SUPPLIER RELATIONSHIP MANAGEMENT PRACTICES AND PROCUREMENT PERFORMANCE OF PRIVATE SUGAR PROCESSING FIRMS IN KENYA

IMBUHILA CELESTINE OKANGA

A RESEARCH THESIS SUBMITTED IN PARTIAL FULLILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE

DEGREE OF MASTER OF BUSINESS ADMINSTRATION

(LOGISTICS AND SUPPLY CHAIN MANAGEMENT)

DEPARTMENT OF BUSINESS ADMINISTRATION AND MANAGEMENT SCIENCE

KAIMOSI FRIENDS UNIVERSITY

2023

DECLARATION

I declare that this research thesis is my original work and has not been presented in any other university or institution for consideration of any award or certification. This research proposal has been complemented by referenced sources duly acknowledged.

Signature: …… Date: ……

Celestine Imbuhila Okanga **Reg No:** DGS/MBA/0020/2020

This research thesis has been submitted for examination with our permission as university supervisors:

Signature: …… Date: ……

Dr. Nurwin Fozia, PhD

Department of Business Administration and Management Science

Kaimosi Friends University

Signature: …… Date: …….

Dr. Margaret Omondi, PhD

Department of Finance and Accounting

Kaimosi Friends University

ABSTRACT

In today's world, procurement performance in private sugar firms is one of the emerging issue of concern. Sugar firms are still hurtling down on cost even when the effects are detrimental to the product's quality. In some scenarios, the quality dimension gets altered to save cost, and the management holds high optimism hoping the quality risk does not get discovered. The main objective of the study was to establish the effect of supplier relationship management practices on procurement performance of private sugar firms in Kenya. The specific objectives of the study were; to determine the effect of information sharing on procurement performance, to examine the effect of supplier training on procurement performance, to determine the effect of contact management on procurement performance and to establish the effect of strategic alliance on procurement performance of private sugar processing firms in Kenya. The study was guided by; information theory, the Principal Agent theory and stakeholders' theory. Positivism research philosophy was used. The study adopted descriptive research design. The target population of the study was 50 respondents from ten private sugar manufacturing firms in Kenya. The study employed census sampling. Questionnaires were used to collect primary data. Data was analyzed using descriptive and inferential statistics that involved multiple linear regressions. Results with an $R^2 = 0.629$ showed that information sharing, supplier training, contract management and strategic alliance explained 62.9% of variations in the procurement performance of private sugar firms in Kenya. Regression coefficients of 0.046, 0.176, 0.217 and 0.354 for information sharing, supplier training, contract management and strategic alliance respectively indicated that embracing supplier management practices improved procurement performance. Therefore, the study recommends embracing of supplier management practices for private sugar firms for the sake of improving procurement performance. The study findings may helpful to management of sugar firms, government and other stakeholders in understanding the best practices to adopt in order to realize excellent supplier relationship that will in turn enhance performance. Further, the study adds to the existing body of knowledge by establishing effect of supplier relationship management practices on procurement performance from the perspective of sugar firms.

DEDICATION

This work is dedicated to my beloved family; my mother Jane Amboso, Brother Chuck Patterson and the wife Venice Chuck and the entire SOMA mission support, God bless you all abundantly.

ACKNOWLEDGMENT

I thank the Almighty God for his; grace, health and favor that he granted me throughout this journey, I also acknowledge the contributions and support from my supervisors; Dr. Nurwin Fozia and Dr. Margaret Omondi who patiently guided and encouraged me throughout the preparation of this thesis. I thank my able supervisors for their diligent guidance from the beginning to the end.

I thank professor Judah Ndiku, all my fellow students at Kaimosi Friends University and the entire staff of the School of Business and Economics for all the support they gave me, understanding and encouragement. Finally, I laud my classmates for the numerous discussions and insights that helped to streamline my preliminary thinking for this thesis May God bless all of you immensely!

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVATIONS AND ACRONYMS

GDP	Gross Domestic Product
IT	Information Technology
JIT	Just in time
KIPPRA	Kenya Institute of Public Policy Research Analysis
PFSA	Pharmaceuticals Fund and Supply Agency
PSAs	Preferred supplier agreement
SCM	Supply chain management
SRM	Supplier relationship management
CIPS	Certified institute of procurement and supplies
SSE	Supplier Selection/Evaluation
ST	Supplier Training

OPERATIONAL DEFINATION OF TERMS

Contract Management	Refers to activities to all done to ensure that all contractors undertake their duties in the house to the satisfaction and according to all the set standards
Information sharing	It is the extent to which a firm shares a variety of relevant, accurate, complete, confidential ideas, plans, and procedures with its supply chain partners timely (Stefanone & Gay, 2023).
Procurement performance	This is a measure of ascertaining the degree to which the procurement function is able to meet the objectives with least possible costs. Precisely, it entails how well organizational procurement objectives have been attained. The firms' focus on supplier delivery; accuracy, flexibility, quality conformance, cost saving, inventory flow and price effectiveness (Coviello, Moretti, & Valbone, 2018).
	It is the process of organizing the way of working with suppliers as strategic tool used for value creating possibilities for both the buyer and the supplier; many authors emphasize the benefits of long-term relationships and close collaborations (Oliveira, Marins, & Rocha, 2017).
Strategic Alliance	Is a business relationship that can take a variety of forms ranging from arm's length contract to a joint venture.
Supplier training	These is the process of improving efficiency and effective systems which are reliable and can ensure excellent which exceed customer expectations (Zhang, Pawar, & Bhardwaj, 2017).

CHAPTER ONE
INTRODUCTION

1.1 Background of the study

Procurement performance pertains to the process of ensuring the goods and services that are acquired meet the need and expectations of the tea manufacturing firms. Procurement performance measurement (PPM) is the systematic process of measuring the effectiveness, efficiency, and spend of procurement teams with the continuous ambition of improving the value of procurement to business. In today's world, procurement performances of private tea firms have been reported to have been reducing. The lead time of the manufacturing firms are too high, the customers are not satisfied with the products and services being offered, variety of the products are not available to customers and most importantly operational efficiency has reduced (Connor, Yang, & Jiang, 2018).

Sugarcane cultivation in Kenya began in the early 19th century by the Indian settlers in Kibos. The sugarcane was initially milled by jaggery plants. The establishment of two factories, Miwani in Kisumu County in 1922 and Ramisi in Kwale County 1927, marked the beginning of large scale commercial sugarcane production in the country for extraction of sucrose as the major product. The by-product includes molasses, bagasse and filter cake.

In many sugar firms, it has been established that cost still plays a vital role in consumer products. Sugar firms are still hurtling down on cost even when the effects are detrimental to the product's quality. In countless scenarios, the quality dimension gets altered to save cost, and the management holds high optimism hoping the quality risk does not get discovered Marginal costs of production of West Kenya Sugar Firm based on income versus expenses remained the same at a constant ratio of 1 as the rate of product quality decreased at a rate of 2.7% in 2021 (Kenya Sugar Board, 2021).

Supplier relationship management (SRM) is a continuous process of interaction, building and maintain relationships with organizational suppliers it is also a strategic discipline that is used to optimize the value of all contacts with external organizations that provide goods and services to the Firm, it is also used strategically to plan and manage all such relationships. SRM comprise of developing more intimate, cooperative connections with

important suppliers in order to unearth and realize new value and lower the risk of failure (Dubey, Gunasekaran, & Papadop, 2019).

Private sugar companies typically retain suppliers at arm's length in situations where they have zero faith in them. The approach is similarly comparable to having little confidence. Some people may not take well to the display of mistrust toward suppliers, and this could result in a number of procurement-related problems. But even so, there is need to security first and exercise caution. The business's risk management plan informs a number of buying choices. Low costs, for example, better reflect the outcome of business activities. However, some suppliers might not offer savings or continue to include certain levies. When working for sugar companies, qualified procurement professionals frequently need to negotiate with their suppliers (Attia & Essam , 2018).

The primary goal of SRM is to enable the tea manufacturing firms to curb challenges facing firms. SRM improves the efficiency and effectiveness of a Firm's supplier sourcing procedures. It ensures the suppliers supply goods and services within the shortest time possible, it also ensures the goods and services provided are of high quality which satisfies customers. In order to continuously lower total ownership costs, manage risks, and improve performance quality, responsiveness, reliability, flexibility, strategic enterprise-wide, long-term, multi-functional, dynamic approach to managing suppliers of goods and services and the entire value network from raw materials to final customer use and disposal (Zhang, Pawar, & Bhardwaj, 2017). Supplier Relationship Management SRM is part of the supply chain management's information flow component and consists of both business procedures and software (SCM). Supplier Relationship Management(SRM) procedures establish a shared language between a Firm and its suppliers even when they employ terminologies and business practices that are very dissimilar (Zhang, Pawar, & Bhardwaj, 2017).

