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Research Article

Supplier Relationship Management and Performance of Manufacturing Firms in Kenya

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Abstract: The aim of this paper is to assess the influence of supplier relationship management on the performance of manufacturing companies in Kenya. While manufacturing firms have been critical to the country's economy, their performance has been declining, raising concerns among the policy makers and key stakeholders. Most of the firms in the industry have been rethinking their operational frameworks, while others existing the market due to turbulent operating environment. However, the concern has also been growing on the supply chain of these firms. Management of suppliers and maintaining a good relationship with key suppliers has been argued to be among the forces behind continued underperformance of the manufacturing firms. This is however, yet to be established in a Kenyan context, hence the subject of the study. The study also sought to assess the moderating effect of quality control on the relationship between supplier relationship management and performance of manufacturing firms in Kenya. The study was informed by the networks theory. Descriptive research approach was utilized and 461 companies were targeted. Through Cochran's formula, a sample of 160 respondents was obtained. Data was collected through questionnaires and analysed using SPSS. The findings revealed that supplier relationship management significantly and positively influenced the performance of manufacturing firms in Kenya. The study concluded that supplier relationship management is critical for firm performance, hence recommending that involving suppliers and maintaining a long-lasting relationship is integral for the continued performance of manufacturing companies.

Keywords: Supplier Relationship Management, Manufacturing Firms, Firm Performance.

1.0 Introduction

1.1 Background to the Study

Supplier relationship management is the process of interacting with suppliers and bringing them closer to the organization so as to work towards a common goal. It is a mirror image of customer relationship management where as a company needs to develop relationships with its customers, it also needs to foster relationships with its suppliers. The desired outcome is a win-win relationship where both parties benefit (Lee & Whang, 2010).

Most of the manufacturing companies rely on raw materials which are available externally. This is to mean that the companies have their suppliers who ought to supply them with the required inputs for continued effectiveness and performance. The benefit of the long-term relationships with the supplier is that the supplier will learn about the real needs and requirements of the buyer through strategic collaborations (Narasimhan & Nair, 2009). This can result is optimization and rationalization of its own operations. The evaluation and measurement of these sorts of activities is hard which makes it a gain for the supplier since it can hide from the buyer and use it as an advantage for its own good (Gabbard, 2014).

Effective supplier relationship management can make the procurement process more cost and time efficient hence ensuring alignment of the supply chain (Akech, 2010). Having supply market intelligence and applying a correct competition situation are ways to implement a good supplier management strategy. Other issues that should be accounted are a reliable source for supplier performance and evaluation as well as developing the suppliers (Barratt & Oliveira, 2011). With the help of common procurement approaches and development projects the supplier relationship is utilized to the maximum (Whan & Teawon, 2015). Supplier relationship management succeeds the best when all the different factors have been taken into account. It is important to consider issues like delivery, packaging, logistics, time management, documentation and reporting and communication (Fassoula, 2013).

In most cases the problems with suppliers are due to the fact that the contract lacks of detailed information about daily supplier management (Hartley, 2010). Selecting a contact person for the buying and selling organization is essential to ensure the information flow between the organizations (Gordon, Zemansky & Sekwat, 2000). According Burt, Dobler and Starling (2013), actively developing the supplier relations is important. Understanding your suppliers and utilizing your suppliers mutual competition has proven to be a very effective way of supplier relationship development.

