# SUPPLIER RELATIONSHIP MANAGEMENT AND THE PERFORMANCE OF MICRO, SMALL AND MEDIUM ENTERPRISES IN NAIROBI CITY COUNTY, KENYA

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#### ABSTRACT

The study seeks to determine the influence of supplier relationship management on the performance of micro, small and medium enterprises in Nairobi City County. The objectives included to determine the influence of supplier relationship management practices, supplier base segmentation, supplier performance management, supplier communication, and supplier integration on performance. The study is anchored on resource-based theory, transaction cost economics theory, communication accommodation theory, network theory and the supplier relationship management model. The study employed a cross-sectional survey approach and mainly concentrated on 5,594 micro, small and medium enterprises in Nairobi City County that are listed under AGPO. The respondents were chosen based on the sample frame. The heads of procurement department in each of the firms were employed as unit of analysis. The primary data were collected through self-administered questionnaires. Statistical Package for the Social Sciences (SPSS version 28) was used to analyze the data. The Cronbach's Alpha value was greater than 0.7 which indicated that the questionnaire met the minimum acceptable threshold. The study findings showed that supplier relationship management practices namely supplier base segmentation, supplier performance management, supplier communication and supplier integration significantly influence the performance of MSMEs in Nairobi City County, Kenya. The study concluded that performance was predicted to improve for every unit increase in these practices. The study further recommends that MSMEs should diversify their customer base to reduce dependency on a single client. Some recommendations include through market research and targeting, proactive sales and marketing efforts, leveraging existing relationships, flexible pricing, and building brand recognition.

**Keyword**: Supplier Base Segmentation, Supplier Performance Management, Supplier Communication, Supplier Integration, Supplier Relationship Management and Performance

#### **1. INTRODUCTION**

Organizations compete frequently for market share and position with other firms in different competitive sets. In these competitive environments, buyers often treat suppliers adversarially since their relationship is viewed as a winlose scenario. However, according to Narain and Singh (2012), it is rarely a win-lose situation because a strong and healthy supplier relationship enhances firm performance. Supplier relationship management can be described as managing the relationships between firms that collectively buy and sell to each other for profit, whether explicit or implicit. In other words, supplier relationships are collaborative relationships where the buyer and supplier jointly pursue strategic goals. As indicated by the broad features of SRM above, this phenomenon significantly affects every business firm, regardless of size or industry (Claro & Claro, 2010). Therefore, managers at all levels must accept this fact and implement some strategies to their advantage.

Globally, supplier relationship management is a very active area to encourage businesses to improve the relationship between them and their suppliers. The main aim is to develop a long-term relationship between a company and its suppliers while improving how they manage their suppliers and helping them conduct business more socially and responsibly (Lambert, 2012). The goal is to increase profitability by encouraging better product innovation, service responsiveness, and sustainability performance. There have been some improvements in the manufacturing industry: adopting new technologies, expanding supplier networks, and improving support for local communities are all signs that top management is taking corporate social responsibility seriously. However, some of these changes have alienated employees who once enjoyed greater job security (Lambert, 2012).

Today, the global sourcing of goods and services from faraway locations is robust and trending, most recently from China and other Southeast Asia countries. This is due to the availability of a higher volume of products and improved logistic services. This is because the supply chain, due to the economy of scale in search of lower materials and high production costs, has become irresistible (Wei & Hua, 2014). However, the small and medium enterprises' performance based on the efficiency of the flows in these longer chains, and consequently the leanness in terms of inventories, strongly relies on the predictability of these elongated lead times, is far from the current state of affairs due to unforeseen circumstances. Yanping (2013) warns supply chain managers of the consequences of the unpredictable hidden costs due to elongated and variable lead-time supply chains, for instance, the costs for stock-outs, excess inventories and write-downs, over and under-productions, among others, and explicitly advises them to consider expediting options for effectively managing such chains to enhance performance.

In Kenya, Micro, Small and Medium Enterprises (MSMEs) play a crucial role in economic growth and employment opportunities creation (Odhiambo, 2023). However, the performance of these MSMEs can be greatly influenced by their supplier relationship management. Supplier relationships are vital for the success of any business, and this holds for MSMEs owned by preference groups in Kenya as well. According to Benton, Prahinski and Fan (2020), building strong relationships with suppliers can have a significant impact on the performance and growth of these businesses. When MSMEs effectively manage their supplier relationships, they can benefit from improved access to resources, such as raw materials and financing. This allows them to operate efficiently and meet the demands of their customers. Additionally, strong supplier relationships can lead to increased trust and collaboration, resulting in better communication, timely delivery of goods and services, and, ultimately, customer satisfaction (Benton et al., 2020).

#### 1.1 Statement of the problem

Supplier Relationship Management (SRM) practices have recently been a concept of interest. The focus is ensuring that buyers and suppliers can plan, develop, implement, and monitor contracts (Sillanpää & Shahzad, 2015: Patrucco, Luzzini, Moretto & Ronchi, 2019). This is done by continuously examining the performance of the contract from both buyers and supplier's perspectives. There is an increasing diversity of roles of both buyer and supplier in the modern business environment. According to Kosgei and Gitau (2016), supplier relationship management is basically about controlling and managing all transactions and the relationship between both parties. Therefore, as stated by Maina and Nyangau (2023), the lack of supplier integration, supplier development, supplier communication, and supplier base optimization between business partners has been the most common challenge in the business environment.

This is why it becomes essential to have efficient SRM practices to ensure the optimized performance of joint venture activities (Maina et al., 2023). A study on supplier relationship management and procurement performance by Nabiliki, Wanyoike, and Mbeche (2019) established that high-performance outcomes are generated in supply chains that are not supplier dependence focused. The supplier relationship management is an increasingly essential area in both business and academic worlds (Ellram & Murfield, 2019). Conversely, another study by Wachuma et al. (2016) on the impacts of lean supply chain practices revealed that improving supplier relationships is challenging when firms do not involve suppliers in decision-making.

Furthermore, findings by Chebichii, Namusonge and Nambuswa (2021) in his study on supplier relationship management and organizational performance among alcohol and beverage industries revealed how firms struggled to embrace collaborative relationships with their suppliers to improve their overall performance. MSMEs are under intense pressure to improve their operating efficiency and profitability. To improve performance, there is a need to review supplier relationship management practices among MSMEs, especially those owned by preference groups (Long, Looijen & Blok, 2018). Kannan (2018) recommends that managing supplier relationships is a critical success factor for any organization that contributes to its success.

Suppliers are an integral part of business operations and, thus, should be managed adequately. Recently, manufacturers have taken advantage of the expanding market despite facing stiff competition in quality, increased operation costs, and timely delivery (Wood, Williams, Nagarajan & Sacks, 2021). Moreover, despite organizations adopting supplier relationship management practices, such as supplier base segmentation, supplier performance management, supplier communication, and supplier integration to enhance performance, the MSMEs are still coping with challenges of market expansion, increasing operation costs, and timely delivery as a result of globalization (Wood et al., 2021: Toaha et al., 2019). Previous studies have shown that organizations with solid supplier relationships can improve performance (Kimario, Mwagike & Kira, 2021). This suggests that strong key supplier relationships may be the panacea for ensuring that organizations can improve their performance.

