



SUPPLY CHAIN MANAGEMENT PRACTICES AND PERFORMANCE OF NON-GOVERNMENTAL ORGANIZATIONS IN HEALTH SECTOR IN NAIROBI CITY COUNTY, KENYA

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ABSTRACT

Supply chain operations are undergoing significant structural changes in today's complicated environment. Supply chain innovation aids firms in achieving more efficient and effective management methods, resulting in higher organizational performance. The general objective was to examine the effect of supply chain management practices on performance of Non-Governmental organization in Nairobi County, Kenya. The specific objectives were; to determine effect of supplier sourcing, inventory management, supplier relationship, and effect of logistics outsourcing on performance of Non-Governmental Organizations in health sector in Nairobi County, Kenya. The theories employed in the study are; Process-Based Theory, the Principal-Agent Theory, transaction cost theory, and Resource-Based View Theory. A descriptive research design was used. The target population was 307 staff from the procurement, finance, and operation departments of 15 NGOs in the health sector in Nairobi County. Yamane 1967 formula was used to sample 174 staff and the number was obtained through stratified and simple random sampling. A close ended questionnaire was used to collect data from study respondents. A pilot study was conducted with 10% of the sample size (17 staff). Reliability was testing using Cronbach's Alpha Coefficient. The data was analyzed using quantitative methods; descriptive and inferential statistics. Data will be presented in Tables. Findings show that; there is a moderate significant correlation between M&E planning and performance of NGOs in health sector ($r=0.397$, $p=0.000$), a moderate significant correlation between inventory management and performance of NGOs in health sector ($r=0.420$, $p=0.000$), a strong significant correlation between supplier relation and performance of NGOs in health sector ($r=0.538$, $p=0.000$), and a moderate significant correlation between logistics outsourcing and performance of NGOs in health sector in Nairobi County ($r=0.436$, $p=0.000$). The recommendations are; the NGO management should improve on supplier sourcing practices to ensure that only qualified suppliers are shortlisted, NGOs' should invest in technology to create an automated beneficiary and supplier management platform, and NGOs should outsource non-core logistics activities and allocate more time and resources to the core activities.

Key Words: supply chain management, supplier sourcing, inventory management, logistics outsourcing

INTRODUCTION

Supply chain operations are undergoing significant structural changes in today's complicated environment. The supply chain (SC) is a network of distributors, haulers, warehousing facilities, and suppliers who work together to sell, deliver, and create a product (Lambert, 2010). supply chain management (SCM) involves controlling products, information, and funds as they flow from the supplier to the organization/nosiness (Christopher, 2016). SCM has resulted to value creation through integrating and cording supply, demand, and relationships that enhances organization performance both in the public and retail sector.

At least 90% of total technological spending in the world is spent on supply chains (Lovelock, 2014). In today's complex supply networks, information technology is seen as a need for effective supply chain control. Famiyeh (2018) found that NGOs have been faulted for failure to change people's live. NGOs funding from donors have been reducing drastically due to poor supply chain management practices . According to Forrester Research, U.S. manufacturers are progressively depending on information systems to enhances SCM (Radjou, 2015). Organizations all over the world have are heavily investing in supply chain management resulting to improved performance. Walmart, for example, has invested in IT to create a sophisticated and highly computerized logistics distribution system that allows for information sharing and efficient distribution in every channel (Li-xia et al., 2020).

Supply Chain Management aims to support timely order receipt and delivery while reducing internal and external lead times (Olamade, 2018). Supply chain managers in Ghana have begun to compete against one another by using technology to develop brand equity, loyalty, and awareness. The managers are aiming to grow market share and make customers happy. The supply chain sector has been altered as a result of advancements in modern technologies (Kwaku, 2016). Lambert (2016) noted that reinforcing supply chain practices in organizations enhances customer satisfaction and improved organization performance. NGOs supply chain pay an essential role of planning and managing the NGO events, sourcing, procurement ,and logistics. Other supply chain practices in NGO sector in South Africa include collaborating and coordinating with donors, suppliers, beneficiaries, and other seasonal service providers.

