

Influence of Procurement Capabilities on Firm Performance of Manufacturing Entities in Kenya

Eric Namusonge

PhD. Candidate Jomo Kenyatta University of Agriculture and Technology, School of Entrepreneurship, Procurement and Management, Nairobi, Kenya

Elegwa Mukulu

Professor Jomo Kenyatta University of Agriculture and Technology, School of Entrepreneurship, Procurement and Management, Nairobi, Kenya

Mike Iravo

Senior Lecturer Jomo Kenyatta University of Agriculture and Technology, School of Entrepreneurship, Procurement and Management, Nairobi, Kenya

DOI: 10.6007/IJARBSS/v7-i2/2660 URL: http://dx.doi.org/10.6007/IJARBSS/v7-i2/2660

ABSTRACT

Procurement is a dynamic function that is crucial to the productivity and general performance of a manufacturing entity. The purpose of manufacturing is to produce value in form of products and services, through different processes and activities, which are performed by a network of organizations both upstream and downstream. These processes form an integrated supply chain where raw materials are converted into final finished products for the end consumer. In order to realize successful performance, the management of manufacturing entities must have a holistic comprehension of procurement and implement it accordingly. Therefore, the objective of this study was to investigate the influence of procurement capabilities on firm performance of manufacturing entities in Kenya. The population of interest for this study was manufacturing firms within Nairobi and its environs. A sample of 69 manufacturing entities was randomly selected to participate in this study. Data was collected using questionnaire. Descriptive and inferential statistics was used aided by Statistical Packages for Social Sciences version 24 to compute the response. The study recommends that the management of manufacturing entities should exploit procurement capabilities on the day to day operation with the aim of ensuring financial viability and a competitive edge over other market competitors thus attaining superior firm performance.

Keywords: Procurement Capabilities, Firm Performance And Manufacturing Entities

Introduction

Manufacturing is viewed as the leading edge of modernization and skilled job creation, as well as a fundamental source of various positive spillovers (Tybout, 2000). The purpose of manufacturing is to produce value in form of products and services, through different processes



and activities, which are performed by a network of organizations both upstream and downstream. These processes form an integrated supply chain where raw materials are converted into final finished products for the end consumer (Zhu & Sarkis, 2006). Supply chain management (SCM) advocates for the integration and coordination of business processes and strategy alignment throughout the supply chain for purposes of satisfying end-consumers in the supply chain.

The supply chain is an entire network of entities, directly or indirectly interlinked and interdependent in serving the same consumer or customer. In manufacturing and supply chain management it is fundamental to possess and employ certain skill sets, knowledge and competencies with regards to supply chain management. The skills, prowess, knowledge and competencies is what is referred to as supply chain capabilities. Supply chain capabilities are the abilities to perform or achieve certain actions or outcomes through a set of controllable and measurable faculties, features, functions, processes, or services. The capabilities may entail aspects such as procurement capability, inventory management capabilities, administrative capabilities, logistics capabilities, integrated logistics management services capabilities, distribution and warehousing capabilities and transport capabilities (Morash, 2001).

The manufacturing sector has a great potential on promoting economic growth and competiveness in Kenya. It is the third leading sectors contributing to GDP in Kenya. The sector has experienced the fluctuations over the years under different financial conditions. It 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, 2011). The Kenyan manufacturing industry continues to grow from strength to strength despite challenges in the operating environment. Currently the manufacturing industry in Kenya contributes 14% to the country's gross domestic product and employs over two million people (KAM, 2015).

Problem Statement

Manufacturing is extremely important for the modernization of any country. It is the main activity that split the developed world from the developing one. According to an economic survey of 2016 undertaken by the Kenya National Bureau of Statistics (KNBS, 2016), The manufacturing sector's contribution to Gross Domestic Product (GDP) improved marginally to 10.3 per cent in 2015 compared to 10.0 per cent in 2014. The sector grew from 3.2 per cent recorded in 2014 to 3.5 per cent in 2015. The growth was partly attributed to reduced cost of inputs such as petroleum products and electricity. However, this growth is significantly lower in comparison to developing countries that are more conversant with the employment of supply chain competencies to the operations such as China, Japan, Malaysia, Korea and Singapore. According to the United Nations Industrial Development Organization (UNIDO, 2015), China's manufacturing output rose by 6.5 per cent in the fourth quarter of 2015. Among other developing countries, a strong growth of 12.4 per cent was registered by Viet Nam. Industrial production also grew by 5.3 per cent in Bosnia and Herzegovina in the fourth quarter of 2015 on a year-to-year basis.