According to Kumar, Singh, and Shankar (2015), the relationship between buyers and suppliers is a critical success factor for any organization. Moreover, Kumar and Rahman (2015) emphasize that supplier relationships are essential to organizational success and future profitability. A collaborative relationship between buyers (organizations) and suppliers will provide the foundation for a sustainable supply chain to produce high-quality products at affordable prices. A study by Panahifar, Byrne, Salam, and Heavey (2018) revealed that a firm's relationship with its suppliers is essential to supply chain management effectiveness. Another study by Lin, Lin and Wang (2022) on the challenges facing buyers and suppliers in the MSMEs sector revealed that supply chain problems lie in the inability of buyers and suppliers to understand each other's expectations, which leads to low performance and waste of resources at all stages of operations, resulting in poor supplier relationships.

However, these studies failed to investigate the effects of supplier relationship management and the performance of Micro, Small and Medium Enterprises in Kenya. The research gap in this area exists because many studies concerning SRM, such as that of Kimario et al. (2021) have focused on firms' performance, forgetting to narrow it down to Micro, Small and Medium Enterprises. The research will cater for the market niche by adding value to knowledge regarding supplier relationship management and its effects on Micro, Small and Medium Enterprises in Nairobi City County.

#### **1.2 Objectives of the Study**

This study's general objective was to assess the influence of supplier relationship management on the performance of micro, small and medium enterprises in Nairobi City County. **Specific Objectives includes.** 

- i. To establish the influence of supplier base segmentation on the performance of micro, small and medium enterprises in Nairobi City County.
- ii. To evaluate the influence of supplier performance management on the performance of micro, small and medium enterprises in Nairobi City County.
- iii. To examine the influence of supplier communication on the performance of micro, small and medium enterprises in Nairobi City County.

iv. To analyze the influence of supplier integration on the performance of micro, small and medium enterprises in Nairobi City County.

#### 2. LITERATURE REVIEW

The theories informing the current study are Resource-Based Theory, Transaction-Cost Economics Theory, Communication Accommodation Theory, Network Theory and Supplier Relationship Management Model. These theories will anchor this study to underpin the nexus between supplier relationship management and performance.

#### 2.1 Resource-Based Theory

This theory was formulated by Pfeffer and Salancik (1978) in their research on the effect of a company's external resources on a firm's performance. These external resource acquisitions are necessary for the tactical and strategic management of most organizations. Resource-based theory affects the procurement efficiency of purchasing firms mainly because it limits the relationship with suppliers as their loyal and decisive partners. Thus, this theory supports the concept of supplier base segmentation. The theory suggests that the need for good relationships may stem from a lack of one resource, which makes you want a relationship with another to get what you don't have, just as sellers depend on buyers in a high-value market and buyers depend on external resource providers (Collins, 2021).

According to Kittur and Chatterjee (2021), the objective of any supplier is to sell their products to any willing buyer who can offer the best price for their goods and services, regardless of the relationship. This theory, therefore, supports the need to create working relationships between buyer and supplier to increase vendor segmentation. Therefore, both companies must use their resources to support each other to achieve common goals. The buyer directs the resources and infrastructure of his company to support his chosen vendors in improving their skills and capabilities in production-related activities, the effects of which are shared by both parties. (Kittur et al., 2021). The theory also assumes that the purpose of a company is to use resources, including knowledge resources, to its advantage; thus, to develop their suppliers, the companies must coordinate the creation, retention, integration and application of knowledge either internally or externally. Implicit knowledge, which includes the knowledge, experience and skills of an individual, is deeply embedded in companies and is closely related to the application of explicit knowledge in production tasks (Gamble, 2020).

The theory states that indirect knowledge is attached to the mentors during the development activity because the company members performing the mentoring are the resource package of the company (Al-Zoubi, Alrowwad & Masa'deh, 2020). Improvements are platforms where indirect knowledge sharing takes place, and mentoring is a knowledge transfer mechanism. Companies organize supplier segmentation by coordinating mentors and teams of supplier employees to share tactical knowledge during improvement efforts (Al-Zoubi et al., 2020). Supplier base segmentation includes three pillars, namely indirect knowledge sharing (resource utilization), training (deployment capability), and company-initiated improvement activities (platform) to improve supplier performance. Thus, the buying firm is able to get quality products, products delivered on time, and decrease stock-outs, all of which contribute to overall organization efficiency.

#### 2.2 Transaction-Cost Economics Theory

Transaction Cost Economics (TCE) provides a valuable lens for understanding how supplier performance management can enhance the performance of micro, small and medium enterprises (MSMEs). At its core, TCE argues that firms seek to minimize transaction costs—the exchange of goods and services (Ketokivi & Mahoney, 2020). Supplier relationships involve various transactions and inefficiencies in these interactions can significantly affect MSMEs. Supplier performance management practices directly address these transaction costs. By clearly defining performance expectations through contracts and metrics, MSMEs create a foundation for effective collaboration. Monitoring supplier performance based on these metrics enables early identification of problems that could lead to higher costs (Patrucco, Moretto, Luzzini & Glas, 2020). For example, consistent late deliveries may require an increase in safety stock, which increases inventory holding costs.

TCE emphasizes the concept of asset specificity—the degree to which an investment specializes in a particular transaction. In the MSME context, investment in supplier relationships can be asset specific. For example, working

with a supplier on a unique product development project creates a certain degree of interdependence. Effective supplier performance management promotes trust and cooperation in such situations, minimizes the risk of opportunistic behavior by either party, and protects the value of a particular investment (Merguei et al., 2022). By proactively managing supplier performance, MSMEs operating in Nairobi can use TCE principles to minimize transaction costs, optimize resource allocation and ultimately increase their overall performance. This becomes even more important for SMEs, which often have limited resources and are more prone to disruptions in their supply chains.

#### 2.3 Communication Accommodation Theory

Communication theory touched on accommodative communication and was developed by Howard Giles in 1973 (Ayeni, 2021). Accommodative communication is the process of adjusting our communication style to suit either a high or low-context culture. High-context cultures refer to those with various verbal and nonverbal cues and high-density information. In contrast, the low context culture relies on explicit messages and few cues (Ayeni, 2021: Ting-Toomey & Dorjee, 2018). Considering this theory, it is evident that micro, small and medium enterprises in Kenya operate as accommodative communicators for both high-context and low-context cultures.

Communication accommodation theory plays a significant role in micro, small and medium enterprises in Kenya. According to Prakasa and Setiawan (2023), MSMEs may not know how to deal with different cultures. They try their best to speak as much as possible by speaking loosely. For example, high-context people will speak more slowly or differently than they usually use in English. The communication theory helps micro, small and medium enterprises in Kenya communicate more effectively for high- and low-context cultures. Communication accommodation theory has been applied to business situations for organizations to display effectively with employees, customers, suppliers and other external parties (Prakasa et al., 2023). CAT measures perceptions of communication accommodation patterns rather than actual designs. Ratings are based on whatever information is available in a working situation. Doing so makes the process challenging to operate because people may not agree with each other, but they will fill out surveys independently.

