quality and mix flexibility. According to Kiarie (2017) “the modern business environment has almost become borderless thus there is evidence of cutting edge supply chain strategies which have proven to be effective in the management of the whole process, consequently, organizations look at the management of relationships in the supply chain as a means of increasing competitive advantage.” Cheng (2009) acknowledges that supply chain strategy consists of actions used to ensure that the supplier is integrated in the chain with manufacturing, warehouses and stores which in the long run, will ensure that goods are produced and distributed at the right quantities, to the right location, at the right time, with an aim of minimizing cost while at the same time satisfying service level requirements."

2. Literature Review and Hypotheses Development

2.1. Vendor Integration

Vendor integration is concerned with involving firms that provide raw material or goods and services in the production process through information sharing, and direct participation. Vendor integration is concerned with "business process integration among manufacturers and vendors through using Information Technology (IT) applications, which is transactional with planning and operations supported by e-business systems, involves information sharing in achieving decision synchronization and collaborates contractually with selected vendors for risk sharing" (Matopoulos, Vlachopoulou & Manthou 2009). Supply chain integration is considered as a very important strategy by both scholars and managers of businesses; and it has fully developed as an invaluable factor in the supply chain management. Aastrup, Grant and Bjerre (2007) posit that "value is created by vendors and manufacturers as they integrate information sources and coordinate tactical efforts and align the aims of the organizations." Handfield, Ragatz and Monczka (1999) state that this integration can take place during idea generation, technical assessment, concept development, prototype development and testing or production ramp.

Integration with suppliers can provide benefits for manufacturers by reducing business risks through joint research and development or joint investment in technology; decreasing inventory level through sharing sales forecast or production schedule; improving product quality and knowledge through co-designing products; and bring about more stable supply prices through commitment in long-term partnership (Hines, 1996). Lee, Kwon and Severance, (2007) acknowledge that "internal integration" plays the most important function in cost-containment; however, integration with the supplier is the most appropriate line of action to achieve reliable performance in the supply chain. This corroborates the earlier position of Christopher (1998) who emphasizes "that leading-edge companies seek to make supply chains more competitive as a whole in which adding values and reducing cost by merely integrating internal business functions of the companies such as purchasing, material management and inventory control is essentially insufficient and the integration must be extended to their trading partners, for example, upstream vendors, in order to achieve true supply chain integration"

3. Measures of Business Performance

3.1. Market Share

In order to ascertain the business health of a firm, core measures are identified; and these core measures include profitability and market share (Gunasekaran, Williams, & McCanghey, 2005). While profitability is the ability of a firm to earn profit; market share is the quotient of a total market that a firm is able to capture and serve (Nwokah & Gladson-Nwokah, 2015; Bell, Keeney, & little, 2008). Gunasekaran et al (2005) suggests that market share assesses how well consumers patronize a given product in the marketplace. Market share is also used to denote the market position of a firm in relation to other firms in an industry. A bigger market share means better organizational health (Ateke & Nwulu, 2017). Market share is a prominent metric of marketing used by firms to assess the effectiveness of any revenue generating effort, including marketing campaigns, branding initiatives and customer relationship management programmes. The reason being that, market share shows how a firm is faring compared to its competitors and also allow the firm to quantify the outcome of its strategies and tactical maneuvers on marketing wellness. In addition, market share indicates enables executives to monitor total market growth or decline, identify key trends in buyer behaviour and identify market potentials and opportunities. The understanding of market share enables the firm to objectively measure pricing strategies, consumer perception of new products, promotions, personnel and other key business decisions. Hence, market share is a measure used to assess the efforts of the marketing function; and is about the best measure of the wellness of a business because it abstracts from variables that pertains to an entire industry (Nwokah & Maclayton, 2006), also because it is the portion of the market potential of the industry that an individual firm retains. Mostly, market share is gained through satisfied and retained customers. Thus, to improve its market share, the firm must reinforce customer retention (Ateke & Iruka, 2015) and provide a focal point of differentiation and optimize media presence. Market share and prospect are important concepts to managers because they indicate the additional business a brand can win and how and when to obtain it (Richard, 2009).

3.2 Customer Satisfaction

Customer satisfaction is "the extent to which a product's perceived performance matches a buyer's experience" (Kotler & Armstrong, 2008). The customer will be satisfied if the performance of the product meets the expectation of the customer; the customer will be delighted if the performance of the products exceeds the customer's expectation (Kotler & Armstrong, 2008). Fornell, Johnson, Anderson, Cha and Bryant (1996) define customer satisfaction as the overall bases for which total purchase and consumption experience are evaluated with the good or service over time. It is therefore important for firms to identify information that could be useful in making customer satisfied in their relationship with firm (Oliver, 1999). Customer satisfaction, retention and product repurchase area crucial component of a business strategy that will enable firms to achieve the profit objective. For example, customers will buy a car after taking a closer look at it such as how is the engine, what is its model, how many kilometers it has been traveling, and if there is any cracks or not; so that they will not feel disappointed after purchasing it. Otherwise, if the company uses only their sell and build method, customers might expect that the car is exactly the same as what they see in the pictures or during the exhibition, and later on if they discover that there are significant differences; this will make the company to receive complaint as a result of that discrepancy. Therefore, firms should understand that customers do not want to experience shortfall in the performance of the product. Customer experience with a product performance determines the customer's future purchase decision. As stated by Hill, Roche and Allen (2007) "customer satisfaction is a barometer that predicts the future customer behavior."