Managing suppliers helps improve their performance and abilities (Ireland, Hitt, & Vaidyanath, 2012). It's important to keep the managing role to yourself when conducting shared product development projects. The buying organization should communicate information with determination to selected suppliers (Callendar & Mathews, 2010). This is in other words known as early supplier involvement. Understanding the actions and processes of the suppliers is a basis for starting to develop relationships with suppliers (Lee, Yeung & Cheng, 2009). Supply market intelligence is one the factors that need to be accounted. It explains the mutual competition between competing organizations in the market. With the help of detailed supply market understanding, the factors that affect competitive advantage can be identified (Whan & Teawon, 2015). The determination of the knowhow of supplier processes and the total cost structure helps to develop supplier relationships. In Kenya, the manufacturing sector is the third biggest industrial sector after agriculture and transport and communication (KPMG, 2014). It is the third leading sector contributing to GDP in Kenya. The growth in manufacturing industry has declined to 3.3 per cent in 2011 as compared to 4.4 per cent in the year 2010 mainly due to a challenging operating environment (KNBS, 2012). Following a long period of stagnation, Kenyan economy went through a strong phase of performance over the period 2003-2007 since the rate of economic growth accelerated up to 7 per cent. During the same period Total Factor Productivity in manufacturing sector increased by as much as 20% (WB, 2013). As an important sector in the overall economic growth, manufacturing sector requires in depth analysis at industry as well as firm level. According to KPMG (2014), real growth in the manufacturing sector averaged 4.1% p.a. during 2006-2013 which is lower than the average annual growth in overall real GDP of 4.6%. As a result, the manufacturing sector's share in output has declined in recent years.

1.2 Statement of the Problem

In the past 10 years, the manufacturing sector in Kenya has recorded a minimal growth rate, as compared to the previous decade. Moreover, most of the companies in the sector have been recording declined sales revenues and gross profits in the recent past. This has seen most of these companies continue to downsize their production and labour force, as a way of cutting-down on the operational costs. This means a massive loss of jobs, loss of government revenue and slower economic growth and development. One of the factors that has stood across the manufacturing firms is their access to raw materials. This is mainly reliant to the suppliers, who play a critical role in making the processes of these firms successful. Studies in other contexts have found the management of the relationship with suppliers to be critical in the manufacturing industry (Amoako-Gyampah, Boakye, Adaku, & Famiyeh, 2019; Oghazi, Rad, Zaefarian, Beheshti, & Mortazavi, 2016; Al-Abdallah, Abdallah, & Hamdan, 2014). However, this is yet to be proved in a local context, hence

this study sought to assess the relationship between supplier relationship management and the performance of manufacturing firms in Kenya.

1.3 Study Objectives

- 1) To determine the relationship between supplier relationship management and performance of manufacturing firms in Kenya.
- 2) To determine the moderating influence of quality control and certification on the relationship between supply relationship management and performance of manufacturing firms in Kenya.

1.4 Study Hypotheses

- 1) **H₀:** Supplier relationship management has no significant relationship with performance of manufacturing firms in Kenya.
- 2) **Ho:** Quality control and certification has no significant moderating effect on the relationship between supply relationship management and performance of manufacturing firms in Kenya.

2.0 Literature Review

2.1 Theoretical Review

This paper was anchored on the networks theory. The network's theory also known as networks perspective is mostly concerned with the value generation through inter-organizational relations (Narasimhan & Nair, 2009). Network theory focuses on exploring how networks of individuals, groups, or firms relate to organizational outcomes at the same level of analysis (Rogers, 2015). This theory was first introduced during the 1980s by Hakansson and Ford and developed from the focus on relationships between just two entities, or supplier collaborations, towards an approach which entails multiple relationships between different counterparts throughout the supply chain such as early supplier involvement. The adherents of the network perspective found that firms acted in accordance with the supply chain alignment perspective (Skipworth & Julien, 2015). Especially firms which delivered to other firms, they did not regard customers and suppliers as competitors, but more as collaborators. Networks are seen as beneficial for every company embedded through investments and actions of the other counterparts involved in the process (Spekman, Kamauff & Myhr, 2012; Theodorakioglou, Gotzamani & Tsiolvas, 2016). This theory supports the variable supplier relationship management by linking early supplier involvement, supplier development and strategic collaborations to essential metrics that can be managed to ensure achievement and effective supply chain alignment.

