



INFLUENCE OF SUPPLIER INVOLVEMENT ON SUPPLIER PERFORMANCE IN KENYA

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ABSTRACT

Despite of implementing a number of determinants to improve supplier performance, supplier still has problems in satisfying the customers. The purpose of this study was to examine the effect of supplier involvement as a determinant of supplier performance in Kenya. Descriptive research design was applied in this study. Target population was one hundred and fifty two (152) managers from sugar processing firms in Kenya. Cronbach Alpha test of 0.834 was obtained indicating the reliability of the research instrument. Content and criterion validity were ensured through incorporating the experts' suggestions in the final paper. Data was analyzed using descriptive statistics and inferential statistics which included correlation analysis and bivariate regression analysis after testing for normality and multicollinearity. A strong positive statistically significant relationship between supplier involvement and supplier performance was obtained. I recommend that the suppliers should be involved at every stage of production so that they own the process. Further study is recommended in the area of moderating the relationship between supplier performance and supplier involvement.

Keywords: supplier involvement, supplier performance

1.0 Introduction

Supplier performance may be perceived as how a supplier is able to provide the required products to the buyer as evidenced through operational outcomes such as quality, delivery, responsiveness, cost and technical support (Wu, 2016). Ho (2012) adds that other factors that may be associated with supplier performance include supplier trust, synergy and information sharing. Supplier performance impacts on procurement performance Nzambu (2015). He adds that decisions to buy

instead of make to improve quality, lower inventories, integrate supplier and buyer systems, and create co-operative relations underline need for good supplier performance.

Companies across industries have become highly dependent on their suppliers. As a result, their business performance is now closely intertwined with the performance of their suppliers. According to Forrester (2016) a failure to manage and monitor supplier performance can lead to major supply chain disruptions, delivery problems, poor quality,

and other issues that damage a company's credibility, as well as their bottom line. On the other hand, Tracy (2016) asserts that an effective supplier management program can help a company spot supplier issues early on, and ensure that they are remediated in a timely manner, thereby reducing business risks and revenue losses.

Supplier performance helps organizations to better understand their suppliers and the suppliers' core capabilities by gaining better insights into the suppliers' performance, build mutually beneficial relationships with suppliers and drives continuous improvement opportunities (David, 2012). The performance of suppliers substantially impacts on the efficiency and effectiveness of the buying firm and is of great importance (Fredriksson, 2011). Supplier performance measures, too, help improve efficiency and effectiveness of supply chain (Handfield, 2010). As Lyons, (2010) points out financial and non-financial performance measures which include: quality, time/responsiveness, innovation, physical environment and safety price performance, cost-effectiveness, revenue, administration efficiency, internal customer satisfaction, supplier performance and strategic performance.

Lyons, (2010) stated that suppliers can be appraised on eight areas, namely: finance, production capacity, human resource, quality, performance, environmental and ethical considerations, and organizational structure. The appraisal criteria is summarized by Carter as the 'seven Cs' which represent: competency, capacity, commitment, control systems, cash resources and financial stability, cost commensurate with quality and service and consistency (CIPS, 2012).

Lawrence (2014) stated that best performing suppliers offer products or services that match or exceed the needs of the buying organizations. Companies boost supplier performance due to magnitude of competitiveness that can be achieved by ensuring the best performance from the suppliers more effectively and efficiently. However this

cannot be realized unless the organization has learnt the gaps existing in the supplier performance as well as the causative factors. In addition, Hamisi (2010) asserts many organizations have adopted the supplier performance management practice for competitiveness where they measure, analyze, and manage the performance of a supplier's performance in an effort to cut costs, alleviate risks, and drive continuous improvement whose intent is to identify potential issues and their root causes so that they can be resolved to everyone's benefit as early as possible.

Manufacturing companies have been using supplier scorecards to measure basic supplier performance metrics for a long time. In the past decade, however, both manufacturing and service firms have become increasingly aware of the importance of supplier performance and its crucial impact on their own performance and market competitiveness. (Barret 2011) asserts that the increasing reliance on outside suppliers has transformed both perception of the need for understanding and improving supplier performance from just a vitamin to a real painkiller.