This theory is essential to MSMEs because it allows them to use the proper communication manner to deliver their services and products efficiently (Wang, 2021). For supplier relationships, accommodation theory emphasizes the importance of shared knowledge and trust to ensure a high accommodation level. The communication accommodation theory is based on people's first impressions when they meet. According to Prakasa et al. (2023), this theory can be applied to workplace communication when people are introduced. Their appearance, participation, speech and vocal tone can give an impression of how serious, formal or informal a person is. This will allow them to adjust their behaviour accordingly. According to Larentis, Antonello, Slongo, Larentis, Antonello and Slongo (2019), cultural and interpersonal boundaries should be discussed during the initial stages of inter-organizational relationships. This will allow parties to understand each other's culture and clearly understand the diversity among members of the organization. Therefore, this theory is relevant to the third objective: assessment of the influence of supplier communication on the performance of MSMEs in Nairobi City County, Kenya.

#### 2.4 Network Theory

A single enterprise cannot fully achieve all management goals in the current competitive business environment. To have a successful business, enterprises must establish and maintain win-win relationships by cooperating closely with their suppliers and customers. Network theory is built on the idea that organizations rely not only on their relationship with direct partners but also on the extended network of relationships with supply chain firms outside their direct chain (Ullah, 2012). Customers and suppliers are the two main types of extended network relationships to which a company must build relationships to succeed. Developing these relationships creates a 'network of networks (Buttle & Maklan, 2019). Thus, a company depends on its direct supply chain and wider external networks, which may include other suppliers, service providers, and customers. Through its relationship with the extended network, an enterprise can influence the outcome of its business effectiveness by controlling its network structure at two different levels: internal and external. External relates to partners in the network, including customers, suppliers, competitors, and non-competitors (Asamoah, Agyei-Owusu & Ashun, 2020).

Network theory is concerned with network development and the enterprise's performance in a specific industry. It focuses on how elements of the entire supply chain relate (Asamoah et al., 2020). Network theory can help identify the key elements of the supply chain and examine how they interact to create a competitive advantage (Wellenbrock, 2013). Also, network theory is essential for connecting buyers and suppliers to develop a strategic alliance and a strong network of relationships (Burt & Soda, 2021). Therefore, the supplier relationship is established on the enterprise's value creation in the supply chain.

This theory has been used in specific manufacturing industries globally (Panetto, Iung, Ivanov, Weichhart & Wang, 2019). It provides a framework for understanding the relations between buyers and suppliers by acting as a management tool by which organizations can quantify, monitor and plan network relationships (Ullah, 2012). Examining how supply chain-based interdependence affects buyer decision-making is also useful. Finally, it can be an effective management tool to improve overall performance by promoting harmony among all network members and realizing vendor integration (Panetto et al., 2019). Therefore, this theory is relevant to the first variable: the establishment of the influence of supplier integration on the performance of MSMEs in Nairobi City County, Kenya.

#### 2.5 Supplier Relationship Management Model

Supplier Relationship Management (SRM) is a strategic approach to managing supplier relationships to maximize value, minimize risks, and drive continuous improvement. It involves a structured, collaborative process of engaging suppliers to establish mutually beneficial partnerships (Park and Chang, 2010). SRM is a comprehensive approach to managing business relationships, which addresses the entire supply chain. It focuses on strategic supplier relationship management (SRM) and engaging with suppliers to establish mutually beneficial partnerships that maximize value for the organization (Park et al., 2010). SRM is a systematic approach to managing business relationships involving a collaborative dialogue between buyers and suppliers, built on the core principles of mutual interests, trust, transparency, and respect (Bwaliez & Abushaikha, 2019). It seeks to optimize procurement results through open dialogue and collaboration among all parties involved in the supply chain processes. The SRM model provides a practical framework for identifying opportunities posed by potential new sources of products or services that may benefit an organization's bottom line (Lambert & Schwieterman, 2010).

According to Penttinen (2007), every industry and business must purchase products and services from suppliers who meet its requirements. However, managing supplier relationships involves complex relationships based on trust and respect. SRM seeks to build mutually beneficial and sustainable collaborative relationships with suppliers, thereby maximizing value for both parties (Lambert et al., 2010). SRMs focus on the organization's performance as a whole and seek to improve total corporate value by facilitating mutually beneficial partnerships between supply chain partners. An effective SRM program can improve total corporate value by fostering mutually beneficial partnerships between supply chain partners (Bwaliez et al., 2019).

According to Porter (2011), organizations need to establish a competitive edge for improved performance by developing and maintaining relationships with suppliers. Micro, small and medium enterprises in Kenya must rely on larger organizations because of their limited resources, generation of few first-tier suppliers, lack of technical expertise, weak information systems, and lack of competition. Research indicates that knowledge-based organizations increasingly focus on customers in new ways by developing collaborative supply chains (Miles & Snow, 2007). This trend toward collaboration between buyers and suppliers will likely increase over time as it allows organizations to cut costs through increased efficiencies and reduced redundancy. However, evidence shows that many organizations experience difficulties managing their supply chain relationships (Christopher, 2016). Therefore, this model is relevant to this study since it explains how firms can build a competitive advantage.

#### 2.6 Conceptual Framework



#### 3.1 Research Design

This study used a cross-sectional survey for this investigation. According to Nardi (2018), a cross-sectional survey collects data to conclude a population of interest (universe) at a specific point in time. Cross-sectional surveys are snapshots of the populations from which they collect information. Cross-sectional surveys can be repeated regularly; however, respondents to the survey at one point are not purposely recruited again, albeit a responder to one administration of the survey could be randomly selected for a future one (Maninder Singh, 2016). It can be carried out utilizing any method of data acquisition. A cross-sectional survey design was deemed appropriate because it helped gather information about the current status of the phenomenon and describe "what exists" about variables or conditions in a situation, hence making it easier to understand the relationship between SRM and the performance of micro, small and medium enterprises in Nairobi City County.

#### 3.2 Target population

The study was conducted in 5,594 micro, small and medium enterprises that are listed under AGPO.

#### 3.3 Sampling frame

The sampling frame for this study consisted of the 5,594 micro, small and medium enterprises that are listed under AGPO. The heads of departments were used as analysis units throughout the firms.

#### 3.4 Sample and Sampling Technique Sampling frame

The research adopted a stratified sampling technique. The study used the Yamane Formula of the year 1967.

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

Where. n= collected sample size N= population size e = margin of error (MOE), e = 0.05, Therefore,  $n = \frac{N}{1 + N(e)^2}$  $n = \frac{5,594}{1+5,594(0.05)^2}$ 5,594 1 + 5.594(0.0025)5,594 14.99 n =n = 373.18n = 373The Sample Size will be 373 respondents. Table 3.1: Sample Size Number of Respondents Sample Size No. Category 1. **Procurement Officers** 1 373 TOTAL 373

#### **3.5 Research Instrument**

A questionnaire was the data collection instrument used in this. This data collection method is usually appropriate when the population is literate, time is restricted, and respondents can express their opinions.

