

Influence of Supplier Development on Organization Performance: An Empirical Investigation of Manufacturing Sector in Oyo State, Nigeria

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Abstract

The significant role of supplier development in promoting the operational performance of manufacturing firms has been acknowledged by scholars and researchers. However, the contributions of supplier development have not been felt in Nigerian manufacturing firms. This study therefore examines that influence of supplier development on organization performance with specific reference to manufacturing firms in Ibadan metropolis, Oyo State, Nigeria. Purposive method was used to select four manufacturing companies operating in Ibadan metropolis while simple random sampling technique was used to select one hundred and twenty (120) respondents from the total population of one thousand three hundred (1,300) staff of all selected four manufacturing companies. Data was sourced through a structured questionnaire and data was analysed with the aid of Mean, Standard deviation and Pearson Product Moment Correlation Coefficient. Results reveal that supplier development has significant influence on operational performance of manufacturing organizations in terms of reduction of production cost, improving quality of product, speed to the market and operational flexibility. The study also confirms that insufficient inducements to the supplier, lack of trust between parties and insufficient supplier resource are major factors affecting the implementation of supplier development in Nigerian manufacturing industry. The study therefore recommends that management of manufacturing firms should implement the application of supplier development concept so as to have competitive advantage and wax stronger in a global competitive environment.

Keywords: *Supplier Development, Organization Performance, Manufacturing Firms, Financial Support*

Introduction

In today's dynamic global business environment, firms are facing a cut-throat competition because focus has steadily increased on delivering value to the customers. Globalisation, technological change and demanding customers make the marketplace more fiercely competitive than ever before. Consumers now impose increasing demands on

manufacturers for variety, quick order fulfilment and fast delivery. Supplier development has been identified as a purchasing strategy that influences organization performance. To support this assertion, Wachiuri, Waiganjo and Oballah (2015) confirm that manufacturing firms have realized the importance of supplier performance in establishing and maintaining their competitive advantage. Supplier development has evolved as an important strategic instrument to improve buyer supplier relationships (Rajendra, Mahajan & Joshi, 2012).

According to Watts and Hahn (1993), supplier development is a long-term cooperative effort between a buying firm and its suppliers to upgrade the supplier's technical, quality, delivery and cost capabilities and to foster ongoing improvements. Chartered Institute of Purchasing and Supply (CIPS) (2013) defines supplier development as the process of working with certain suppliers on a one-to-one basis to improve their performance (and capabilities) for the benefit of the buying organisation. Supplier development activities are defined as the most important effort that firms undertake not only to gain competitive advantage but to develop suppliers for long term partnership and relationship enhancement (Job, 2015; Rajendra et al., 2012). Wenli, Paul, Andy and Yeung. Cheng (2012) see supplier development as a kind of cooperation between a buyer and a supplier to seek continuous improvement in supplier performance and, at the same time, strengthen the buyer's competitive advantage.

Previous studies on supplier development have convergent opinions that supplier development is an alternative paradigm to organization performance in term of cost reduction, customer satisfaction, quick order fulfilment and fast delivery (Khuram, Ilkka, Elina & Shpend, 2016; Wagner, 2011). Firms are more eager in supplier development programs not only to continue long term relationship with their suppliers but also to develop strategically global competitive advantage (Loppacher, Cagliano, & Spina, 2011). Krause (1999) and Yeung, (2008) note that manufacturing firms have realised that supplier performance is crucial to their establishing and maintaining competitive advantage, supplier development has been a subject of considerable research in supply chain management (SCM). Equally, Rajendra et al., (2012) reiterate that cooperation with suppliers can make buyer more efficient and thus enable goods to be purchased at lower prices and also makes buyer to look for his core competency to remain more competitive.

Despite the fact that manufacturing firms in developing economies have acknowledged the significant role of supplier development in promoting organizational performance and contributes strategically to overall operational effectiveness, little research has empirically examined the impact of supplier development on organization performance in the manufacturing sector of Nigeria. This study intends to fill the gap in knowledge and providing insight to the manufacturing organizations in Nigeria on how they can leverage on supplier development process to enhance their operational performance and to save them from distressed syndrome currently facing manufacturing sector in Nigeria.

Research Questions

The following questions shall be the focus of this study

- i. To what extent does supplier development influence operational performance in manufacturing firms in Nigeria?
- ii. What are the challenges facing supplier development in manufacturing firms in Nigeria?

Research Objectives

The main objectives of this study are:

- i. To determine the influence of supplier development on operational performance in manufacturing firms in Nigeria.
- ii. To determine the challenges of supplier development in manufacturing firms in Nigeria.

Research Hypothesis

H₀: Supplier development has no significant influence on operational performance in manufacturing firms in Nigeria.