SRM as a result boosts the effectiveness of procedures related to purchasing products and services, controlling inventory, and processing materials (Helo & Hao, 2019),Moreover SRM, according to (Dubey, Gunasekaran, & Papadop, 2019), is any supplier-facing business technique that enables firms to collaborate with their supplier base for mutual success. SRM solutions have mostly been designed to lower the total cost of ownership (TCO) for purchased items while giving an organization a competitive advantage through closer ties with its suppliers.

Supplier relationship management in sugar processing industries are factors that explores performance of procurement practices, customer relation and organizational performance. Information and material flow across the supply chain as an effective competitive weapon, supplier relationship management provides the structure for how suppliers are developed and maintained. The establishment of PSAs between the firm and its suppliers where an effective supplier can be a critical component of a leading edge supply chain. The supplier participation in a product design process that can offer more cost effective design choice, helping to select the best component and technologies, and design assessment. According to (Shao, 2019), strategically aligned organizations can work closely together and eliminate wasteful of time and effort, few companies have yet implemented a formal SRM which is also in line with the organizational strategy.

To measure buyer-supplier relationship, (Attia & Essam , 2018) identifies the concept of supply chain management as; vision, goals and quality information sharing which ultimately improves organizational Performance. Relationship management provides the firms face to the customer, including management of the PSAs which provide sources of customer information, customers can give comments through customer's card and learn what they like and dislike and how your product or service directly benefits them by noting their preferences and interest.

Kang and Sung, (2017), stated that in supplier relationship management one should note their customer preference and interest, consider perceived quality and establish a dialogue with their willing customers by asking opinions on a regular basis to ensure consistent delivery of goods and service, one should also focus on caring for existing customers. In the event of a firm failing to satisfy and retain her customers then her performance financially, market dominance, customer service and improvement in sales are affected. Attia and Essam (2018) argued that firms go into business to prosper and the level of prosperity or success is measured in terms of business performance.

Recent research on supplier relationships has brought about a lot of attention, especially since it has become clear that cultivating close relationships with suppliers provides a lot of benefits. The relationship between buyer and supplier has emerged into a new way of responding to increased competitiveness and profitability; however less has been done in Kenyan on sugar industry (Scuotto, Caputo, & Villasalero, 2017).

In America, manufacturing procurement performance has decreased and as a result, its share of the nation's GDP is now less than half of what it was twenty years ago. This was due to lack of communication between suppliers and the manufacturing sectors which raised production costs and caused the gross operating profit margin to drop from 10.5% in 2012 to 3.6% in 2013 (Adesanya, Bin Iqdara, & Yang, 2020).

Organizations are being forced to redefine their relationships with both customers and suppliers as a result of the weakening global economy. By emphasizing value addition throughout the procurement process costs must be reduced (Adesanya, Bin Iqdara, & Yang, 2020).

To create win-win scenarios, bottlenecks must be eliminated and performance measurements must center on supplier relationship management for process participants. The guiding philosophy is to continuously enhance the process while ensuring client satisfaction at the point of delivery. Due to poor performance, practitioners, academics, and researchers have been paying close attention to procurement performance for decades (Adesanya, Bin Iqdara, & Yang, 2020).

Companies are investing in next-generation capabilities, adjusting their supply chains to the needs of the client, and maintaining an emphasis on quick and effective supply chains. The Japanese automakers Toyota and Honda were found to be strengthening and developing their connections with their suppliers, which helps both the client and the supplier (Price water Coopers Report, 2019).

Many businesses in the African continent struggle to consistently manage their supplier relationships, the main cause of this is the absence of a precise structure and consistent supplier management policies. The connection between various Firm departments and its suppliers can be categorized as tactical and operational in traditional supplier partnerships. Relationships are therefore deficient in openness, both from an external perspective and in terms of internal governance and relationship ownership. The existence of effective supplier relationship management is not very well established in the African nations with the majority of the continents' businesses conducting their operations in an arm's-length arrangement (Bag, Gupta, & Telukdarie, , 2018).

In Nigeria, manufacturing sectors' procurement performance has deteriorated which has led to a drop in GDP from 9.8% in 2017 to 9.6% in 2020 for manufacturing businesses

that; design, manufacture, trade, and distribute products, the procurement expenses as a percentage of overall costs range from 50 to 80% from integration and execution to the advantages and difficulties that modern procurement faces, the relationship with suppliers and its effects on the supply chain can be significant (Onikoyi & Babafemi, 2017). There is little doubt that the relationship between suppliers will impact the economy in the future. Strategic partnering is one of the few themes in procurement that is still thought to have the potential to make a substantial difference along with sustainability and is at the top of the corporate agenda of many international organizations (Onikoyi & Babafemi, 2017).

In Kenya, top procurement levels showed a rising degrees of supplier collaboration and reorganization of existing ties. While 77% of procurement performance in some industries may be directly influenced by supplier innovation, the vast majority of companies view the success of their strategic supplier collaborations as bad or mixed. A strong supplier connection may significantly improve procurement performance and serve as the cornerstone for realizing the Vision 2030 Plan (Deloitte's Procurement Performance Survey, 2021).

The connection paradigm which seeks and builds ways of developing long-term relationships between suppliers and customers has been developed as a result of the expansion of technology, aggressive globalization, innovation and technology and the implementation of deregulation laws. For companies to reach their full potential in the management of organizations a gap must be filled, in Kenya supplier relationship management due to concerns with chaotic events (Kiarie, 2017).The means of operation for organizations in Kenya have always been present with a large number of them operating without any formal system for the administration of the resources and the suppliers who play a crucial role in supplying the organizations' needs. Despite having a significant need for a supply base, manufacturing companies have made less of an effort to build connections with suppliers that will increase the organization's working conditions (Kiarie, 2017).

1.2 Statement of the Problem

Supplier relationship management practices are one of critical strategies that have been adopted by many organizations in Kenya and the rest of the world. Supply relationship management practices helps organizations in simplifying and streamlining communication channels in operations between a buyer and its suppliers, it aids in cost reduction, reduction of waste and minimizes price volatility and in the long run all this help in improving quality of products (Mitrega, Forkmann, & Henneb, 2017)**.** Despite adoption of supplier relationship management practices, sugar firms are still incurring high cost in producing sugar, the quality of sugar produced is also very low.

In countless scenarios, the quality dimension gets altered to save cost, and the management holds high optimism hoping the quality risk does not get discovered. Marginal costs of production of West Kenya Sugar Firm has increased by a ratio of 1 as the rate of product quality decreased at a rate of 2.7% in 2021 (Kenya Sugar Board, 2021). Due to this condition, some of the sugar firms in Kenya have closed down its operation such as Mumias Sugar Firm and Muhoroni Sugar as a result of shortage in products and services that are caused by delay of suppliers to supply goods and service. Many studies have been done on supplier relationship management and procurement performance. Most of the researches conducted on Sugar Processing firms have revealed contradicting results, which has made it difficult to know weather information sharing, supplier training, contract management and strategic alliance affects performance of sugar firms in Kenya. Some studies have also established insignificant effect of supplier relationship management practices on procurement performance and this research on supplier relationship management practices of private sugar processing firms in Kenya will focus on filling this gap.

1.3 Objectives of the Study

1.3.1 General objective

The study sought to establish the influence of supplier relationship management practices in Private Sugar Processing firms in Kenya

1.3.2 Specific Objectives

The specific objectives of the study were;

i. To determine the effect of information sharing on procurement performance of Private Sugar Processing firms in Kenya
ii. To examine the effect of supplier training on procurement performance of Private Sugar Processing firms in Kenya.
iii. To determine the effect of contract management on procurement performance of Private Sugar Processing firms in Kenya.
iv. To establish the effect strategic alliance on procurement performance of Private Sugar Processing firms in Kenya.

1.4 Hypothesis of the Study

The following null hypothesis guided the study

i. **H_{01}:** Information sharing has no significant effect on procurement performance of Private Sugar Processing firms in Kenya.
ii. **H_{02}:** Supplier training has no significant effect on procurement performance of Private Sugar Processing firms in Kenya.
iii. **H_{03}**: Contract Management has no significant effect on procurement performance of Private Sugar Processing firms in Kenya**.**
iv. **H_{04}:** Strategic Alliance has no significant effect on procurement performance of Private Sugar Processing firms in Kenya.

1.5 Significant of the Study

Stakeholders in the manufacturing sector such as; owners, employees, suppliers, customers, and shareholders was able to comprehend how important it is to maintain excellent SRM procedures in order to produce a variety of goods that will satisfy the final consumer. The stakeholders will also be able to comprehend the various implications of SRM on organizational quality management, production planning and product development in the various manufacturing companies throughout Kenya. This will allow these businesses to prepare more effectively and employ creative methods.

Policy makers and the Government was able to enhance development and promotion of effective Supplier relationship management practices. The creation of SRM rules that

support efficient economic growth in the manufacturing sector through improved production planning, quality regulation, and innovation was encouraged as a result.