#### **3.6 Data Collection Procedure**

This is the step-by-step process followed to collect data from the selected respondents. Before data collection, the researcher obtained an introductory letter from the Jomo Kenyatta University of Agriculture and Technology's procurement and logistics department explaining the need for a study and formally requesting permission from the management of the various micro, small and medium enterprises firms. Finally, utilizing the drop-and-pick procedure, the researcher administered the questionnaires to the respondents. Respondents had approximately two weeks to fill out the questionnaire

#### 3.7 Data Analysis and Presentation

Data processing refers to gathering, manipulating, and converting data to produce helpful information (Scaarpa & Azzalini, 2012). This was significant since the raw data collected did not provide many people with helpful information. After gathering data from questionnaires, it was analyzed. The process of examining data using analytical and logical thinking to investigate each component of the data acquired and processed is known as data analysis (Lewis et al., 2009).

All returned questionnaires from respondents were thoroughly reviewed, and the data was coded and tested for completeness before being analyzed using the Statistical Package for Social Sciences (SPSS version 28) software.

The Pearson Correlation Coefficient was also used to carry out inferential data analysis. Further, according to Mugenda and Mugenda (2003), the correlation was used to assess the degree of association between two variables. Correlation measures the relationship or association between two continuous numeric variables (Kothari, 2004). Furthermore, correlation illustrated the direction and degree to which they differ from case to case without saying that one causes the other.

Because the study focuses on supplier relationship management and the performance of micro, small and medium enterprises, a multiple linear regression model was deemed appropriate for the study because it helped determine the strength of the effect the independent variables had on a dependent variable. It also assisted in determining the quantitative link between a variable and some factors that are regarded as the cause of the change, establishing a mathematical model, and then predicting the results based on the current factor data (Brase & Brase, 2016). As a result, multiple linear regression analysis assisted the researcher in determining how much the dependent variable changed when the independent factors changed (Jaccard et al., 2006; Mark T et al., 2020).

The multiple regressions equation.  $Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \varepsilon$ Where

Y is the performance

X1, represents supplier base segmentation,  $\beta$ 1 is the coefficient for supplier base segmentation.

X2, represents supplier performance management,  $\beta 2$  is the coefficient for supplier performance management.

X3, represents supplier communication,  $\beta$ 3 is the coefficient for supplier communication.

X4, represents supplier integration,  $\beta$ 4 is the coefficient for supplier integration.

 $\epsilon$  is the error term

In the model,  $\beta 0$  = the constant value while the coefficient  $\beta i = 1....4$  is the slope of the coefficients showing effect of independent variables X1, X2, X3, X4 on the dependent variable (Y). The error ( $\epsilon$ ) term shows the unexplained factors in the model.

#### 4. RESEARCH FINDINGS AND DISCUSSION

#### 4.1 Response Rate

The study targeted procurement officers in the micro, small and medium enterprises in Nairobi City County. Mellahi and Harris (2016) define the response rate as the percentage of respondents who complete and return their questionnaires. The number of respondents whose questionnaires were completed and returned is divided by the number of respondents in the entire sample, including those who did not respond. According to the sample size, there were 373 research questionnaires distributed to the MSMEs.

300 out of 373 mailed and self-administered questionnaires were filled out adequately, yielding an 80.4 percent response rate. This is because some respondents declined to respond to the questionnaires. This is depicted in Table 4.1. The response rate was representative and adequate for analysis to make conclusions and generalize the research's findings. Fincham (2014) recommends a response rate of 60% or above for the analysis. Similarly, according to Kothari (2012), a response rate of 50% should be considered average, 60% to 70% adequate, and 70% or higher should be considered remarkable.

 Table 4.1: Instrument Response Rate

Item	Frequency	Percentage
Distributed Questionnaires	373	100.0
Completed and Returned Questionnaires	300	80.4
Unreturned Questionnaires	73	19.6

#### 4.2 Pilot Test Results

The objective of conducting a pilot study was to ensure reliability and validity and ensure that the questions being asked were relevant and straightforward to understand (Mugenda & Mugenda, 2013). For this study, 37 respondents

were randomly chosen from the operational level employees at the listed MSMEs in Nairobi City County who were not included in the study.

#### 4.2.1 Findings on Reliability of the Research Instrument

The Cronbach Alpha statistic is used to assess internal consistency. Viladrich et al. (2017) recommends that the dependability figures be based on the average inter-relationships between the individual test items for the test to be internally consistent. When Cronbach's Alpha coefficient is employed as a measure of reliability, the value should be greater than 0.7 (Viladrich et al., 2017). Table 4.2 shows the reliability test results for the study's research variables.

Table 4.2 revealed that Cronbach's Alpha value for supplier base segmentation, which included 8 items, was 0.825. Furthermore, the results revealed that Cronbach's alpha value for supplier performance management, which also included 8 elements, was 0.875. Additionally, the studies revealed that Cronbach's Alpha value for supplier communication with 8 items was 0.796. Table 4.2 also showed that the Cronbach's Alpha value for supplier integration which comprised 8 elements, was 0.815. Finally, the results showed that Cronbach's alpha value for performance, which had 9 elements, was 0.757. This demonstrated that all of the variables in the study had Cronbach's Alpha values more than.7, indicating satisfactory internal consistency.

S/No	Variable	Cronbach's Alpha	Number of Items	Decision
1	Supplier Base Segmentation	.825	8	Accepted
2	Supplier Performance	.875	8	Accepted
	Management			
3	Supplier Communication	.796	8	Accepted
4	Supplier Integration	.815	8	Accepted
5	Performance	.757	9	Accepted

#### Table 4.2: Reliability Findings

#### N=37

#### 4.2.2 Findings on Validity of the Research Instrument

This study employed content validity. According to Bryman and Bell (2015), content validity is a qualitative type of validity in which the scope of the definition is clear, and the analysts or judges decide whether or not the test is totally within the scope. In essence, there are two approaches to determining content validity: asking questions regarding the instrument or test and seeking the opinion of expert judges in the field (Drost, 2011).

Content validity was attained by constructing the questionnaires following the research variables and each variable's associated measurement indicators. This was done by limiting the questions to the variables' conceptualizations and ensuring each variable's indicators fell within the same measure. Experts evaluated the validity of the tool. Their recommendations helped improve the questionnaire that came before the actual data collection.

#### 4.3 Descriptive Analysis of the study variable

According to Loeb et al. (2017), descriptive analysis is essential for a study since it clarifies the findings in their current state and lays the groundwork for the researcher to comprehend the phenomena on which the study is based. The mean and the standard deviation were the two primary descriptive statistics employed in the study. The mean represents the data values' average score. The interpretation of the mean is that higher data values correspond to higher means. A high mean would imply that more respondents gave the Likert scale's highest values, whereas a low mean would indicate that more respondents gave the scale's lowest values. According to Mogaka, Odari, and Arani (2022), the Likert scale of the mean ( $\bar{x} = 4.2$  to 5 strongly agree; 3.4 to 4.2 agree; 2.6 to 3.4 undecided; 1.8 to 2.6 disagree, and 1 to 1.8 strongly disagree) was used. The spread of data values around the mean is measured by the standard deviation (Std. Dev.). The smaller the standard deviation, the closer the data values are to the mean, and the higher the standard deviation, the further the data values are spread from the mean.