In order to succeed as a brand manufacturer, it is important to create and maintain an efficient and effective supply chain all the way to the consumer (Kumar, 2008). Therefore, the



performance of a manufacturing entity is influenced by the supply chain capabilities in place. Ganeshkumar and Nambirajan (2013) suggested that supply chain competitiveness strongly influences the organizational performance of the manufacturing firms, while the competitiveness of the manufacturing firms is strongly influenced by supply chain competence and supply chain practices of the manufacturing firms. Procurement is a supply chain capability aspect if it is well understood and implemented accordingly. Therefore, the purpose of this study is to investigate the influence of procurement capabilities on firm performance of manufacturing entities in Kenya.

Objective of the study

The objective of this study was to determine the influence of procurement capabilities on firm performance of manufacturing entities in Kenya.

Hypothesis

H₀ There is no significant correlation between procurement capabilities and firm performance of manufacturing entities in Kenya.

LITERATURE REVIEW

The study was focused on dynamic capabilities theory and agency theory.

Dynamic capabilities theory

The term "dynamic" refers to as "the capacity to renew competences so as to achieve congruence with the changing business environment; this is relevant in situations where time to market is critical and the nature of competition is difficult to determine". Capabilities are referred to as "the key role of strategic management in appropriately adapting, integrating and reconfiguring, internal and external organizational skills, resources, and functional competences to match the requirements of a changing environment". Dynamic capabilities theory was first introduced to explain firm performance in dynamic business environments, focusing on the capabilities that firms employ to reach competitive advantage (Beske, Land, & Seuring, 2014). The function of dynamic Capabilities seemingly work towards the goal of achieving sustainable competitive advantage in dynamic business environments. The manufacturing function operates in an ever changing environment. Therefore, in an attempt to maintain a competitive advantage over other firm; manufacturing entities should employ information communication technology capabilities that are advance and in conformity with the emerging trends in manufacturing and operations.

The dynamic capabilities theory explains that the way organizations develop firm specific competences to respond to changes in the business environment is ultimately related to the firm's business processes, market positions, and opportunities (Teece, 2014). These three factors form the basis for determining DC's. *Processes* encompass the way things are done in organizations and they have three roles; coordination, learning and reconfiguration. *Positions* define specific endowments of technology, intellectual property, complementary assets, customer base, and its external relations with suppliers and complementors. *Paths* refer to the



strategic alternatives available to the firm; these are defined by path dependencies and technological opportunities. The organizational processes that are shaped by a firms asset positions and paths, explain the essence of the firms DC's and its competitive advantage. The competitive advantage that is accompanied by these capabilities can be attributed to the fact that firm specific assets such as values, culture and organizational experience cannot be traded in the market. This implies that distinctive competences and capabilities must be built within the firm (Teece et al., 1997). The fact that DC's cannot be bought suggests that a firm's behavior is unique and hard to replicate. Teece et al. (1997) argue that competitive advantage through competences can only generate rents if they are based on a collection of routines, skills, and complementary assets that are difficult to imitate.

Agency Theory

Agency theory is concerned with agency relationships. Two parties have an agency relationship when they cooperate and engage in an association wherein one party (the principal) delegates decisions and/or work to another (an agent) to act on its behalf (Rungtusanatham et al., 2007). The important assumptions underlying agency theory are that: Potential goal conflicts exist between principals and agents; each party acts in its own self-interest; Information asymmetry frequently exists between principals and agents; Agents are more risk averse than the principal and Efficiency is the effectiveness criterion (Ekanayake, 2004; Rungtusanatham et al., 2007). In agency relationships, typically, the principal will seek to minimize the agency costs, such as, specifying, rewarding and monitoring, and policing the agent's behavior, while the agent works towards maximizing rewards and reducing principal control (Fleisher, 1991). Efficient management of agency problems such as information acquisition (or communication), preference mismatch (or conflict of interest), effort (or moral hazard) and capability (or adverse selection), mainly associated with the agent (Fleisher, 1991), is also imperative to any principal-agent relationship.