2.2 Conceptual Framework

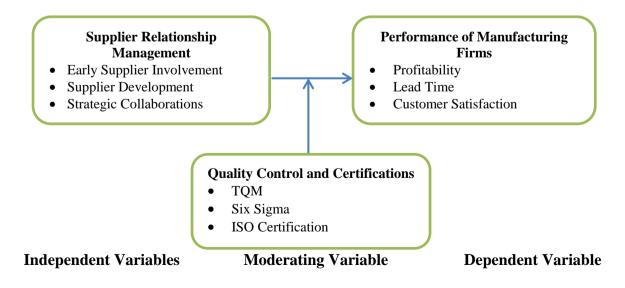


Figure 1. Conceptual Framework

2.3 Review of Empirical Literature

Theodorakioglou, Gotzamani, and Tsiolvas (2016) underpin that supplier relationship management is the process that defines how a company interacts with its suppliers. Integration of internal processes of the organization with the suppliers and customers forms the essence of the whole idea behind supply chain alignment (Wagner & Bode, 2013). With the widespread use of internet, web-based systems enable organizations to form strong customer and supplier integration for inventory management, demand forecasting, customer and supplier relationship management (Callendar & Mathews, 2010). Strategic suppliers/vendors are defined as those that provide high value, high complexity goods or services. According to Narasimhan and Nair (2009) the descriptions of relationships are relatively abstract and vary with the discipline from which they are being researched (strategy, economics or psychology). As soon as two or more parties (organizations) associate themselves in order to fulfill a mutual business purpose a relationship is established. Such an association leads to various joint activities, which are dependent on the specific business objective. Buyer supplier relationships are classified as adversarial arm's length approach and partnerships approach (Vachon, Halley & Beaulieu, 2009). The difference between, traditional arm's-length relationship and partnership is clear. Partnerships are closer than other types of relationship while traditional arm's length relationships are seen as having positive links to performance but little is known about the nature of this performance (Carr & Smeltzer, 2012).

According to Vachon, Halley and Beaulieu (2009) for more than a decade, there has been a large and growing interest, among academics and practitioners alike, in the value of effective supply chain alignment practices. The literature suggests that a move towards to a close relationship between suppliers and customers is mutually beneficial for both parties. Buyer supplier relationships are commonly evaluated as supply base reduction, communication and long-term relationship. Performance on the other hand is how efficient and effective supplier relationship management solution help in achieving organizational objectives (Rogers, 2015).

Casadesus and De-Castro (2015) affirmed that TQM and other quality practices plays a considerable role in better managing and aligning supply chain relations. Theodorakioglou *et al.* (2016) examined how the EFQM model facilitates intra-firm coordination and concluded that quality practices results in better intra-organizational alignment.

Yang *et al.*, (2013) developed and applied a six sigma methodology in a leading manufacturing organization to improve supply chain operations. They concluded that such methodology could play a considerable role for successful supply chain thinking. Similarly, Mehrjerdi (2013) confirmed the role of implementing six sigma tools in improving coordination efforts in supply chains.

It is widely accepted that the ultimate aim of implementing ISO standards is to satisfy the demand of external customers as well as potential customers (Douglas, Coleman & Oddy, 2013). Bagchi *et al.*, (2013) referred to a study conducted in the USA and the UK in 2004, 2005, 2006 that concluded that the internal benefits of earlier versions of ISO 9000 takes precedence over external benefits. However, Robinson and Malhotra (2015) argued that quality practices must expand from traditional intra-firm mind sets to include inter-organizational supply chain activities.

3.0 Research Methodology

The study adopted both qualitative and quantitative methodology. This was mainly supported by descriptive research approach and the positivism research philosophy. Descriptive research design sets out to extensively describe whether supplier relationship management is related to performance of manufacturing firms in Kenya. The study targeted the large manufacturing firms in Kenya. The 2017 KAM directory has listing of members (firms) by sectors which contains a register of 12 sectors of those in manufacturing firms spread all over the country (KAM, 2017). The population of the large sized registered members as per the directory is 461. This study used Cochran's formula to sample 160 large manufacturing firms from the total population. The research utilized a structured

questionnaire to collect primary data. A timetable for data collection was developed and scheduled appointments with the respondents, specifying in detail the date, time and place where the data was to be collected.

This study adopted a descriptive data analysis and inferential data analysis. Descriptive data analysis was adopted for this study because descriptive analysis was used to describe the basic features of the data in a study. It provides simple summaries about the sample and the measures. The study adopted inferential data analysis in order to enable it reach conclusions that extend beyond the immediate data alone to infer from the sample data about the population.