#### 4.3.1 Supplier Base Segmentation

The findings tabulated in Table 4.3 revealed that on the first aspect of the relationships with suppliers, most respondents were undecided whether their firms cultivated strong relationships with a limited number of reliable suppliers for better communication, understanding, and cooperation ( $\bar{x} = 3.31$ ,  $\sigma = 1.028$ ). On the statement that the organization diversify their customer base to reduce dependency on a single client, the respondents were also undecided with this statement, as shown by a mean of 2.89 and a standard deviation of 1.416. The other aspect was that the firms constantly seek ways to enhance efficiency, quality, and cost-effectiveness. The respondents indicated that this was practiced and adopted in their organizations, as shown by a mean of 3.84 and a standard deviation of 0.835. Regarding negotiating for better terms and collaborating with suppliers to find mutually beneficial solutions,

most respondents agreed with this statement, evidenced by a mean of 4.12 and a standard deviation of 0.829. The respondents further agreed that meeting industry standards and complying with regulations not only ensures legality but also builds credibility, as evidenced by a mean of 4.02 and a standard deviation of 0.884. Most respondents agreed that the organizations diversified their supplier base to minimize risks associated with over-reliance on a single supplier, as evidenced by a mean of 3.89 and a standard deviation of 0.895. The respondents also agreed that their firms had reduced the number of suppliers we work with, as evidenced by a mean of 3.98 and a standard deviation of 0.971.

Lastly, according to the findings, the respondents also agreed that they used a stringent criterion to select and evaluate suppliers based on factors such as quality, reliability, cost-effectiveness, delivery times, and flexibility, as evidenced by a mean of 3.74 and a standard deviation of 1.190. According to these findings, most MSMEs in Nairobi City County have been relatively observing supplier base segmentation as an aspect of supplier relationship management practices. A study by Lajimi and Majidi (2021) posited that by segmenting suppliers based on factors like spend volume, criticality to operations, and risk profile, companies can tailor their SRM strategies.

Supplier Base Segmentation	Mean	Std. Deviation
The firm cultivates strong relationships with a limited number of reliable suppliers for better communication.	3.31	1.028
understanding, and cooperation		
We diversify our customer base to reduce dependency on	2.89	1.416
a single client.		
Our firm constantly seeks ways to enhance efficiency,	3.84	.835
quality, and cost-effectiveness		
The firm negotiates for better terms and collaborate with	4.12	.829
suppliers to find mutually beneficial solutions		
Meeting industry standards and complying with	4.02	.884
regulations not only ensures legality but also builds		
credibility		
We have diversified our supplier base to minimize risks	3.89	.895
associated with over-reliance on a single supplier	(	
Our firm has reduced the number of suppliers we work	3.98	.971
with		
We also use stringent criteria to select and evaluate	3.74	1.190
suppliers based on factors such as quality, reliability,		
cost-effectiveness, delivery times, and flexibility		

#### Table 4.3 Supplier Base Segmentation Practices

#### 4.3.2 Supplier Performance Management

The findings tabulated in Table 4.4 revealed that on the first aspect of performance expectations, most respondents agreed that the organization had clearly defined performance expectations for each of their suppliers ( $\bar{x} = 3.98, \sigma =$ 0.971). On whether the firms had specific and measurable metrics, the respondents also agreed that their firms had established specific and measurable metrics to track supplier performance, as shown by a mean of 3.74 and a standard deviation of 1.190. The other aspect was that both the companies and their suppliers had a clear understanding of the performance metrics used. The respondents agreed that they practiced this in their institutions, as shown by a mean of 4.01 and a standard deviation of 1.120. Also, on performance expectations, the respondents agreed that their suppliers consistently met the agreed-upon performance expectations. This is evidenced by a mean of 4.03 and a standard deviation of 1.083. The respondents further agreed that the organization had a clear process for identifying and addressing instances of non-compliance from suppliers, as evidenced by a mean of 4.07 and a standard deviation of 1.034. On the statement that the organizations regularly monitor the performance of their suppliers against established metrics, the findings revealed that the respondents agreed with the statement ( $\bar{x} = 4.11$ ,  $\sigma = 1.020$ ). The respondents also strongly agreed that the organization utilized data and reports to track trends in supplier performance over time, as evidenced by a mean of 4.53 and a standard deviation of 0.782. Lastly, the respondents also strongly agreed that their firms had a dedicated team or individual responsible for monitoring supplier performance, as evidenced by a mean of 4.34 and a standard deviation of 0.963. The findings implied that most MSMEs in Nairobi City County utilized data and reports to track trends in supplier performance over time. The findings compare with those by Gackowiec et al. (2020), who established that data and reports reveal trends in key performance indicators (KPIs), allowing proactive identification of potential problems.

Supplier Performance Management	Mean	Std. Deviation
Our company has clearly defined performance expectations for each of our suppliers	3.98	.971
We have established specific and measurable metrics to track supplier performance	3.74	1.190
Both our company and our suppliers have a clear understanding of the performance metrics used	4.01	1.120
Our suppliers consistently meet the agreed-upon	4.03	1.083
We have a clear process for identifying and addressing instances of non-compliance from suppliers	4.07	1.034
We regularly monitor the performance of our suppliers against established metrics	4.11	1.020
We utilize data and reports to track trends in supplier performance over time	4.53	.782
We have a dedicated team or individual responsible for monitoring supplier performance	4.34	.963

#### 4.3.3 Supplier Communication

The findings show that the MSMEs adopted frequent communications with suppliers through diverse channels ( $\bar{x} = 4.53$ ,  $\sigma = .782$ ). Given the five-point scale Likert mean of more than ( $\bar{x} = 4.2$ ) and an average standard deviation, it is clear that a major section of the respondents strongly agreed with this statement. In addition, the study observed that product and service delivery in the organization had been improved through information sharing with suppliers ( $\bar{x} = 4.34$ ,  $\sigma = .963$ ). Given the five-point scale Likert mean of more than ( $\bar{x} = 4.2$ ) and an average standard deviation, it is clear that a major section of the respondents strongly agreed with the statement. Further, the findings illustrated that the organizations ensure a relatively high communication level with suppliers ( $\bar{x} = 4.06$ ,  $\sigma = 1.049$ ). Given the five-point scale Likert mean of more than ( $\bar{x} = 3.4$ ) and an average standard deviation, it is clear that a major section of the respondents agreed with this statement. On integration with suppliers, findings show that integration with our suppliers has improved the firms' overall performance and supply chain performance ( $\bar{x} = 4.02$ ,  $\sigma = 1.011$ ). Given the five-point scale Likert mean of more than ( $\bar{x} = 3.4$ ) and an average standard deviation, it is clear that a major section of the respondents agreed with this statement. Further, the study established that frequency of communication with the suppliers has strengthened the overall supply chain performance ( $\bar{x} = 3.95$ ,  $\sigma = 1.092$ ). Given the five-point scale Likert mean of more than ( $\bar{x} = 3.4$ ) and an average standard deviation, it is clear that a major section of the respondents agreed with this statement. Further, the study established that frequency of communication with the suppliers has strengthened the overall supply chain performance ( $\bar{x} = 3.95$ ,  $\sigma = 1.092$ ). Given the five-point scale Likert mean of more than ( $\bar{x} = 3.4$ ) and an average standard deviation, it is clear that a major section of the res

Also, the findings illustrated that the MSMEs ensured smooth business transactions through improved communication with suppliers ( $\bar{x} = 4.44$ ,  $\sigma = .767$ ). Given the five-point scale Likert mean of more than ( $\bar{x} = 4.2$ ) and an average standard deviation, it is clear that a major section of the respondents strongly agreed with the statement. Moreover, the study established that the MSMEs ensured prompt communication of needed goods and services information flow to improve supplier relationships ( $\bar{x} = 3.14$ ,  $\sigma = 1.291$ ). Given the five-point scale Likert mean of more than ( $\bar{x} = 4.2$ ) and an average standard deviation, it is clear that a major section of the respondents strongly agreed with the statement.