Customer satisfaction is dynamic and relative; and if a firm is not customer-centric, it cannot help improve customer satisfaction and keep customer truly loyal (Hague & Hague, 2016). In this case, "if competitors improve customer satisfaction, then" the firm may loss its customers. Thus, for a firm to improve customer satisfaction, it must notice customer expectations. If employees have a positive influence, then they can play a big role to increase customer satisfaction level. "Satisfaction is a dynamic, moving target that may evolve overtime, influenced by a variety of factors; particularly when product usage or the service experience takes place over time, satisfaction may be highly variable depending on which point in the usage or experience cycle one is focusing" (Lovelock, & Wright, 2007).

3.1 Environmental Sustainability

Resources abound in the environment for the wellbeing of mankind. Exploiting these resources for our benefit without using them up completely of destroying them is the thrust of environmental sustainability. Sustainability is the renewable and continuity of a behaviour on source. Day (2014) defines environmental sustainability as the renewal or maintenance of the natural assets or resources which can be used by present generation without compromising their use by future generations. Day (2014) posits that, for renewable resources, the rate of harvest should not exceed the rate of generation (sustainable yield); for pollution, the rate of waste generation from projects should not exceed the assimilative capacity of the environment."It is worthy of note that, not all resources are renewable. Thus, it is germane to provide substitutes for depleted nonrenewable resources. Day (2014) articulate that, the focal point of environmental sustainability is to ensure that there is quality of life; clean, safe and healthy environment; good economic wellbeing of the community; and appreciable of social satisfaction. As organizations exploit the depositions by nature, concerted effort should be made to ensure that this exploratory activity does not bring destruction on the environment, but should be done a sustainable basis so that future generations can meet these resources and use for their own wellbeing. Adebambo (2016) opine that "the duty of preservation of our environment must be a corporate responsibility, it must never be delegated, and we must take both individual and corporate responsibilities for the preservation of our environment."

This study therefore adopts market share and customer satisfaction as metrics and parameters of Business performance; and hypothesizes as follows:

Ho1: There is no significant relationship between vendor integration and market share

Ho2: There is no significant relationship between vendor integration and customer satisfaction.

Ho3: There is no significant relationship between vendor integration and environmental sustainability.

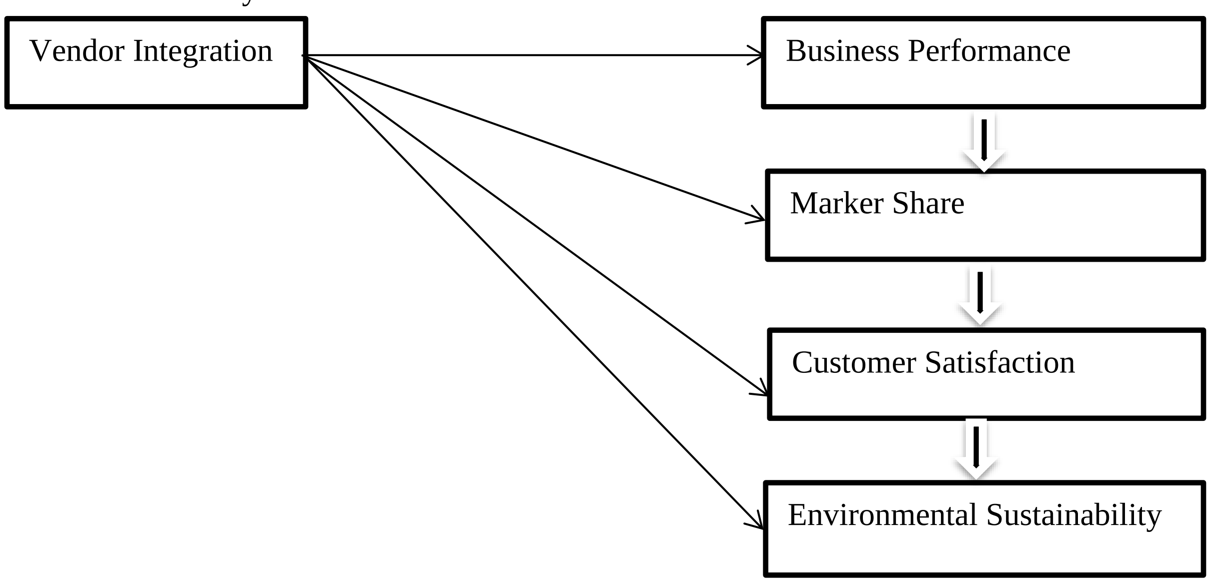

Figure 1. Conceptual framework of vendor integration and Business Performance'

Source: Researcher's conceptualization from review of related literature (2019).