According to Gacuru and Kabare (2015), greater coordination between the different activities along the supply chain has enabled cost reduction in logistics operations as a result of information sharing via ICT systems. NGOs are guided by donor requirements, procurement regulations, and national legislation while adopting the SCM process. During an emergency, however, these standards are not adhered to effectively because managers in charge of logistics during rescue missions are sometimes overburdened in their efforts to supply goods and services in the quickest time. Failing to do this may lead to deaths and loss of valuable resources. In most situations, organizations do not fulfill the set goals which causes issues within the organization, particularly with donors, who may at times suspend or cancel funds.

Statement of the Problem

NGOs play an important role in economic development, facilitates trade, community particulary for health projects through accessibility of most needed services by citizens. While some NGOs provide access to credit at low interest rates, other non-governmental organizations (NGOs) provide possibilities for people to start businesses or farms that will help them pay off their debt over time (Metta, 2020). In the 2018/2019 fiscal year, 1,026 non-governmental organizations (NGOs) contributed a total of KES 34.9 billion to the government's 'Big Four' agenda through humanitarian programs. Health-related initiatives received Kshs. 30.8 billion,

food security and nutrition received Kshs. 3.8 billion, manufacturing received Kshs. 352.6 million, and housing and settlement received Kshs. 19.6 million from NGOs. However, out of Kshs. 140 billion from donors, Kshs. 25.7 billion cannot be traced (NGO Coordination Board's, 2020).

NGOs spend almost 80% of their operations on logistics and Supply Chain Management but greatest challenges for supply chain management (SCM) in NGOs is managing costs while meeting beneficiaries' demands. NGO Council of Kenya has noted that majority of non-governmental are not able to reliably source for funds, control expenses, and comply to suitable accounting and procurement practices for their sustainability.

Non-Governmental Organizations in Kenya have long struggled with critical matters concerning supplier management, with cases of funds embezzlement reported hence affecting service delivery in terms of supply chain management efficiency and effectiveness. NGO staff have also been accused of resources misappropriation and using organization's resources for personal gain (World Bank, 2018). Although they are not profit-oriented, adoption of suitable procurement practices contribute to 76% improvement in operations efficiency (Awuor, 2019).

There exist various studies globally and in Kenya too with regards to supply chain and organization performance. Lie, Ragu-Nathan, and Rao (2016) found that SCM practices enhances organization performance and competitiveness. According to Kwadwo's (2015) study on the impact of efficient inventory management on manufacturing company profitability in Ghana, inventory management geared toward raw materials has a positive and significant impact on manufacturing firm profitability. Tangus (2015) study on effect of supplier relationship management on performance of manufacturing firms in Kisumu County showed an increase in supplier information sharing caused an increase in firm performance. Despite substantial studies concerning effect of supply chain innovation on organization performance in Kenya, there is study limitation in NGOs in Nairobi County, Kenya. This study sought to bridge this research gap by investigating effect of supply chain management on performance of NGOs in the health sector in Nairobi County, Kenya.

Objectives of the Study

- i. To determine effect of supplier sourcing on performance of NGOs in health sector in Nairobi City County, Kenya.
- ii. To examine effect of inventory management on performance of NGOs in health sector in Nairobi City County, Kenya.
- iii. To assess effect of supplier relationship on performance of NGOs in health sector in Nairobi City County, Kenya.
- iv. To establish effect of logistics outsourcing on performance of NGOs in health sector in Nairobi City County, Kenya.

LITERATURE REVIEW

Theoretical Review

According to Davenport and Beers (1995), a business process is a planned and measurable collection of actions with stated business results for consumers. A more detailed definition of business process management is explained by Zairi (1997), including an organized strategy to analyze and continuously improve essential operations, including communications, promotions, manufacturing, and other significant components of a firm's operations. With a process theory, the goal of each process is to satisfy the needs of the consumers through efficient process management. Notably, success may be seen in integrating business operations