Euster (2016) in the study on factors affecting the performance of supply chain financing in Kenya asserts that the act of information sharing in the supply chain enables accurate and faster business decision making that translates to enhanced performance of the supply chain in terms of financing. Information sharing is essentially regarded as the bullwhip effect terminator (Fiala, 2012). This sharing of supply information essentially enhances stakeholders total cost reduction hence improving on overall chances of optimal performance of supply chain financing (Gavirneni, 2012). In other words, a successful sharing of useful information between the supply chain partners can result in a reduction in inventory and manufacturing cost, better understanding of customer needs, and faster response to market changes. Good performance of suppliers is vital to the efficiency and success of the public

procurement sector and contributes to the best value of money spent by any organization.

Supplier performance is one of the supply chain performance measures that involve cost, quality, time and customer satisfaction (Wu, 2016). In order to assess supplier performance there should be a systematic way of measuring performance which establishes what to measure, methods and systems to collect information and use of measurement data. Unfortunately many organizations in the public sector have not instituted formal procedures for measuring supplier performance as result no records to support their views on supplier performance. Once a supplier is selected the focus shifts from evaluation to the continuous measurement of supplier performance. To improve performance and manage costs, quality and delivery time an organization must be able not only to select the right supplier, but also to monitor and manage performance of supplier over time. Measuring supplier performance is among the ways of measuring supply chain performance. Some measures assess supply base, others assess the purchasing department, while still others may be used to monitor the interfaces between purchasing and other internal functions. Measuring supplier performance is an important tool that is very useful to improve supplier performance, improve supplier communication, and recognize exceptional performance and identify suppliers with developmental needs (Nyongera, 2011). Based on this background the study therefore focuses on the determinants of supplier performance in manufacturing firms specifically Nzoia Sugar Company.

Lukhoba (2015) in the study on effect of supplier development on supplier performance: a survey of food manufacturing companies in Kisumu County cited that according to a number of studies, supplier performance is measured by various criteria. She adds that several key competitive factors were broadly used to assess the supplier performance. For examples, product quality, delivery

performance, price, physical distribution, services, flexibility, relationships are considered to be important factors for measuring the supplier performance PohLean, WaiPengWong. The supplier performance improvement was used as the key indicator for the success of supplier development strategies.

The supplier performance improvement was used as the key indicator for the success of supplier development strategies. There is a greater dependence on suppliers. Suppliers have played strategic roles in organizations, and have significantly engaged in creating a competitive advantage and their actions have a positive impact on the organization's performance. Many companies faced the problems of supplier's inability to improve themselves (Krause, 2010). A number of studies suggested strategies to improve supplier performance. Raising the rate of supplier performance expectations, worldwide sourcing strategy, early supplier design involvement, supplier performance improvements rewards and direct supplier development are suggested to improve supplier performance.

1.1.1 Global Perspective of the determinants

Nzambu (2015) asserts that decisions to buy instead of make to improve quality, lower inventories, integrate supplier and buyer systems, and create co-operative relations underline need for good supplier performance. Recent trends are to fewer suppliers; long-term contracts, e-procurement, and continuing improvement in quality, price, and service require closer co-ordination and communication between key procurement partners. Supplier switching for lower prices may not result in the best long-term value. Sharing information and assisting suppliers to improve performance is a necessity for world-class performance.

Globally, sugar is considered a strategic commodity with a multifunctional role in the economic development of over 127 producer countries. Dramatic shift have occurred in the global sugar

production and consumption trends removing much of the surplus that was being sold in the international market below market price. Sugar in the world market and other low cost producers such as Malawi, Zambia and Swaziland, who are members of COMESA pose a great danger to the Kenya sugar industry due to zero tariff tax regimes. This has created undue competition to Kenyan sugar millers and hence need to seek new ways of doing business in order to maintain market leadership position within their operating environment.

1.1.2 National Perspective of the determinants

Sugar processing is an important sector in Kenya and it makes a substantial contribution to the country's economic development. It has the potential to generate foreign exchange earnings through exports and diversify the country's economy. This sector has grown over time both in terms of its contribution to the country's gross domestic product and employment. The average size of this sector for tropical Africa is 8 per cent. Despite the importance and size of this sector in Kenya, it is still very small when compared to that of the industrialized nations (Iren, 2013). Kenya's manufacturing sector is going through a major transition period largely due to the structural reform process, which the Kenya Government has been implementing since the mid-eighties with a view to improving the economic and social environment of the country (Awino, 2015).