4. Methodology

This study adopted the cross-sectional survey research design. This research design enabled the researcher to collect unbiased data from the study targets and describe the relationship between the variables. The population of this study consists of the four hundred and fifty (450) independent petroleum marketers in Rivers State (IPMAN Journal, 2015). The sample size of this study was drawn from the four hundred and fifty (450) independent petroleum marketers in Rivers State. The sample size of this study was determined using Yamane (1967) formula. This method was adopted to generate an appropriate sample size for the study from which generalization can be made on the entire population because the population is large. Thus, two hundred and twelve (212) independent marketers or their managers constituted the respondents of the study. The respondents include directors, station managers, station supervisors and depot representatives. This study made use of both descriptive and inferential statistics to analyze the data. Thus, univariate descriptive statistics such as the mean, standard deviation, frequency distribution, percentages, and bar chart were used to analyze the data. Furthermore, bivariate inferential statistics of Pearson Product Moment Correlation (PPMC) was used to test the hypotheses stated in the study. More so, multivariate inferential statistics of Partial Correlation was adopted to determine the moderating influence of competition on the relationship between vendor relationship management and business performance. These analyses were done with the help of the Statistical Package for Social Sciences (SPSS Version 22.0).

Table 1: Summary of Reliability Analysis

S/n	Variables	Number of Items	Cronbach's Alpha Coefficients
1.	Vendor Integration	4	0.896
2.	Market Share	4	0.982
3.	Customer Satisfaction	4	0.975
4.	Environmental Sustainability	4	0.959

Source: SPSS Output form Survey Questionnaire

5. Results and Discussion

H01: There is no significant relationship between vendor integration and market share.

Table 2: Correlation between Vendor Integration and Market Share

		Vendor Integration	Market Share
Vendor Integration	Pearson Correlation	1	.849**
	Sig. (2-tailed)		.000
	N	192	192
Market Share	Pearson Correlation	.849**	1
	Sig. (2-tailed)	.000	
	N	192	192

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

From the results of the SPSS output on table 2, it can be seen that there is a very strong, positive relationship between vendor integration and market share. This is indicated in the correlation coefficient; which is 0.833. Again, the probability value is less than the critical value; i.e. 0.000 < 0.05. Therefore, we reject the null hypothesis that there is no significant relationship between vendor integration and market share.

H02: There is no significant relationship between vendor integration and customer Satisfaction.

Table 3: Correlation between Vendor Integration and Customers' Satisfaction

		Vendor Integration	Customer Satisfaction
Vendor Integration	Pearson Correlation	1	.789**
	Sig. (2-tailed)		.000
	N	192	192
Customer Satisfaction	Pearson Correlation	.789**	1
	Sig. (2-tailed)	.000	
	N	192	192

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

From the results of the SPSS output on table 3, it can be seen that there is a strong, positive relationship between vendor integration and customer Satisfaction. This is indicated in the correlation coefficient of 0.789. Again, the probability value is less than the critical value; i.e. 0.000 < 0.05. Therefore, we reject the null hypothesis that there is no significant relationship between vendor integration and customer Satisfaction.

H_{03}: There is no significant relationship between vendor integration and environmental sustainability.

Table 4: Correlation between Vendor Integration and Environmental Sustainability.

		Vendor Integration	Environmental Sustainability
Vendor Integration	Pearson Correlation	1	.840**
	Sig. (2-tailed)		.000
	N	192	192
Environmental Sustainability	Pearson Correlation	.840**	1
	Sig. (2-tailed)	.000	
	N	192	192

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

As shown in the results of the SPSS output on table 4, it can be seen that there is a very strong, positive relationship between vendor integration and environmental sustainability. This is evident in the correlation coefficient; which is 0.840. Again, the probability value is less than the critical value; i.e. 0.000 < 0.05. Therefore, we reject the null hypothesis that there is no significant relationship between vendor integration and environmental sustainability.

6. Conclusion

Findings from the study revealed that strong, significant and positive relationship exist between vendor integration and market share; vendor integration, customer satisfaction and environmental sustainability. In addition to the foregoing, building and maintaining effective vendor relationship through vendor evaluation, selection, integration and development will enhance profitability, market share, customer satisfaction and environmental sustainability. Hence, the study concludes that vendor integration relates positively and significantly market share, customer satisfaction and environmental sustainability.

Recommendations

Based on the findings and conclusion of the study, it is therefore recommended as follows:

- Independent petroleum marketers in Rivers State should properly access the capacity of vendors before engaging them for the supply of their products.
- Independent petroleum marketers in Rivers State should properly identify and choose among the plethora of vendors those that have the capacity to deliver the quality of products at the right time and price.
- Independent petroleum marketers in Rivers State should integrate their vendors through information sharing, and direct participation.

- Independent petroleum marketers in Rivers State should help to enhance the capability and performance of vendors meet their supply needs and specifications.
- Independent petroleum marketers in Rivers State should build and maintain mutually beneficial relationship with vendors for effective business performance.

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