4. Data Analysis and Discussion

4.1 Response Rate, Reliability Test and Background Information

4.1.1 Response Rate

A response rate of 79.4% was obtained where 127 questionnaires out of 160 were dully filled and returned for analysis. This was considered adequate for analysis.

4.1.2 Reliability Test Results

Reliability test was carried out using Cronbach's alpha coefficient. A threshold of 0.70 was adopted. Supplier relationship management had a coefficient of 0.807, quality control and certification had 0.799 while firm performance had a coefficient of 0.822. These were deemed reliable hence the subsequent analysis was carried out. Table 1 summarizes the results.

Table 1. Reliability Test Results

Variable	Number of Items	Cronbach's Alpha
Supplier Relationship Management	13	0.807
Quality Control and Certification	13	0.799
Firm Performance	8	0.822

4.1.3 Background Information

Most of the firms had been in operation for more than 20 years and were privately owned companies. Most of the companies had between 2 and 6 products and sub-sectors such as chemical and allied, printing and paper, food, beverage and tobacco and leather and textiles were presented. Diversity was obtained and various demographic characteristics were obtained among the corresponding companies.

4.2 Supplier Relationship Management

The study assessed the relationship between supplier relationship management and performance of manufacturing firms in Kenya. The study sought to assess the influence of early supplier involvement, supplier development and strategic collaborations on the performance of manufacturing firms in Kenya. The respondents were asked to indicate their level of agreement or disagreement with specific statements on supplier relationship management. The findings are as shown in Table 2.

The findings imply that while a smaller majority of the companies have upheld supplier relationship management, there are still significant numbers who are yet to uphold supplier relationship management hence the need to focus on such area as manufacturing firms in Kenya. The findings are in line with those by Ellram (2015) who found that most organizations fail to achieve their objectives and performance goals as a results of poor relationship management with their suppliers which is most likely to affect quality of supplies, efficiency and customer satisfaction in the long-run.

The findings are in line with those by Job (2015) who found out that supplier involvement is a key aspect towards development and enhancing the collaboration between the organization and the suppliers for efficiency, effectiveness and reliability in future.

Table 2. Descriptive Results on Supplier Relationship Management

Statement Statement	Mean	Std. Dev.
Suppliers in our organization are adequately involved in	3.39	0.95
designing the products based on the customer specifications		
Information is adequately and timely shared with the supervisors	3.17	0.96
regarding the customer needs and specifications early enough		
before the need arises		
There are frequent meetings with the suppliers to intensify on	4.13	0.81
how our company continues doing business with the suppliers		
There is an active and effective platform for sharing information	3.82	0.93
with the suppliers to enhance continued collaboration and		
efficient communication		
There proper systems and procedures of dispute resolution with	3.98	0.91
the suppliers for enhanced collaboration		
Our organization frequently collaborates with the suppliers to	3.81	0.97
come up with ways of best serving the clients		
There are frequent engagements with our suppliers to share ideas	3.92	0.85
The existing least of suppliers is frequently updated to ensure	3.87	0.87
availability of variety of suppliers at the time of need		
The company has set measures to steer continued strategic	3.97	0.89
collaboration with the suppliers		

4.3 Quality Control and Certifications

The study sought to establish the relationship between quality control and certifications and performance of manufacturing firms in Kenya. The respondents were asked to indicate the effectiveness of quality control and certifications on the performance of manufacturing firms in Kenya. Table 3 summarizes the findings. The results indicated that 44.9% of the respondents claimed that quality control and certifications Implemented their organization was very effective. 40.9% of the respondents ranked indicated that they quality control and certifications implemented in your organization was effective. 11% of the respondents agreed that they quality control and certifications system implemented in your organization was somehow effective. Further results indicated that 3.1% regarded quality control and certifications implemented in their organization as ineffective.

