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BUYER SUPPLIER RELATIONSHIP MANAGEMENT AND PERFORMANCE OF MEDICAL DEVICE MANUFACTURERS IN NAIROBI CITY COUNTY, KENYA

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ABSTRACT

The relationship between the buyer and the supplier forms an integral part in purchasing and supplies management not only in big corporate organizations but also in small and medium organizations across all sectors. Nevertheless, there is no best way of management for it depends with the management and the people being managed besides the organization's operating environment which includes but not limited to evolving laws and policies, economic changes, knowledge and expertise of employees from both supplying and buying organizations among other factors. The end result was to achieve the best decision for the benefit of the organization or organizations in line with its or their corporate strategic objectives. The general objective of the study was to determine the effect of buyer supplier partnership on Performance of medical device manufacturers in Nairobi City County, Kenya. The specific objectives were to assess the effect of supplier selection on Performance of medical device manufacturers in Nairobi City County, Kenya and to examine the effect of supplier development on Performance of medical device supply firms in Nairobi City County, Kenya. The target population was 60 employees of the registered manufacturing firms in Nairobi City County, Kenya. The study adopted stratified sampling design. Using stratified sampling design, a sample size of 60 respondents was taken. The study collected primary data through the use of structured questionnaires as data collecting instrument. The validity of the instrument was assessed using expert opinion to determine the reliability of the data- collecting instrument. Inferential and descriptive statistical techniques were used to analyze quantitative data. The effect of the independent factors on the dependent variable was assessed using a multiple regression analysis model that was presented in the form of tables, graphs, frequencies, and percentages. The study ensured that informed consent, confidentiality and anonymity are observed in the data collection and processing. The findings showed that the adjusted R^2 was 0. .621 signifying that 62.1% of the variations in performance of medical device manufacturers was explained by supplier relationship management prospects, (Buyer-supplier partnership, Supplier selection). The study therefore concluded that Buyer-supplier partnership and Supplier selection has significance influence on performance of medical device manufacturers. The study thus recommends that the management to put more emphasis on Buyer-supplier partnership and Supplier selection since they have a great influence on performance of medical device manufacturers.

Key Words: Buyer Supplier Relationship Management, Buyer Supplier Partnership, Supplier Selection

Background of the study

The buyer-supplier relationships have recently become the core of economic activities in any particular state and a critical point in attainment of the set goals and targets in organizations (Terpend, et al. 2008). The amount of profit generated by any particular firm is directly proportional to how the company handles its suppliers (Cox, 2011). Particularly, good supplier to buyer relationships acts as a driver to both customer and shareholder value (O'Toole & Donaldson, 2002).

In order to win and retain the business both buyer and supplier must work together as a team. Care should be taken while choosing the suppliers to make sure that they have required capabilities and resources to fulfil the needs. A successful relationship is one in which there is mutual sharing of risk and rewards, clear understanding of each other's roles and responsibilities, high level of commitment and trust, long-term orientation, mutual information sharing, a sincere desire to win and responsiveness towards each other's and end user's needs (Lemke *et al*., 2002).

In a contractual business deal, suppliers are expected to offer quality products at competitive prices, deliver excellent service, and respond to emergencies and special requests when treated with respect, honesty, and fairness. Additionally, the public image of both the buyer and supplier, as well as the performance of all members of the supply chain, play a crucial role in enhancing communication and information sharing, ultimately improving overall supply chain and individual performances (Cannon *et al*., 2011),. Effective supply chain integration relies heavily on buyer-supplier relationships. Building strong relationships throughout the supply chain is crucial for business success. The manufacturing industry is highly volatile due to unpredictable market trends and fluctuating customer demand. Additionally, environmental diversity highlights uncertainty in the global business environment. To address market volatility and diversity, retailers should establish flexible relationships with multiple channel partners to meet unexpected demands and reduce reliance on a single vendor (O'Brien, 2014).

In the current competitive business environment, companies are facing growing demands from customers to strengthen the connection between buyers and suppliers in order to enhance customer satisfaction. The importance of improving this relationship and meeting customer needs efficiently is considered essential for gaining a competitive advantage and remaining viable. However, many supply chains today consist of complex systems of production and distribution centers located in various regions, linking suppliers from diverse locations worldwide, such as Africa and other continents (O'Brien, 2014).

Organizational performance is the ultimate success of a company, which involves setting specific goals to be achieved within a certain timeframe, as well as achieving efficiency and effectiveness (Griffin, 2010). It can also be defined as a company's ability to reach objectives such as high profits, quality products, a significant market share, positive financial outcomes, and sustainability within a set period using appropriate strategies (Koontz and Donnell, 2003). Assessing organizational performance helps determine how well a company is performing in terms of profitability, market share, and product quality compared to other businesses in the same industry. Ultimately, it reflects the productivity of a company's members in terms of revenue, profit, growth, and the overall development and expansion of the organization.

