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SUPPLIER RELATIONSHIP MANAGEMENT STRATEGY AND PERFORMANCE OF MANUFACTURING FIRMS IN KENYA

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ABSTRACT

The study sought to evaluate how supplier relationship management strategy affects the performance of manufacturing firms in Kenya. The assessment and projections of economic growth of Kenya is pegged on the increase in the contribution of the manufacturing sector to the economy. However, there is still a gap as to how Manufacturing firm's performance can be heightened despite prominence in the government development blueprints such as Vision 2030. Despite the Government initiatives to promote manufacturing firms through "Buy Kenya build Kenya" and mandatory reservation of 40% in all Government agencies Procurement Budgets for goods to be sourced locally; An overwhelming number of manufactures in Kenya have experienced a fall in turnover, with a least 23% registering losses in the range of 65% to 100%, and with 51%, registering loses between 30% and 65%, due to a fall in demand of the products. This study sought to determine the influence of supplier relationship management strategy on the performance of manufacturing firms in Kenya. The study was guided by The Networks Theory. For this study, the research philosophy was positivism. This study adopted cross-sectional research design. The KAM 2023 directory has listing of members (firms) by sectors which contains a register of 13 sectors of those in manufacturing firms spread all over the country (KAM, 2023). The study targeted all manufacturing companies registered under Kenya Association of Manufacturers. Therefore, the target population was 1032 manufacturing companies in Kenya while the unit of observation was senior managers from production and Supply Chain management. This study adopted Yamane (1967) simplified formula to calculate the sample size. Using this formula, a sample of 288 manufacturing firms were selected. This study utilized a semi-structured questionnaire to collect data. Data analysis was done through use of descriptive and inferential statistics. The study used SPSS version 25 in the analysis of data. The study showed a significant positive relationship between supplier relationship management strategy and the performance of manufacturing firms. Effective supplier integration and collaboration contributed to improved firm performance. Early Supplier Involvement (ESI) leads to cost reduction, improves productivity and reduces lead time and overall improved quality. Supplier Development reduces costs and improves productivity as well overall organization financial and operational performance. Procurement departments should strive to undertake supplier segmentation as informed by Kraljic Model. Following this segmentation, the finance department should allocate resources and attention to these suppliers focusing most attention to strategic suppliers.

Key Words: Supplier Relationship Management Strategy, The Networks Theory, Manufacturing Firms

Background of the Study

Even though manufacturing sector make significant contribution to the national economy, KAM (2022) argues that, they still experience a number of challenges. These include; reduces consumer effective demand and drives inflation, high production cost, use of obsolete technologies, weak linkages with local supplies, competitiveness of Kenyan products and intense globalized competition. For instance, beer manufacturers in Kenya are facing challenges in the supply chain due to influence of stiff competition, regulation and globalization. Due to these challenges, the performance of the organizations has decreased tremendously due to inefficient and ineffective client connection strategies and supplier relationship. Generally, in terms of performance, and improvements, EABL is far behind (KPMG, 2018). The company has diversified its supply chain capacity investments such by installation of new canning line that has boosted the production capacity of the company. The tough market conditions faced by EABL can be attributed to the on-going government crackdown on second generation brews, increased regulation following the implementation of Alcoholic drinks & control Act (2010), growing inflation, increase of Senator Keg's excise duty, high production costs arising from electricity and fuel costs, weakening East African currencies against the dollar and erratic rainfall patterns (KPMG Africa, 2018).

The EABL supply chain depends on several companies for successful delivery (EABL, 2018). The most problematic issues affecting the preferred level of openness of EABL is using inventory level alone. Lower delivery periods are the key structural element of lean processes and can result to enhanced effectiveness of supply unit processes. This in turn lowers the inventory cost making it more consistent and increases manufacturing flexibility. Lean methods also ensures quick push and pull in the firm's product supply chain enabling quick response to demand rather than anticipated forecast (Azevedo et al., 2016).

Unilever is one of the world's most successful international consumer goods companies with one of its branches in Kenya. Company supply chain strategy as fast-moving customer focuses on efficiency, cost reduction and supply chain planning. Unilever Kenya has implemented SAP – Advance Planning Optimizer to manage their supply chain strategy. The company controls the inventory under Unilever Inventory management strategystrategy(UIM) team by using stock dynamic replenishment concept (Unilever, 2018). The planning process is quantity and period orientated; As a result, Unilever receive information about supply demands on external suppliers, transport requirements, planned production output as well as stock levels at individual locations in the logistics network.

In Unilever, supply chain integration is known as supply network collaboration (SNC). Collaborative planning in internal Unilever forecast demand generated by marketing and demand planning. Unilever is using hybrid of push and pull strategies. The production stage are done in push manner based on aggregate customer demand forecast so the uncertainty is reduced so safety stock inventory is lower, cost minimization and effective resource utilization (Unilever, 2018) . The next stage for distribution are done in a pull manner for replenishment needed by distributor, by using sophisticated IT and customer relationship management under CD area that they already have. With the application of push and pull strategy, Unilever Kenya has grown to be a leading Fast-Moving Customer Goods of Home and Personal Care as well as Foods and Ice Cream products in Kenya. The Company seeks to manage and grow the business in a responsible and sustainable manner.

Kenya Medical Supplies Authority (KEMSA) is the company of the state set up under the service

of wellbeing that as built up under KEMSA demonstration of 2018 whose capacity is to obtain, store and convey clinical supplies for open program remedy. With the point of improving assistance conveyance, KEMSA has experienced numerous changes. The administration has come up with methods for unraveling its recorded difficulties through the supply chain system. One of the techniques is the selection of the pull and push framework that have extraordinarily relied upon the attributes of the clinical items they handle (Alumina, 2019). Distribution of products to KEMSA's 4001 offices is done through a pull and push framework. This strategy utilizes a mix of both in-house and re-appropriated transport to make direct conveyances to the particular offices. 80% of conveyances are finished by outsider coordination's suppliers (3PLs). Execution markers for dispersion include: normal vehicle lead time-5 days and transport costs as a level of turnover/throughput-10 % (Alumila, 2019).

The supply chain with higher demand uncertainties and have higher unit cost including low transportation cost relative to the product's total cost then this can have a better fit for the pull system or commonly known as the demand driven system. On the other hand, products that have low demand uncertainties and require high economy of scale would preferably have greater cost saving from push and pull supply chain strategies (Kamau, 2016).

According to Manufacturing Priority Agenda 2020 (MPA, 2021), the Kenya's manufacturing sector has exhibited a fluctuation in growth. The sector expanded by 3.6 percent in 2015 and decreased to a low of 0.5 percent in 2017.In 2018, it recovered to a rise of 4.2 percent (MPA, 2020). Subsequently, manufacturing sector contribution to Gross Domestic Product (GDP) has reduced from 8 percent in 2017 to 7.7 percent in 2018.