Table 3. Rating the Effectiveness of Quality Control and Certification

Category	Frequency	Percentage
Very Effective	57	44.9%
Effective	52	40.9%
Somehow Effective	14	11.0%
Ineffective	4	3.1%
Total	127	100%

4.4 Performance of Manufacturing Firms

The study sought to establish the performance of the manufacturing firms in Kenya. The respondents were asked to indicate their level of agreement on specific statements regarding the performance of their respective firms. This was based on a five-point Likert's scale. The findings as shown in Table 4 revealed that majority of the respondents disagreed that their company has been committed to reduce the costs of operation in all its activities. Majority of the respondents disagreed that through focus on waiting time and reduce it significantly we have achieved better supply chain performance. It was further established that most of the organizations did not adequately involve their suppliers in designing of the products based on the customer specifications to enhance satisfaction. The respondents further disagreed that through continued focus on supplier relationship management, their respective companies have been able to enhance its profitability.

Table 4. Descriptive Results on Organizational Performance

Statement	Mean	Std. Dev.			
Our company has been committed to reduce the costs of	2.61	1.35			
operation in all its activities					
Through focus on waiting time and reduce it significantly we	2.46	1.35			
have achieved better supply chain performance					
We adequately involve our suppliers in designing of the products	2.51	1.28			
based on the customer specifications to enhance satisfaction					
We have adopted new technologies in the supply chain systems	3.21	1.27			
to reduce lead time and promote effectiveness					
Through supplier relationship management, the company has	2.18	1.29			
been able to enhance its profitability					

4.5 Correlation Analysis

Correlation analysis was used to determine both the significance and degree of association of the variables and predict the level of variation in the dependent variable caused by the independent variable. Table 5 shows the findings. The correlation analysis to determine the association between supplier relationship management and performance of manufacturing firms in Kenya, Pearson correlation coefficient computed and tested at 5% significance level. The results indicate that there was a positive relationship (r=0.464) between supplier relationship management and performance of manufacturing firms in Kenya. In addition, the researcher found the relationship to be statistically significant at 5% level (p=0.000, <0.05).

Table 5. Summary of Pearson's Correlations

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		Firm	Supplier Relationship		
		Performance	Management		
Firm Performance	Pearson Correlation	1			
	Sig. (2-tailed)	0.000			
	N	127			
Supplier Relationship	Pearson Correlation	.464*	1		
Management	Sig. (2-tailed)	0.000			
	N	127			

4.6 Hypotheses Testing

H_0 : Supplier relationship management has no significant relationship with performance of manufacturing firms in Kenya

The study sought to establish the relationship between supplier relationship management and performance of manufacturing firms in Kenya. The model summary $(R, R^2, and adjusted R^2)$, ANOVA and regression coefficients were the main approaches used to test for the relationship between supplier relationship management and performance of manufacturing firms. The results are as shown in Table 6. As the model summary results reveal, the R^2 for the model was 0.159. This implies that up to 15.9% variation in the performance of manufacturing firms in Kenya is as a result of supplier relationship management.

As the ANOVA test results portray, the F-Statistics was 23.701 at a significance level of 0.000. This is an implication that supplier relationship management significantly influences the performance of manufacturing firms since the P-value (0.000) is lower than the standard p-value of 0.05.

As the regression coefficients portray, the constant value is 4.299 implying that if supplier relationship management and other factors are held constant, the performance of manufacturing firms in Kenya would improve by 4.299. On the other hand, the Beta coefficient for supplier relationship management is 0.080 while the standardized coefficient is 0.343. The findings imply that

a unit increase in supplier relationship management would lead up to 34.3% increase in the performance of manufacturing firms in Kenya. The P-value for the variable is 0.002 which is less than 0.05. This is to imply that there is a significant influence of supplier relationship management on the performance of manufacturing firms in Kenya. The findings therefore support the rejection of the null hypothesis that there is no significant and positive influence of supplier relationship management on the performance of manufacturing firms in Kenya.