Statement of the Problem

Buyer-supplier partnership consists one of the key interests in enhancing the performance of organizations especially in the medical device manufacturing. This is attributed to the fact that enhancements in the procurement operations will ultimately cause a significant improvement in the performance. As such, the supplier to buyer relationship proves essential if this were to be attained. Notwithstanding this significance, the exact association that subsists between the

variables is not that well established by the existing empirical studies. This could help in addressing the problem of inefficiency of medical device supplies in the market to under supply and/ or acute stock-out of the items in public and private health institutions.

In the past, a number of studies have been done on buyer supplier relationship. Mohammed (2012) did study on performance of manufacturing firms in Mombasa, Kenya and established that well-coordinated buyer supplier association influences significantly on the operational performance. In Uganda Muhwezi (2019) did empirical study to establish the buyer supplier relationship and revealed that the parties involved do not put maximal effort in ensuring that the relationship is sustained. Thus, this leads to low level of trust and the expected results are not realized. However, the above studies were carried out in a manufacturing firm and in Uganda not in the same context as current study. In view of these, a study was required to establish the influence of buyer supplier relationship management on performance of medical device supply firms in Nairobi City County, Kenya.

The government launched pharmaceutical industry Diagnostic Report in 3/10/2020 which sought to address the problem of inadequacy of medical device supplies in the country due to over dependency on imported inputs and or ready-made devices, coupled with high cost of logistics, utilities and packaging materials which requires proper coordination framework. Krause *et al*. (1998) suggested the identification of critical commodities for development as a first key step of a strategic supplier development process. The Chartered Institute of Purchasing and Supply (CIPS, 2007) have defined category management "as organizing the resources of the Procurement team in such a way as to focus externally onto the supply markets of an organization (as against having a focus on the internal customers or on internal Procurement departmental functions) in order to fully leverage purchasing decisions". This strategy can help the authority to enhance its functions in the country and achieve its goals and objectives.

In view of the current situation at the Nairobi City County, Kenya, there are numerous complaints from the public due to rampant stock out of essential medical device supplies ranging from drugs, surgical consumables and medical equipment in the public health institutions. Odero (2006) emphasizes on a firm's positioning in the environment to improve its value chain among its competitors. The value chain model can be used to define a firm's core competency and the activities in which it can pursue a competitive advantage through cost advantage and differentiation. For example, if firms can embark on local suppliers for supply partnership, then it can save a lot of money and time compared to using overseas suppliers. What a business undertakes is directly linked to achieving competitive advantage. For instance, a business that wishes to outperform its competitors through differentiating itself through higher quality will have to perform its value chain activities better than the opposition.

By contrast, a strategy based on seeking cost leadership will require a reduction in the costs associated with the value chain activities or a reduction in the total amount of resources used. Ikundo (2007) carried out a survey on the perceptions of pharmaceutical producers and end users towards the role played by pharmaceutical distributors using the value chain concept in Kenya. However, lack of coherence in the literature has led to the gaps which require further study on the same. The other gap identified was that even though there are acute stock out of items in the public medical institutions, there are also high rate of obsolescence stock in warehouses leading to further public outcry due to inefficiency of supply chain network.

General Objective

To establish the influence of buyer supplier relationship management and performance of medical device manufacturers in Nairobi City County, Kenya

Specific Objectives

i. To determine the influence of buyer supplier partnership on Performance of medical device manufacturers in Nairobi City County, Kenya.
ii. To assess the influence of supplier selection on Performance of medical device manufacturers in Nairobi City County, Kenya.

Theoretical Literature Review

Partnership Theory

McQuaid (2000) in reference to Stratton 1989 states that, "A partnership is a collaboration among business, non-profit organizations, and government in which risks, resources and skills are shared in projects that benefit each partner as well as the community. There are a number of assumptions underlying definitions of partnership. First, the potential for synergy of some form, so 'the sum is greater than the parts. Second, the partnership involves both development and delivery of a strategy or a set of projects or operations, although each actor may not be equally involved in all stages. Third, in public-private partnerships the public sector is not pursuing purely commercial goals. Therefore, a criterion of partnership is the presence of social partnership (so excluding purely commercial transactions).

Partnership involves co-operation, i.e., "to work or act together" and in a public policy can be defined as co-operation between people or organizations in the public or private sector for mutual benefit (see Holland, 1984). Harding (1990) sets out a similar general definition of 'private- public partnership' as "any action which relies on the agreement of actors in the public and private sectors and which also contributes in some way to improving the urban economy and the quality of life" (p.110), although he argues that this has limited conceptual value.

Partnership theory holds that firms enter into mutual agreements through trust to achieve their goals and objectives through synergy. It therefore facilitates reduction of turnaround time in delivery of goods and services thus sorting out the gap of inadequacy of medical device supplies in Nairobi City County, Kenya supply chain network.