The growth in manufacturing sector in 2018 was as a result of picking up of agro processing activities as well as an increase in the manufacturing activities which include increased assembly of vehicles (KNBS, 2022). The declining trend in manufacturing sector's contribution to GDP calls for concerted efforts to spur the sector's growth for it to attain a 15 percent contribution of GDP by 2022 as envisioned by the 'Big Four Agenda'. To accelerate structural transformation of Kenya's economy towards an industrial economy, there is need to revitalize leather, textile and apparel industries as well as boost competitiveness of manufacturing industries

The competitiveness of a manufacturing sector is one of the key concerns in any economy. The increasing level of competition and globalization in the world economy has a major impact on the need for organizations to improve their supply chain performance. Many companies pay millions of dollars in order to improve their supply chain performance through process inventory management strategies, policies, customer management and training their employees (Aldrich & Herker, 2015).According to the Competitive Industrial Performance (CIP) Index data from United Nations Industrial Development Organization (UNIDO, 2019), the manufacturing sector in Kenya is ranked at position 112 out of 150 economies in the global manufacturing. As a share of GDP, Manufacturing Value Added (MVA) declined to 9.9 percent in 2017 from 10.29 percent in 2015.Aditionally, manufactured exports as a share of total exports declined from 48.6 percent to 41.6 percent. Manufacturing capacity to produce has increased as reflected in the rise of MVA per capita from 113.95 in 2015 to 115.99 US dollars in 2017. However, the capacity to export manufactured goods has declined from 57.44 to 42.93 US dollars.

The country seems to be more capable of producing manufactures than exporting them. This may likely be attributed to a dominant domestic demand, low competitiveness of Kenyan manufactures in the international market or trade barriers on exports (UNIDO, 2015). Finally, Kenya's share of

world manufacturing production has increased from 0.0439 percent in 2015 to 0.0441 percent in 2017, indicating that other economies have expanded their MVA at a slower rate than Kenya. However, the share of world manufactured exports has reduced from 0.00195 percent to 0.00176 percent over the same period, indicating that the market share for manufacture exports has reduced.

According to the US Department of State, this exposes a gap in the country's ability to achieve a fully industrialized economy by 2020. It argues that there is still a lot of room for expansion in Kenya's manufacturing sector, but for this to happen, reforms to the business environment need to be made to factor in the influence of supply chain alignment in the sector (KPMG, 2018). The manufacturing sector has a great potential on promoting economic growth and competitiveness in the country like Kenya.

Statement of the problem

The assessment and projections of economic growth of Kenya is pegged on the increase in the contribution of the manufacturing sector to the economy (GOK, 2022). However, there is still a gap as to how Manufacturing firm's performance can be heightened despite prominence in the government development blueprints such as Vision 2030 (Economic Survey,2022). In reality, the performance and contribution of manufacturing firms to Kenyan's economy has been worrying especially in the wake of realizations that other sectors of the economy such as real estate and telecommunications have surpassed it on the contribution to the GDP (Economic Survey, 2023). According to the data released by the Kenya National Bureau of Statistics in 2023, GDP at market price contributed by manufacturing firms has been: 9.8% in 2019, 9.6% in 2020, 9.5% in 2021, 8.9% in 2022 and employment has moved from 280,700 in 2019, 271,000 in 2020, 270,200 in 2021 and to 251,700 in 2022.

According to KAM, KPMG 2022 Survey, despite the Government initiatives to promote manufacturing firms through "Buy Kenya build Kenya" and mandatory reservation of 40% in all Government agencies Procurement Budgets for goods to be sourced locally; An overwhelming number of manufactures in Kenya have experienced a fall in turnover, with a least 23% registering losses in the range of 65% to 100%, and with 51%, registering loses between 30% and 65%, due to a fall in demand of the products. Challenges facing manufacturing firms in Kenya may be substantially due to lack of innovative strategies that are key drivers of economic performance and growth, this has led to the rise of importation of capital goods to kshs 1,806.3 billion in 2021 from Kshs 1,581.3 billion in 2018. (Economic survey 2020). According to KIPPRA 2023, Kenya's Manufacturing trade performance is held back by the concentration of exports in the EAC and imports from markets outside Africa, this has been orchestrated by luck of resilient from negative economic shocks, between 2019 and 2023, 72 per cent of African countries received less than 1% (one per cent) each of Kenya's total manufacturing exports to the continent which has to a greater extent affected its growth and contribution to employment in Kenya.

According to the Competitive Industrial Performance (CIP) Index data from United Nations Industrial Development Organization (UNIDO, 2022), the manufacturing sector in Kenya is ranked at position 112 out of 150 economies in the global manufacturing. As a share of GDP, Manufacturing Value Added (MVA) declined to 8.6 percent in 2022 from 10.29 percent in 2019.Aditionally, manufactured exports from Kenya as a share of total exports declined from 48.6 percent to 41.6 percent. According to KNBS (2023), there is an indication of mergers and acquisitions in most manufacturing companies due to the ongoing financial difficulties, which have

seen Simba cement, acquire 100% shares of Cemtech that was one of the upcoming cement manufacturing company in Kenya.

Under the Big Four Agenda, the government's goal is to increase the manufacturing sector's contribution to the Gross Domestic Product (GDP) to 15 per cent by 2022 (currently at 9.2 per cent), create jobs annually, increase foreign direct investment and improve ease of doing business (Presidency, 2022). However, stakeholders have raised many concerns on the lack of strategic focus in inventory management, distribution management and including lack of adherence to the currently laid policies (Ayoyi and Odunga, 2015). Despite manufacturing enterprises contributing significantly to Kenya's GDP, their performance has been dismal over the years and below expectation, between 2019 and 2023, manufacturing contribution to national GDP declined by 1.5 percentage points while the contribution to the industrial sector GDP declined by 2.8 percentage while other sectors registered higher growth rates in the same period (World Bank, 2024). Kenya manufacturing sector growth is projected to slow further for the third year in a row from 2.6% in the year 2024 to 1.8% in 2025, almost three-quarters of a percentage point below the average of the 2022 (World Bank 2024) This depicts the downwards trajectory that manufacturing firms in Kenya are undergoing.

Global Competitiveness Report 2022-2023 shows that, compared to the average of Sub-Saharan Africa countries, Kenya manufacturing sector is ranks lower in terms of factors that contribute to more efficient goods market which is attributed to lack of innovative strategies, and the country has a score of 1.8 points (out of 7) in the Global Competitiveness Index.