Table 6. Supplier Relationship Management and Firm Performance Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	1 .399 ^a .159		.153	.62565		
a. Predictors: (Constant), Supplier Relationship Management						

ANOVA

Model	Sum of	df	Mean Square	F	Sig.
	Squares				
Regression	9.278	1	9.278	23.701	$.000^{b}$
Residual	48.930	125	.391		
Total	58.208	126			
	Regression Residual	Regression 9.278 Residual 48.930	Squares Regression 9.278 1 Residual 48.930 125	Squares 1 Regression 9.278 1 9.278 Residual 48.930 125 .391	Squares 1 Regression 9.278 1 9.278 23.701 Residual 48.930 125 .391

a. Dependent Variable: Performance of Manufacturing Firms

b. Predictors: (Constant), Supplier Relationship Management

Regression Coefficients

Model		Unstandardized		Standardized	t	Sig.		
		Coefficients		Coefficients				
		В	Std. Error	Beta				
	(Constant)	2.240	.231		9.699	.000		
	Supplier Relationship	.343	.071	.399	4.868	.000		
	Management							
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a. Dependent Variable: Performance of Manufacturing Firms

Ho: Quality control and certification has no significant moderating effect on the relationship between supplier relationship management and performance of manufacturing firms in Kenya The regression coefficients for the moderated model are as shown in Table 7. Supplier relationship management was found to be insignificant (p= 0.816 > 0.05, $\beta = 0.004$). The findings imply that quality control and certification does not moderate the relationship between supplier relationship management and performance of the manufacturing firms in Kenya.

Table 7. Regression Coefficients (Moderated)

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B Std. Error		Beta		
(Constant)	2.046	144		14.196	.000
Supplier Relationship	.004	.019	.025	.234	.816
Management*					
Moderator					

5.0 Conclusion and Recommendations

5.1 Conclusion

Supplier relationship management has significant relationship with performance of manufacturing firms in Kenya. The sub-constructs of supplier relationship management that is early supplier involvement, supplier development and strategic collaborations influence performance positively. The study also concluded that quality control and certifications has a moderating influence on the relationship between supply chain alignment and performance of manufacturing firms in Kenya. The

study also concluded that supply chain alignments are positively associated with performance of manufacturing firms.

5.2 Recommendations

It is recommended that manufacturing firms in Kenya should have an improved supplier relationship management as it leads to high performance. The firms should have early supplier involvement, supplier development and strategic collaborations. The study also recommends that future scholars and researchers should aim to test the relationship between supplier relationship management and performance using different sub constructs apart from early supplier involvement, supplier development and strategic collaborations. This can bring rigour and offer platforms for comparison of findings.

Conflicts of interest

There is no conflict of interest of any kind.

References

- 1. Akech, J.M. 2010. Development partners and governance of public procurement in Kenya: enhancing democracy in the administration of aid. New York University Journal of International Law and Politics, 37(4): 829-868.
- 2. Al-Abdallah, G.M., Abdallah, A.B. and Hamdan, K.B. 2014. The impact of supplier relationship management on competitive performance of manufacturing firms. International Journal of Business and Management, 9(2): 192-202.
- 3. Amoako-Gyampah, K., Boakye, K.G., Adaku, E. and Famiyeh, S. 2019. Supplier relationship management and firm performance in developing economies: A moderated mediation analysis of flexibility capability and ownership structure. International Journal of Production Economics, 208: 160-170.
- 4. Bagchi, P.K. and Skjoett-Larsen, T. 2013. Integration of information technology and organizations in a supply chain. International Journal of Logistics Management, 14(1): 89-108.
- 5. Barratt, M. and Oliveira, A. 2011. Exploring the experiences of collaborative planning initiatives. International Journal of Physical Distribution and Logistics Management, 31(4): 266-289.
- 6. Burt, D.N., Dobler, D.W. and Starling, S.L. 2003. World class supply management. 7th International Edition, McGraw-Hill, Irwin, Boston.
- 7. Calendar and Mathews. 2010. Public procurement reexamined. Journal of Public Procurement, 1(1): 9-50.
- 8. Carr, A.S. and Smeltzer, L.R. 2012. The relationship between information technology use and buyer-supplier relationships: an exploratory analysis of the buying firm's perspective. IEEE Transactions on Engineering Management, 49(3): 293-304.
- 9. Casadesus, M. and De-Castro, R. 2015. How improving quality improves supply chain management: empirical study. The TQM Magazine, 17(4): 345-357.
- 10. Douglas, A., Coleman, S. and Oddy, R. 2013. The case for ISO 9000. The TQM Magazine, 15(5): 316-324.
- 11. Ellram, L.M. 2015. Early Supplier Involvement and Procurement effectiveness in Public Entities in London. European Journal of Purchasing and Supply Management, 3(1): 21–31.
- 12. Fassoula, E.D. 2013. Transforming the supply chain. Journal of Manufacturing Technology Management, 17(6): 848-860.
- 13. Gordon, S.B., Zemansky, S.D. and Sekwat, A. 2000. The public purchasing profession revisited. Journal of Public Budgeting, Accounting and Financial Management, 12(2): 248-271.