The study will provide relevant information to other researchers and scholars interested in developing studies based on SRM practices. In addition, this was beneficial to the school archives of research studies based on SRM practices for reference to other students. The research will also be able to develop better understanding of SRM practices by developing the study.

These findings will contribute to knowledge and development of literature in the subject area under investigation and serve as a basis for further research for all those interested in the topic.

It will provide a framework for ensuring effective procurement practices in manufacturing firms and how effective project delivery through improved supplier buyer relationship was achieved. The study will help manufacturing firms in working closely with their stakeholders in achieving competitive advantage. It would also influence national and corporate organizations to adopt commercial relationships that will enhance their procurement practices to achieve organizational goals.

1.6 Scope of the Study

The study was limited to the influence of supplier relationship management factors and performance of sugar processing industries in Kenya (West Kenya Sugar Firm, Butali Sugar Firm, Busia Sugar Firm, Olepito Sugar Firm, Naitiri Sugar Firm, Transmara Sugar Firm, Sukari Sugar Firm, Kwale International Sugar Firm, Ranges Sugar Firm and Kisii Sugar Firm). Private sugar companies in Kenya have for many recent years faced a reduction in their performance since the products and services offered have not certified many internal customers. This was established to have been caused by poor information sharing among customers, inadequate supplier training and selection (Connor, Yang, & Jiang, 2018).

1.7 Limitations of the Study

The study mainly focused only on four practices that is, information sharing, supplier training, contract management and strategic alliance makes the study inadequate in comprehensively examining how other practices might affect procurement performance. Some companies had minimized operations which took more time to access some staff who were on leave to come and fill the questioner.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This section discusses the most recent literature relating to the study variables, theoretical and empirical literature related to the study variables. It also shows how this research relates to existing body of knowledge and identifies the gaps existing in the current body of knowledge. The summary of the literature review, which supports the gaps being addressed by the study and proposal conceptual frame work is provided.

2.2 Theoretical Review

This section summarizes of key theories relating to supplier relationship management on procurement performance. The chapter will describe the following theories; the information theory, principal-agent theory and stakeholder theory.

2.2.1 Information Theory

This theory was postulated by (Shannon, 1948). Shannon emphasized that the information measure was solely dependent on the communication process's probabilistic structure. Information theory techniques are probabilistic in nature and some consider information theory to be a part of probability theory. The information of a message describing one of these events quantifies the symbols required to express the event optimally in a given range of possible occurrences. 'Optimal' means that the obtained code word will decide the event unambiguously, distinguishing it from all others in the set and was of minimal length, consisting of a minimum number of symbols in addition, information theory gives approaches for distinguishing genuine information from noise and determining the channel capacity required for optimal transmission based on the transmission rate.

There are two fundamentally distinct methods for sending messages: discrete signals and continuous signals. Discrete signals can only indicate a limited number of distinct, recognized states. The letters of the English alphabet, for example, are often regarded as discrete messages. Continuous signals, often known as analog signals, are commonly used to transmit quantities that can vary over an infinite range of values.

A famous example is sound. Such continuous quantities, on the other hand, can be approximated by discrete signals, for example, on a digital compact disc or via a digital telecommunication system, by increasing the number of distinct discrete values available until any inaccuracy in the description falls below the level of perception or interest (Lesne, 2014).

The medium over which the communication is transmitted is referred to as the channel. In the case of radio and television transmissions, the channel could be wires, the air or space, or fiber-optic cable. In the case of a signal generated by hammering on the plumbing, the channel may be the pipe that receives the blow. The benefit of using an abstract model is that it allows for the inclusion of a wide range of channels. Some of the limits imposed by channels on signal propagation was described later. Everything that interferes with the transmission of a signal is referred to as noise. Interference in telephone talks can be produced by static on the line, cross speak from another line, or background noise (Amiri, Kamrani, Ahmad, Bhattacharya, & Mansoori, 2021).

Signals sent optically via the air may be hampered by clouds or high humidity. Clearly, noise sources vary depending on the communication technology. A single system may contain multiple noise sources, but if all of these independent sources are understood, they can sometimes be treated as a single source. Because information theory cannot always explain how to obtain specific objectives, people now know which questions to ask and can concentrate their efforts on areas that will offer the most return. They also understand which kind of inquiries are difficult to answer and which areas are unlikely to yield a high return on investment (Casagrande, Fabris, & Girometti, 2022).

Flow of information from the supplier to the organization is very vital and important. Therefore, there should be clear channel of communication between supplier and the organization. This theory will apply in this study to caution suppliers and customers to ensure proper and relevant flow of information to enable them serve one another effectively and efficiently. In that case the parties should be aware of each party's expectations before engaging in a deal.

2.2.2 Principal Agent Theory

This theory was put forward by Jensen and Meckling in 1976. This theory explains the reationsjhip between the principal and agent.

The agent is the person appointed by the principal to fulfill duties on the principal's behalf. An agent is a person who acts on behalf of another person, the principal, in dealing with other people.The agency theory describes how one party determines the tasks that the other party is expected to perform.

They suggested a theory of how the governance of a Firm is based on the conflicts of interest between the Firm's owners (shareholders), its managers and major providers of debt finance. Each of these groups has different interests and objectives.The shareholders want to increase their income and wealth. Their interest is with the returns that the Firm will provide in the form of dividends, and also in the value of their shares. The value of their shares depends on the long-term financial prospects for the Firm. Shareholders are therefore concerned about dividends, but they are even more concerned about long-term profitability and financial prospects, because these affect the value of their shares.

The managers are employed to run the Firm on behalf of the shareholders. However, if the managers do not own shares in the Firm, they have no direct interest in future returns for shareholders, or in the value of the shares. Managers have an employment contract and earn a salary. Unless they own shares, or unless their remuneration is linked to profits or share values, their main interests are likely to be the size of their remuneration package and their status as Firm managers.

The major providers of debt have an interest in sound financial management by the Firm's managers, so that the Firm was able to pay its debts in full and on time. According to this view, the agent is responsible for assisting the principal in completing the agreed-upon mission. The theory is concerned with the costs and benefits of an agent-principal interaction. It also advises that, in order to reduce the potential of a moral threat, principals and agents contract to maximize advantages, which includes establishing monitoring functions such as auditing. According to the theory, a firm's primary goal should be to make the best use of its stakeholders' funds.

The principal and agent, according to the notion, endeavor to maximize utility. They all have competing interests, and the principle normally expects the agent to act in his best interests.

However, the agent's best interests may not always coincide with those of the principal; for example, auditors are required to evaluate management performance on behalf of stakeholders (Eisenhardt, 1989). Auditors may fail to act in the best interests of stakeholders when they conspire with management in the discharge of their duties.

Adverse selection, which occurs when the principal does not have access to all available information at the time of decision-making, is the most difficult part of this principal-agent interaction (Lan & Heracleous, 2010).

Asymmetry of knowledge, moral hazard, divergent risk preferences, agency cost, and conflicts of interest occur from the separation of ownership and control. The concept proposes numerous remedies, such as strong management ownership, independent board members, and multiple committees, all of which can reduce agency conflict and expenses (Mitnick, 2015).

The nature of the interaction between principal and agent is heavily focused on in agency theory. The theory also focuses on both parties' rights and obligations, various corporate governance procedures and their mitigation through regulations, agency difficulties, and observations aimed at managing the decisions and actions of agents in the modern corporation. The agency hypothesis is based on the issue of conflicting interests among the parties in a relationship or contract (Panda & Leepsa, 2017).

The notion that the interests of principals and agents diverge is at the heart of agency theory. According to agency theory, the principle can restrict divergence from his interests by providing suitable incentives to the agent and investing monitoring costs to limit the agent's opportunistic behavior. To ensure the success of outsourced projects in the organization, this study adopts the viewpoint that it is prudent to monitor and control the critical factors of project performance within a contracting arrangement (Vitolla, Raimo, & Rubino, 2020).

The principal-agent theory can be applied to this study, with private sugar businesses acting as the principal and suppliers acting as the agents. The essential tenet of contract theory is that there should be a clear understanding of the principal's needs and the agent's ability to

meet these needs satisfactorily. The theory is relevant to the study because it emphasizes the importance of strategic planning in contract management.

When a contract is clearly specified and prepared, it is easier for the principal and agents to meet each other's needs in an efficient manner, resulting in improved procurement performance.

2.2.3 Stakeholder Theory

The stakeholder theory was developed from four lines of organization management research: strategic organizational planning, systems theory, corporate social responsibility and organizational theory (Freeman & Reed, 1983). Stakeholder theory has been variously described as a perspective, a set of ideas, expressions and metaphors related to the overarching objective of maximizing stakeholder value. Researcher's and practitioners of stakeholder theory emphasize "jointness" of interests upon which all corporate value creation depend. They contended that a corporation is best understood as a network of relationships between various organizations and individuals that have a stake in or an interest in the firm's success. Stakeholder theory is often contrasted with the prevailing economic view of the firm which is summarized under the label shareholder theory. This purportedly narrow perspective of the firm is characterized by the belief that corporations exist to create as much value as possible for shareholders (Sundaram and Inkpen 2004).