In a procurement and supply chain relationship the buying firm acts like a principal that delegates the authority of production and/or services to the supplier, the supplier being the agent, so both parties are engaged in an agency relationship (Zsidisin & Ellram, 2003). Similarly, in a manufacturing organization the entity could be either the principal or the agent depending on whether it is buying from the supplier or selling to a market intermediary. Therefore, the management of manufacturing entities need to employ aspects of the agency relationship and the agency theory to the daily operations. Along with the delegation of production and services, the responsibility of maintaining satisfactory quality of the supplied products and services is also delegated to suppliers, so buying firms need to ensure that suppliers provide products and/or services that conform to the quality requirements stipulated in the supply contracts.

Procurement Capabilities

Procurement is the acquisition of goods and services with an aim of satisfying individual and organizational needs. Procurement has been designated as a critical activity by academics and top managers at manufacturers such as Honda of America (Fitzgerald, 1995). This function determines how much to buy, the supplier(s) chosen, the level of quality delivered, the price



paid, and when and where the goods will be presented. Procurement has played a fundamental role in organization's management by being responsible for purchasing specific resources from the external part of the enterprise required by internal operations. In the literature, procurement and purchasing are sometimes discussed as interchangeable terms; however, there are authors (Lysons & Farrington, 2006; Miemczyk et al., 2012) who distinguish procurement as an evolution of purchasing which was fundamentally focused on cost-reduction in the past. Consequently, procurement is no longer considered a simple business function accountable for planning, implementing, evaluating and controlling purchase decisions (Szwejczewski et al., 2005; Paulraj & Chen, 2007); it also encompasses the management of resources and suppliers (Lindgreen et al., 2013).

Procurement has enlarged its scope to achieve a competitive advantage in the current volatile market. In doing so, it seeks to align and synchronize internal requirements to external resources so as to reach the company's target (Chicksand et al., 2012). In this context, authors such as Castaldi et al. (2011) define procurement as a boundary spanning function, which looks at both sides of the extended enterprise to find good and reasonable solutions for them (Lindgreen et al., 2013). The procurement function provides information to other functions and internal customers taking responsibility to supply procurement with their needs (Szwejczewski et al., 2005). Thus, cross-functional integration between procurement and other functions is fundamental to increase visibility of the flows and, consequently, allow for more reliable decision making from managers (Chiang et al., 2012). Externally, procurement is responsible for product or service cost, timeframes of delivery, product quality and general supply decisions, such as supplier selection and supplier relationship (Szwejczewski et al., 2005; Castaldi et al., 2011).

Procurement capabilities refer to the attributes, abilities, organizational processes, knowledge, and skills in the procurement function that allow a firm to achieve superior performance and sustained competitive advantage over competitors. The procurement capabilities have become widely recognized as an important function, responsible for increasing competitiveness within an unstable environment (Lawson et al., 2009), influencing positively the organization profitability (Alinaghian et al., 2011) and contributing as much as other functions to business continuity (Ellegaard & Koch, 2012). It is, therefore, evident that procurement plays a fundamental role in any organization. By doing so, this function is capable of managing relevant internal and external organizational issues which may help improve organizational performance.

Firm Performance

There are various definitions of performance such as: the ongoing monitoring and reporting of program accomplishments, particularly progress towards target goals which is conducted by program or agency management (Nadkarni & Narayanan 2007). Malina and Selto (2004) defined performance as a set of tools that are developed for making better decisions within an organization. Firm performance refers to how well an organization achieves its market-oriented goals as well as its financial goals. Two other aspects must be considered when attempting to define performance: its time frame and its reference point. It is possible to differentiate



between past and future performance; past superior performance does not guarantee that it will remain superior in the future (Carneiro, 2005). Another issue related to time is the duration of the interval (short, medium or long term) considered.

Firm performance has a direct influence on the stakeholders since they possess ownership and control of the entity; therefore, it is prudent to consider the stakeholders approach in defining and understanding firm performance. The stakeholder theory offers a social perspective to the objectives of the firm and, to an extent, conflicts with the economic view of value maximization. The use of stakeholders' satisfaction as firm performance was also adopted by a large number of different authors: (Richard et al., 2009). Besides offering a way to decide what performance is in a comprehensive way, the use of this theory allows one to resolve the issue of differentiating between performance antecedents and outcomes. Performance measures assess the satisfaction of at least one group of stakeholders. This conceptualization of firm performance is applicable across different companies, as remarked by Carneiro, Silva, Rocha, & Dib (2007), allowing one to differentiate between high and low performers in the eyes of each stakeholder.