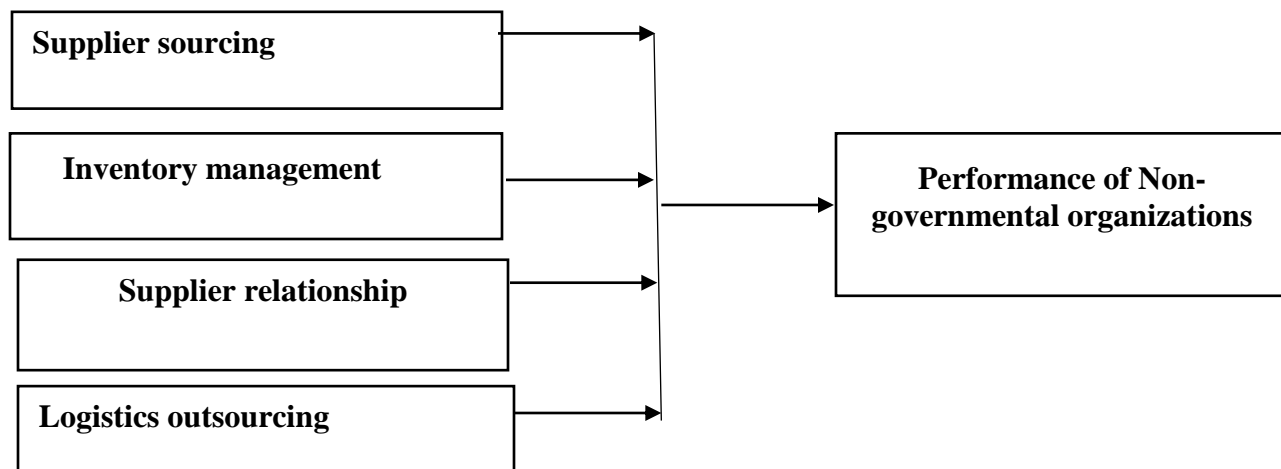
throughout supply chain organizations (Hammer, 2001). Effectively managing corporate practices through process integration inside and across supply chain participants will increase the efficiency and effectiveness of transaction and relationship structures (Lambert 2008).

The primary goal of principal-agent theory is to optimize contractual interactions between the principal and the agent. According to Eisenhardt (1989), the implicit assumptions must be explored, including the fact that agents operate as beneficiaries, that actors have limited rationality, and that asymmetric information occurs between agents and the principal. The information asymmetries enable actors to exploit their discretion power to optimize their gain. To overcome this exploitation, the principal seeks to influence the agent's behavior through appropriate incentive contracts. Practically, agreements between organizational entities are mostly based on a contractual exchange connection against the division of labor and specialization. It is common that business entities that relate to management function as benefit maximizers. However, if done in an uncoordinated manner, each function seeks to maximize its objectives and benefit, even if this is opposed to the defined business goals. Contrary, an agency theory establishes a broad context of awareness and may thus be utilized to align goals.

According to Williamson(1979), transaction cost theory focuses on organizational borders, seeking to analyze the activities that should occur within the market and those bound within the business. Transaction cost theory, specifically, anticipates when a market, hierarchy, or blends such as coalitions would be employed for management. Williamson, a Nobel Prize winner in economics, viewed a transaction broadly as exchanging goods or services across boundaries. He proposed that internalizing the transaction process within one hierarchy was effective when costs remained high. However, purchasing a product or service from the market was preferable only when transaction costs turned low.

The theory was propounded by Barney (1991) and it states that organizations are profit-oriented entities functioning in distinct markets that are predictable and advancing towards an equilibrium (Barney, 1991). According to Shalakha (2015), identifying and owning internal strategic resources adds to an organization's capacity to develop and sustain a competitive advantage. Using the Resource-Based View (RBV) Theory, a resource is regarded as strategic if it fits particular features such as being unique, non-substitutable, valuable, and easily imitated to contribute to the organization's improved supply chain performance. Given the external shifting conditions that a company experiences in a competitive business environment, resources must be efficiently managed and utilized (Lippman & Rumelt, 2003).

Conceptual Framework



RESEARCH METHODOLOGY

The researcher employed a descriptive research design. Descriptive research aims at determining and reporting the current state of things, as well as to assist the study in observing, analyzing, and drawing trustworthy conclusions. A descriptive research depicts an accurate profile of people, events, or circumstances. The design enabled the researcher to find out whether supply chain practices enhances performance on NGOs.