The sector experienced the lowest real GDP growth rates in 2008 to 2009 as 1.7 percent in 2008 and improved to 2.6 percent in 2009 (East African Community Facts and Figures– 2010, March Issue, 2011). In the financial year 2010, the real GDP growth rate was 5.6percent, revealing the improvement (East African Community Facts and Figures – 2011, October Issue, 2011). The lack of demand from the domestic market caused depreciation in Shilling and international demand was largely hit by global financial crises which caused the slower growth in the manufacturing

sector. In terms of gross domestic product (GDP), the share of manufacturing sector maintained in the last 10 years from 2000-2001 as 10 percent to 2009-2010. On the other side, investment a “booster” of an economy, according to (East African Community Facts and Figures – 2011, October Issue, 2011) has shown a decreasing trend from 2008 to 2010. Performance as a quality of any company is achieved by valuable outcome such as higher returns. It can also be measured by the levels of efficiency and this can be analyzed by a variety of methods, such as the parametric (stochastic frontier analysis) and nonparametric (data envelopment analysis). The management of any company would like to identify and eliminate the underlying causes of inefficiencies, thus helping their firms to gain competitive advantage and attain sustainable competitive advantage, or at least, withstand the challenges from others (Iren, 2013). In the economically competitive world, good financial management is a key indicator of a corporation performance.

1.2 Statement of the problem

As buying firms look for ways to excel in today's highly competitive world, they come to appreciate the need to look beyond their immediate environments and to consider their role in the supply chain within which they operate. The more buying firms improve their own efficiency, the more they recognize the need to pay attention to the efficiency or otherwise of their suppliers and their suppliers' suppliers. Not surprisingly, supplier performance and the factors contributing towards it have attracted the attention of managers, practitioners and researchers (Lysons, 2010). To this end, the factors determining supplier performance have been examined in a number of previous studies. For example, Wu, Choi and Rungtusanatham (2010) investigated the implications of supplier performance in the supplier-supplier relationships in buyer-supplier-supplier triads. Prahinski and Benton (2004) considered the relationship between

communication strategies and supplier performance, Mols, Hansen and Villadsen (2012) investigated the effect of internal production on supplier performance whilst Aksoy and Ozturk (2011) focused on the relationship between supplier selection and performance. A common thread underlying the results of these studies is the enduring influence of supplier performance on business performance. It is therefore against this background that the study aims to examine the determinants of supplier performance in sugar processing firms in Kenya.

2.0 Statement of the problem

As buying firms look for ways to excel in today's highly competitive world, they come to appreciate the need to look beyond their immediate environments and to consider their role in the supply chain within which they operate. The more buying firms improve their own efficiency, the more they recognize the need to pay attention to the efficiency or otherwise of their suppliers and their suppliers' suppliers. Not surprisingly, supplier performance and the factors contributing towards it have attracted the attention of managers, practitioners and researchers (Lysons 2010). To this end, the factors determining supplier performance have been examined in a number of previous studies. For example, Wu, Choi and Rungtusanatham (2010) investigated the implications of supplier performance in the supplier-supplier relationships in buyer-supplier-supplier triads. Prahinski and Benton (2004) considered the relationship between communication strategies and supplier performance, Mols, Hansen and Villadsen (2012) investigated the effect of internal production on supplier performance whilst Aksoy and Ozturk (2011) focused on the relationship between supplier selection and performance. A common thread underlying the results of these studies is the enduring influence of supplier performance on business performance. It is therefore against this background that the study aims to examine the

determinants of supplier performance in sugar processing firms in Kenya.

3.0 Objective of the paper

To evaluate the influence of supplier involvement as a determinant of supplier performance in Kenya

4.0 Theoretical Framework

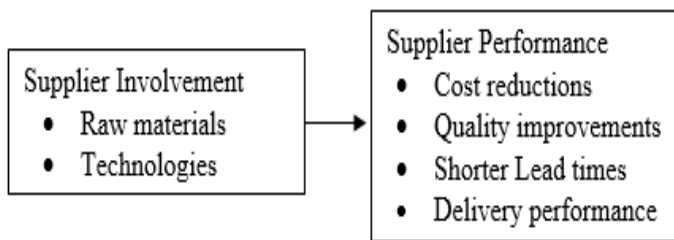
Resource based view (RBV) theory was adopted since suppliers are considered resources to the institutions. RBV believes that a firm's resources and capabilities are its most important assets. So the primary concern of RBV is about obtaining access to another firm's core competencies to gain competitive advantage. According to (Steinle & Schiele, 2008) suppliers can be regarded as resources in case they are "sufficiently bound to a firm". With these assumptions they clearly follow the extended resource based view, e.g. the relational view as mentioned in Dyer & Singh (1998), implying, resources can also be obtained through inter-firm connection from the external environment.