Superior financial performance is a way to satisfy investors and can be represented by profitability, growth and market value (Cho & Pucik, 2005). These three aspects complement each other. Profitability measures a firm's past ability to generate returns (Glick et al., 2005). Growth demonstrates a firm's past ability to increase its size. Increasing size, even at the same profitability level, will increase its absolute profit and cash generation. Larger size also can bring economies of scale and market power, leading to enhanced future profitability. Market value represents the external assessment and expectation of firms' future performance. It should have a correlation with historical profitability and growth levels, but also incorporate future expectations of market changes and competitive moves.

Customer and employee satisfaction are two further aspects to consider. Customers want companies to provide them with goods and services that match their expectations (Fornell, Johnson, Anderson, Cha, & Bryant, 1996). To do that, companies must understand their needs, avoid defects and improve the perceived quality and value added by their offerings. Customer satisfaction increases the willingness-to-pay and thus the value created by a company (Barney & Clark, 2007). Employees' satisfaction is related to investments in human resources practices. This group tends to value clearly defined job descriptions, investment in training, career plans and good bonus policies (Harter, Schmidt, & Hayes, 2002). The satisfaction of these stakeholders, translates itself into a firm's ability to attract and retain employees and lower turnover rates.

According to Ganeshkumar and Nambirajan (2013) firm performance can be measured by the following factors: Market share, Sales growth, Profit margin, Overall product quality, Overall competitive position, Average selling price, Return on investment and the Return on sales. The approach in measuring firm performance can be divided into two categories which are financial measures and non-financial measures. Alternative, firm performance can be measured by financial measures and strategic measures. Non-financial measures include aspects such as customer satisfaction, employee satisfaction, environmental performance, social performance,



efficiency, effectiveness and relevance. In line with the above literature, financial measures and non-financial measures will be adopted to measure organizational performance in this study.

RESEARCH METHODOLOGY

The research adopted a cross functional design using both quantitative and qualitative approaches. The population of interest for this study was 680 manufacturing firms within Nairobi and its environs. A sample of 69 manufacturing entities was randomly selected to participate in this study. Both primary and secondary data was used for the study. Primary data was collected using questionnaires covering on the influence of procurement capabilities on firm performance. Descriptive and inferential statistics was used aided by Statistical Packages for Social Sciences version 24 to compute the response. Secondary data consisted of publications and literature related to procurement and supply chain management.

RESEARCH FINDINGS AND DISCUSSION

Response Rate

Orodho,(2003) defines response rate as the extent to which the final data sets includes all sample members and is calculated as the number of respondents with whom interviews are completed and divided by the total number of respondents in the entire sample including non-respondents. The researcher distributed a total of 69 questionnaires. Out of the 69 questionnaires, 59 were filled and returned, representing a 86% return rate as shown in table 4.1 which was a good representation and sufficient to make generalizations. This response rate confirms to Mugenda (2008) stipulation that a response rate of 50% is adequate for analysis; a rate of 60% is good and a response rate of 70% and over is excellent.

Procurement Capabilities

Respondents were asked different questions with an aim to establish the influence of procurement capabilities on firm performance of a manufacturing entity in Kenya. Their responses were rated on a 5 points likert-scale in which they either stated Not at all, small extent, moderate extent, large extent and very large extent. Thus, in this study the scale of not all and small extent meant disagree while large and very large extent meant agreed. The results were, expressed as percentages, as shown in the table below.



Procurement Capabilities	NAT (%)	SE (%)	ME (%)	LE (%)	VLE (%)	Mean	Std. Deviation
Cost efficiency of procurement influences our firms performance	5	19	24	33	19	3.41	1.16
Cost effectiveness of procurement	3	10	33	36	17	3.53	1.01
The Sourcing Strategy in place affects our organization performance	7	10	27	34	22	3.54	1.15
Ability to undertake Supplier management influences our performance	5	15	20	39	20	3.54	1.13

Key: NAT-Not at all; SE-Small Extent; ME- Moderate Extent; LE-large Extent; VLE- Very Large Extent

The respondents were asked whether the cost efficiency of procurement influence their firms performance, 33% of the responded indicated that cost efficiency of procurement influences the firm's performance to a large extent, 19% of the respondents indicated that cost efficiency of procurement influences the firms performance. Therefore, majority (52%) of the respondents agreed that cost efficiency influences firm performance. however, 24% of the respondents indicated that cost efficiency influences the firm's performance to a moderate extent. In particular, 19% and 5% of the respondents indicated that cost efficiency influences the firm's performance to a small extent and not at all respectively. According to the respondents, cost effectiveness of procurement affects firm performance. More specifically, 36% and 17% of the respondents either indicated to large extent and a very large extent.