Several studies on supply chain and manufacturing firm's performance have been done However; these studies have used different contexts and knowledge approaches. For instance, Kitheka (2017) in a study of pull and pull supply chain strategies and the performance of supermarkets in western Kenya. Bungei (2018) examined a study on the role of supply chain management practices on organizational performance: A case study of Kenya medical research institute. Mwangangi (2016) did a study to examined the influence of logistics management the on the performance of manufacturing firms in Kenya however this study did not involve push and pull strategies. Rotich (2016) studied on the effect of inventory management strategy on financial performance of listed manufacturing firms in Kenya; however, this study did not touch on the knowledge of push and pull strategies. Atela (2023) analyzed a study on the competitive strategies and performance of manufacturing cement companies in Kenya; however, this study specifically was narrowed to the cement manufacturing industry did not touch on supplier relationship management strategy. Limited studies seem to have been conducted on this problem especially on push and pull supply strategy in manufacturing industry and hence the cause of this study. This study filled the gap by examining the effect of supplier relationship management strategy and performance of manufacturing firms in Kenya.

General Objective

i. To determine the influence of supplier relationship management strategy on the performance of manufacturing firms in Kenya.

Hypotheses of the Study

H03: Supplier relationship management strategy has no significant effect on performance of manufacturing firms in Kenya.

LITERATURE REVIEW

Theoretical Review

The Networks Theory

Network's perspective also known as networks theory is mostly concerned with the value generation through inter-organizational relations (Narasimhan & Nair, 2019). Network perspective focuses on exploring how networks of individuals, groups, or firms relate to organizational outcomes at the same level of analysis (Rogers, 2015). This theory was first introduced during the 1980s by Hakansson and Ford and developed from the focus on relationships between just two entities, or supplier collaborations, towards an approach which entails multiple relationships between different counterparts throughout the supply chain such as early supplier involvement. The adherents of the network perspective found that firms acted in accordance with the supply chain alignment perspective (Skipworth & Julien, 2015). Especially firms, which delivered to other firms, they did not regard customers and suppliers as competitors, but more as collaborators. Otieno (2014) define the network as a specific type of relation linking a defined set of persons, objects or events. The networks can be divided into three concepts; actors, resources and activities.

All form their own networks but are dependent on each other. The networks have been utilized for both global supply chain management studies as well as supply chain partnerships in specific industries or countries (Cousins, Lawson & Squire, 2018). Chang, Chiang and Pai (2017) further state that the supply chain network is a complicated network model and its specific context depends on the relationships and collaborations among the network members. Moreover, networks are seen as beneficial for every company embedded through investments and actions of the other counterparts involved in the process (Spekman, Kamauff, & Myhr, 2017). This theory supports the variable of supplier relationship management strategy by linking early supplier involvement, supplier development and strategic collaborations to essential metrics that can be managed to ensure achievement and effective push and pull supply chain strategies.

Conceptual Framework

Conceptual frameworks are visual representations of the relationships between the various building blocks of a study and its arguments (Mugenda & Mugenda, 2018). In this study the independent variable is supplier relationship management strategy, the moderating variable is customer demand while the dependent variables is performance of manufacturing firms. The model that forms the conceptual framework of the study is presented in Figure 2.1.

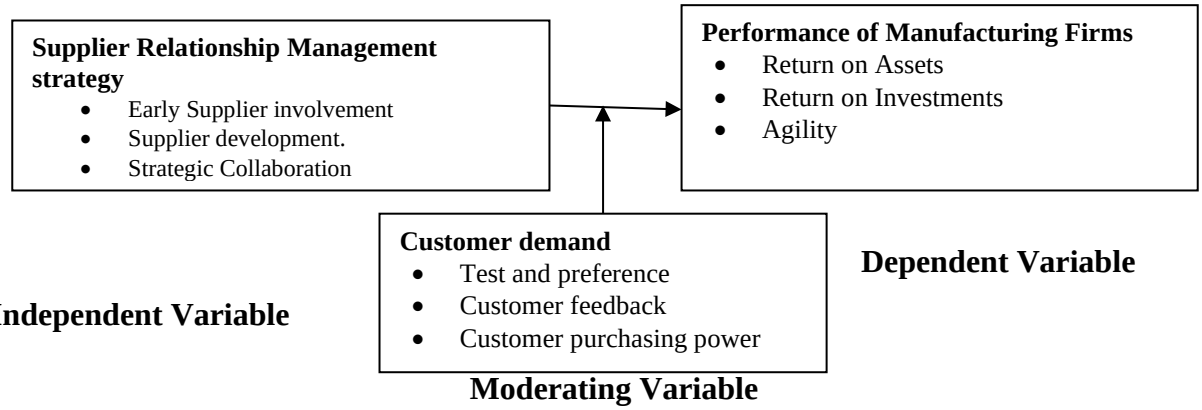

Figure 2. 1: Conceptual Framework

Supplier Relationship Management strategy

The supplier relationship management strategy encompasses creating closer, strategic alliances, collaborative relationships with the organization suppliers to reduce costs, enhance profits and comply with the rules and regulations (Njagi & Shalle, 2016). According to Leftwich, Leftwich and Moore, (2014), the SRM can be used to streamline and make more efficient and effective the procurement processes between the organizations and its suppliers. It covers a wide perspective from creating a multi long-term, multi-functional, dynamic approach to selecting suppliers of goods and services and managing them. Supplier relationship management starts from sourcing raw materials to final customer use and disposal to continually reduce total ownership costs, manage risks, and improve performance that enhance quality, innovations, responsiveness, reliability and flexibility (Marshall, McCarthy, Claudy & McGrath, 2019) in manufacturing firms.

Tarafdar and Qrunfleh (2017), defined supplier relationship management (SRM) as a discipline and a process involved in managing preferred suppliers and finding new ones whilst reducing costs, making procurement predictable and repeatable, pooling buyer experience and extracting the benefits of supplier partnerships. While for certain transactions self-centred or discrete relationships, typically characterized as arm's length, may be appropriate, for others, more collaborative relationships may be appropriate (the shift of the relationship spectrum is towards co-destiny). Supplier Relationship Management (SRM) is the discipline of strategically planning for, and managing, all interactions with third party organizations that supply goods and/or services to an organization in order to maximize the value of those interactions (CIPS 2020). SRM entails creating closer, more collaborative relationships with key suppliers in order to uncover and realize new value and reduce risk of failure.

The immediate objective of SRM is to streamline and make more effective the sourcing processes between an enterprise and its suppliers (Kumar & Reinartz, 2018). It is a strategic, enterprise-wide, long-term, multi-functional, dynamic approach to selecting suppliers of goods and services and managing them and the whole value network from raw materials to final customer use and disposal to continually reduce total ownership costs, manage risks, and improve performance - quality, responsiveness, reliability, and flexibility (Son, Lee, Ha & Nam, 2019). SRM includes both business practices and software and is part of the information flow component of supply chain management (SCM). SRM practices creates common frame of reference/interfaces to enable effective communication between an enterprise and suppliers who may use quite different business practices and terminology.