Lastly, the study findings showed that the respondents agreed that they applied best buyer practices and shared information with their suppliers on procurement status and performance ( $\bar{x} = 3.80$ ,  $\sigma = .918$ ). According to Aalbers and Whelan (2021), organizations improve their performance through frequent communication with suppliers through various channels like email, phone calls, and online supplier portals. This allows for flexible and timely communication based on the situation. The findings implied that most MSMEs in Nairobi City County understood the importance of improving their supplier communication processes, hence ensuring smooth business transactions through improved communication with suppliers. According to <u>Saralaya</u>, Saralaya and D'Souza (2019), open communication allows for early detection of potential issues with deliveries, quality, or inventory levels. MSMEs can work with suppliers proactively to address these issues, minimizing disruptions to their own operations. These findings compared to Egelund-Müller et al. (2017), who posited that regular communication also enables assessment of whether both parties are fulfilling their obligations.

#### **Table 4.5: Supplier Communication Practices**

Supplier Communication	Mean	Std. Deviation
We have adopted frequent communications with suppliers	4.53	.782
through diverse channels		
Product and service delivery in the organization has been	4.34	.963
improved through information sharing with suppliers		
We ensure a relatively high communication level with	4.06	1.049
suppliers		
Integration with our suppliers has improved our overall	4.02	1.011
performance and supply chain performance		
The frequency of communication with our suppliers has	3.95	1.092
strengthened our overall supply chain performance		
We have ensured smooth business transactions through	4.44	.767
improved communication with suppliers		
We have ensured prompt communication of needed goods	3.14	1.291
and services information flow to improve supplier		
relationships		
We apply best buyer practices and share information with	3.80	.918
our suppliers on procurement status and performance		

#### **4.3.4 Supplier Integration**

The study found out that respondents were not sure whether their firms had real-time information technology connectivity system that enhanced information sharing with suppliers ( $\bar{x} = 3.14$ ,  $\sigma = 1.291$ ). Given the five-point scale Likert mean of more than ( $\bar{x} = 2.6$ ) and an average standard deviation, it is clear that a major section of the respondents was undecided about this statement. Moreover, the study established that there was an interactive website where suppliers give and receive operational feedback ( $\bar{x} = 3.80$ ,  $\sigma = .918$ ). Given the five-point scale Likert mean of more than ( $\bar{x} = 3.4$ ) and an average standard deviation, it is clear that a major section of the respondents agreed with the statement. Further, the study established that operational integration with suppliers has reduced supply chain costs ( $\bar{x} = 2.52$ ,  $\sigma = 1.637$ ). Given the five-point scale, Likert mean of less than ( $\bar{x} = 2.6$ ), and an average standard deviation, it is clear that a major section of the respondents disagreed with the statement. On supplier participation, the findings showed that key suppliers participated in organizational project teams ( $\bar{x} = 3.80$ ,  $\sigma = .971$ ). Given the five-point scale Likert mean of more than ( $\bar{x} = 3.4$ ) and an average standard deviation, it is clear that a major section of the respondents disagreed with the statement. On supplier participation, the findings showed that key suppliers participated in organizational project teams ( $\bar{x} = 3.80$ ,  $\sigma = .971$ ). Given the five-point scale Likert mean of more than ( $\bar{x} = 3.4$ ) and an average standard deviation, it is clear that a major section of the respondents agreed with the statement. Moreover, the study established that the organization had invested in supplier integration programs ( $\bar{x} = 4.26$ ,  $\sigma = .978$ ). Given the five-point scale Likert mean of more than ( $\bar{x} = 4.2$ ) and an average standard deviation, it is clear that a major section of the respondents strongly agreed with the statement.

The findings illustrated that the participants were unsure whether their firms manage supplier's knowledge through process integration ( $\bar{x} = 2.96$ ,  $\sigma = 1.551$ ). Given the five-point scale Likert mean of between ( $\bar{x} = 2.6$  and 3.4) and an average standard deviation, it is clear that a major section of the respondents was undecided about the statement. Moreover, the study established that ICT integration with suppliers enables fast adjustment to market changes ( $\bar{x} = 3.72$ ,  $\sigma = 1.051$ ). Given the five-point scale Likert mean of more than ( $\bar{x} = 3.4$ ) and an average standard deviation, it is clear that a major section of the statement.

Lastly, the study established that the firm safely keeps and updates a database of all the suppliers to track their performance ( $\bar{x} = 4.18$ ,  $\sigma = 1.128$ ). Given the five-point scale Likert mean of more than ( $\bar{x} = 3.4$ ) and an average standard deviation, it is clear that a major section of the respondents agreed with the statement. A well-maintained database provides comprehensive data on past performance metrics (e.g., on-time delivery rate, quality control percentage) across all suppliers. This allows for data-driven decisions regarding sourcing strategies, contract negotiations, and supplier development initiatives (Raouf & Al-Ghamdi, 2023). The findings also implied that most MSMEs in Nairobi City County invested in supplier integration programs. These practices improved supplier integration practices. According to Govindan and Jha (2024), integration fosters open communication and collaboration with suppliers, enabling joint problem-solving, proactive issue identification, and coordinated planning. This leads to streamlined workflows and reduced delays.

#### Table 4.6: Supplier Integration Practices

Supplier Integration	Mean	Std. Deviation
Our firm has real-time information technology	3.14	1.291
connectivity system that enhances information sharing		
with suppliers		
There is an interactive website where suppliers give and	3.80	.918
receive operational feedback		
Operational integration with suppliers has reduced supply	2.52	1.637
chain costs		
Our key suppliers participate in our project teams	3.80	.971
The organization has invested in supplier integration	4.26	.978
programs		
The organization manages supplier's knowledge through	2.96	1.551
process integration		
ICT integration with suppliers enables fast adjustment to	3.72	1.051
market changes		
Our firm safely keeps and updates a database of all the	4.18	1.128
suppliers to track their performance		