The respondents were asked whether the sourcing strategy in place affects their organization's performance, 34% said that the sourcing strategy in place influences the organization's performance to a large extent, 22% of the respondents indicated that the sourcing strategy in place influences the firm's performance and 27% suggested that the sourcing strategy influences the firm's performance to a moderate extent. When probed on the influence of supplier management on firm performance, 39% indicated that the ability to undertake supplier management influences the performance to a large extent, 20% indicated that ability to undertake supplier management influences the performance to a very large extent. Therefore, majority (59%) of the respondents agreed that the ability to undertake supplier management influences firm performance.

In general, the respondents indicated that procurement capabilities influence the performance of manufacturing firms. These findings are supported by Koester and Rash, (2005) who found out that there are significantly benefits to be gained in the area of procurement with regards to supply chain management and organizational performance. In addition, the findings are



supported by Lawson et al., (2009), Alinaghian et al., (2011) and Ellegaard & Koch, (2012) who found out that procurement capabilities have become widely recognized as an important function, responsible for increasing competitiveness, influencing positively the organization performance and contributing as much as other functions to business continuity.

Test of hypothesis

The researcher conducted regression analysis so as to establish the influence of procurement capabilities on firm performance of manufacturing entities in Kenya. The hypothesis tested was:

H₀ There is no significant correlation between procurement capabilities and firm performance of manufacturing entities in Kenya.

The linear regression model shows R^2 = 0.427 which means that 42.7 percent change of performance of the manufacturing entities in Kenya can be explained by a unit change of procurement capabilities. The result is shown in the table below.

Model Summary of procurement capabilities

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.661ª	.436	.427	.71354		

a. Predictors: (Constant), Procurement capabilities

Out of the results there is an indication that one unit change in procurement capabilities translates to 42.7 percent change in performance of manufacturing entities in Kenya. Therefore, the procurement capabilities have an influence on how manufacturing entities perform. These findings concur with Koester and Rash, (2005) who found out that there are significantly greater benefits to be gained in the area of procurement with regards to supply chain management and organizational performance

Further test on ANOVA shows that the significance of the F-statistic 0.00 is less than 0.05 as indicated in the table below. This implies that there is a positive significant relationship between procurement capabilities and firm performance.

ANOVA of procurement capabilities

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.477	1	22.477	44.146	.000 ^b
	Residual	29.021	57	.509		
	Total	51.498	58			

a. Dependent Variable: Firm performance

b. Predictors: (Constant), Procurement capabilities



Further test on the beta coefficients of the resulting model, the constant α = 0.238, if the independent variable of procurement capabilities is held constant then there will be a positive performance of the manufacturing entity in Kenya by 0.238., The regression coefficient for procurement capabilities was positive and significant (β = 0.617) with a t-value=6.644 (p-value<0.001). As shown in the table below.

Coefficients of procurement capabilities

Model			Unstandardized Coefficients		t	Sig.
		В	Std. Error	Beta		
1	(Constant)	.238	.093		2.559	.013
	Procurement capabilities	.617	.093	.661	6.644	.000

a. Dependent Variable: Firm performance

This implies that for every 1 unit increase in procurement capabilities, performance of the manufacturing entities in Kenya is predicted to increase by 0.6.17 units and therefore H_0 is accepted. This result revealed that procurement capabilities contributed positively towards the performance of organizations.

CONCLUSION AND RECOMMENDATIONS

Based on the results of the study, it could be concluded that procurement capabilities had a positive significant influence on the firm performance of manufacturing entities in Kenya. The study found out that there was a positive significant linear relationship between procurement capabilities and firm performance of manufacturing entities in Kenya. Procurement capabilities influences the firm performance in that procurement is a key driver of the supply chain, therefore proficiency in procurement would result in enhanced performance of the entire supply chain thus enhanced organizational performance. From the study finds, it could be concluded that manufacturing firms in Kenya strive to enhance their procurement capabilities by ensuring cost efficiency of procurement, ensuring cost effectiveness of procurement, strategic sourcing and undertaking supplier management.