RESEARCH FINDINGS AND DISCUSSIONS

Descriptive Analysis of the Variables of the Study

Supplier Sourcing

The first objective sought to determine effect of supplier sourcing on performance of NGOs in health sector in Nairobi County, Kenya. The staff were requested to mark on the level of agreement with listed statements regarding supplier sourcing. Findings are presented in Table 1.

Majority of the staff concur that; the organization considers the supplier's prior performance while working with other organizations (m= 4.22), considers the suppliers who offers quality products at competitive prices (m= 4.03), the organization emphasis on mutual benefits in the sourcing process of its suppliers, in the sourcing process of its suppliers, organization emphasizes mutual benefits and plan synchronization (m= 3.78), selects suppliers with similar goals and values as the organization (m= 3.70), and the NGOs have automated the supplier sourcing process (m= 3.62). The respondents disagreed that the suppliers provide technical know-how to the organization (m= 1.88). This implies that the NGOs prioritize suppliers with previous record of quality supply of goods and services. This may help to reduce risks related to supply of low quality products and services. Automation of supplier sourcing would enable the organizations to source from multiple suppliers offering quality goods and services at favorable prices. Sourcing from many suppliers also enhances competitive tendering, responsibility, and impartiality in the tendering process. It also allows organizations to have access to specialized supplies that fulfill beneficiaries' needs. Multiple sourcing gives a buyer an opportunity to buy at reduces prices. Findings concurs with Ojwang et al. (2018) that multiple sourcing promotes the acquisition of high-quality commodities, saves time, and lowers costs.

Table 1: Supplier Sourcing and NGO Performance

Statements	SD		D		N		A		SA		M
	F	%	F	%	F	%	F	%	F	%	
Organization has automated the supplier sourcing process	16	12.8	6	4.8	12	9.6	66	52.8	25	20.0	3.62
Organization considers the suppliers who offers quality products at competitive prices	8	6.4	17	13.6	7	5.6	24	19.2	69	55.2	4.03
The organization emphasis on mutual benefits in the sourcing process of its suppliers	6	4.8	18	14.4	5	4.0	64	51.2	32	25.6	3.78
The organization checks the supplier's prior performance while working with other organizations.	6	4.8	10	8.0	9	7.2	26	20.8	74	59.2	4.22
Suppliers who share our organization's goals and values are chosen.	12	9.6	8	6.4	8	6.4	74	59.2	23	18.4	3.70
Suppliers chosen bring technical expertise to our organization	68	54.4	26	20.8	14	11.2	12	9.6	5	4.0	1.88

Inventory Management

The second objective focused on effect of inventory management on performance of NGOs in health sector in Nairobi County, Kenya. The staff were requested to mark on the level of agreement with listed statements regarding inventory management. Results are presented in Table 2

Results reveal that the staff concur that; technology helps to identify stocks outs and to restock (m= 4.28), the organization generates inventory reports on time (m= 4.12), the effective inventory management helps to save ordering stock costs (m= 3.93), the procurement managers have enhanced collaboration of inventory management decisions between departments (m= 3.77), the organization has an effective inventory management system (m= 3.74), and the organization use Just in Time to improve reliability of suppliers (m= 3.66). This is an indication that the NGOs have taken various initiatives with respect to managing inventory. Inventory management is key to performance of supply chain activities. Management has also considered the perquisite to appropriately fulfill orders, effectively plan and order inventory, and improve beneficiary and donor satisfaction. Findings are in agreement with Onchoke and Wanyoike (2016) that the NGOs are willing to implement inventory management systems to improve service delivery to the beneficiaries.