Customer Demand

According to Levis and Papageorgiou (2014), customer demand is how much a customer is willing to buy a certain product for a certain period of time that forms the agreement of competitive strategy, benefit sharing and risk sharing between buyers and sellers. Various vendors try as much as possible to present the required product quantity and quality so as to achieve the maximum number of customers (Tsai & Chen, 2015). Consequently, the customers invest much of their time and money in making sure that they purchase products of the required quantity and of good quality. Tiemessen, Fleischmann, van Houtum, van Nunen and Pratsini (2013) Customer demand creates a relationship between the customer and the vendor because of trust that has been created between each other. This in turn brings about creation of mutual benefit, achievement of competitive advantage and improved performance (Feng, T., Cai, D., Zhang, Z., & Liu, B. 2016).

Customer demand that is formed between consumers and a manufacturing firm brings about benefit-sharing, risk-sharing as well as long-term, stable and cooperative relationships. Establishing forecasts and management of customer demand can attain the objectives of reducing cost, diversification of risk, gaining critical resources and improving competitive position (Feng.T *et al* 2016)

In line with Yavas and Ashill (2016), some of the main factors used to measure the moderating effect of customer demand include; customer satisfaction, customer loyalty and tastes and preference of customer. Customer satisfaction is the ability of the purchased product to meet the expectations of the consumer, which in turn makes the customer to purchase it again. Customer needs analysis is the process of identifying a customer's requirements for a product or service (Jordan, 2018). It's used in all kinds of product and brand management contexts, including concept development, product development, value analysis, and more. Customer service is important because organizations that provide good customer service gain a competitive advantage over organizations that do not. For example, quality of customer service is related to customer loyalty, customer retention, and increased organizational profits (Reicheld & Sasser, 2019).

Empirical Review

Supplier Relationship management strategy

According to Palmer (2018) in their survey on supplier appraisal and relationship management in Germany, a competitive supplier sourcing process should be carried out in an open, objective and transparent manner that can achieve best value for money in public procurement. Essential principles that should be observed in conducting the procurement function include supplier financial capacity, capability and readiness to embrace new technology among other factors. In addition to the above indicators, the findings of study conducted by Christian (2016) revealed that cost factors, technical capability, quality assessment, organizational profile, service levels and risk factors, in that order of relative importance, are key factors affecting supplier selection in management of the firm.

The findings further indicated that experts who are knowledgeable and have expertise to conduct the exercise professionally since supplier selection is a process vulnerable to personal interference especially in the Manufacturing sector should do supplier selection.

According Vorster (2015) in her study on the determinants of supplier selection and evaluation in Pakistan Telecom industry, supplier financial capacity and expertise are key factors which determine the eventual performance of both the supplier and performance of the firm. The study depicted high correlation between the financial capacity of supplier and ability of supplier to deliver which in turn enhances procurement performance indicating a need for strategic alliances for improved performance of the parties. Similarly, a study on the supplier appraisal of procurement process in manufacturing firm conducted in General Motors East Africa established that reduction in purchasing cost through effective supplier evaluations and relationship management is one of the most significant purposes of procurement

A study by Manyega (2015) on the determinants of firm’s performance in manufacturing firms established that the main concern of organization function is to make sure that one buys from the best suppliers and also improve the current suppliers relatiosnhips. The organizations therefore choose suppliers with who have the capacity to deliver. The study further observed that supplier incentives and awards can work as a tool to influence future behaviour of both buyer and supplier

organization. By connecting procurement targets to certain supplier competence, organizations achieve higher supplier performance thereby leading to improved procurement performance. On the other hand, Cardenas et al (2017) in his study on factors affecting performance of manufacturing firms in Nairobi County found out that selection of suppliers is done based on certain set criteria and the needs of the procuring entity. He points out that among the factors which affects the performance of a firm includes timely preparation of procurement plan, strategic supplier selection plus buyer supplier relationships among other factors. Further study indicates that, after the prequalification of suppliers' based on supplier competence, firms expect a lot from their suppliers because they are confident that they have filtered their suppliers on very efficient. However, they are uncertain about the quality of the items to be delivered, on time delivery, commitment to quality, technology leverage, and overall performance of suppliers (Tozay, 2017).

These findings concur with findings of CIPS (2020) in their report on monitoring the performance of suppliers pointed that strategic monitoring of competence of suppliers is critical in management of performance operations and most importantly, management of supplier-buyer relationship. It is important that any procurement and supplies professional have the required skills in supplier relationship competence determination so as to be in a position to develop appropriate performance criteria both for suppliers and the entire procurement function. The report further indicates that performance management criteria should be well communicated to all stakeholders who are directly involved in procurement operations so as to enhance their contribution towards achievement of the desired standards.

In attempts to reach this objective, firm undertakes diverse measures ranging from supplier selection, supplier evaluation, setting of selection and evaluation criteria, staff training, among other measures with the intention of improving performance. Challenges, such as global warming, have demanded greater concern by organizations regarding their management (Lin *et al*., 2016). However, in order to improve their relations with the environment, these organizations must contribute towards a reduction in impacts from their supply chains, stimulating improvements in their performance.

The insertion of supplier criteria in the supplier selection process for a given firm will be proportional to the environmental demand of final consumers (Manyenze, 2018). Firms have recognized the need to develop strategies that extend their traditional corporate governance processes beyond the firm boundary to their supply chain partners (Kytle & Ruggie, 2015). The most visible indicator of this extension is the emergence of Corporate Social Responsibility-oriented purchasing strategies, such as laying down standards that suppliers must meet in order to win business (Keating et al., 2018).

Customer Demand

Zeithaml (2015) gives an excellent overview of findings of research on aspects of the relationship between customer satisfaction and organizational performance. Positive evidence on the direct relationship between customer satisfaction and organizational performance. in hospital settings with higher profitability; Aaker and Jacobson (2014) found better stock return linked to improved quality perceptions; Anderson, Fornell and Lehmann (2013) found a significant association between customer satisfaction and accounting return on assets that shareholder value is highly elastic with respect to customer satisfaction. Other research is showing that higher customer satisfaction translates into higher than normal market share growth, the ability to charge a higher price, improved customer loyalty with a strong link to improved profitability, and lower transaction

costs (Lysons K, Farrington, 2017). Customer satisfaction is also found to be strongly correlated with repurchase intentions, the willingness to recommend the company, and to improved cross-buying (Piasecki 2015)

RESEARCH METHODOLOGY

Research Philosophy

For this study, the research philosophy was positivism. This is because this philosophy premises that knowledge is grounded on facts and that no abstractions or personal position of the individuals is considered. Positivisms thus derive quantitative method, which holds that there is an objective reality that can be expressed numerically, explanatory and predictive power (Neuman, 2018).

With this model, knowledge is valid only if it is grounded on values of reason and facts, collected through direct surveillance and experience measured empirically through quantitative approaches and statistical investigation. Under this paradigm, theoretical models can be established that are generalizable to explain cause and effect association (Saunders, Lewis & Thornbill, 2017).