They proceed by setting suppliers in context with the four resource attributes, mentioned in Barney (1991), and required to achieve a competitive advantage. Following his logic, suppliers can be argued to contribute to a competitive advantage in case they offer valuable products, are rare in the sense of being not comparable to others, their products are not easy to substitute, and the relationship between buyer and supplier is difficult to imitate Steinle & Schiele, (2008). It is argued, that within an industry only few suppliers exist which offer valuable resources, being a preferred customer of them can have a contribution to a competitive advantage of the firm, which supports the focus of the resource based view Steinle & Schiele (2008).

Therefore, the resource based view contributes to the decision about the supplier portfolio by considering the relationship between buyer and supplier as the mean to achieve a competitive advantage. Suppliers are seen as valuable resources themselves or as the

source to access them, and by becoming their preferred customer, firms do not only gain preferential treatment but also the ability to distance competitors which do not have the same status, that eventually can lead to a superior competitive position.

5.0 Conceptual Framework



6.0 Research Methodology

Descriptive research design was applied.

7.0 Findings

This section consists of explanations under descriptive analysis and inferential analysis for the independent (supplier involvement) and dependent variable (Supplier performance).

7.0.1 Descriptive Results

a). Descriptive results for Supplier

The perception of the respondents was evaluated basing on their agreement on various statements pertaining Supplier involvement as a determinant of supplier performance. Table 4.5 shows that 71% of the respondents agreed that a supplier is involved when a new product is being developed. Further 72% of the respondents agreed that generation of ideas is ideal only when suppliers are involved. 82% of the respondents agreed that suppliers are involved in the decisions to use raw materials and that 96% of the respondents agreed that consideration of customers-partner future needs is done. The mean score for responses for this section was 4.245 which indicate that supplier involvement is a critical factor in determination of supplier performance.

Table 1: Descriptive results on supplier involvement

Opinion Statement	SD	D	U	A	SA	Mean
1 New product development	3%	3%	1%	71%	30%	4.32
2 Generation of ideas	5%	2%	0%	72%	29%	4.33
3 Decision of use of raw materials	1%	0%	2%	82%	23%	4.22
4 Consideration of customer-partner future needs	0%	48%	60%	0%	0%	4.11
Mean						4.245

b) Descriptive results for supplier performance

The dependent variable was tested to determine the effect of supplier collaboration, involvement information sharing. Table 2 shows that 77.8% of the respondents agreed that supplier performance improves with reduction of product cost. Further 66.7% of the respondents agreed that there was improved product quality, 66.7% agreed that perfect order fulfillment rate increased, 68% agreed that deliveries were reliable and dependable. The mean score for responses for this section was 4.2125 which indicate that supplier performance is a critical factor.

Table 2: Descriptive results on supplier performance

Opinion Statement	SD	D	U	A	SA	Mean
1 Reduction of product cost	0.9%	0%	0.9%	77.8%	20.4%	4.17
2 Improved product quality	0.9%	0.9%	11.1%	66.7%	20.4%	4.05
3 Perfect order fulfillment rate	0.9%	0%	0%	66.7%	32.4%	4.30
4 Delivery reliability and dependability	0%	0%	0%	67%	33%	4.33
Mean						4.2125

7.1 Relationship between Supplier involvement and supplier performance

7.1.1 Correlation results

Correlation analysis showed the relationship between the variables (Jahangir & Begum, 2008; Kariuki, Namusonge & Orwa, 2015). Table 3 findings showed a strong positive correlation of 0.320 between supplier involvement and supplier performance. The P value was 0.000 at 1 % (0.01) level of significance.