Table 2: Inventory Management and NGO Performance

Statements	SD		D		N		A		SA		M
	F	%	F	%	F	%	F	%	F	%	
The organization has an effective inventory management system	8	6.4	12	9.6	6	4.8	78	62.4	21	16.8	3.74
Organization generates inventory reports on time	4	3.2	11	8.8	8	6.4	45	36.0	57	45.6	4.12
Technology helps to recognize stock outs and to replenish stock in display	4	3.2	8	6.4	11	8.8	28	22.4	74	59.2	4.28
Effective inventory management helps to save ordering stock costs	7	5.6	12	9.6	9	7.2	52	41.6	45	36.0	3.93
The procurement managers have improved coordination of inventory management decisions	8	6.4	12	9.6	10	8.0	66	52.8	29	23.2	3.77
The company use Just In Time to improve reliability of suppliers	11	8.8	11	8.8	12	9.6	66	52.8	25	20.0	3.66

Supplier Relationship

The third objective assessed effect of supplier relationship on performance of NGOs in health sector in Nairobi County, Kenya. The staff were requested to mark on the level of agreement with listed statements regarding supplier relationship. Results are shown in Table 4.5.

Findings reveal that the NGO staff agreed that; the organization maintains a database for all its suppliers (m= 4.14), has an enhanced relations with various suppliers (m= 3.92), regularly reviews risks associated with existing suppliers with respect to quality standards (m= 3.69), and integrate suppliers in the supply chain (m= 3.34). However, majority of the NGOs do not communicate with suppliers in system upgrade (m= 2.57), and the organizations do not have an integrated information sharing system (m= 2.39). This is an indication that the NGOs are making efforts to share information with suppliers. Technology has made it easier to share information globally with various suppliers which saves organizations' operation costs. This would in turn enable the suppliers to share information regarding market trends and forecast

costs of various products. Findings concur with a study Abdallah (2015) who found that NGOs constantly share information with its suppliers to ensure suppliers adhere to quality requirements. In addition, Li, Ragu-Nathan, and Rao (2016) found that supplier relationship contributed to competitive advantage and supply of fairly priced and quality products delivered on time.

Table 3 Supplier Relationship and NGO Performance

Statements	SD		D		N		A		SA		M
	F	%	F	%	F	%	F	%	F	%	
The organization communicates with suppliers in system upgrade	29	23.2	68	54.4	6	4.8	8	6.4	14	11.2	2.57
The organization regularly reviews risks associated with existing suppliers	10	8.0	17	13.6	8	6.4	57	45.6	33	26.4	3.69
Suppliers are integrated in the supply chain	20	16.0	5	4.0	7	5.6	20	16.0	73	58.4	3.34
The organization maintains a database for all its suppliers	7	5.6	12	9.6	8	6.4	28	22.4	70	56.0	4.14
The organization has an enhanced relations with various suppliers	12	9.6	16	12.8	8	6.4	23	18.4	66	52.2	3.92
The organization has an integrated information sharing system	75	60.0	26	20.8	12	9.6	4	3.2	8	6.4	2.39

Logistics Outsourcing

The fourth objective established effect of logistics outsourcing on performance of NGOs in health sector in Nairobi County, Kenya. The staff were requested to mark on the level of agreement with listed statements regarding logistics outsourcing. Findings are presented in Table 4

Results show that the NGO staff concur that; outsourcing warehousing enables organization to concentrate on core activities ($m= 4.35$), transport Management Software technology provides the desired custom data ($m= 4.26$), outsourcing transfers the risks of transportation operations to the logistics provider ($m= 3.89$), the organization uses JIT to enhance timely delivery of goods and services ($m= 3.72$), and outsourcing distributors provide the organization with the ideal distribution location ($m= 3.67$). Majority of the respondents however disagreed the organization uses reverse logistics ($m= 2.42$). This implies that the NGOs outsource logistics to focus on the core business which is to delivery health services to the underprivileged. Use of fleet tracking systems enhances transparency in the supply chain since the organization is able to track the movement of goods from the source to destination which enhances service deliver. Findings support Dube (2014) who found that reverse logistics is not intensively applied by NGOs. In addition, Sigala and Wakolbinger (2019) found that NGOs outsourced some activities depending on the situation at hand.