Research Design

This study adopted cross-sectional research design since it uses theories and hypothesis to account for the forces that causes a certain phenomenon to occur (Cooper & Schindler, 2017). The design is also appropriate for the study as it allows the survey to be carried out in the natural settings and permits the study to employ probability samples. This enhances statistical inferences to be made to the broader populations and permit generalizations of findings to real life situations, thereby increasing the external validity of the study (Frankfort-Nachmias & Nachmias, 2018). The probability sample minimizes bias and enhances reliability of data. Additionally, the design allows the use of questionnaires and inferential statistics in establishing the significant relationships between the variables (Hair *et al.*, 2017).

The study also employed cross-sectional research design as it seeks to describe and establish associations among key study variables, namely, inventory management strategy, information flow strategy, supplier relationship management strategy, distribution management strategy, and customer demand and performance of manufacturing firms. The study used a cross-sectional research design, as data was collected at a given point in time (Creswell, 2014). The design is suitable where the study seeks to describe and portray characteristics of a phenomenon. It also enables the study to profile the sample of a population by collecting accurate information (Burton, 2020).

Target Population

The KAM 2023 directory has listing of members (firms) by sectors which contains a register of 13 sectors of those in manufacturing firms spread all over the country (KAM, 2023). The study targeted all manufacturing companies registered under Kenya Association of Manufacturers. Therefore, the target population was 1032 manufacturing companies in Kenya while the unit of observation was senior managers from production and Supply Chain management.

Sample Size

A sample size is a representation of a larger population. According to (Gujarati, 2017), a sample is deemed suitable if it captures the characteristics of the population sufficiently. According to Mugenda (2003), a sample of 10-50% of the target population is appropriate for social Science studies. This study adopted Yamane (1967) simplified formula to calculate the sample size which provided the number of responses that should to be obtained using the equation;

$$n = \frac{N}{1 + N(e)^2}$$

Where:
n = sample size
N = population size
e = the level of precision

This formula assumes a degree of variability of 0.5, the level of precision of 5% and a confidence level of 95%.
$n = 1032 / [1+ 1032(0.05)^2]$
$= 288.2681564 \approx 288$

Using this formula, a sample of 288 manufacturing firms were selected. The selected sample represented 28.8% of the target population. According to Mugenda (2003), a sample of 10-50% of the target population is appropriate for social Science studies. The study then selected senior supply chain managers from each of the 288 selected companies. Therefore, the sample size will be 288 respondents.

Data Collection Instruments

Data collection is the process of collecting and collating information on variables in a systematic way that enables one to answer research questions and evaluate outcomes (Kothari, 2014). This study utilized a semi-structured questionnaire to collect data. Mugenda and Mugenda (2003) state that a questionnaire is a form or document with a set of questions deliberately designed to elicit responses from respondents or research informants for purpose of collecting data or information. The questionnaire contained both closed and open-ended questions. In the closed section the respondents were required to pick one answer. The questionnaire was divided into six sections. The first section focused on personal and professional aspects of the respondents while the other five sections each focuses on a single research objective. Semi structured questionnaires are those in which some control or guidance is given for the answer (Kothari, 2017). These study chose to use Questioners because they are easy to administer and hence saves time as a drop and pick strategy was adopted.

Pilot Study

The term pilot study is used in two different ways in social science research. It can refer to so-called feasibility studies which are small scale versions, or trial runs, done in preparation for the major study Mugenda & Mugenda (2003) However, a pilot study can also be the pre-testing or trying out of a particular research instrument (Gujarati, 2017). A pilot study might give an advance warning about where the main research project could fail, where research protocols may not be followed, or whether proposed methods or instruments are inappropriate or too complicated (Nassiuma, 2019). The questionnaire was pilot tested on 10% of the members of the sample size. These gave to 29 respondents. The responses obtained from this pilot study were used to determine the discrimination, validity, reliability and multicollinearity of the questionnaire after which the relevant amendments were made to the questionnaire. According to Kothari (2017), discrimination of a questionnaire means that people with different scores on a questionnaire, should differ in the construct of interest to the study.

Data Analysis and Presentation

Descriptive data analysis was adopted for this study because descriptive analysis is used to describe the basic features of the data in a study. It provides simple summaries about the sample and the measures (Kothari, 2017). Together with simple graphics analysis, they form the basis of virtually every quantitative analysis of data (Bryman & Bell, 2016). The study adopted inferential data analysis in order to enable it reach conclusions that extend beyond the immediate data alone to infer from the sample data about the population.

Inferential statistics facilitate inferences from sample data to population conditions (Mangal & Mangal, 2013). The study used SPSS version 25 in the analysis of data. The study utilized the SPSS to develop a multiple regression model to make inferences on the effect of each of the independent variables on the dependent variable. The rationale for using correlation and regression analysis is to establish the relationship between inventory management, information flow, supplier relationship management and distribution management against Performance of Manufacturing Firms. Illustrative data representation devices and tools were adopted to diagrammatically represent and analyse the data.

To aid in testing for moderation, the moderating variable was computed by multiplying X by M. A z –score will then be computed for both X and M to specify the precise location of each value within the distribution by indicating whether the score is above the mean (positive) or below the mean (negative). The numerical value of the z-score specifies the distance from the mean by counting the number of standard deviations between X and μ. The resultant scores give a distribution that has a mean score of zero and a standard deviation of one.

FINDINGS AND DISCUSSION

Descriptive Statistics

Supplier Relationship Management and Performance of Manufacturing Firms

The mean score for the statement "Early supplier involvement plays a significant role in cost reduction and improving productivity" is 4.65, with a standard deviation of 1.307. This indicates that the respondents agreed with the statements regarding to the above opinion statement. More so, the mean score for the statement "Early supplier involvement plays a significant role in improving lead time" is 4.28, with a standard deviation of 1.374. It equally indicates that the respondents were in agreement regarding to the above opinion statement. Further, the mean score for the statement "Reliable source for supplier performance and evaluation have helped achieve good supplier management" is 4.15, with a standard deviation of 1.044. This shows that the respondents agreed with the above opinion statement. Additionally, the mean score for the statement "Supplier development plays a significant role in cost reduction and improving productivity" is 4.93, with a standard deviation of 1.374. This indicates that the respondents agreed with the above statement.