- 14. Hartley, J.L. 2010. Collaborative value analysis: experiences from the automotive industry. Journal of Supply Chain Management, 36(4): 27-33.
- 15. Ireland, R.D., Hitt, M.A. and Vaidyanath, D. 2012. Alliance management as a source of competitive advantage. Journal of Management, 28(3): 413-446.
- 16. Job, M.K. 2015. Supplier Development and Operational Performance of Manufacturing Firms in Nairobi City County. MBA Thesis of School Of Business University of Nairobi.
- 17. Lee, H. and Whang, S. 2010. Information sharing in supply chain. International Journal of Technology Management, 20(4): 373-387.
- 18. Lee, P., Yeung, A. and Cheng, T. 2009. Supplier alliances and environmental uncertainty: An empirical study. International Journal of Production Economics, 1(2): 190-204.
- 19. Mehrjerdi, Y.Z. 2013. A framework for six sigma driven RFID-enabled supply chain systems. International Journal of Quality and Reliability Management, 30(2): 142-160.
- 20. Narasimhan, R. and Nair, S. 2009. Supplier integration-finding an optimal configuration. Journal of Operations Management, 24(5): 563-582.
- 21. OECD. 2010. Integrity in Public Procurement: Mapping out Good Practices for Integrity and Corruption Resistance in Public Procurement.
- 22. Oghazi, P., Rad, F.F., Zaefarian, G., Beheshti, H.M. and Mortazavi, S. 2016. Unity is strength: A study of supplier relationship management integration. Journal of Business Research, 69(11): 4804-4810.
- 23. PPOA. 2010. Assessing Procurement Systems in Kenya Report. Nairobi: Public Oversight Authority.
- 24. Robinson, C.J. and Malhotra, M.K. 2015. Defining the concept of supply chain quality management and its relevance to academic and industrial practices. International Journal of Production Economics, 96(3): 315-337.
- 25. Rogers, P.A. 2015. Optimising supplier management and why co-dependency equals mutual success. Journal of Facilities Management, 4(1): 40-50.
- 26. Skipworth, H. and Julien, D. 2015. Supply chain alignment for improved business performance: an empirical study. Supply Chain Management: An International Journal, 20(5), 511-533.
- 27. Spekman, R.E., Kamauff, J.W. and Myhr, N. 2012. An empirical investigation into supply chain management a perspective on partnership. International Journal of Physical Distribution and Logistics Management, 28(8): 630-650.
- 28. Theodorakioglou, Y., Gotzamani, K. and Tsiolvas, G. 2016. Supplier management and its relationship to buyer's quality management. Supply Chain Management: An International Journal, 11(2): 148-159.
- 29. Vachon, S., Halley, A. and Beaulieu, M. 2009. Aligning competitive priorities in the supply chain: the role of interactions with suppliers. International Journal of Operations and Production Management, 29(4): 322-340.
- 30. Wagner, S.M. and Bode, C. 2013. Supplier relationship-specific investments and the role of safeguards for supplier innovation sharing. Journal of Operations Management, 12(6), 23-38.
- 31. World Bank. 2013. Reducing Supply Chain Barriers Could Increase Global GDP Up To 6 Times More Than Removing All Import Tariffs Report, Switzerland.
- 32. Yang, H.M., Choi, B.S. and Chae, B. 2013. Supply chain management six sigma: a management innovation methodology at the Samsung group. Supply Chain Management: An International Journal, 12(2): 88-95.