Resource Based View Theory (RBV)

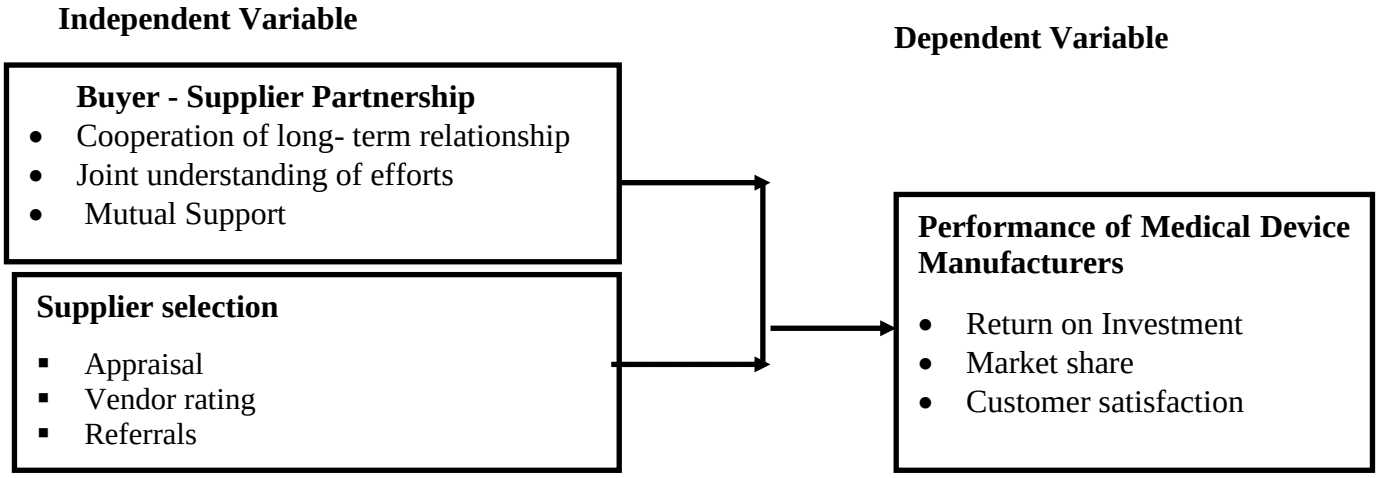
The RBV theory was developed by Wernerfelt in (1980). The Resource Based View is an aggregate of resources that management of an organization translates into weaknesses and strengths of an organization depending on the value of the resources to the firm. According to RBV, firms gain sustainable levels of competitive advantage when it deploys valuable capabilities and resources which have inelastic supply (Grunert & Hildebrandt, 2004). RBV holds that the competitive position of an organization is due to strategic resource endowment. Such strategic resources are costly to substitute and imitate, they are rare and valuable in nature. RBV assumes that firms need to be successful in getting and managing valuable resources in order to be effective**.** Effective buyer-supplier relationship will ensure sustainability of resources in the entire supply chain. Opportunities have an objective component and they exist whether or not an individual recognises them. Opportunities are derived from the attributes of the markets within which an organization is contemplating action, (Venkataraman, 2000).

An organization must study the attributes and the structure of the industry they anticipate an opportunity in and exploit the economies of scale in order to thrive. The primary opportunities in mature industries are to refine products and engage in process innovation to improve quality and lower cost, Porter (1980). This theory advocates that understanding organizational opportunities is important because the characteristic of an opportunity influences the value that the opportunity might create. It proposes that organization's trip requires differences in people and these differences manifest themselves in the ability to recognize opportunities (Shane 2013).

Organization's alertness is an attitude; it's an emotional state with a pre-disposition for action. Its receptiveness to available opportunities in a market. organization's alertness is not a deliberate search, but the constant scanning of the environment by organization's who recognizes market imperfection. These alert individuals are on the lookout for imperfectly distributed information but potentially misplaced resources they may have access to before others. However, while these opportunities may exist, independent of economic actors, an economic actor must act on the opportunity since the opportunity lacks urgency and individuals can only earn profits if they recognize the opportunity and its value. The economic actor in this view is simply able to acquire the information at a lower cost than other economic actors and this becomes the source of profit.

Conceptual Framework

A conceptual framework describes the relationship between the research variables (Patten,2017). The model includes the variables and the assumed relationship between the independent variables (supplier partnership and supplier selection) and the dependent variable (Performance). The conceptual framework of the study is shown in figure 2.1



Source: Author (2024)

Figure1.1 Conceptual Framework

Buyer-Supplier Partnership and Organization Performance

For firms to form lasting partnership, there must be mutual cooperation among them. Cooperation is a similar or complementary coordinated actions taken by firms in an interdependent relationship to achieve mutual or singular outcomes with expected reciprocation over time (Anderson and Narus 1990). Cooperation between the exchange parties reflects the expectations of working together to achieve mutual and individual goals jointly. The cooperative inter-business relationship is primarily based upon personal trust between business parties. Most businessmen say that the most reliable sources of information come from close relationships within and among business organizations. Without close relationship, the suppliers or buyers are not willing to share information and have less intention to cooperate. Ambler *et al*. (1999) state that active cooperation plays a role in suppliers or buyer organization growth and thus there is a positive correlation between cooperation and satisfaction.