Table 3: Relationship between supplier involvement and supplier performance

Variable		Supplier Performance (SP)	Supplier involvement (SI)
Supplier Performance	Pearson Correlation	1.000	
	Sig. (2-tailed)		
Supplier involvement	Pearson Correlation	0.320**	1.000
	Sig. (2-tailed)		0.000

7.1.2 Simple regression analysis

The Regression analysis in table 4 established that the coefficient determination of R^2 was 0.102 which indicate that 10.2% of change in supplier performance was caused by supplier involvement. The correlation coefficient (R) of 0.320 indicates the strength of association between the observed (supplier involvement) and predicted variable (supplier performance). The findings imply that supplier involvement was an important predictor of supplier performance in sugar processing firms in Kenya.

Table 4: Supplier involvement and supplier Performance Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.320	0.102	.094	.40793

a. Predictors: (Constant), Supplier involvement

Further the researcher run the regression analysis slope coefficient representing the influence of the supplier involvement on supplier performance. Findings of Table 5 show that linear regression model of supplier involvement on supplier performance was $Y = \beta_0 + \beta_1 X_1 + \epsilon$ which becomes $FP = 2.584 + 0.383 X_1$. The beta coefficient of 0.320 indicate that supplier involvement had strong effect on supplier performance this has been supported by

$t = 3.472$ at $P = 0.000$ at 5% level of significance. The null hypothesis was rejected and alternative hypothesis accepted that supplier involvement significantly determine financial performance among sugar processing firms in Kenya.

Table 5: Supplier involvement and supplier performance regression coefficients

Variable	B	Std. Error	Beta	T	Sig.
(Constant)	2.584	.470		5.499	.000
Information Sharing	0.383	.110	.320	3.472	.000

a. Dependent Variable: Supplier Performance

8.0 Conclusion and Recommendation

The researcher sought to evaluate the effect of supplier involvement on supplier performance of Nzoia sugar company Ltd. It was established that supplier involvement determines the performance of suppliers. Involving suppliers in new product development decisions and continuous improvement efforts enables the suppliers to share knowledge and increase learning so that better solutions can be found to complex, inter-company problems that impact performance.

The performance management criteria should focus on suppliers' financial capacity as one of the criteria for supplier selection. This is because suppliers' financial capability directly influences the ability of the suppliers to meet organizational needs. There is need to communicated to all stakeholders who are directly involved in procurement operations on the need to consider financial capacity of suppliers.

The researcher recommends that supplier competence should be considered when awarding supply contracts. It should form the basis of awarding contracts. This is because the level of suppliers' competence determines the suppliers' ability to understand user needs and enhances their ability to satisfy supply needs of the procuring organizations.

REFERENCES

- Awino, Z. B. and Gituro, W. (2009). *An empirical investigation of supply chain management practices in large private manufacturing firms in Kenya. (Unpublished PHD Thesis). University of Nairobi.*
- CIPS, (2012). *Sourcing in procurement and supply. Pretoria: Profex Publishing.*
- Davenport, T. (2008). *Putting the enterprise into the enterprise system. Harvard Business Review, Vol. 76 No. 4, pp. 121-31.*
- David, K.H., (2012). *Analyzing the Buyer Supplier Relationship Engagement on the Performance Benefits and Its Impact on Business Performance. International journal of contemporary business studies Vol 3, No 12 ISSN 2156-7506.*
- Dyer, J.H., Sung Cho, D. & Chu, W. (1998). *Strategic Supplier Segmentation: The Next "Best Practice" in Supply Chain Management, CMR, Vol. 40, No. 2, pp. 57-77.*
- Handfield, R.B. and Bechtel, C. (2002). *The role of trust and relationship structure in improving supply chain responsiveness. Industrial Marketing Management 31 (4), 367-382.*
- Kasisi, M, Yusuf, K. & Iravo, M. (2015). *Effects of Supplier Relationship Management on the Performance of Organizations in Selected Sugar Companies in Western Kenya. Journal of Economics and Finance (IOSR-JEF) e-ISSN: 2321-5933, p-ISSN: 2321-5925. Volume 6, Issue 3. Ver. III.*
- Krause, D.R., Scannell, T.V. & Calantone, R.J. (2000). *A structural analysis of the effectiveness of buying firms' strategies to improve supplier performance. Decision Sciences, Vol. 31 No. 1, pp. 33-55.*