The mean score for the statement "Lack of detailed information about daily supplier management causes problems with suppliers" is 4.54, with a standard deviation of 1.446. It shows that the respondents agreed with the above opinion statement. Again, the mean score for the statement "Supplier relationship management policy has helped supply chain processes to be more cost and time efficient" is 4.11, with a standard deviation of 1.369. It shows that the respondents were neutral concerning the above opinion statement. The mean score for the statement "Our company

has used SRM to streamline and make more efficient and effective the procurement processes between the organizations and its suppliers" is 4.17, with a standard deviation of 1.058. The mean score for the statement "Strategic collaborations play a significant role in cost reduction and improving productivity" is 4.14, with a standard deviation of 1.389. This demonstrates that the respondents were in agreement with the regard to the above opinion statement. The mean score for the statement "Our company has good supplier management strategy through supply market intelligence and applying a correct competition situation" is 4.35, with a standard deviation of 0.870. This indicated that the respondents agreed with the above opinion statement. Finally, the mean score for the statement "Common procurement approaches and development projects have helped utilize supplier relationship to the maximum" is 4.44, with a standard deviation of 0.786. This mean demonstrates that the respondents agreed with the above opinion statement.
From the descriptive findings on the variable regarding inventory management strategy, the study comes up with the following deductions; that Early Supplier Involvement is recognized as a significant factor in cost reduction and improving productivity. And that supplier development is considered important for cost reduction and productivity improvement. More so the study deduced that lack of detailed information about daily supplier management is seen as a potential problem. The supplier relationship management policy is believed to make supply chain processes more efficient. Additionally, the use of strategic collaborations and supply market intelligence is perceived to contribute to cost reduction and productivity improvement.

The central theme here was supply chain-based relationship approaches. The categories of these relationships include trust-based relationship, power-based relationship and competition-based relationships. Trust based approaches included the relationships spectrum ranging from adversarial relationship to strategic partnerships. On the other hand, power-based approaches include a combination of cooperative approaches and communicative approaches

Table 4. 1: Descriptive Statistics for Supplier Relationship Management (SRM)

Aspect	SD	D	N	A	SA	Mean	SD
Objective3Early supplier involvement plays a significant role in cost reduction and improving productivity	5.1%	0%	0%	52.5%	42.4%	4.65	1.307
Early supplier involvement plays a significant role in improving lead time	3.1%	0%	0%	47.1%	49.8%	4.28	1.374
Reliable source for supplier performance and evaluation have helped achieve good supplier management	2.7%	0%	0%	48.2%	49.0%	4.15	1.044
Supplier development plays a significant role in cost reduction and improving productivity	1.6%	0%	0%	48.6%	49.0%	4.93	1.374
Lack of detailed information about daily supplier management causes problems with suppliers	3.5%	0%	0%	58.4%	38%	4.54	1.446
Supplier relationship management policy has helped supply chain processes to be more cost and time efficient	3.1%	0%	0%	56.5%	40.4%	4.11	1.369
Our company has used SRM to streamline and make more efficient and effective the procurement processes between the organizations and its suppliers	2.7%	0%	0%	54.9%	42.4%	4.17	1.058
Strategic collaborations play a significant role in cost reduction and improving productivity	2.0%	0%	0%	60%	38%	4.14	1.389
Our company has good supplier management strategy through supply market intelligence and applying a correct competition situation	2.7%	0%	0%	55.3%	42%	4.35	.870
Common procurement approaches and development projects has helped utilize supplier relationship to the maximum	2.0%	0%	0%	60.4%	37.6%	4.44	.786

$\bar{x}$= 4.376

Customer Demand and Performance of Manufacturing Firms

The mean score for the statement "The organization meets the inventory and service demands of the customers" was 4.0625 with a Std. Dev of .99803. The mean score for the statement "The organization has adopted a demand-driven, consumer -centric approach to planning and forecasting" was 4.0694and a Std. Dev of .95091. The mean score of the statement "The organization focuses less on statistical analysis and more on strategic demand management." Was 4.0208 with a Std. Dev of .91199. The mean score for the statement "Taste and preferences of the customers are key consideration in the organization" was 4.0625 with a Std. Dev of 1.06580. The mean score for the statement "The company Collaborate closely in real-time with customers and trading partners" was 4.0486 with a Std. Dev. of 1.07306. The mean score for the statement "The company enhances customer loyalty by consistently having positive emotional experience, physical attribute-based satisfaction and perceived value of the customer." was 4.0764 and a Std. Dev of .90901. The mean score for the statement "Customers can share their opinions through surveys, interviews, and tell a company whether they're satisfied or dissatisfied." Was 4.056 with a Std. Dev. of 1.0019. The mean score for the statement "The level of customer demand affects the sales volume of the company" was 4.1111 with a Std. Dev. of .82029.

Table 4. 2: Descriptive Statistics for Moderating Effect of Customer Demand

Aspect	SD	D	N	A	SA	Mean	SD
Objective 5 The organization meets the inventory and products that meets demands of the customer's requirements.	5.1%	0%	0%	53.3%	41.6%	4.0625	.99803
The organization has adopted a demand-driven, consumer -centric approach to planning and forecasting	3.5%	0%	0%	60.0%	36.5%	4.0694	.95091
The organization focuses less on statistical analysis and more on strategic demand management.	3.9%	0%	0%	57.6%	38.4%	4.0208	.91199
Customers Taste and preferences are key consideration in our organization's inventories and production schedules.	4.3%	0%	0%	45.5%	50.2%	4.0625	1.06580
The company Collaborate closely in real-time with customers and trading partners	3.1%	0%	0%	47.8%	49%	4.0486	1.07306
The company enhances customer loyalty by consistently having positive emotional experience, physical attribute-based satisfaction and perceived value of the customer.	3.5%	0%	0%	54.1%	42.4%	4.0764	.90901
Customers can share their opinions through surveys, interviews, and tell a company whether they're satisfied or dissatisfied.	3.1%	0%	0%	49.4%	47.5%	4.056	1.0019
The level of customer demand affects the sales volume of the company	2.4%	0%	0%	62.4%	35.3%	4.1111	.82029

$\bar{x}$= 4.0634

Descriptive Statistics for Performance of Manufacturing Firms

The mean for the statement that the organization is making profits over the past three years was 3.5787 with a standard deviation of. 1.39724 The mean for the statement that the organization has recorded a steady increase in profits over the last three years was 4.3583 with a standard deviation of .82068. The mean for the statement that the number of products that we sell has also increased during the past three years was 4.3071with a standard deviation of .59659 The mean for the statement that the firm is responsive enough to deal with disruptions ex-post a disturbance was 4.3661with a mean of .81718. The mean for the statement that the company is flexible enough to have additional capacities in their contingency plans was 4.2795with a standard deviation of .51520. The mean for the statement that the company exercises product diversification was

4.2874with a standard deviation of 1.00987. The mean for the statement that the company's customer base has been increasing over the last 3 years was is 4.2874 and a standard deviation of .54090. The mean for the statement that the company receives complements from our customers was 3.9488 with a standard deviation of 1.19673. The mean for the statement that most of our sales are orders from our repeat customers is 4.2362 with a standard deviation of .46125