The foundation of successful business and effective buyer-supplier management lies in developing a fresh competitive strategy that fosters a cooperative relationship with suppliers. Buyer-supplier partnerships have transformed to adapt to increased competition, with a focus on quality, cost, flexibility, and delivery in response to the global marketplace. This shift towards

closer collaboration between buyers and suppliers is driven by the need for inter-firm cooperation with multiple business partners due to the competitive environment (Klein, 2007).

The concept of buyer-supplier relationship is crucial for helping a focal firm effectively manage its partners in order to establish long-term partnerships (Fynes et al 2008). Within the supply chain, partnerships result in enhanced information sharing, decreased uncertainty, and improved performance. This ultimately benefits the end customer by providing higher quality and cost-effective products within a shorter timeframe. Many manufacturers seek to enhance competitiveness by fostering closer relationships with suppliers, in addition to enhancing operations. The significance of collaboration in supplier relationships and the role of information integration in enhancing performance are widely acknowledged (Vickery et al 2007).

Information integration plays a crucial role in enhancing information sharing, coordination, and planning within organizations, as stated by Koh and Saad (2006). A key strategy employed by manufacturers to effectively manage their supply chains is by establishing strong strategic partnerships with suppliers. Manufacturers who cultivate strong relationships with suppliers are more capable of responding to unexpected challenges, developing effective solutions to organizational issues, and minimizing monitoring expenses. These partnerships ultimately lead to improved economic results, as highlighted by (Chen and Paulraj, 2004).

Supplier Selection and Organization Performance

This was carried out with the intention that selected suppliers have similar goals as the organization seeking a relationship. The process is continuously managed through joint goals and purposes. Specifically, the goals are directly linked to firm objectives and are mostly based on cultural values (Gordon, 2008). When firms are strategically connected, they share characteristics like sharing risk and rewards, as well as resources. When firms have common goals and values, positive outcomes, synergy, and improved results are often achieved. Strategic partners work towards a shared goal, not for selfish reasons

Supplier selection involves identifying, evaluating, and deciding on suppliers for necessary raw materials. Despite being resource-intensive in terms of finances and time, the process yields significant benefits when high-quality suppliers are chosen. It goes beyond simply comparing price lists, as factors like value for money, reliability, and service play a crucial role. A firm's preferences will vary based on its business priorities and approach. A structured approach to supplier selection can also help firms understand how their potential clients make purchasing decisions (Gurler, 2005).

Various scholars have pointed out that the selection of suppliers is a key factor in a firm's performance. The strategy an organization uses for selecting suppliers can impact its corporate image in terms of relationships with suppliers. Supplier selection, as defined by Chebichii et al (2023) in reference to (Rajesh & Ravi, 2015), involves the inspection, evaluation, and selection of suppliers to join an organization's supply chain. Supplier selection is widely regarded as crucial for organizational performance because suppliers can influence the price, quality, delivery reliability, and availability of products (Das & Buddress, 2017). Therefore, the method of selecting a supplier is essential for the business's success. According to Cheptora et al. (2018), supplier selection involves multiple criteria and sub-criteria, whether quantitative or qualitative. Factors such as price, quality, and credit terms influence supplier selection (Kariuki et al., 2015)

En Xei (2012) advocates that buyer firms with strong social ties to existing suppliers may overlook potential benefits from alternative suppliers found through market-driven processes. The ongoing debate revolves around whether a market-oriented or relationship-focused approach to selecting suppliers leads to superior supplier performance. Furthermore, given that buyer

companies often employ both selection methods simultaneously, examining the combined impact of these approaches on supplier performance is crucial

Choosing the right suppliers is vital for ensuring that a firm can deliver products and services on time, at the right prices, and meeting quality standards. Selecting suppliers based on specific criteria helps identify partners that can meet customer requirements. The right supplier provides quality materials, timely delivery, fair prices, and good service. A firm's success depends on the effectiveness of its supplier relationships. Proper selection and management of suppliers is key to achieving quality, timely delivery, reasonable prices, technical capability, and service levels (Tan, 2002).

Supplier selection is crucial for both a firm's performance and its strategic position in the operating environment. Medical device manufacturing companies are directly impacted by supplier selection criteria, particularly focusing on the reliability of supplies from established firms to ensure stock reliability. Establishing a relationship with a supplier can limit the ability of smaller private or public buyers to sustain their business due to the risk of suppliers abruptly discontinuing service

RESEARCH METHODOLOGY

Research Design

The research design is a conceptual framework for the conduct of research. The purpose of a research design is to ensure that the evidence obtained enables the researcher to effectively address the research problem logically and as clearly as possible (Sekaran, 2013). The study adopted a descriptive research design, which is a process of collecting data in order to answer questions concerning the status of the subject in the study. This design is advantageous as it is much simpler to describe the buyer supplier relationship management and performance of Medical Device Manufacturers.

Target Population

Target population is a well-defined or set of people, elements, and events, group of things or households that are being investigated to generalize the results (Mugenda and Mugenda 2013) The target population was 20 Registered Manufacturers in Kenya where the researcher for each Registered Manufacturer sought three respondents i.e. (head of procurement department stores in charge, and stock accountant). This provided 60 respondents that is 20 Registered Manufacturers *3 respondents.