They contended that stakeholders are divided into two groups: primary and secondary. According to contemporary corporate stakeholder theory, the value of a corporation is determined by the cost of implicit claims such as good customer service and corporate social responsibility, as well as the cost of explicit claims.

Stakeholder theory emerges from the descriptive, normative and practical taxonomic branches. Descriptive stakeholder theory is used to define an occasion, clarify certain Firm characteristics and behaviors. It tries to describe participants' opinions on their own companies' goals and purposes, as well as how such actions affect various stakeholders. The instrumental stakeholder theory emphasizes the linkages or lack thereof between stakeholder management and the achievement of long-term firm goals such as growth and profitability (Parmar, et al., 2010).

Stakeholder motivation in a business management setting represents contemporary interest in addressing the issue of sustainability in inter-organizational connections, where the firm is often deemed an unacceptable unit of study and a whole system, sector-based, or industry view is required, it provides a theoretical lens through which researchers can discover and investigate elements that support organizational survival and legitimacy (Freudenreich, Lüdeke-Freund, & Schaltegger, 2020). According to stakeholder thinking, relationships do not exist in a vacuum of dyadic links, but rather as a network of impacts including several stakeholders (Jones, Harrison, & Felps, 2018).

This concept is consistent with the interest in boundary bridging and stakeholder networks that stretch beyond the boundaries of the firm or individual who can influence or is influenced by a Firm's success. The source of an increasingly volatile corporate environment is a shift in the relationship between internal stakeholders (owners, customers, employees, and suppliers) and external stakeholders such as; governments, consumer advocates, environmentalists, special interest groups and the media (Jones, Wicks, & Freeman, 2017). The breadth of Shareholders theory, as well as its ability to recognize and prioritize competing requirements, has reignited interest in the literature, particularly in the context of joint implementation of sustainable supply chain scenarios (Freeman, Phillips, & Sisodia, 2020).

Supplier training which part of stakeholder relationship between suppliers and customers is ensures that there is sustainability connection between the suppliers and the customers. This helps the suppliers to understand the priorities and requirements of its customers. Therefore, understanding of stakeholder theory was required to investigate how supplier training affects procurement performance of private sugar manufacturing firms.

2.3 Conceptual Framework

The independent variables; information sharing which was measured by transparency, number of meetings and technology, Supplier training which was measured by workshops, seminar and staff skills. Contract management which was measured by contract resolution, contract administration and contract monitoring and acceptance. Strategic alliance which was measured by joint planning, supplier development and training in new technology.

The dependent variable which is organizational performance was measured by operational efficiency, quality of products and customer satisfaction

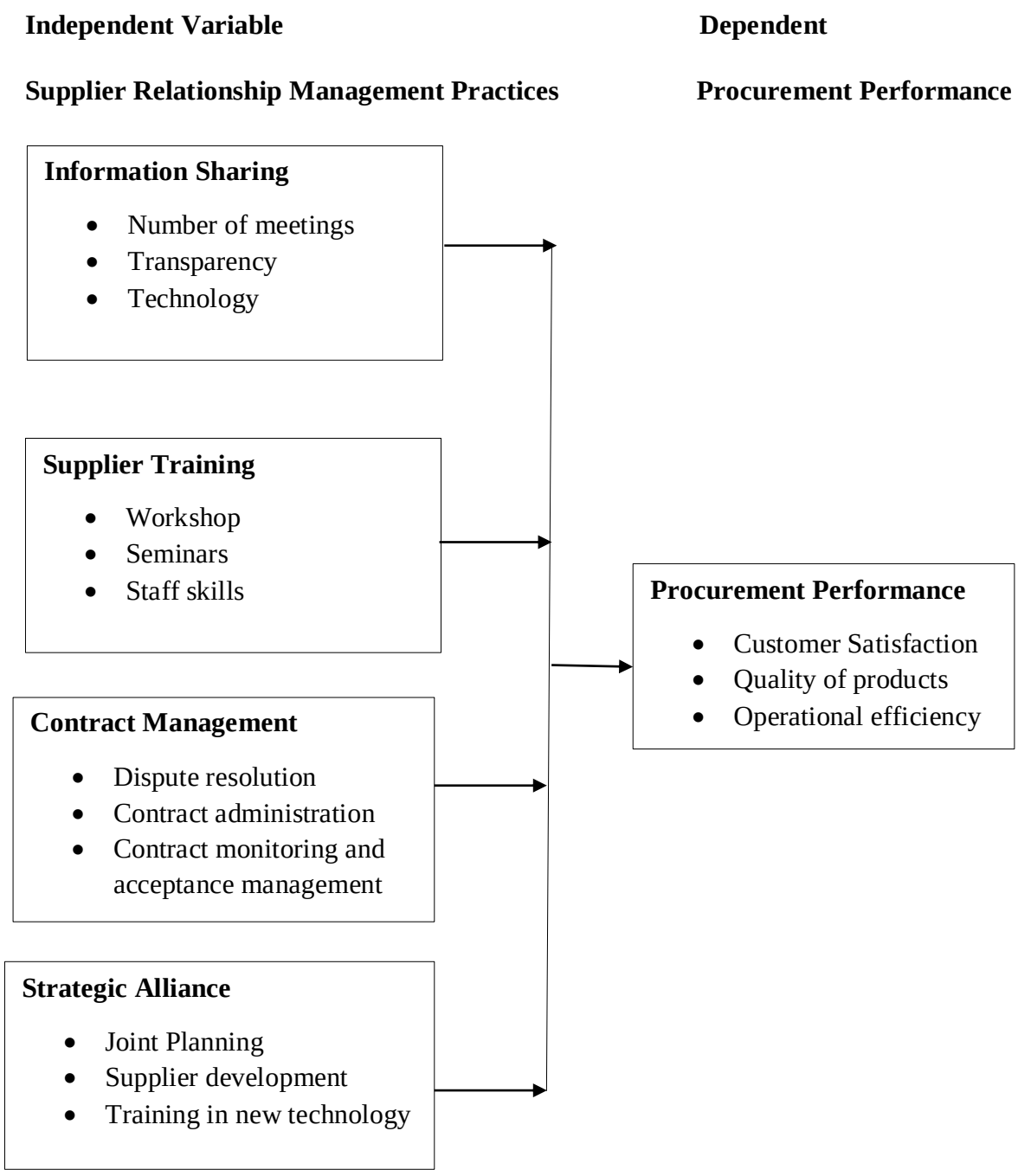

Figure 2. 1: Conceptual Framework Source; Researchers Conceptualization.

2.3.1 Information Sharing

Firms can improve their supply chain performance by sharing information, resulting in increased revenues and profits. The transmission of information about supply chain and positions, sales statistics and projections, order status, production and delivery schedules and capacity, and performance indicators is known as information sharing in procurement. Information sharing as "giving organizations with forward insight, improved production planning, inventory management and distribution" in their firm supply chain performance (Makokha, 2019). Today's businesses want to share information with their suppliers, but they also want that information to be useful and timely when it comes to ordering and replenishment, which will improve the performance of manufacturing companies (Kembro, Näslund, & Olhager, 2017). Information sharing (IS) in a supply chain refers to how much confidential or important information is made available to all participants. IS happens when a Firm can access data from many supply chains, leading to collaboration that minimizes supply chain inefficiencies (Waithaka & Waiganjo, 2015).

Information sharing includes but is not limited to; information transfer in shipment tracing, billing transactions, and complaint resolution. Suppliers, producers, and customers recognize that sharing information results in a bigger advantage than suppressing information. Firms, for example, may have surplus inventory if they do not communicate product demand predictions. When customers are prepared to submit shifting forecasts, however, manufacturers and suppliers can plan accordingly by reducing the bullwhip impact (Gebisa & Ram, 2021).

Njagi and Shalle (2016) contend that the information exchanged between key parties is made more difficult by the interaction between customers and providers, which is becoming increasingly complicated. Businesses have adopted technologies like the internet and electronic data exchange to get around these issues (EDI). These technologies make it simple for participants in the supply chain to exchange information.

Sharing information is critical in the supply chain system, both conceptually and practically because it improves business performance, nevertheless by determining its benefits requires collaboration with other supply chain partners. The underlying idea is that a Firm cannot compete on its own and must work with other parties (Khan & Siddiqui, 2018). Sharing information is how businesses are able to deal with demand uncertainty. Sharing

information enables a firm to promptly fulfill consumer orders (Wachira, 2013). Additionally, information exchange enables a Firm to have up-to-the-minute Knowledge on when to place orders and restock stock levels. Replenishment is a crucial choice since it aids a Firm in reducing stock outs (Waithaka & Waiganjo, 2015).