The study recommends that it would be appropriate for the management of manufacturing entities to exploit that procurement capabilities on the day to day operation with the aim of ensuring a competitive advantage over other market competitors thus attaining superior firm performance. Mastering the supply chain capabilities can lead to other operational benefits such as efficiency and effectiveness in other support function such as human resource, finance, auditing and marketing.



In addition, the study also recommends that in an attempt to enhance procurement capabilities via strategic sourcing, the management of the manufacturing entities could focus on developing strategic supplier partnership. Strategic supplier partnerships leverage the strategic and operational capabilities of individual participating organizations to help them achieve significant ongoing benefits. It emphasizes direct, long-term association and encourages mutual planning and problem solving efforts. Strategic partnerships with suppliers enable organizations to work more effectively with a few important suppliers who are willing to share responsibility for the success of the products. In the long run strategic supplier partnership could result in lean and agile procurement which in turn could enhance performance.

REFERENCES

- Alinaghian, L.S., Aghdasi, M., & Srai, J.S. (2011). Developing a refined model for purchasing and supply system transformation: benefiting from organizational change theories in purchasing development models. 20th Annual IPSERA Conference, Maastricht, 1-17.
- Barney, J., & Clark, D. N. (2007). Resource-based theory. New York: Oxford.
- Beske, P., Land, A., & Seuring, S. (2014). Sustainable supply chain management practices and dynamic capabilities in the food industry: A critical analysis of the literature. *International Journal of Production Economics*, 152(6), 131-143.
- Castaldi, C., Kate, C.T., & Braber, R. (2011). Strategic purchasing and innovation: a relational view. *Technology Analysis & Strategic Management*, *23*(9), 983-1000.
- Carneiro, J. (2005). Measurement of organizational performance: conceptual and methodological questions. In M. Gutierrez & H. Bertrand (Eds.), *Business Studies IV*. Rio de Janeiro: Mauad, 145-175.
- Carneiro, J. M. T., Silva, J. F., Rocha, A., & Dib, L. A. R. (2007). Building a better measure of business performance. *RAC-Eletrônica*, 1(2), 114-135.
- Chiang, C., Kocabasoglu-Hillmer, C., & Suresh, N. (2012). An empirical investigation of the impact of strategic sourcing and flexibility on firm's supply chain agility. *International Journal of Operations & Production Management*, 32(1), 49-78.
- Chicksand, D., Watson, G., Walker, H., Radnor, Z., & Johnston, R. (2012). Theoretical perspectives in purchasing and supply chain management: an analysis of the literature. *Supply Chain Management: An International Journal*, 17(4), 454-472.
- Cho, H., & Pucik, V. (2005). Relationship between innovativeness, quality, growth, profitability, and market value. *Strategic Management Journal*, *26*(6), 555-575.



- East African Community Secretariat. (2011). *East African Community Facts and Figures* 2010. Arusha: EAC Secretariat.
- Ekanayake, S. (2004). Agency theory, national culture and management control systems. *The Journal of American Academy of Business Cambridge*, 4(1/2), 49-54.
- Ellegaard, C., & Koch, C. (2012). The effects of low internal integration between purchasing and operations on suppliers' resource mobilization. *Journal of Purchasing & Supply Management*, 18(3), 148-158.
- Fleisher, C.S. (1991). Using an agency-based approach to analyze collaborative federated interorganizational relationships. *The Journal of Applied Behavioral Science*, *27*(1), 116-30.
- Fitzgerald, K.R. (1995). For superb supplier development Honda wins! *Purchasing*. 119(4), 32-40.
- Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & Bryant, B. E. (1996). The American customer satisfaction index: nature, purpose and findings. *Journal of Marketing*, 60(4), 7-18.
- Ganesh Kumar, C. and Nambirajan, T. (2013). Supply Chain Management Components, Competitiveness and Organisational Performance: Causal Study of Manufacturing Firms. Asia-Pacific Journal of Management Research and Innovation, 9(4) 399–412.
- Glick, W. H., Washburn, N. T., & Miller, C. C. (2005). The Myth of Firm performance. *Proceedings of the Annual Meeting of American Academy of Management*. Honolulu, Hawaii.
- Harter, J. K., Schmidt, F. L., & Hayes, T. (2002). Business-unit-level relationship between employee satisfaction: a meta-analysis. *Journal of Applied Psychology*, 87(2), 268-279.
- Helfat, C. E., Finkelstein, S., Mitchell, W., Peteraf, M., Singh, H., Teece, J. D., & Winter, S. G. (2007). *Dynamic Capabilities: Understanding Strategic Change in Organizations*. London: Blackwell.
- Kenya Association of Manufacturers (KAM). (2015). *Kenya Manufacturers & Exporters Directory*. (11th ed.), Nairobi: Kenya Association of Manufacturers
- Kenya National Bureau of Statistics (KNBS). (2016). *Economic survey 2016.* Kenya National Bureau of Statistics.
- Koester, L., & Rash, K. (2005). Building Supply Chain Capabilities in the Pharmaceutical Industry. Part 2: Winning supply chain capabilities, United Parcel Service of America.