Sample and sampling technique

A sample is a portion or a subset of the population that has been chosen for further analysis. Sampling attempts to gain an understanding of the characteristics of the entire population based on the characteristics of the sample (Gujarat and porter, 2009). Since the population is small 60, the study opted for census survey of the entire population, resulting in 60 respondents.

Data Collection Instruments.

Zikmund (2013) defines data instruments as the tools employed to collect research data. The goal for all data collection is to capture quality evidence that then translates to rich data analysis and allows the building of a convincing and credible answer to questions that have been posed (zohrabi, 2013). The researcher used both primary and secondary data Primary data and was collected by administering questionnaires. The use of questionnaires was justified by the fact that the vast majority of study participants are familiar with them. Furthermore, questionnaires are less expensive to use than interviews. Structured research questionnaires were used to collect data (closed ended questions). A drop and pick later method were used to administer the questionnaires. Secondary data was obtained from publications and journals.

Data Collection procedure

The researcher first obtained all necessary authorization from the University, a research permit from the National Commission for Science, Technology, and Innovation, and finally from the management of medical device manufacturers. The researcher utilized these research authorizations to obtain entry to the chosen participants. During field surveys, the drop and pick approach was used. The questionnaires were distributed to selected respondents and collected after one week. Where respondents were unable to be reached, the researcher contacted them by phone after obtaining their permission

Pilot Testing

Pilot test is an activity that assists the researcher in determining if there are flaws, limitations, or other weaknesses within the questionnaire design and allows the researcher to make necessary revisions to research instruments prior to the implementation of the study (Yin, 2018). The rule of thumb is that 10% of the sample should constitute the pilot test (Cooper & Schindler, 2011). The pilot study was conducted on 6 participants, or 10% of the total sample size. The six respondents chosen for pilot testing were not included in the final study, bringing the sample size down from 60 to 54.

Data Analysis and Presentation

Cooper and Schindler (2014) point out that, analysis means the categorizing, ordering, manipulating, and summarizing of data in order to obtain answers to research questions. The quantitative data was analysed using both descriptive and inferential approaches in SPSS version 28. Percentages, means and standard deviation were used to present the results of descriptive analysis. Multiple linear regression was utilized to determine buyer supplier relationship management and performance of medical device manufacturers. The following multiple regression equation formula was used:

$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \mathscr{E}$

Where:

Y = Performance of Medical device manufacturers.

x_1 = Buyer-supplier partnership

x_2 = Supplier selection

$\mathscr{E}$ = Error term

β_0 = Constant

$\beta_1, \beta_2, \beta_3, \beta_4$ = Coefficient of all independent variables

RESEARCH FINDINGS AND DISCUSSIONS

Descriptive statistics

Descriptive statistics are useful for elucidating the level of consensus among research participants regarding buyer-supplier relationship management. Additionally, these statistics play a key role in understanding the data distribution patterns. Basic descriptive statistical methods were utilized to present the findings provided by the respondents.

Buyer-Supplier Partnership and Performance

The first objective of the study was to determine the influence of buyer supplier partnership on Performance of medical device manufacturers in Nairobi City County. The findings are presented in table 4.1 below.

Table 4. 1: Buyer-Supplier Partnership

Statement	Mean	Std Dev
Delivery of goods and services has been improved through Cooperation of long- term relationship with suppliers	3.89	1.154
Our agency applies best buyer practices and through Joint understanding of efforts share information with supplier procurement status.	3.75	1.043
There is a mutual support system in place for both buyers and suppliers.	3.90	.995
The firm and suppliers engage in joint decision-making on matters of shared interest.	4.04	.931
Overall score	3.90	1.031

Source: Researcher (2024)

According to the research findings from table 4.8, the respondents agreed that the delivery of goods and services has been improved through Cooperation of long- term relationship with suppliers. The average rating for this improvement is 3.89, with a standard deviation of 1.154. Additionally, the study revealed that the respondents agreed that their agency applies best buyer practices and through Joint understanding of efforts share information with supplier procurement status, with an average rating of 3.75 and a standard deviation of 1.043. Furthermore, the majority of respondents agreed that the Mutual Support to their suppliers is crucial in enhancing supply chain performance with an average rating of 3.90 and a standard deviation of 0.995. Lastly, the study aimed to determine whether the firm and suppliers engage in joint decision-making on matters of shared interest, and the results indicated that the majority agreed with an average rating of 4.04 and a standard deviation of 0.931.

The overall average of buyer supplier partnership effect on Performance of medical device manufacturers was 3.90 indicating that buyer supplier partnership had a significant effect on Performance of medical device manufacturers. The findings are in agreement with study done by Shahzad et al (2015) on the Influence of Buyer-supplier Collaboration and Data Integration on Supply Chain Efficiency which concluded that the partnership between the buyer and supplier, as well as the integration of information, greatly affect the performance of the supply. Trust was found to play crucial roles in maintaining strong relationships between suppliers and businesses for long-term growth. By collaborating with suppliers, a firm can enhance its ability to align supply and demand while effectively managing costs.