According to Pereira, Christopher, and Silva (2014), knowledge sharing reduces expenses in an organization's supply chain. Furthermore, investing in IS would result in shorter lead times and smaller batches, lowering operating costs (Kong, Rajagopalan & Zhang, 2017).

2.3.2 Supplier Training.

Buyer-supported training refers to supplier development programs that receive assistance from customers. According to the literature, buyers support their suppliers in a variety of ways, with some customers providing more support than others, some buyers are concerned with short-term gains, while others see supplier development as a long-term investment. As a result, suppliers have access to various sorts of supplier development programs based on their buyers. Studies concentrating on the supplier perspective would be the best way to analyze the types of training that would most benefit suppliers. Buyer-supported training programs could be expanded by identifying the relevant forms of training and that in order for purchasing to adequately assess and aid suppliers in improving quality, purchasers need to become familiar with the important components of quality management (Mariko, 2021). This is because buyers might choose the type of training that is appropriate for various groups of providers. The correct kind of training may therefore lead to an improvement in supplier performance, which would drive an increase in buyer-supported training. Buyer may send his personnel or a group of team members to train the supplier or he may invite a group of suppliers experiencing the same difficulty to train at his own firm (Nabiliki, Wanyoike, & Mbeche, 2018).

2.3.3 Contract Management

Contract management is the process of planning, coordinating, regulating, and incorporating terms and conditions included in a business agreement reached by the parties (Muinde, 2022). Contract management is unavoidable in private sugar firms if outstanding procurement performance is to be attained.

It is the activities of a buyer during a contract period to ensure that all parties to the contract fulfil their contractual obligation and thus, it not only facilitates contract negotiations,

contract formation, contract implementation, or possibly dispute resolution, as well as audit preparation and protection, but it is also an important part of the risk management strategy of private sugar firms toward a sustainable provision of cost reduction in the market environment (Gatari, Shale, & Osoro, 2022).

2.3.4 Strategic Alliance

A strategic alliance is an agreement between two companies to collaborate on a mutually advantageous initiative while maintaining each Firm's independence. The arrangement is less complicated and less enforceable than a joint venture, in which two businesses pool their resources to form a new Firm organization. The following are types of strategic alliances, the first alliance is a horizontal alliance formed by firms that compete for the same resources, such as consumers or suppliers, and typically represents one-way exchanges (Emami, Welsh, Divari, & Arash, 2022).

In this structure, organizations such as research consortia or trade unions exchange or pool their resources toward a common purpose. The second type of alliance is a vertical alliance, which is an agreement between a Firm and the entities that supply inputs or use its outputs, such as suppliers, purchasers, financial institutions, or the labor pool. Vertical partnerships typically represent one-way transactions. The third sort of alliance is reciprocal, in which organizations share inputs and outputs in both directions. Firms in reciprocal relationships exchange ideas, personnel, and equipment, share lab space, and send designs back and forth (Umar, 2020).

2.4 Empirical Literature Review

This section reviews the previous studies on supplier relationship management and procurement performance of private Sugar Processing firms in Kenya.

2.4.1 Information Sharing and Procurement Performance

Makokha, (2019), carried out a study to investigate the impact of information sharing on supplier performance at Sugar Processing Firm Ltd. The research employed a descriptive research design, with questionnaires used to collect both quantitative and qualitative data. The target population consisted of 152 Nzoia Sugar Firm procurement department personnel.

The random sample technique was used to ensure that the population under study had an equal chance of being chosen. Data was gathered utilizing both primary and secondary

methods. Pearson correlation, descriptive statistics, and multiple regression analysis were used to analyze the data. The main finding was that information sharing had a significant impact on supplier performance.

Okore and Kibet, (2019), they sought to look at the impact of information sharing on the supply chain performance of the tourism business in Kakamega County. The study utilized an explanatory survey design. The target group included 459 personnel from Kakamega County's four licensed tour businesses and five licensed hotels (Tourism Regulatory Authority, Western region, 2016). As a research instrument, a questionnaire was used. According to the study's findings, information sharing influences the supply chain performance of the tourism business in Kakamega County.

Gebisa and Ram, (2021), they conducted empirical research on the impact of information sharing and inventory management practices on firm performance. To achieve the stated goal, the study focused on the supply chain operations of some Ethiopian enterprises. Data was gathered from 170 respondents, who included employees, suppliers, and distributors from the organizations under inquiry. The indicated objective and hypothesis in this study were tested using structural equation modeling (SEM). The findings indicate that information sharing have a significant and immediate impact on firm supply performance.

Khan and Siddiqui, (2018), undertook a study to determine the relationship between information sharing and its impact on the supply chain performance of Pakistani pharmaceutical manufacturing enterprises. Data was collected from 35 pharmaceutical companies in Pakistan's major cities. Self-reported questionnaires were utilized to obtain data from managers in several pharmaceutical companies in Pakistan. The findings reveal that information sharing and the quality of information sharing have a significant impact on the supply chain performance of pharmaceutical manufacturing enterprises.

2.4.2 Supplier Training and Procurement Performance

Mariko, (2021), conducted research to investigate the impact of supplier development on the procurement performance of the Kakira manufacturing organization. In creating the study, the researcher used both qualitative and quantitative methodologies with a total of 36 individuals took part in the survey and they were chosen at random.

The information was gathered through surveys and interviews and provided in the form of tables, graphs, and pie charts for easy examination. The research findings demonstrated

that supplier development is really essential in increasing supplier and organizational performance.

Nabiliki, Wanyoike, and Mbeche, (2018), conducted a study to determine the impact of supplier training, supplier appraisal, supplier collaboration, and supplier financial support on procurement performance. A survey study design was used since it allows for data collection from respondents in natural situations. The survey targeted all procurement workers and accountants in Nakuru East Sub- County food and beverage manufacturing enterprises and as a result, the target demographic included all procurement personnel and accountants from 16 food and beverage production enterprises totaling 48 procurement staff. A structured questionnaire was used to collect data. The data was examined using descriptive statistics (means and standard deviations) as well as inferential statistics (correlation and regression). According to the findings of the study, supplier training had a positive and significant impact on procurement performance.

Oyamo and Nyakeyo, (2019),to find out how supplier training affects procurement performance at Rongo University and in order to achieve the aims, a descriptive study design was used and a quantitative approach was used to collect data from Rongo University staff with sample size of 79 people was purposefully chosen. Data was collected through a questionnaire, which was then analyzed using descriptive statistics. The association between the independent and dependent variables was demonstrated using multiple regression analysis. The study's findings revealed that Rongo University personnel saw training as critical to procurement performance.

2.4.3 Contract Management and Procurement Performance

Kariuki and Nyang'au, (2019), undertook a study to assess the impact of contract management on county government procurement performance in Kenya. This study focused on Garissa County employees. The descriptive survey design was used in the course of the research. To collect data for the study, the researcher employed questionnaires as research instruments. The research design for the study included both primary and secondary data analysis. Descriptive statistics were used to analyze the quantitative data.

Furthermore, the data was analyzed using multiple regression analysis in the study. This study indicated that contract management has a significant and positive influence on county government procurement performance in Kenya.

Muinde, (2022), conducted a study to investigate on the effect of contract management on procurement performance of public universities in Kenya.

The descriptive research design was used in the study. In this investigation, a census method was used. A total of 124 university officials (Unit of Observation) were chosen at random. Questionnaires were used to collect primary data. In order to obtain qualitative data, key informant interviews were also done. The auditor general's and PPRA reports provided secondary data. Descriptive statistics were used as measures of central tendency. Correlation analysis and multiple linear regression were also inferred using inferential statistics. The study's findings demonstrated that contract management has a positive and significant impact on procurement performance in Kenyan public universities.

Ogembo and Muturi, (2019), assessed the effect of contract management on procurement performance in Kenya's devolved governments. The investigation used a descriptive study approach. The inquiry used both qualitative and quantitative skills to collect data from Kisii County procurement-related department workers. Questionnaires were used to collect study data. The study employed stratified random sampling to ensure that every division was represented. The study data was analyzed using descriptive and inferential statistics. According to the study findings, contract management has a positive and significant effect on procurement performance among Kenya's devolved governments.

Gatari, Shale, and Osoro, (2022), established the effect of procurement contract management on sustainable performance of state corporations in Kenya. The research design utilized in this study was a mixed-methods design. The study's target population consisted of 187 state corporations. A census was employed to poll all state corporations, and purposive sampling was used to select the finance manager and procurement manager, yielding 374 respondents. The primary source of data for the study was primary data collected using research questionnaires. The research included both descriptive and inferential analysis. The results of the demonstrated that procurement contract management has a significant and positive influence on the long-term performance of Kenyan state organizations.