- Kumar, S. (2008). A study of the supermarket industry and its growing logistics capabilities. International Journal of Retail & Distribution Management, 36(3), 192-211.
- Lawson, B., Cousins, P.D., Handfield, R.B., & Petersen, K.J. (2009). Strategic purchasing, supply management practices and buyer performance improvement: an empirical study of UK manufacturing organizations. *International Journal of Production Research*, 47(10), 2649-2667.
- Lindgreen, A., Vanhamme, J., Van Raaij, E.M., & Johnston, W.J. (2013). Go configure: the mix of purchasing practices to choose for your supply base. *California Management Review*, 55(2), 72-96.
- Lysons, K., & Farrington, B. (2006). *Purchasing and supply chain management*. (7th ed.). Essex, England: Pearson Education Limited.
- Nadkarni S & Narayanan V.K. (2007). Strategy frames, strategic flexibility and firm performance: The moderating role of industry velocity, *Strategic Management Journal* 28(3), 243-270.
- Malina, M. A., & Selto, F. H. (2004). Choice and change of measures in performance measurement models. *Management Accounting Research*, 15(4), 441-469.
- Miemczyk, J., Johnsen, T.E., & Macquet, M. (2012). Sustainable purchasing and supply management: a structured literature review of definitions and measures at the dyad, chain and network levels. *Supply Chain Management: An International Journal*, *17*(5), 478-496.
- Morash, E.A., Droge, C.L.M., & Vickery, S.K. (1996). Strategic logistics capabilities for competitive advantage and firm success. *Journal of Business Logistics*, 17(1), 1-22.
- Morash, E. A. (2001). Supply chain strategies, capabilities, and performance. *Transportation Journal*, 41(1), 37-54.
- Mugenda, A. (2008). *Social Science Research: Conception, Methodology and Analysis*. Nairobi: Kenya Applied Research and Training Services.
- Orodho, A.J., & Kombo, D.K. (2002). *Research methods*. Nairobi: Kenyatta University, Institute of Open learning.
- Paulraj, A., & Chen, I.J. (2007). Environmental uncertainty and strategic supply management: a resource dependence perspective and performance implications. *Journal of Supply Chain Management*, 43(3), 29-42.



- Richard, P. J., Devinney. T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance: towards methodological best practice. *Journal of Management*, 35(3), 718-804.
- Rungtusanatham, M., Rabinovich, E., Ashenbaum, B., & Wallin, C. (2007). Vendor-owned inventory management arrangements in retail: an agency theory perspective. *Journal of Business Logistics*, 28(1), 11-35.
- Szwejczewski, M., Lemke, F., & Goffin, K. (2005). Manufacturer-supplier relationships: An empirical study of German manufacturing companies. *International Journal of Operations & Production Management*, 25(9-10), 875-897.
- Teece, D. J. (2014). A dynamic capabilities-based entrepreneurial theory of the multinational enterprise. *Journal of International Business Studies*, 45(1), 8-37.
- Tybout, J.R. (2000). Manufacturing firms in developing countries: how well do they do, and why? *Journal of Economic Literature*. 38(1), 11-44.
- United Nations Industrial Development Organization Statistics (2015). World Manufacturing Production Statistics for Quarter IV, 2015. Retrieved on 17th August 2016, from www.unido.org/statistics.
- Zhu, Q., & Sarkis, J. (2006). An inter-sectional comparison of green supply chain management in China: *Drivers and practices*. 14(2-7), 472-486.
- Zsidisin, G.A., & Ellram, L.M. (2003). An agency theory investigation of supply risk management. *The Journal of Supply Chain Management*, 39(3), 15-27.