Supplier Selection and Performance

The second objective was to assess the influence of supplier selection on Performance of medical device manufacturers in Nairobi City County. The descriptive analysis results are presented in table 4.2

Table 4. 2: Supplier Selection and Performance

Statement	Mean	Std Dev
Potential suppliers are appraised before making decision to engage them in the supply of goods	3.93	.961
Our agency has strong trust in suppliers introduced us through referrals	4.12	.849
Vendor rating has helped firm to attain efficient and effective selection of suppliers in our supply chain	4.06	.792
As an outcome of Vendor rating Suppliers within our supply chain fulfill their obligation.	3.82	1.035
Overall score	3.98	.909

Based on the aforementioned findings, the survey participants unanimously agreed Potential suppliers are appraised before making decision to engage them in the supply of goods, with an average rating of 3.93 and a standard deviation of 0.961. Furthermore, the respondents emphasized that their agency has strong trust in suppliers introduced us through referrals, as evidenced by an average score of 4.12 and a standard deviation of 0.849. When evaluating if Vendor rating has helped firm to attain efficient and effective selection of suppliers in their supply chain, the respondents agreed with an average score of 4.06, and a standard deviation of 0.792. Additionally, the respondents indicated that t as an outcome of Vendor rating suppliers within our supply chain fulfill their obligation., as reflected by an average rating of 3.82 and a standard deviation of 1.035. These outcomes from the survey participants' responses regarding supplier selection clearly demonstrate its significant influence on overall performance.

The component of supplier selection on Performance of medical device manufacturers had an overall mean of 3.98. This implies that supplier selection has a significant influence on Performance of medical device manufacturers. The outcome of the study is supported by work done by Chebichii, Namusonge, and Nambuswa (2023) on the impact of supplier selection on organizational performance in food and beverage manufacturing firms which revealed that supplier selection explains 49% of the variation in the organizational performance of food and beverage manufacturing companies in Kenya (R^2 = .490). The study concluded that supplier selection (β=.520) significantly influences the performance of food and beverage manufacturing companies in Kenya.

Correlation Analysis

The findings of a correlation study are outlined in this section, which aimed to establish the connection between independent and dependent variables. Table 4.3 displays the correlation matrix.

Table 4. 3: Correlation Analysis

		Buyer-Supplier Partnership	Supplier Selection	Performance
Performance	Pearson correlation	1		
	N	48		
Supplier Selection	Pearson correlation	.714	1	
	N	48	48	
Supplier Development	Pearson correlation	.561	.794	
	N	48	48	

****correlation is significant at 0.05 (2-tailed)**

The study objective was to determine the influence of buyer supplier partnership on Performance of medical device manufacturers in Nairobi City County, Kenya. To achieve this, a Pearson correlation test was used. Table 4.3 shows a strong correlation (r (48) =.681; $p<0.05$) between Buyer-Supplier Partnership and Performance of medical device manufacturers in Nairobi City County, Kenya. This indicates that Buyer-Supplier Partnership has a positive relationship with the Performance of medical device manufacturers in Nairobi City County, Kenya. Moreover, the statistical analysis revealed a significant correlation between these two variables (p-value < 0.05). This indicates that there is a direct association between Buyer-Supplier Partnership and the Performance of medical device manufacturers in Nairobi City County, Kenya. These results underscore the significant impact of Buyer-Supplier Partnership on the Performance of medical device manufacturers in Nairobi City County, Kenya. The results concur with Kemunto and Ngugi (2014) study on the impact of strategic buyer supplier alliance on procurement

performance in private manufacturing organizations, which revealed that strategic buyer supplier alliance significantly influences procurement performance.

Additionally, the research intended to assess the influence of supplier selection on Performance of medical device manufacturers in Nairobi City County, Kenya. The research conducted a Pearson correlation analysis, and the findings displayed in Table 4.3 show a significant correlation ($r(48) = .714$; $p<0.05$) Supplier Selection and Performance of medical device manufacturers in Nairobi City County. Moreover, a significant correlation ($p<0.05$) was revealed between these two variables, indicating a direct association between supplier selection and the Performance of medical device manufacturers in Nairobi City County. This implies that supplier selection has a significant influence on the Performance of medical device manufacturers in Nairobi City County. The findings of the study back up those of Krop and Iravo (2016) study on supplier selection on the efficiency of the procurement function who indicated that supplier selections significantly influenced procurement performance and recommended prioritizing strict supplier selection processes to ensure their positive influence on procurement activities.

Multiple regression analysis

The study utilized a multiple regression test to determine if supplier relationship management prospects (Buyer-supplier partnership and Supplier selection) had a significant influence on the performance of medical device manufacturers in Nairobi City County. The results, includes the model summary, analysis of variance, and beta regression coefficients, and are summarized in the following sections.