Table 4 Logistics Outsourcing and NGO Performance

Statements	SD		D		N		A		SA		M
	F	%	F	%	F	%	F	%	F	%	
The organization uses JIT to enhance timely delivery of goods and services	8	6.4	16	12.8	3	2.4	74	59.2	24	19.2	3.72
Transport Management Software technology provides the desired custom data	5	4.0	12	9.6	8	6.4	20	16.0	80	64.0	4.26
The organization use reverse logistics to minimizes supply chain costs	8	6.4	86	68.8	3	2.4	21	16.8	7	5.6	2.42
Outsourcing warehousing enables the organization to concentrate on core activities	66	52.8	26	20.8	8	6.4	14	11.2	11	8.8	4.35
Outsourcing distributors provide the organization with the ideal distribution location	4	3.2	9	7.2	6	4.8	26	20.8	80	64.0	3.67
Outsourcing transfers the risks of transportation operations to the logistics provider	6	4/8	16	12.8	8	6.4	78	62.4	17	13.6	3.89

NGO Performance

The staff were requested to indicate the level to which the agreed/disagreed with measures of NGO performance. Results are shown in Table 5.

Findings show that 41.6% of the NGO staff agreed that the beneficiaries are satisfied, 44% disagreed on efficiency in service delivery and 41.6% strongly disagreed on efficiency in funds utilization. This implies that the NGOs beneficiaries are satisfied which may be due to the fact that the NGOs aim at helping the underprivileged who may appreciate any help offered where satisfactorily or not. The NGOs are however facing challenges in funds utilization which could be due to unavailability of funds to hire professional auditors. Service delivery in the NGOs is also not satisfactorily which may be as a result of high demand of services with limited resources.

NGO Performance

Statements	SD		D		N		A		SA		M
	F	%	F	%	F	%	F	%	F	%	
Efficiency in service delivery	39	31.2	56	44.8	8	6.4	10	8.0	12	9.6	2.20
Efficiency in funds utilization	52	41.6	41	32.8	21	16.8	11	8.8	0	0	1.93
Beneficiary satisfaction	10	8.0	4	3.2	16	12.8	43	34.4	52	41.6	3.04

Correlation Analysis

To assess the relationship between the study variables, the study used the Karl Pearson's coefficient of correlation (r). Correlation was significant at <0.005 and any value >0.005 was considered insignificant. Additionally, a correlation of <0.3 shows weak correlation, 0.31-0.49 moderate correlation while >0.5 shows a strong correlation. Correlation results are shown in Table 5

Findings show; a moderate significant correlation between supplier sourcing and performance of NGOs in health sector ($r=0.397$, $p=0.000$), a moderate significant correlation between

inventory management and performance of NGOs in health sector ($r=0.420$, $p=0.000$), a strong significant correlation between supplier relationship and performance of NGOs in health sector ($r=0.538$, $p=0.000$), and a moderate significant correlation between logistics outsourcing and performance of NGOs in health sector in Nairobi County ($r=0.436$, $p=0.000$). Findings concurs with Lie, Ragu-Nathan, and Rao (2016) that supply chain management practices enhances organization performance. The study findings further support; Agunda et al. (2019) that strategic supplier management significantly influences firm performance, Mugabe (2017) a positive correlation between inventory management and firm performance, Nawaz (2020) that supplier information sharing significantly affect organization performance, and Kamanga and Ismael (2016) that outsourcing firm activities significantly affect organization performance

Correlation Coefficients

Variables		Performance	Supplier Sourcing	Inventory management	Supplier relationship	Logistics outsourcing
NGO Performance	Pearson Correlation	1				
	Sig. (2-tailed)					
Supplier Sourcing	Pearson Correlation	.397**	1			
	Sig. (2-tailed)	.000				
Inventory management	Pearson Correlation	.420**	.672	1		
	Sig. (2-tailed)	.000	.000			
Supplier relationship	Pearson Correlation	.538**	.643	.709	1	
	Sig. (2-tailed)	.000	.000	.000		
Logistics outsourcing	Pearson Correlation	.436**	.689	.829	.769	1
	Sig. (2-tailed)	.000	.000	.000	.000	

Regression Analysis

Table 4 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.743 ^a	.595	.542	0.690

Table 5 Analysis of Variance

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	39.804	4	9.951	12.570	.000
Residual	94.996	120	.792		
Total	134.800	124			