H₁: Supplier development has significant influence on operational performance in manufacturing firms in Nigeria.

Concept of Supplier Development

Supplier development started to gain attraction as a business idea after the Second World War, particularly in Japan. It was only in the 1970's when the process started to take hold in the United States of America that it began to be used more widely as a business tactic (CIPS, 2013). The concept of supplier development was firstly introduced by Leenders (1966) in an organization to describe the willpower of manufactures in enhancing the numbers of suppliers for the purpose of improved performance (Khuram et al., 2016). Supplier development refers to an organization's efforts to create and maintain cordial relations with competent suppliers. According to Wenli *et al* (2016), manufacturers tend to develop closer ties with their suppliers because cooperative buyer–supplier relationships are linked to significantly reduced cost, shorter lead-time, increased productivity, and enhanced quality. Supplier development is a kind of cooperation between a buyer and a supplier to seek continuous improvement in supplier performance and, at the same time, strengthen the buyer's competitive advantage (Wagner, 2011 cited in Wenli *et al.*, 2016). Watts and Hahn (1993) define supplier development as a long-term cooperative effort between a buying firm and its suppliers to upgrade the supplier's technical, quality, delivery and cost capabilities and to foster ongoing improvements. Schwartz and Font (2005) define supplier development as any acting effort by the buying firm with its suppliers to increase the performance and/or capability of the supplier and meet the buying firms short- and/or long term supply chain efforts by the buying firms to increase the performance and/or capability of suppliers of products in order to improve the sustainability of the objectives and core function of the buying firm.

Supplier Development Techniques

Krause (1997) claims that direct involvement as a factor of supplier development consist of a set of practices such as: formal supplier evaluation, certification, recognition, informal supplier evaluation, supplier site visits, training, and buyer sites and facilities visits, as well as verbal or written demand for performance improvement. This set of practices composing direct involvement indicates a multidimensional nature of supplier development. In another study, Job (2015) argues that supplies development techniques consist of supplier training programme, supplier evaluation and assessment, supplier certification/qualification, provision of financial support, supplier audits, and providing incentives and recognition. Wachiuri, Waiganjo and Oballah (2015) subscribe that supplier development techniques involve training of suppliers, rewards, financial support and firm involvement. Ochieng (2014) confirms that supplier development techniques involve supplier participation, buyer coordinator, information exchange and supplier understanding of goals, feedback provision, site visits, supplier recognition and training and education.

Lukhoba and Muturi (2015) agree that supplier development consists of four methods, which are: early supplier involvement, financial support, supplier training and supplier incentive, while Yegon, Kosgei and Lagat (2015) argues that supplier development techniques were only grouped into two, namely technical support and financial support.

Theoretical Review

The study anchors on the network theory because many scholars have applied the theory in the area of supplier development as a means of gaining competitive advantage in their study. Competitive advantage can be achieved through supplier development based on network theory. According to Gichuru, Iravo, and Iravo (2015) the performance of a firm depends not only on how efficiently it cooperates with its direct partners, but also on how well these partners cooperate with their own business partners. The Network theory can be used to provide a basis for the conceptual analysis of reciprocity in cooperative relationships. The firm's continuous interaction with other players becomes an important factor in the development of new resources and in situation where the resources of two organizations are combined they tend to achieve more advantages than through individual efforts (Haakansson & Ford, 2002).

Empirical Review

Previous studies have convergent views on the influence of supplier development on organization performance. For instance, Wachiuri, Waiganjo and Oballah (2015) investigate the role of supplier development on organizational performance of manufacturing industries with specific reference to East Africa Breweries Limited in Kenya (EABL). The specific objectives are to; establish the role of training suppliers, the role of rewards, the role of financial support and role of firm involvement on organizational performance of EABL: A descriptive case study design was used. Statistical analysis was carried out using SPSS. The study reveals that rewards, financial support and firm involvement have a great role in the performance of EABL. Yegon, Kosgei and Lagat (2015) also investigate the effect of supplier development on buyer performance. A survey of sugar milling firms in Western Region of Kenya. Explanatory Research design was utilized to explain the cause-effect relationship between supplier development and buyer performance. A sample of 88 top level purchasing and marketing executives was selected through purposive sampling technique. Data from respondents were analyzed using correlation analysis and multiple regressions. The study finds out that supplier technical support and supplier financial support has positive effect on buyer performance.

Lukhoba and Muturi (2015) also examine the effect of supplier development on supplier performance in food manufacturing companies in Kisumu County. The study focuses on the specific objectives of analyzing four methods of supplier development, which are: early supplier involvement, financial support, supplier training and supplier incentive in food manufacturing industries. Data was collected using secondary and primary sources.. Primary data was collected using questionnaires which were employed to collect quantitative data in an attempt to answer the research questions. Descriptive statistics was used to analyze the data. The data was analyzed and presented in form of tables and pie charts. Results reveal that early supplier involvement, financial support, supplier training and supplier incentives have a positive effect on supplier performance.