Table 4. 3: Descriptive Statistics for Performance of Manufacturing Firms

Statements	SD	D	N	A	SA	Mean	Std. Deviation
The organization is making profits over the past three years	20.5%	0%	4.3%	51.6%	23,65	3.5787	1.39724
The organization has recorded a steady increase in profits over the last three years	3.1%	0%	3.1%	45.3%	48.4%	4.3583	.82068
The number of products that we sell has also increased during the past three years	0%	0%	7.1%	55.1%	37.8%	4.3071	.59659
The firm is responsive enough to deal with disruptions ex-post a disturbance	3.1%	0%	2.8%	45.3%	48.8%	4.3661	.81718
The company is flexible enough to have additional capacities in their contingency plans	0%	0	3.1%	65.7%	31.1%	4.2795	.51520
The company exercises product diversification	6.3%	0%	2.8%	40.6%	50.4%	4.2874	1.00987
The company's production schedules are always tracked real-time to eliminate wastages	0%	0%	4.3%	62.6%	33.1%	4.2874	.54090
We statistically analyze defects and errors in production process to minimized returns and rejection from our delivered products	7.9%	1.6%	22.0%	24.8%	43.7%	3.9488	1.19673
Our production processes minimize Works in progress items and parts to hasten customer orders.	0%	0%	1.6%	73.2%	25.2%	4.2362	.46125

Inferential Statistics

Correlation analysis

For Performance of Manufacturing Firms and Supplier Relationship Management Strategy the study established that there is a positive and significant correlation between the performance of manufacturing firms and their supplier relationship management strategy ($r = 0.764$, $p < 0.01$). This suggests that firms with strong supplier relationships and effective management practices perform better. More so, for Performance of Manufacturing Firms and Distribution Management Strategy: There is a positive and significant correlation between the performance of manufacturing firms and their distribution management strategy ($r = 0.732$, $p < 0.01$). This indicates that firms with efficient distribution management practices tend to have higher overall performance. The findings from the correlation analysis provide valuable insights into the relationships between different supply chain strategies and the performance of manufacturing firms.

Supplier Relationship Management Strategy, the positive correlation between supplier relationship management strategy and firm performance highlights the significance of building and maintaining strong supplier relationships. Collaborative partnerships with suppliers can lead to various benefits such as improved quality, timely delivery, cost savings, and access to innovation. Firms that actively manage their supplier relationships, engage in open communication, and foster mutually beneficial collaborations are more likely to achieve better performance outcomes.

For distribution Management Strategy, the positive correlation between distribution management strategy and firm performance underscores the importance of effective distribution practices. Efficient distribution management ensures timely and cost-effective delivery of products to customers, which can enhance customer satisfaction and loyalty. Firms that optimize their distribution networks, streamline transportation processes, and leverage technology to improve visibility and tracking can achieve better performance in terms of delivery speed, reliability, and cost-efficiency.

Table 4. 4: Correlations

		Performance of Manufacturing Firms	Supplier Relationship Management strategy
Performance of Manufacturing Firms	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	255	
Supplier Relationship Management strategy	Pearson Correlation	.764**	1
	Sig. (2-tailed)	.000	
	N	255	255

Supplier Relationship and Performance

The correlation coefficient R (simple correlation coefficient) measures the strength and direction of the linear relationship between the supplier relationship management strategy and the performance of manufacturing firms. In this case, the R value is 0.764, indicating a strong positive relationship between the predictor (supplier relationship management strategy) and the dependent variable (performance of manufacturing firms). The coefficient of determination (R-squared) represents the proportion of variance in the dependent variable that can be explained by the supplier relationship management strategy. In this case, the R-squared value is 0.584, meaning that approximately 58.4% of the variance in the performance of manufacturing firms can be explained by the supplier relationship management strategy. The adjusted R-squared value takes into account the number of predictors and sample size, providing a more conservative estimate of the proportion of variance explained. In this case, the adjusted R-squared value is 0.582. Std. Error of the Estimate value is (0.45689) which represents the standard deviation of the residuals, providing an indication of the average distance between the observed and predicted values.

Table 4. 5: Model Summary for Supplier Relationship Management Strategy

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.764[a]	.584	.582	.45689

a. Predictors: (Constant), Supplier Relationship Management strategy

The ANOVA table examines the overall significance of the regression model. The regression sum of squares (74.059) represents the variability in the dependent variable explained by the supplier relationship management strategy. The residual sum of squares (52.813) represents the unexplained variability or error term in the model. The total sum of squares (126.872) is the sum of the regression sum of squares and the residual sum of squares. The F-statistic (354.781) tests the overall significance of the regression model. With a p-value of .000, which is less than the

conventional significance level of .05, we can conclude that the regression model is statistically significant. This suggests that the supplier relationship management strategy has a significant impact on the performance of manufacturing firms in Kenya.

This study corroborates that of (Ibrahim, 2022) who conducted a research titled supplier relationship management and performance of road construction projects. The study adopted a multiple regression analysis model to establish the effect of supplier relationship management on performance of road construction projects in Wajir County. From the regression model summary results Supplier Relationship Management had R2 of 0.187 indicating that performance of road construction projects is accounted for by supplier relationship management. A unit change in Supplier Relationship Management influences a positive change in performance of road construction projects by 18.7%.

Again, the study corroborates with the findings of (Rajab et al., 2021) who conducted a study to establish the influence of supplier relationship management on performance of manufacturing firms in Kenya. The researcher operationalized supplier relationship management into metrics such as early supplier involvement, supplier development, and joint investment. The results of their regression model indicated that a unit change in supplier relationship management accounted for 22.6% change in dependent variable; organizational performance R2=0.226.

Table 4. 6: Anova Table for Supplier Relationship Management Strategy

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	74.059	1	74.059	354.781	.000[b]
	Residual	52.813	253	.209		
	Total	126.872	254			

a. Dependent Variable: Performance of Manufacturing Firms

b. Predictors: (Constant), Supplier Relationship Management strategy

The constant term (0.841) represents the expected value of the dependent variable (performance of manufacturing firms) when the supplier relationship management strategy is zero. The coefficient for the supplier relationship management strategy (0.782) indicates that a one-unit increase in the supplier relationship management strategy is associated with a 0.782 increase in the performance of manufacturing firms. The standardized coefficient (beta) of 0.764 suggests a strong positive relationship. From the ANOVA table of (Ibrahim, 2022) the F statistic, (1, 42) = 9.647 with a p value= 0.003. indicating that the model was statistically significant.

These results are in tandem with Mandal (2022) who established the effect of Early supplier involvement on firm performance through team work and New product development. The study demonstrated that through Early supplier development, a firm can ensure on time delivery of materials and increase customer satisfaction. Additionally, the study findings are consistent with the averments of (Oktapia, 2022) on the effect of Early Supplier Involvement on New Product Development.

On supplier development, the findings of this study are in agreement with those of (Pradhan, 2018) who contended that supply chain performance ca be bolstered through supplier development and enhanced supply chain visibility. The study posited that supplier development programs shields an organization from bullwhip effect risks due to mismatch between demand and supply and improves

supply chain visibility. The study is consistent with the empirical findings of Liu et al., (2020) who conducted a study on the effect of buyer-supplier strategic collaboration on operating performance of Chines companies. The study established that strategic supply chain collaboration bolsters performance of buying companies.