2.4.4 Strategic Alliance and Procurement Performance

Bimbola, Lahanmi, Babalola, and Iyabo, (2020), conducted a study to analyze the effects of strategic alliance on financial performance of construction enterprises in Nigeria. The

survey design was used in the study to collect information via questionnaires distributed to construction professionals.

Three hundred and sixty-three (363) respondents provided data for the study. The descriptive and inferential statistics were used to analyze the study data. The study's findings revealed that strategic alliances have a positive and significant impact on the financial performance of Nigerian construction enterprises.

Charles, Kule, and Kapaya, (2021), examined the impact of strategic alliance management on the performance of Rwandan microfinance institutions. The target population consisted of 491 MFIs, with a sample size of 220 calculated using Slovene's formula. The descriptive research design was used in the study. The structured questionnaire was used to obtain primary data for the study. Data collected was analyzed using descriptive and inferential statistics. The association between strategic alliance management and MFI performance was established using structural equation modeling (SEM). According to the study findings, strategic alliance has a positive and significant effect on the performance of MFIs in Rwanda.

Warutere and Shale, (2018), studied the impact of strategic supplier alliance management on supply chain performance in Kenya's devolved government. A case of Murang'a county. The descriptive survey research design, as well as quantitative and qualitative methodologies, were used in the study. The survey's target population was 500 Murang'a county staff members. Structured questionnaires were the primary tool for data gathering. Descriptive and inferential statistics were used to examine the data. To establish the association between variables, Pearson correlation analysis was used. The study's findings revealed that strategic supplier alliance management has a positive and significant impact on devolved government supply chain performance in Kenya.

Emami, Welsh, Divari, and Arash, (2022), examined the impact of strategic alliance on firm performance among small entrepreneurial firms in the telecommunications industry. The study adopted descriptive research design. The target population of the study was staff of the small entrepreneurial firms.

The study used primary data collected through questionnaires. data collected was analysed through descriptive and inferential statistics. The study uses structural equation modeling to analyze primary data obtained from a sample of 74 small entrepreneurial firms in the

telecommunications sector. The study findings found that strategic alliances significantly and positively impact partners' performance of small entrepreneurial firms in the telecommunication sector.

2.5 Critique and Research Gaps

Table 2. 1: Critique and Research Gap

Author and Year	Topic & Scope	Target Population	Critique and Research Gap.
Makokha, (2019).	The impact of information sharing on supplier performance at Public Sugar Processing Firm Ltd.	Public Sugar Processing Firm Ltd.	The study focused on public sugar manufacturing firms hence need for similar study in private sugar sector.
Okore & Kibet, (2019)	The impact of information sharing on the supply chain performance of the tourism business in Kakamega County.	The target group included 459 personnel from Kakamega County's four licensed tour businesses and five licensed hotels.	The study targeted licensed hostels hence need for a similar study to focus on private manufacturing firms.
Gebisa & Ram, (2021),	Impact of information sharing and inventory management practices on firm performance in Ethiopian Enterprises	The target population included 170 respondents (employees, suppliers, and distributors from the organizations under inquiry)	The study focused on the enterprise in Ethiopia. Therefore, there is need for a similar study in private sugar firms in Kenya.

Author and Year	Topic & Scope	Target Population	Critique and Research Gap.
Khan & Siddiqui, (2018)	Relationship between information sharing and its impact on the supply chain performance of Pakistani pharmaceutical manufacturing enterprises.	The study targeted 35 pharmaceutical companies in Pakistan's major cities.	The study focused on Pakistan Companies hence need for a similar study to focus on private manufacturing firms
Mariko, (2021)	Impact of supplier development on the procurement performance of the Kakira.	The study targeted 36 individuals in Kakira	The study was conducted in Kakira firms hence there is a need to conduct similar study in Kenya.
Nabiliki, Wanyoike, & Mbeche, (2018)	Impact of supplier training, supplier appraisal, supplier collaboration, and supplier financial support on procurement performance	target demographic included all procurement personnel and accountants from 16 food and beverage production enterprises, totaling 48 procurement staff	The study was conducted on food manufacturing firms in Nakuru East sub county hence need for similar study on private sugar firms in Kenya

Author and Year	Topic & Scope	Target Population	Critique and Research Gap.
Oyamo & Nyakeyo, (2019)	To find out how supplier training affects procurement performance at Rongo University.	The study targeted 79 procurement officers in Rongo university	The study was conducted in a university environment. Hence need for a similar study in sugar firms sector.
Kariuki and Nyang'au, (2019)	Assessed the impact of contract management on county government procurement performance in Kenya.	This study focused on Garissa County employees.	This study focused on county governments hence need for similar study in private sugar governments.
Muinde, (2022)	Evaluated the effect of contract management on procurement performance of public universities in Kenya.	A total of 124 university officials (Unit of Observation) were chosen at random.	The study was conducted in public universities hence need for similar study in sugar manufacturing firms.
Ogembo and Muturi, (2019)	Assessed the effect of contract management on procurement performance in Kenya's devolved governments.	The study targeted Kisii County procurement-related department workers.	The study was conducted in Kisii county hence need for similar study to be done on sugar firms in Kenya at large.

Author and Year	Topic & Scope	Target Population	Critique and Research Gap.
Gatari, Shale, and Osoro, (2022),	Established the effect of procurement contract management on sustainable performance of state corporations in Kenya.	The study's target population consisted of 187 state corporations.	The study focused on state corporations hence there is need for a similar study in sugar manufacturing firms in Kenya.
Bimbola, Lahanmi, Babalola, and Iyabo, (2020)	conducted a study to analyze the effects of strategic alliance on financial performance of construction enterprises in Nigeria.	The study targeted three hundred and sixty-three (363) respondents provided data for the study.	The study was conducted in construction enterprises in Nigeria hence there is need for the similar study in the sugar manufacturing firms in Kenya.
Charles, Kule, and Kapaya, (2021)	The impact of strategic alliance management on the performance of Rwandan microfinance institutions.	The target population consisted of 491 MFIs, with a sample size of 220 calculated using Slovene's formula.	The study was conducted in micro-finance institutions in Rwanda. There is need for a similar study in sugar manufacturing firms in Kenya at large
Warutere and Shale, (2018)	The impact of strategic supplier alliance management on supply chain performance in	The survey's target population was 500 Murang'a county staff members.	The study was conducted in Murang'a county hence need for similar study in Kenya.

Author and Year	Topic & Scope	Target Population	Critique and Research Gap.
	Kenya's devolved government. A case of Murang'a county.		
Emami, Welsh, Divari, and Arash, (2022	examined the impact of strategic alliance on firm performance among small entrepreneurial firms in the telecommunications industry.	The target population of the study was staff of the small entrepreneurial firms.	The study was conducted in telecommunications industry hence need for similar study in sugar industry.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research design, target population, sample size and sampling technique, research Instruments, reliability of instruments, validity of instrument, pilot study, data analysis and presentation and ethical considerations.

3.2 Research Philosophy

The study adopted a positivist research philosophy that relates to the philosophical stance of the natural scientist and entails working with an observable social reality to assist generate law-like generalizations (Hochbein & Smeaton, 2018). A research philosophy refers to the system of beliefs and assumptions about the development of knowledge. Additionally, this philosophy promises unambiguous and accurate knowledge and it emphasizes on the positivist focus on strictly scientific empiricist method designed to yield pure data and facts uninfluenced by human interpretation or bias. This philosophy was adopted since most of the companies under the study are viewed as real in the same way as physical objects and natural phenomena as well. Positivism makes it possible to use statistical methods for testing hypotheses to assess research data gathered through the use of quantitative research methods (Creswell, 2017).

3.3 Research design

The study used descriptive research design. This design was appropriate in collecting information about people's attitude, opinion and habit. It can be used to obtain information concerning the status of the phenomena and to describe what exist with respect variable and condition in situation (Dannels, 2018). Descriptive research captures the opportunity to capture data from respondent through questionnaire (Bloomfield & Fisher, 2019), this design was therefore suitable for this study since it established the effect of supplier relationship management on organizational performance on sugar processing firms in Kenya in Kenya.

3.4 Target population

According to (Asiamah, Mensah, & Oteng, 2017) target population is a large collection of individuals or objects being the main focus of a scientific query and have similar characteristics and viewed population as a large collection of all subjects from where a stratified sampling is drawn. The study targeted 50 respondents comprising of 10 Merchandise Managers, 10 Procurement managers, 10 Store Managers, 10 Field Supervisors and 10 Chief Executive Officers in the five Companies (West Kenya Sugar Firm, Butali Sugar Firm, Busia Sugar Firm, Olepito Sugar Firm, Naitiri Sugar Firm, Transmara Sugar Firm, Sukari Sugar Firm, Kwale International Sugar Firm, Ranges Sugar Firm and Kisii Sugar Firm).