Regression Model Summary

Table 4. 4: Regression Model Summary

Model	R	R Square	Adjusted R Square	Std Error of Estimate
1	.798	.637	.621	.14683

a. predictors: (Constant), (Buyer-supplier partnership, Supplier selection)

From the data presented in Table 4.4, it is observed that there exists a strong positive correlation (correlation coefficient of 0.798) between the dependent and independent variables. Additionally, the findings indicate that the supplier relationship management prospects, (Buyer-supplier partnership and Supplier selection) account for 63.7% of the variation in the performance of medical device manufacturers in Nairobi City County. This indicates that these supplier relationship management prospects have a significant impact on the overall performance of medical device manufacturers.

Analysis of variance

An ANOVA test was performed at a significance level of 0.05 to determine the F statistics, and the outcomes are shown table 4.5.

Table 4. 5: Analysis of variance

Model	Sum of Squares	d.f	Mean Square	F	Sig
Regression	473.217	2	236.61	50.59	.000[b]
Residual	215.131	46	4.677		
Total	**688.348**	**48**			

a. Dependent variable: Performance

b. Predictors: (Constant), Buyer-supplier partnership and Supplier selection

The ANOVA analysis yielded outcomes, as shown in Table 4.5. The calculated F value from the results was 50.59, at a corresponding P-value of 0.000, which is less than the significance level of 0.05. These findings indicate that supplier relationship management prospects significantly influenced the performance of medical device manufacturers in Nairobi City County.

Table 4. 6: Regression coefficients Results

Model		Unstandardized coefficients		Standardized Coefficients	t	p- Value
		B	Std Error	Beta		
1	Constant	-2.973	3.182		2.847	.000
	Buyer-Supplier Partnership	.571	0.223	.463	4.195	.002
	Supplier Selection	.629	0.192	.617	2.748	.000

a. Dependent variable: Performance

The statistical analysis outcomes shown in table 4.6 above aided in the estimation of the linear regression model presented below

P = -2.973+**0.571BSP+ 0. 629 SS**
P = Performance of Medical Device Manufacturers

BSP= Buyer-Supplier Partnership

SS= Supplier Selection

The first objective of the study was to determine the influence of buyer supplier partnership on Performance of medical device manufacturers in Nairobi City County, Kenya. The outcomes of the regression analysis presented in Table 4.17 indicate that supplier partnership holds statistical significance with a beta coefficient of 0. 571 and p-value of 0.002, which is lower than the significance level of 0.05. Thus, a beta coefficient of 0. 571 for supplier partnership indicates that, holding all factors constant, a one-unit increase in supplier partnership results in a 57.1% improvement in the Performance of medical device manufacturers in Nairobi City County, Kenya. This indicates a direct association between supplier partnership and the Performance of medical device manufacturers in Nairobi City County, Kenya. Through this analysis, the study confirms the presence of a significant relationship between supplier partnership and Performances of medical device manufacturers in Nairobi City County, Kenya. The findings are consistent with Shahzad et al. (2015) study on the Influence of Buyer-supplier Collaboration and Data Integration on Supply Chain Efficiency, which concluded that the buyer-supplier partnerships, as well as information integration, have a significant impact on supply chain performance. Trust was revealed to play an important role in sustaining strong relationships between suppliers and businesses for long-term growth. By partnering with suppliers, a company can improve its ability to align supply and demand while effectively managing costs.

The second objective sought to assess the influence of supplier selection on Performance of medical device manufacturers in Nairobi City County, Kenya. The results obtained from table 4.16 reveal that Strategy Formulation reveals a significant coefficient of estimate, with a β value of 0. 629 (p value = 0.000, which is lower than $\alpha = 0.05$). This implies that a one-unit increase in Strategy Formulation results in a 62.9 % increase in the Performances of medical device manufacturers in Nairobi City County while keeping other factors constant. Thus, there exists a

direct association between supplier selection and Performance of medical device manufacturers in Nairobi City County, Kenya. These findings clearly establish a significant association between supplier selection and Performance of medical device manufacturers in Nairobi City County, Kenya. The results of the study are supported by the research carried out by Chebichii, Namusonge, and Nambuswa (2023) on the effect of supplier selection on the performance of food and beverage manufacturing companies. Their study found that supplier selection explains 49% of the variance in the performance of food and beverage manufacturing firms in Kenya (R^2 = .490). The study concluded that supplier selection (β=.520) significantly influences the performance of food and beverage manufacturing companies in Kenya.

Conclusions of the Study

The first objective sought determines the influence of buyer supplier partnership on Performance of medical device manufacturers in Nairobi City County, Kenya. From the findings, buyer supplier partnership had a positive regression beta coefficient that was significant. The study revealed that the management through Cooperation of long- term relationship has led to improved Delivery of goods and services. The study revealed that through Joint understanding of efforts they share information with supplier procurement status to improve service. The study also indicated that the management has put in place mutual support system for both buyers and suppliers The study concluded that effect of buyer supplier partnership on Performance of medical device manufacturers was positive and significant.