Chen et al. (2015) examined the impact of supplier relationship management practices on firm performance in the context of the electronics industry. Their study revealed that effective supplier relationship management, including activities such as supplier selection, collaboration, and information sharing, positively influenced product quality, cost reduction, and customer satisfaction, ultimately leading to improved firm performance. Choi and Hartley (1996) conducted research on the effects of supplier relationships on manufacturing performance. They found that close relationships with suppliers, characterized by trust, commitment, and mutual cooperation, resulted in reduced lead times, improved product quality, and enhanced operational performance.

Li et al. (2016) investigated the relationship between supplier relationship management and supply chain performance in the manufacturing sector in China. Their findings indicated that effective supplier relationship management practices, such as supplier evaluation, communication, and joint problem-solving, contributed to improved supply chain coordination, reduced costs, and enhanced overall performance. Ghosh and Shah (2013) examined the impact of supplier relationship management on firm performance in the Indian manufacturing industry. Their study revealed that firms that actively managed their supplier relationships through measures like supplier development, trust-building, and collaborative planning experienced improved operational efficiency, cost reduction, and increased customer satisfaction. Zeng et al. (2015) conducted a study on the relationship between supplier relationship management and firm performance in the automotive industry. Their research findings demonstrated that firms with effective supplier relationship management practices achieved better supply chain integration, reduced supply chain risks, improved product quality, and increased operational performance.

Table 4. 7: Coefficients table for Supplier Relationship Management Strategy

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.841	.143		5.879	.000
	Supplier Relationship Management strategy	.782	.041	.764	18.836	.000

a. Dependent Variable: Performance of Manufacturing Firms

The specific model;

$$Y= \beta 0+ \beta 1\ X4+\varepsilon$$

Performance of Manufacturing Firms = 0.841+0.782 Supplier Relationship Management Strategy

Moderating Effect of customer Demand

The regression model demonstrates a moderately strong relationship with a correlation coefficient (R) of 0.522. This indicates that the combined effect of the predictors (information flow strategy) moderated by customer demand explains approximately 27.2% of the variance in the performance

of manufacturing firms. The adjusted R-squared value of 0.273 suggests that the model provides a good fit to the data, considering the number of predictors and sample size. This adjusted value suggests that approximately 27.3% of the variance in firm performance is explained by the predictors and customer demand moderation.

Table 4. 8: Model Summary with the Moderator Variable

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.522[a]	.272	.273	.40539

a. Predictors: (Constant), x4m, x1m, x2m, x3m

The ANOVA results indicate that the regression model is statistically significant, as the regression sum of squares (85.786) is significantly larger than the residual sum of squares (41.086). This suggests that the combination of information flow strategy and customer demand moderation significantly contributes to explaining the variance in the performance of manufacturing firms.

Table 4. 9: Anova Table with the Moderator

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	85.786	2	42.89	263.13	.000[b]
	Residual	41.086	252	.163		
	Total	126.872	254			

a. Dependent Variable: Performance of Manufacturing Firms
b. Predictors: (Constant), x4m, x1m, x2m, x3m

Analyzing the coefficients, it is observed that the predictor moderated by customer demand has statistically significant effects on firm performance. The standardized coefficients (Beta) provide insights into the relative importance of the predictor; Information Flow strategy moderated by customer demand also has a positive standardized coefficient (Beta = 0.859), suggesting that the interaction between information flow strategy and customer demand has a significant positive impact on firm performance.

The positive coefficient indicates that an information flow strategy that considers customer demand patterns positively influences firm performance. This implies that firms that effectively share and communicate information across the supply chain, taking customer demand into account, are likely to achieve better performance outcomes. Timely and accurate information exchange can lead to improved coordination, responsiveness, and customer satisfaction.

Table 4. 10: Coefficients Table with the Moderator

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.108	.069		30.727	.000
	Information Flow strategy moderated by customer demand	1.124	.018	.859	6.784	.000

a. Dependent Variable: Performance of Manufacturing Firms

Hypothesis Testing

The test of hypothesis was conducted using the Ordinary Least Square Regression. The acceptance/rejection criteria was that, reject the null hypothesis if the p-value is less than the convectional 0.05. Fail to reject the null hypothesis if the p-value is higher than the convectional 0.05.

H_{o3}: Supplier relationship management strategy has no significant effect on performance of manufacturing firms in Kenya.

The null hypothesis was that Supplier Relationship Management Strategy has no significant effect on performance of manufacturing firms in Kenya. Results in Table 4.30 indicates that p-value (0.028) was less than the convectional p-value (p= 0.05). This demonstrates that Supplier Relationship Management Strategy has a significant effect on performance of manufacturing firms in Kenya. Otherwise put, the role of Supplier Relationship Management Strategy in determining the performance of manufacturing firms in Kenya cannot be ignored. In conclusion, we reject the null hypothesis H_{o3}: Supplier relationship management strategy has no significant effect on performance of manufacturing firms in Kenya.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The study showed a significant positive relationship between supplier relationship management strategy and the performance of manufacturing firms. Effective supplier integration and collaboration contributed to improved firm performance. Early Supplier Involvement (ESI) leads to cost reduction, improves productivity and reduces lead time and overall improved quality. Supplier Development reduces costs and improves productivity as well overall organization financial and operational performance. Supplier relationship management policy is important and firms that had the best approach to supplier relationship management are more likely to post better performance.

Recommendations

Procurement departments should strive to undertake supplier segmentation as informed by Kraljic Model. Following this segmentation, the finance department should allocate resources and attention to these suppliers focusing most attention to strategic suppliers. Additionally, they should forge long term strategic partnership with such suppliers and maintain transactional relationships with suppliers of routine non-critical supplies. Also, conducting supplier development for strategic suppliers while setting Key Performance Indicators and Service Level Agreements will bolster the performance of these manufacturing firms.

A vibrant Supplier Relationship Management (SRM) program can be a powerful tool for improving organizations sustainability performance, by ensuring a solid, optimized relationship collaborations with suppliers contributes to an organization's operational efficiency, while the reverse can lead to negative consequences. Manufacturing firms should treat their service providers like business partners by exhibits mutual respect and lay a solid foundation for a long-term relationship with strategic partners and hence need for compliance with Global and regional

data security and protection Legal and regulatory framework by leveraging on current technologies such as blockchains, artificial intelligence (AI) in tandem with supplier relationship management (SRM) software in order to foster supply chain visibility,additionaly Firms should endeavor to adopt, implement and integrate sustainable supplier relationship policies that builds on Environmental Social and Governance (ESG) pillars in order to enhance their operational and financial performance by festering strategic collaborations with suppliers and other upstream and downstream supply chain player in research and design investment determination.

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