Table 3. 1: Target Population

Category	Number	Percentage (%)
Merchandise Managers	10	20
Procurement managers	10	20
Store Managers	10	20
Field Supervisors	10	20
Chief Executive Officers	10	20
Total	**50**	**100**

3.5 Sample Technique

A sample is a smaller collection of data that is chosen or chosen from a big population by a research study using a predetermined technique of selection. It makes it possible to make broad conclusions about the target population. There are several methods utilized in sample selection, but they differ in the amount of money, time, and experience needed (Jung, 2014). The sample is also chosen according to their competence on the required information.

The study employed census sampling as all the 10 private sugar firms in Kenya was used for data collection.

Census sampling was most appropriate since the study population is small. This sampling techniques helped in eliminating sampling error hence valid and detailed information was collected (Skinner, 2018).

3.6 Data collection Instruments

In-depth information was gathered through questionnaires. Closed-ended questions were used because they are precise and simple to evaluate. Closed-ended questions are also affordable, simple for respondents to respond to and they guarantee respondents' confidentiality.

3.7 Data Collection Procedure

The research assistants delivered the questionnaires to the respondents in person at each of the ten firms they have chosen in order to gather primary data. The respondents were given two weeks to complete the questionnaires. The research assistants later collected the questionnaires once the allotted time had passed.

3.8 Pilot Test

A pilot study was conducted among the 10 staff of Kibos Sugar Firm because the Firm had similar characteristic to those of targeted groups. Despite the Firm adopting supplier relationship management, Procurement performance still has a major issue as the operations have not been streamlined and simplified. The rationale of pilot testing was to establish any potential weaknesses in the research instrument (Kumar, 2017). The findings of the pilot study helped in identifying anomalies that could occur during the actual research by the instruments used thereby enhancing the reliability and validity of the research instruments.

3.8.1 Reliability

Reliability aids in conveying how well the data obtained produces reliable findings. The accuracy of a research instrument's depiction of the entire population being studied is measured by how consistently it produces results or data after numerous trials (Kothari, 2014). Using Cronbach's alpha, whose values range from 0 to 1, reliability was assessed. Numbers below 0.70 are seen as less trustworthy and are therefore unacceptable, while values between 0.7 and 1.00 suggest a significant reliability and are thus acceptable.

The formula to calculate Cronbach's alpha is given below.

$$\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N-1) \cdot \bar{c}}$$

Where N - is the number of items

C-bar – is the average inter-item covariance

V-bar - equals the average variance

Table 3.2: Reliability of Research Instruments

Variable	Cronbach's alpha	Number of items	Result
Information Sharing	0.733	10	Reliable
Supplier Training	0.763	10	Reliable
Contract Management	0.820	10	Reliable
Strategic Alliance	0.980	10	Reliable
Procurement Performance	0.728	10	Reliable

Table 3.2 show the Cronbach's alpha values for all variables that were greater than 0.70. Therefore, the constructs of the study were reliable.

3.8.2 Validity

Validity was tested using experts and factor analysis. Using an expert analysis, the validity of the questionnaires was examined to see if they accurately measure the intended outcomes. Experts such as supervisors were given the questionnaires to review. In order to make the claim that features being verified by a tool of data collection adequately and correctly cover what is intended, factor analysis was also employed to test validity in this case which evaluated the construct validity of the questionnaire. The findings out of the instrument measures were made easier by looking at its validity. To check if the questionnaires have the necessary information, it was necessary to review them.

Table 3.3: KMO and Bartlett's Test Results

Construct	No of Items	KMO	Bartlett's test of Sphericity		
			χ^2	df	P-value
IS	10	0.715	127.284	45	0.000
ST	10	0.736	95.035	45	0.000
CM	10	0.724	161.281	45	0.000
SA	10	0.848	66.613	45	0.020
Procurement performance	10	0.959	108.887	45	0.000

Table 3.3 results showed KMO values of greater than 0.7 for all constructs hence suitable and based Bartlett's test with p-values less than 0.05 it was established that the constructs had equal variances hence perfect for factor analysis. Therefore, convergent validity had been established.

3.9 Data processing, Analysis and Presentation

The data collected was cleaned, sorted, coded and run through the statistical package for social sciences (SPSS) version 27. Both descriptive and inferential statistics were generated. Descriptive statistics comprised of mean, minimum and maximum statistics. Inferential statistics comprise of multiple regression analysis and correlation analysis. Data was presented using tables. The following regression model was used to establish the strength of the relationship supplier relationship management and procurement performance.

$Y=ß_0+ß_1IS+ß_2ST+ß_3ST+ ß_4SA+ \varepsilon$ …… *(3.2)*

Where:

Y-Procurement performance

$ß_0$- constant

$ß_1, ß_2 ß_3 ß_4$- Regression coefficients

IS-Information sharing

ST-Supplier Training

CM-Contract management

SA-Strategic alliance

ε -The error term

3.10 Diagnostic Tests

Diagnostic tests were conducted to ensure the multiple regression model meets all the regression assumptions. The following diagnostic tests was conducted.

3.10.1 Test of Normality

The test for normality aimed to determine if the data set under investigation is normally distributed and whether the regression model adhered to the assumptions of linear regression. This is essential in establishing any significant effects or relationships.The null hypothesis for normality states that variables are normally distributed.

To determine whether the variables are normal, the Shapiro Wilk test was used. When the p values are less than 0.05, the null hypothesis is rejected, and when the p values are more than 0.05, the null hypothesis is not rejected.

3.10.2 Test of Autocorrelation

The independence of the error terms, which suggested that the observations are autonomous, is tested using autocorrelation. The Durbin Watson test was used to determine the autocorrelation of model residues. To make sure that the estimated variance of the regression coefficient is not skewed and inconsistent, an autocorrelation test is conducted. Also, it the test helps to ensure that the r2 is not overstated to suggest a better fit than what actually exists. The basic assumption of the linear regression is that there is no auto correlation between the model residues. If a Durbin Watson test statistics is below 1.5 or greater than 2.5 then it depicts a problem of autocorrelation. Otherwise, if it lies between 1.5 and 2.5 then there is no autocorrelation (Kenton, 2021).

3.10.3 Test of Multicollinearity

Multicollinearity occurs when there is a strong correlation between two or more independent variables in the regression model. The null hypothesis in the linear regression model is that there is no multicollinearity among the variables under examination. In order for the regression model to provide findings on its own, the predictor variables in a model shouldn't be strongly connected. The amount of association between predictor variables in the regression model was determined using the variance inflation factor (VIF). VIF values between 1 and 10 indicate that the model has no multicollinearity, whereas values over 10 indicate the presence of multicollinearity (Jong, 2019).

3.10.4 Test of Heteroscedasticity

When the error variance varies among observations, there is heteroscedasticity. It produces p-values that are lower than the predicted value and could lead to biased and inconsistent regression coefficients (Jong, 2019).

The null hypothesis states that the residuals in the model are not Heteroscedastic. To determine whether heteroscedasticity exists or not, the graphical method was adopted with residuals plotted against predicted dependent variable. The residuals are homoscedastic if the graph does not depict a regular pattern (Jong, 2019).

3.11 Ethical Considerations

The director of graduate studies provided a letter of approval for the research project. The National Commission for Science, Technology, and Innovation (NACOSTI) granted permission for the research to be conducted. In order to help respondents to complete questionnaires and provide the necessary data for the study, the respondents' consent was obtained. Since it is obvious that sensitive information should not be accessed by anybody, the data collected from the respondents was handled with the highest confidentiality and was used only for academic purposes.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents and discusses the results which comprise general overview of the private sugar firms, descriptive statistics, and correlation and regression analysis results.

4.2 General Overview

General overview involved understanding the sugar firms in terms of years in operation, qualification of employees and number of suppliers.

Table 4.1: Sugar firms overview

Aspect	Frequency	Percent
	Years in Operation	
Years	Frequency	Percent (%)
1-5 years	14	28.0
6-10 years	11	22.0
11-20 years	18	36.0
Above 20 years	7	14.0
Total	**50**	**100.0**
	Highest level of Education	
Level	Frequency	Percent (%)
Certificate	4	8.0
Diploma	11	22.0
Bachelors	24	48.0
Masters	10	20.0
PhD	1	2.0
Total	**50**	**100.0**
	Number of Suppliers	
Suppliers	Frequency	Percent (%)
6-10	1	2.0

10-20	9	18.0
More than 20	40	80.0
Total	**50**	**100.0**

Results in Table 4.1 indicated that the private sugar processing firms had been in operation for at least one year. That is, according to 7 (14.0%) of the respondents there were firms that had operated for over 20 years, 11(22.0%) of respondents averred that firms had been in operation for 6-10 years, 14 (28.0%) had been in operation for 1-5 years while 18(36.0%) of respondents affirmed that the firms had operated for between 11-20 years. In terms of the education level for the respondents who are workers in the firms it was evident that 1(2.0%) had a PhD, 4(8.0%) certificate, 10 (20.0%) masters, 11(22.0%) diploma and 24(48.0%) had bachelor's degree. The firms had at least 6 suppliers where from the respondents, 1 (2.0%) confirmed reliance on 6-10 suppliers, 9(18.0%) affirmed involvement of 10-20 suppliers while 40(80.0%) confirmed having more than 20 suppliers. From the foregoing, it was evident that, in terms of the general overview, majority of the private firms had been operation for 11-20 years thereby providing a formidable ground for reliable data collection, most of the workers had bachelor's degrees which meant that they understood the topic under survey too well and also majority of the firms depended on more than 20 suppliers meaning that they understood well the concept of supplier relationship management. This showed that the private sugar firms in Kenya were well established in terms of operation, had qualified workers and had a diverse range of suppliers indicating reliability in terms of supplies.