The second objective of the study was to assess the influence of supplier selection on Performance of medical device manufacturers in Nairobi City County, Kenya. The results of the study showed that Potential suppliers are appraised before making decision to engage them in the supply of goods and Vendor rating has helped firms to attain efficient and effective selection of suppliers in our supply chain. As per the findings, the regression beta coefficient of Supplier Selection was positive and significant. The study revealed that an improvement in Supplier Selection would lead to an increased Performance of medical device manufacturers in Nairobi City County. Hence, the study conclude that Supplier Selection has a positive and significant effect on Performance of medical device manufacturers.

Recommendations for management, Policy and Practice

The regression analysis findings indicated that the beta coefficient of the buyer supplier partnership was both positive and significant. Consequently, the study recommends that policy makers and strategists in medical device manufacturers management units should prioritize the buyer supplier partnership construct when formulating strategic management decisions.

From the regression analysis results, Supplier Selection had the largest regression beta coefficient that was significant and positive. Thus this study recommends that the strategic management in medical device manufacturers appraises potential suppliers before making decision to engage them in the supply of goods. They should also prioritize vendor rating to enable firm to achieve effective selection of suppliers in the supply chain

REFERENCES

Chebichii, B.D, Namusonge, G.S & Nambuswa M.E (2023) Influence Of Supplier Selection On Organizational Performance In Food And Beverage Manufacturing Companies In Kenya. *African Journal of Emerging Issues* (AJOEI). 5 (3) 64-80

Chen, I.J. and Paulraj, A. (2004). Understanding supply chain management: critical research and a theoretical framework. International Journal of Production Research, Vol.42, No. 1, pp. 131-140.

Dwyer, R.F., Schurr, P.H. and Oh, S. (1987), "Developing buyer-seller relationships", *Journal of Marketing*, Vol. 51, pp. 11-27.

Fynes, B., de Búrca, S., Mangan, J. (2008) The effect of relationship characteristics on relationship quality and performance. International Journal of Production Economics, Vol.111, No.1, pp. 56–69.

Handfield, B. and Bechtel, C., (2012). The role of trust and relationship structure in improving supply chain responsiveness. Industrial Marketing Management 31(4), 367-382.

Kariuki Joan et al (2015) Local Supply Chains for Medicines and Medical Supplies in Kenya: Understanding the Challenge. Inclusive Bioeconomy Programme Working Paper 001/2015) ACTS Press

Kemunto, D. & Ngugi, K. (2014). Influence Of Strategic Buyer Supplier Alliance on Procurement Performance in Private Manufacturing Organizations A Case of Glaxo SmithKline**.** *European Journal of Business Management, 2* (1), 336-341.

Krop, E. & Iravo, M. A. (2016). Effects of supplier selection on performance of procurement function in public sector: A case of West Pokot County government. International Academic Journal of Procurement and Supply Chain Management, 2 (2), 51-73

Lemke, F., Goffin, K., and Szwejczewski, M. (2002). Investigating the Meaning of Supplier-Manufacturer Partnerships: An Exploratory Study., *International Journal of Physical Distribution and Logistics Management*, Vol. 33, No. 1, pp.12-35.

Lysons, K. & Farrington, B (Eds.) (2015). Procurement and Supply Chain Management, (7th ed.), Pearson Education Canada

Patten, M. L., & Newhart, M. (2017). *Understanding Research Methods: An Overview of the Essentials* (10th ed.). Routledge.

Pornchaiwisesk, P. (2012). The Impact of Supplier Development on Supplier Performance; The Role of Buyer- Supplier Commitment. *European Journal of Business and Management*.

Porter, M. (1980). *Competitive strategy.* New York: Freed Press.

Porter, M. E., & Kramer, M. R. (1985). Advantage. *Creating and Sustaining Superior Performance, Simons*, 56-68.

Shahzad, A. K, Yan, L, and Sumaira S (2015). The Effect of Buyer-supplier Partnership and Information Integration on Supply Chain Performance: An Experience from Chinese Manufacturing Industry. *International Journal of Supply Chain Management, 4(2).*

Van Weele, A. J. (2018). *Purchasing and supply chain management* (7th ed.). Cengage Learning.

Venkataraman, S. (2000). *The promise of entrepreneurship as field research. Academy of management review 25 (1):* 217 – 226.

Vickery, S.K., Jayaram, J., Droge, C., Calantone, R. (2003). The effects of an integrative supply chain strategy on customer service and financial performance: An analysis of direct versus indirect relationships. Journal of Operations Management, Vol.21, pp. 523– 539.

Whitworth, B & Demoor, R. (2001). Generating agreement in computer mediated groups. Small Group Research, 32(5), 621-661.

Williams. L, S. (2008). The Mission Statement: A Corporate Reporting Tool with a Past, Present, and Future, " Journal of Business Communication, 25 (2), April, 94-119

Yin, R. K. (2018). *Case study research and applications*. Sage.

Zohrabi, M. (2013). Mixed method research: Instruments, validity, reliability and reporting findings. *Theory and Practice in Language Studies*, *3*(2), 254-262.