Table 6 Regression of Beta Coefficient and Significance

Model	Unstandardized		Standardized	T	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
Constant/Y Intercept	3.556	.600		5.922	.000
Supplier sourcing	.163	.098	.071	.640	.514
Inventory management	.158	.139	.060	.418	.677
Supplier relationship	.307	.106	.467	3.740	.000
Logistics outsourcing	.221	.148	.022	1.143	.005

The R squared (0.595) shows the variations in the independent variable due to variations in the dependent variables. The value of R^2 is 59.5% which shows supply chain management practices causes 59.5% variations in performance of NGOs in health sector in Nairobi County. Therefore other supply chain management practices that were not part of the study scope causes 40.5% variations in performance of NGOs in health sector in Nairobi County.

An analysis of variance was conducted to determine the relationship between supply chain management practices and performance of NGOs in health sector in Nairobi County . Results are presented in Table 6 The model was significant (p-value = 0.000) at the 0.05 level in describing the linear relationship between the study variables, as shown in Table 4.10. Furthermore, the F-statistic is greater than 1, indicating that the model is appropriate for assessing the link between the independent and dependent variables.

The regression analysis further shows how a change in every study independent variable predicts change on the dependent variable. Table 7 presents the regression coefficients. Therefore, holding all variables at a constant zero, performance of health NGOs would be at 3.556. a unit increase in supplier sourcing would cause a 0.163 increase in performance of NGOs in health sector, a unit increase in inventory management would cause a 0.158 increase in performance of NGOs in health sector, a unit increase in supplier relationship would cause a 0.307 increase in performance of NGOs in health sector, and a unit increase in logistics outsourcing would cause a 0.221 increase in performance of NGOs in health sector. According to the T statistics, supplier relationship has the most significant effect on NGO performance (3.740), followed by logistics outsourcing (1.143), supplier sourcing (0.640) and inventory management (0.418).

Conclusion

The NGOs source for different suppliers with aim of getting the supplier with fairly priced but quality products/services. Multiple sourcing allows for the attainment of corporate goals in the shortest time possible, resulting in better performance. They also do a background check of the suppliers' previous performance to prevent risks that may rise if the supplier is unreliable particularly in disaster situations that require fast and consistent supply of several humanitarian resources. Competitive tendering has allowed non-governmental organizations to meet their specialized requirements for goods and services. It also ensures that the tendering process is transparent and fair, resulting in a successful supply chain.

The NGOs have taken various initiatives with respect to managing inventory. Inventory management practices ensures that there is no stock run out which enhances effectiveness of the NGO in service delivery. Underprivileged citizens particularly in rural and slum areas depend on the services offered by NGOs since they are either free or affordable compared to the public and other private entities offering health service. Hence, effective inventory movement practices are

crucial in ensuring that the stores, warehouses for medical supplies do not run out of stock which may have devastating health effects to those who depend on the NGOs.

NGOs share information with the suppliers and keep updated data of the suppliers. Supplier relationship helps to create a strategic supplier partnership and the organization is able to make procurement plans on time since the supplier constantly update them on the market trends particularly on cost of products and quality. Communication with the suppliers could enhance timely product availability, reduce order cycle timelines, and reduce logistics expenses. Good supplier relationship creates a bond between the supplier and the buyer which is essential for order processing. It also enables both parties to learn more about the operations of each other.

Majority of the sampled NGOs have adopted technology in the logistics management specifically transport and just in time systems. Outsourcing enables an organization to focus on core business which is to offer health services to people who look upon them. Outsourcing also enables an organization to accurately budget for logistics since they pay a one-time fee to the logistics firm. If this was not the case, then the organization would have to deal with fluctuating fuel costs and other unplanned for overhead costs while transporting products from the source to the destination. Outsourcing warehouses also help to save operational costs since the organization does not have to rent/ lease warehouse and the costs related to security personnel assigned to the warehouse.

Recommendations

The NGO management should improve on supplier sourcing practices to ensure that only qualified suppliers are shortlisted. Ethics should be strictly adhered to ensure that there is no conflict of interest while sourcing for suppliers. The tendering process should also be transparent to ensure fairness in shortlist suppliers. This will ensure that all the suppliers are selected on merit hence higher probability of supplying quality products and services.