Ochieng (2014) also investigate the role of supplier development in procurement effectiveness in terms of first time quality, delivery and order cycle time, cost and technology at the National Cereal and Produce Board. Simple random sampling technique was used to select fifty (50) respondents. Data were analysed with the aid of correlation analysis and

multiple regressions. Results show that information exchange, suppliers understanding of goals, suppliers' participation and buyers' coordination had had very good impact on procurement function. However supplier participation was found to be more significant followed by buyer coordinator presence, information exchange and supplier understanding of goals. Kamau (2013) also examines the relationship between Buyer-supplier relationships and organizational performance among large manufacturing firms in Nairobi, Kenya concluded that buyer- supplier relationships had assisted the large manufacturing companies to enhance the performance of their organizations.

Conceptual Framework

After the careful study of literature review, the following conceptual model is formulated to illustrate the impact of supplier development on organization performance.

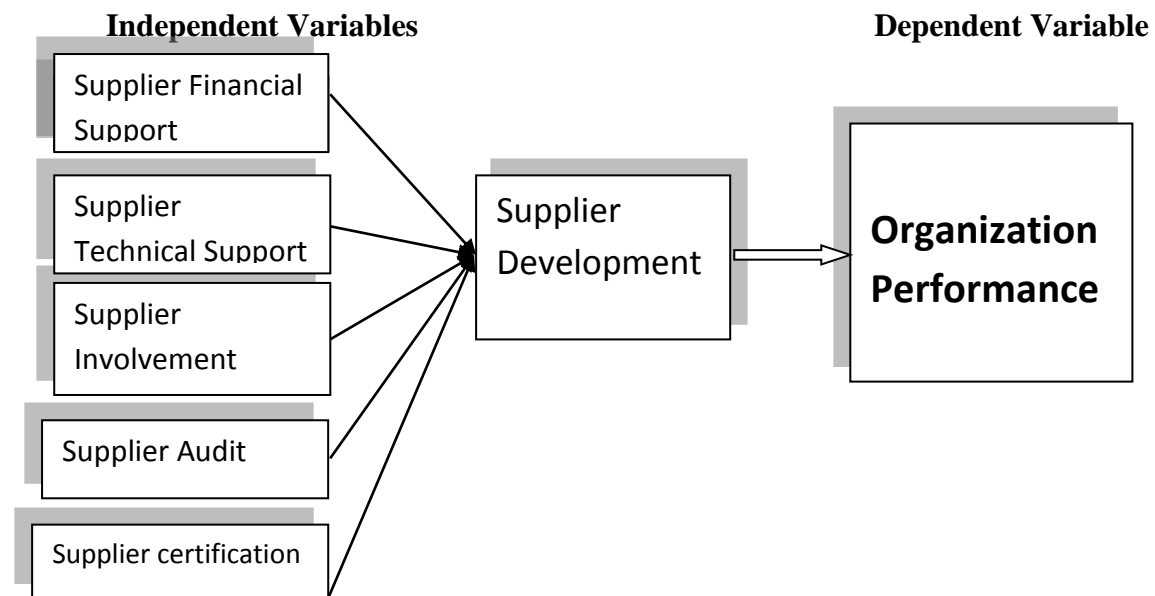


Figure 1: Conceptual Model
Source; Designed by the Authors

To evaluate the influence of supplier development on organization performance; supplier development is measured by supplier training (SUTR), financial support (FISP), supplier involvement (SUIM), supplier audit (SUAD) and supplier certification (SUCN). While organization performance is measured it term of reduction of production cost, improving quality of product, speed to the market and operational flexibility.

Mathematically, the model is expressed as follows:

$$\text{Organization Performance} = f(\text{SUTR}, \text{FISP}, \text{SUIM}, \text{SUAD}, \text{SUCN}) \text{ ----- (i)}$$

$$\text{Organization Performance} = \beta_0 + \beta_1\text{SUTR}_1 + \beta_2\text{FISP}_2 + \beta_3\text{SUIM}_3 + \beta_4\text{SUAD}_4 + \beta_5\text{SUCN}_5 + \mu_i \text{ -----(ii)}$$

Where:

β_0 = intercept

β_1 - β_5 = regression coefficient

μ_i = stochastic error term

Methodology

Research design: Descriptive research design is employed for this study which is more appropriate because the study seeks to build a profile about the relationship between supplier development and organization performance.