#### 4.3.5 Performance of Micro, Small and Medium Enterprises

The findings illustrated that the organizations had adopted quality products and services ( $\bar{x} = 3.80, \sigma = .971$ ). Given the five-point scale, Likert mean of more than  $(\bar{x} = 3.4)$ , and an average standard deviation, it is clear that a significant section of the respondents agreed with the statement. Further, this study found that the organizations had adopted cost-cutting measures ( $\bar{x} = 4.26$ ,  $\sigma = .978$ ). Given the five-point scale Likert mean of above ( $\bar{x} = 4.2$ ) and an average standard deviation, it is clear that a significant section of the respondents strongly agreed with this statement. On policies, the findings illustrated that they were undecided whether their firms had adequate policies that support supplier relationship management ( $\bar{x} = 2.96$ ,  $\sigma = 1.551$ ). Given the five-point scale Likert mean of more than  $(\bar{x} = 2.6)$  and an average standard deviation, it is clear that a significant section of the respondents was undecided about this statement. Moreover, the findings illustrated that there was an excellent rating of the corporate image of our firm ( $\overline{x} = 3.72$ ,  $\sigma = 1.051$ ). Given the five-point scale Likert mean of above ( $\overline{x} = 3.4$ ) and an average standard deviation, it is clear that a significant section of the respondents agreed with this statement. Also, the findings illustrated that the profitability of the firms had grown over time ( $\bar{x} = 4.18, \sigma = 1.128$ ). Given the fivepoint scale Likert mean of above ( $\bar{\mathbf{x}} = 3.4$ ) and an average standard deviation, it is clear that a significant section of the respondents agreed with this statement. The study findings also illustrated that the level of operating costs in the firms had gone down in the recent years ( $\bar{x} = 3.15$ ,  $\sigma = 1.658$ ). Given the five-point scale Likert mean of above  $(\bar{x} = 2.6)$  and an average standard deviation, it is clear that a significant section of the respondents was undecided with this statement. Moreover, the study findings also illustrated that the organization had increased its market share ( $\bar{x} = 4.22$ ,  $\sigma = 1.103$ ). Given the five-point scale Likert mean of above ( $\bar{x} = 4.2$ ) and an average standard deviation, it is clear that a significant section of the respondents strongly agreed with this statement. Also, the study findings showed that there was improved information sharing and flow with stakeholders ( $\bar{x} = 3.72$ ,  $\sigma =$ 1.051). Given the five-point scale Likert mean of above ( $\bar{x} = 3.4$ ) and an average standard deviation, it is clear that a significant section of the respondents agreed with this statement. Lastly, the findings illustrated that organization had experienced enhanced partnerships and relationships ( $\bar{x} = 4.18$ ,  $\sigma = 1.128$ ). Given the five-point scale Likert mean of above ( $\overline{x} = 3.4$ ) and an average standard deviation, it is clear that a significant section of the respondents agreed with this statement. These findings implied that most MSMEs in Nairobi City County had adopted costcutting measures to improve their performance. According to Teece (2018), a business's success depends on improved operationalization. Therefore, these findings compared to those of Darcy, Hill, McCabe, and McGovern (2014), who posited that profitability analysis gave firm managers a clear picture of their company, enabling them to strategize better and plan for their long-term growth and improve supply chain performance.

#### **Table 4.7: Performance Practices**

reflormance of Wishies Wean Stu, Deviation	Performance of MSMEs	Mean	Std. Deviation
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The organization has adopted quality products and	3.80	.971
services		
The organization has adopted cost-cutting measures	4.26	.978
The organization has adequate policies that support	2.96	1.551
supplier relationship management		
There's an excellent rating of the corporate image of our	3.72	1.051
firm		
The profitability of our firm has grown over time	4.18	1.128
The level of operating costs in our firm has gone down in	3.15	1.648
the recent years		
Our organization has increased its market share	4.22	1.103
There is improved information sharing and flow with	3.72	1.051
stakeholders		
The organization has experienced enhanced partnerships	4.18	1.128
and relationships		

#### 4.4 Correlation

This section presents the summary of the correlation analysis. The correlation significance was determined at  $p \le 0.05$ , as summarized in Table 4.8. The first correlation was done to determine whether supplier base segmentation significantly influenced the performance of MSMEs in Nairobi City County, Kenya. The results in Table 4.8 show a significant relationship (r=0. 431, p<0.05) between the variables. Therefore, the Pearson product correlation of supplier base segmentation and the performance of MSMEs was found to be low positive and statistically significant. This shows that an increase in supplier base segmentation practices would lead to a high performance. The study also sought to determine the influence of supplier performance management on the performance of MSMEs in Nairobi City County. The correlation results in Table 4.8 indicate a significant relationship (r= 0. 367, p  $\le 0.05$ ) between the variables. The Pearson product correlation of supplier performance management and the performance was also found to be low positive and statistically significant. This shows that an increase in supplier and statistically significant. This shows that an increase product correlation of supplier performance management and the performance was also found to be low positive and statistically significant. This shows that an increase in supplier performance of MSMEs in Nairobi City County.

It was also essential to determine whether there was a relationship between supplier communication and performance. The correlation analysis in Table 4.8 indicates that there was indeed a significant relationship (r = 0. 498,  $p \le 0.05$ ) between the variables. The Pearson product correlation of supplier communication and performance of MSMEs were also found to be low positive and statistically significant. Therefore, this also shows that an increase in supplier communication practice would lead to a high performance of MSMEs. Lastly, a correlation was done to determine the influence of supplier integration on performance of MSMEs in Nairobi City County, Kenya. The results in Table 4.8 show a significant relationship (r=0.310, p<0.05) between the variables. Therefore, the Pearson product correlation of MSMEs were found to be very low positive and statistically significant. This shows that increased supplier integration practices would lead to a high performance of MSMEs were found to be very low positive and statistically significant. This shows that increased supplier integration practices would lead to a high performance of MSMEs were found to be very low positive and statistically significant. This shows that increased supplier integration practices would lead to a high performance of MSMEs in Nairobi City County, Kenya.

#### Table 4.8: Correlation Analysis

		Supplier Base Segmentation	Supplier Performance Management	Supplier Communication	Supplier nIntegration	Performance
Supplier Base Segmentation	Pearson Correlation	1				
	Sig. (2-tailed)					
	Ν	300				
Supplier Performance Management	Pearson Correlation	.388**	1			
	Sig. (2-tailed)	.000				

	Ν	300	300			
Supplier Communication	Pearson Correlation	.177**	.226**	1		
	Sig. (2-tailed)	.002	.000			
	Ν	300	300	300		
Supplier Integration	Pearson Correlation	.137*	.178**	.185**	1	
	Sig. (2-tailed)	.018	.002	.001		
	Ν	300	300	300	300	
Performance	Pearson Correlation	.431**	.367**	.498**	.310**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	300	300	300	300	300
**. Correlation is significant at the 0.01 level (2-tailed).						

\*. Correlation is significant at the 0.05 level (2-tailed).

#### **4.5 Regression Analysis**

The study used multiple regression analysis to determine the significance of the relationship between the pooled dependent and independent variables. This analysis explained how the independent variables influenced the dependent. The results are presented in Table 4.9. The results in Table 4.9 suggested that the value obtained for Pearson's Model Correlation Coefficient (R) is  $r = 0.748^{a}$  was high. This indicated that the model improved when variables were added to determine the determinants of the performance of MSMEs in Nairobi City County, Kenya. The adjusted r-square value of r = 0.512 also suggests that the regression model could explain approximately 51% of the changes in the dependent variable. The ANOVA test results on the dependent and independent variables are summarized in Table 4.10.