NGOs should update the vendor list frequently which could be done through market research and continuously adding strategic suppliers entering the market on the vendor list which could make the process of supplier sourcing easier and less time consuming.

REFERENCES

- Abdallah N. A. (2015). Effect of supplier relationship management on humanitarian supply chain performance at the World Food Programme in Somalia. Department of Management Science, School of Business, University of Nairobi-Kenya. *European Scientific Journal*, 13 (16).
- Aboneh, H. (2017). *Effect of Supply Chain Management Practices on Organizational Performance in Pharmaceutical Companies in Addis Ababa*. Unpublished PhD. Thesis, St. Mary's University
- Agburu, J., Anza, N. & Iyortsuun, S. (2017). Effect of outsourcing strategies on the performance of small and medium scale enterprises (SMEs). *Journal of Global Entrepreneurship Research*, 10(1) 20-96
- Agunda, J. O., Murrende, S., & Juma, D. (2019). Influence of strategic supplier management on supply chain performance of non-governmental organization: A case study of one acre fund, Kenya. *The Strategic Journal of Business & Change Management*, 6 (4), 709 – 724.
- Ali, M., Babai, Z., Boylan, J. & Syntetos, A. (2017). Supply chain forecasting when information is not shared. *European Journal of Operational Research* 260, 984-994
- Atnafu, D., Balda, A. & Shaofeng Liu (Ed.). (2018). The impact of inventory management practice on firms' competitiveness and organizational performance: Empirical evidence

- from micro and small enterprises in Ethiopia. *Cogent Business & Management*, Taylor & Francis 5 (1).
- Barney, J. B. (2012). *Gaining and Sustaining Competitive Advantage* (2nd ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Becerra-Fernandez, I., & Sabherwal, R. (2015). *Knowledge management: Systems and processes*.
- Chan, F.T. (2014). Performance measurement in a supply chain. *The international journal of advanced manufacturing technology*, 21(7), 534-548
- Davenport, T. H. & Michael C. B. (1995). Managing Information about Processes. *Journal of Management Information Systems*, 12(1)57-80.
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1)57-74.
- Famiyeh, S. (2018). Green supply chain management initiatives and operational competitive performance. *Benchmarking: An International Journal*, 25(2)9-23
- Gacuru, W. & Kabare, K. (2015). Factors affecting efficiency in logistics performance of trading and distribution firms based in Jomo Kenyatta International Airport area. *International Academic Journal of Procurement and Supply Chain Management*, 1(5), 50-71.
- Munovi, N., & Kongere, T. (2015). *Logistics Outsourcing and Performance of Humanitarian Organizations in Kenya*. Unpublished Masters thesis, University of Nairobi
- Musau, G. (2018). *Supply Chain Determinants of Organizational Performance among Textile Manufacturing Firms in Kenya*. Unpublished PhD Thesis, Jomo Kenyatta University of Agriculture and Technology.
- Nawaz, W (2020). *The Impact of Supply Chain Management Practices On Organizational Performance Of Textile Industry*. Unpublished Masters' Thesis, Bahria University
- Ngoto, A. N., & Kagiri, A. (2016). Factors Affecting Supply Chain Management Performance in International NGOs. *International Academic Journal of Procurement and Supply Chain Management*, 2(1), 37-49
- Odongo, W. & Dora, M. (2017). Role of power in supply chain performance: evidence from agribusiness SMEs in Uganda. *Journal of Agribusiness in Developing and Emerging Economies*, 7(3), 89-121
- Oduor, A. (2017). *Effect Of Supplier Sourcing Strategies On Organizational Performance In South Nyanza Sugar Company Limited Migori County, Kenya*. Unpublished Masters' Thesis, Maseno University
- Ojwang, B., Willis, M. & Alala, O.B. (2018). *Effect of sourcing on supplier performance in nongovernmental organizations in Kisumu town, Kenya*. *International Journal of Economics, Commerce and Management*. United Kingdom, 5(4).
- Pires, L. (2014). Multi-Criteria Decision Making Approaches For Supplier Evaluation And Selection: A Literature Review. *European Journal of Operational Research*, 202(1)16-24.