Study Area: This research work was carried out among the management of manufacturing companies in Ibadan metropolis, Oyo State, Nigeria. The choice of Ibadan is based on the fact that it is largest city in the West Africa. The rationale for this is that since all the organisations are manufacturing and are located in Ibadan, Oyo State; some degree of uniformity is expected to exist in their purchasing policies and practices.

Sampling Method and Sample Size: Purposive method was used to select four manufacturing companies (Nigerian Breweries Plc, Procter and Gamble, Nigerian Bottling Company and 7up Bottling Company) operating in Ibadan metropolis while simple random sampling technique was used to select one hundred and twenty (120) respondents from the total population of one thousand three hundred (1,300) staff of all selected four manufacturing companies. The sample size of respondents was determined by the formula suggested by Mugenda and Mugenda (2003).

Data Collection Instruments: The data collection instrument for the study was a structured closed ended questionnaire. The research instrument was administered and retrieved personally by the researchers with the aid of two research assistants.

Validity and Reliability of the Instruments

The instrument used in this study was submitted to a panel of experts for validation. The reliability of the instrument was determined through Cronbach's Alpha internal-consistency methods.

Method of Data Analysis: Data was analysed with the aid of Mean, Standard Deviation and Pearson Product Moment Correlation Coefficient (PPMCC).

Results and Discussion

Table 1: Influence of Supplier Development Techniques on Organization Performance.

	1	2	3	4	5	6
1. Organization Performance	1.000					
2. Supplier Training and Education	0.722*	1.000				
3. Supplier Financial Support	0.563**	0.454**	1.000			
4. Supplier Technical Support	0.421**	0.327**	0.578*	1.000		
5. Supplier Audit	0.401*	0.306*	0.530	0.065	1.000	
6. Supplier Certification	0.239**	0.193**	0.294**	0.269**	0.168	1.000

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

* Correlation is significant at the 0.05 level (2-tailed).

Table 1 shows that there is significant relationship between suppliers development techniques and organization performance. Specifically, results reveal that supplier training ($r = 0.722$, $P < .05$) supplier audit ($r = 0.401$, $P < .05$) have positive influence on organization

performance at 5% level of significant, while supplier financial support ($r = 0.563$, $P < .01$), supplier technical support ($r = 0.421$, $P < .01$) and supplier certification ($r = 0.239$, $P < .01$) have significant influence on organization performance at 1%. This implies that supplier financial support, supplier technical support and supplier certification have more influence on organization performance.

This study corroborates the work of Wachiuri et al (2015) who establish that supplier development through suppliers training and financial support have a significant influence on organization performance. This study is also in line with work of Yegon et al (2015) who find out that supplier technical support and supplier financial support has positive effect on buyer performance. In another study, Job (2015) affirms that supplier development through supplier certification, supplier audit, financial support, technical support and training and education have positive and significant influence on operational performance in manufacturing industry. Lukhoba and Muturi (2015) and Ochieng (2014) also agree that supplier development is catalyst to organization performance.

Therefore, null hypothesis is rejected while alternative hypothesis which states supply development has significant influence on operational performance in manufacturing firms in Nigeria is accepted.

This implication of this study is that implementation of supplier development techniques by the management of manufacturing firms in Nigeria may assist them to have competitive advantage and wax stronger in a global competitive environment.

Table 2: Challenges Facing Supplier Development in manufacturing Firms

Statement	N	Mean	SD	Decision
Lack of supplier commitment		3.5602	1.3083	Accepted
Insufficient supplier resource		3.8750	1.26732	Accepted
Lack of trust between parties		3.9500	1.21510	Accepted
Poor alignment of firm cultures		2.6333	0.34060	Rejected
Insufficient Inducements to the Supplier		3.9917	0.57242	Accepted
Insufficient top management support		3.7083	1.25956	Accepted

Source; Authors' Data Analysis

Any Mean score up to 3 and above was interpreted as acceptable by respondents while 2.99 and below is adjudged rejected by the respondents. This shows that majority of respondents agree that all the above items are major challenges facing supplier development in manufacturing in Nigeria expect poor alignment of firm cultures. However, results indicate that insufficient inducements to the Supplier ($M = 3.9917$), lack of trust between parties ($M = 3.9500$) and insufficient supplier resource are major factors ($M = 3.8750$) affecting the implementation of supplier development in Nigerian manufacturing industry.

Conclusion and Recommendations

Based on the findings, the study concludes that supplier development is an alternative paradigm to operational performance of manufacturing organizations in terms of reduction of production cost, improving quality of product, speed to the market and operational flexibility. The study also confirms that insufficient inducements to the Supplier, lack of trust between parties and insufficient supplier resource are major factors affecting the implementation of supplier development in Nigerian manufacturing industry. The study therefore recommends that management of manufacturing firms should implement the application of supplier development concept so as to have competitive advantage and wax stronger in a global competitive environment.

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