#### Table 4.9: Multiple Linear Regression Analysis Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.748ª	.519	.512	.908

a. Predictors: (Constant), Supplier Integration, Supplier Base Segmentation, Supplier Communication, Supplier Performance Management

The results of Table 4.10 indicated a significant relationship between the independent variables and the dependent variable (F= 53.295; df = 4, 295, 299; p = 0.000). These findings validated the one suggested in Table 4.8, thus, implying that supplier base segmentation, supplier performance management, supplier communication, and supplier integration practices of supplier relationship management were significant in determining the performance of MSMEs. The beta value was used to determine the importance of the independent variables used in the model, and the results are summarized in Table 4.11.

#### of Sum Mean Square Model Squares df F Sig. 1 Regression 139.177 4 34.794 53.295 .000<sup>b</sup> Residual 192.593 295 .653 Total 299 331.770

### **Table 4.10: Summary of ANOVA Results**

## a. Dependent Variable: Performanceb. Predictors: (Constant), Supplier Integration, Supplier Base Segmentation, Supplier Communication, Supplier Performance Management

The results in Table 4.11 indicated that supplier communication was the most important variable in the model ( $\beta = 0.384$ ). This was followed by supplier base segmentation ( $\beta = 0.285$ ), then supplier integration ( $\beta = 0.176$ ) and supplier performance management ( $\beta = 0.138$ ) respectively. These beta values indicated that the dependent variable, that is, the performance of MSMEs in Nairobi City County, Kenya, would change by a corresponding number of standard deviations as a result of changes in the standard deviations of the respective variables. Thus, the resulting linear regression model was: Y (Firm Performance) =0.611 (Constant) + (0.367) (Supplier Base Segmentation) + 0.150 (Supplier Performance Management) + 0.517 (Supplier Communication) + 0.143 (Supplier Integration).

Table 4.11: Overall Significance of Test Results
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		Unctondordiza	d Coofficients	Standardized		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.611	.337		-1.810	.071
	Supplier Base Segmentation	.367	.062	.285	5.889	.000
	Supplier Performance	.150	.053	.138	2.814	.005
	Management					
	Supplier Communication	.517	.062	.384	8.299	.000
	Supplier Integration	.143	.037	.176	3.849	.000
a. Deper	ndent Variable: Performance					

#### 5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### **5.1 Conclusions**

The study concluded that performance was expected to grow for every unit increase in supplier base segmentation. This showed that when there was improved supplier base segmentation, MSMEs gained an improved performance. Further, the study concluded that MSMEs needed to diversify their customer base to reduce dependency on a single client. By catering to a variety of customers, the organizations are more likely to pick up on new trends and adjust your offerings accordingly. Moreover, the study concluded that the firms needed to cultivate strong relationships with a limited number of reliable suppliers for better communication, understanding, and cooperation.

The study concluded that performance was predicted to improve for every unit increase in supplier performance management. This implied that as supplier performance management improved, MSMEs gained an increase in performance. Further, the study concluded that the firms established specific and measurable metrics to track supplier performance. Specific metrics, like "response time to inquiries within 24 hours," provide objective data for evaluating supplier performance. This transparency would foster trust and fairer evaluations Additionally, the study concluded that organization had clearly defined performance expectations for each of their suppliers. It is clear from the results that the MSMEs utilized data and reports to track trends in supplier performance over time. This significantly allowed for mitigation strategies before disruptions occur. The findings also implied that there were specific supplier performance management processes to ensure improved performance in the organizations.

The study concluded that an increase in performance for every unit increase in supplier communication was predicted. This indicated that as supplier communication improved, MSMEs gained an improved performance. Further, the study concluded that the MSMEs ensured prompt communication of needed goods and services information flow to improve supplier relationships. Moreover, the organizations applied best buyer practices and shared information with their suppliers on procurement status and performance. Further, the study established that frequency of communication with the suppliers strengthened the overall supply chain performance. According to the results, it could be concluded that MSMEs need to improve on integration with their suppliers to improve their firms' overall performance and supply chain performance.

The study concluded that an increase in performance for every unit increase in supplier integration was predicted. This research revealed that when supplier integration improved, MSMEs gained an increased performance. Further, the study concluded that operational integration with suppliers reduced supply chain costs. As derived from other studies, this study also concluded that key suppliers participated in organizational project teams. Furthermore, the study concluded that the firms needed to safely keep and update a database of all the suppliers to track their performance.

According to the results, the study concluded that the MSMEs invested in supplier integration programs. This fostered open communication and collaboration between the organization and its suppliers. Moreover, it allowed for joint problem-solving, proactive issue identification, and coordinated planning. Moreover, according to the study, it can be concluded that the key suppliers also participated in organizational project teams.

#### 5.2 Recommendations

According to the research, MSMEs should diversify their customer base to reduce dependency on a single client. Some recommendations include through market research and targeting, proactive sales and marketing efforts, leveraging existing relationships, flexible pricing, and building brand recognition. The study suggests that to ensure improved supplier base segmentation, MSMEs needed to cultivate a strong relationship with a limited number of reliable suppliers for better communication. These strong relationships foster better communication, understanding of each other's needs, and a collaborative environment for problem-solving.

To increase their performance, the study suggests that MSMEs should improve on supplier performance management. Also, management should establish specific and measurable metrics to track their supplier performance. Top management in MSMEs should strive to ensure clearly defined performance expectations for each of their suppliers. Clearly defined expectations establish a common ground for both the firm and its suppliers. Hence, everyone understands the desired outcomes, leading to focused efforts towards achieving those goals. According to the research, MSMEs should ensure understanding a clear understanding of the performance metrics used between them and their suppliers. This will serve as the basis for evaluating the potential impacts of supplier performance management to suppliers, both beneficial and adverse. The study further advised that suppliers need to consistently meet the agreed-upon performance expectations. Consistently meeting expectations fosters a positive reputation, attracting new business opportunities

The study further recommends that supplier communication in the MSMEs were encouraged to ensure prompt communication of needed goods and services information flow to improve supplier relationships. This will allow gathering supplier feedback and identify potential issues, can enhance responsiveness and improve relationships. Moreover, there was need to apply best buyer practices and share information with their suppliers on procurement status and performance. Organizations improve their performance through frequent communication with suppliers through various channels like email, phone calls, and online supplier portals.

Safely keeping and updating a database of all the suppliers, according to the report, was recommended to since it would enable the organizations to track their performance. Moreover, a well-maintained database provides comprehensive data on past performance metrics (e.g., on-time delivery rate, quality control percentage) across all suppliers. Additionally, the study recommended the need to implement operational integration with suppliers to reduce supply chain costs. Furthermore, MSMEs were encouraged to ensure key suppliers participated in organizational project teams. Integration with the supplier would foster open communication and collaboration between the organization and its suppliers.

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#### 7. LIST OF COUNTY REFERRAL HOSPITALS IN KENYA

https://ppra.go.ke/wp-content/uploads/2017/05/PPOA-List-of-SMEs-Disadvantaged-Groups.pdf