4.3 Descriptive Statistics

4.3.1 Information sharing and procurement performance

Information sharing aspects using descriptive statistics that were measured on a 5-point likert scale investigated involved regular meetings with strategic suppliers, suppliers access to critical information, good communication channels with the suppliers, written communication being emphasized, impromptu visits to suppliers undertaken, teamwork used for sharing information with its key suppliers and whether regular meetings, information sharing, written communication and use ICT for regular communication improves procurement performance.

Table 4.2: Information sharing descriptive statistics

Aspect	Min	Max	Mean
The organization holds regular meetings with its strategic suppliers	1	5	3.86
Holding of regular meetings with suppliers improves procurement performance through information sharing	2	5	4.34
The organization uses ICT for regular communication with its strategic suppliers	2	5	4.10
Information sharing between the Firm and suppliers improves procurement performance	1	5	4.56
The Firm allows suppliers to access its critical information like sales forecast promotion strategy and production runs	2	5	3.90
The Firm has good communication channels with the suppliers	1	5	4.30
Written communication is emphasized for organization and suppliers transparent communication	2	5	4.18
Written communication improves procurement performance through transparency	1	5	4.32
Impromptu visits to suppliers premises are sometime undertaken by organization management to share information on key supplies	1	5	4.00
Organization uses teamwork for sharing information with its key suppliers	2	5	4.16

Results in Table 4.2 depicted an average of 3.86 for regular meetings with strategic suppliers, 3.90 for suppliers access to critical information, 4.30 for good communication channels with the suppliers, 4.18 for written communication being emphasized, 4.00 for impromptu visits to suppliers undertaken, 4.16 for teamwork used for sharing information with its key suppliers.

It was also noted that average outcomes of 4.34, 4.56, 4.32 and 4.10 were established to show that regular meetings, information sharing, written communication and use ICT for regular communication with suppliers improve procurement performance respectively.

As pertaining the question as to whether Information sharing between the Firm and suppliers improves procurement performance, the results indicated that with an approximate mean of 4.56, and this was in agreement with the findings of Okore and Kibet, (2019) who established that information sharing influences the supply chain performance of the tourism business in Kakamega County. The respondents agreed that the private sugar firms hold regular meetings with strategic suppliers, suppliers accessed critical information like sales forecast promotion strategy and production runs, there was good communication channels with the suppliers, written communication is emphasized for transparent communication, impromptu visits to suppliers premises are sometimes undertaken by management to share information on key supplies and teamwork was being used for sharing information with key suppliers. Further, the respondents agreed that holding of regular meetings with suppliers and using written communication improves procurement performance while given an average of 4.56 which was approximately 5 indicated that the respondents strongly agreed that information sharing between the sugar firms and suppliers improves procurement performance.

4.3.2 Supplier training and procurement performance

Supplier training aspects investigated using descriptive statistics measured on a 5-point likert scale were regular workshops and seminars with strategic suppliers, employees attendance of trainings to improve procurement skills, benefits of training staff on procurement practices, raining suppliers improves their capacity, institution's procurement staff training level and if supplier training through workshops and seminars and administering training programs for strategic suppliers improves procurement performance.

Table 4.3: Supplier training descriptive statistics

Aspect	Min	Max	Mean
The organization holds regular workshops with its strategic suppliers	1	5	3.60
Supplier training through workshops improves procurement performance	1	5	3.86
The organization holds regular procurement seminars with its strategic suppliers	1	5	4.08
Administering training programs for strategic suppliers enhance the Firm's procurement performance	1	5	4.20
Training of suppliers improves suppliers capacity to deal with supplies issues	1	5	4.35
Employees attend trainings to improve skills on procurement practices	1	5	4.18
Benefits of training staff on procurement practices are more than the costs	1	5	4.14
The institution's procurement staff are highly trained on procurement practices so as to get procurement skills	2	5	4.16
Regular seminars improves suppliers skills hence improving procurement performance	1	5	4.30

Table 4.3 results showed an average of 3.60 and 4.08 for holding of regular procurement workshops and seminars with strategic suppliers respectively. On average an outcome of 4.18 for employees attending trainings to improve skills on procurement practices, 4.35 for training of suppliers to improve capacity to deal with supplies issues, 4.14 for benefits of training staff on procurement practices are more than the costs and 4.16 for institution's procurement staff being highly trained on procurement practices.

Further, average outcomes of 3.86, 4.20 and 4.30 were identified to show that supplier training through workshops and seminars and administering training programs for strategic suppliers improves sugar firms' procurement performance respectively.

Pertaining the survey question on whether Training of suppliers improves supplier's capacity to deal with supplies issues, results showed that with an approximate mean of 4.35. This finding concurs to that of Nabiliki, Wanyoike, and Mbeche,(2018) who established that supplier training had a positive and significant impact on procurement performance. Then the respondents agreed that the private sugar firms hold regular procurement workshops and seminars with strategic suppliers, employees attending trainings to improve skills on procurement practices, training of suppliers improves capacity of suppliers to deal with supplies issues, benefits of training staff on procurement practices are more than the costs and sugar firms' procurement staff are highly trained on procurement practices. Further, the respondents agreed that that supplier training through workshops and seminars and administering training programs for strategic suppliers improves sugar firms' procurement performance.

4.3.3 Contract management and procurement performance

Contract management aspects investigated were use of appropriate procedures to resolve possible differences, existence of appointed contract implementation teams to supervise contracts, periodically conducts quality inspections on its running contracts, supervision of contracts to ensure specified terms and conditions are met by contractor, creation and maintenance of positive relationship with the contractor, maintenance of updated form of the contract, control and management of contract variations. It was also established whether dispute resolution between an organization and contractor and quality inspection of running contracts improves procurement performance of private sugar firms' in Kenya.

Table 4.4: Contract management descriptive statistics

Aspect	Min	Max	Mean
The organization uses appropriate procedures to resolve possible differences with the contractor	1	5	4.00
Dispute resolution between an organization and contractor improves procurement performance	1	5	4.02
The organization always ensures that there are appointed contract implementation teams to supervise contracts	2	5	4.30
The organization periodically conducts quality inspections on its running contracts	2	5	4.34
Quality inspection of running contracts improves procurement performance	1	5	4.38
The firm always supervises its contracts by ensuring that the contractor meets the specified terms and conditions of the contract	2	5	4.50
The organization creates and maintains a positive relationship with the contractor	1	5	4.36
The organization maintains an updated form of the contract	1	5	4.12
The organization controls and manages contract variations	1	5	4.30

Results in Table 4.4 depicted an average of 4.00 for use of appropriate procedures to resolve possible differences, 4.30 for existence of appointed contract implementation teams to supervise contracts, 4.34 for conducting periodical quality inspections on its running contracts, 4.50 for supervision of contracts to ensure specified terms and conditions are met by contractor, 4.36 for creation and maintenance of positive relationship with the contractor, 4.12 for maintenance of updated form of the contract and 4.30 for control and management of contract variations. It was also noted that average outcomes of 4.02 and 4.38 were established to show that dispute resolution between an organization and contractor and quality inspection of running contracts improves procurement performance of private sugar firms' in Kenya respectively.

The results implied that with an approximate mean of 4, then the respondents agreed that the private sugar firms use of appropriate procedures to resolve possible differences, there existed appointed contract implementation teams to supervise contracts, firm's conduct periodical quality inspections on its running contracts, firms had created and maintain positive relationship with the contractor, there was maintenance of updated form of the contract and control of and management of contract variations. On the other hand, an approximate average value of 5 based on the responses indicated that there was supervision of contracts to ensure specified terms and conditions are met by contractor. More importantly, from an approximate value of 4 the respondents agreed that dispute resolution between an organization and contractor and quality inspection of running contracts improves procurement performance of private sugar firms' in Kenya.

4.3.4 Strategic alliance and procurement performance

Strategic alliance aspects investigated using descriptive statistics were frequent engagement of strategic suppliers, strategic suppliers help in development of procurement specifications, suppliers engaged to identify distribution/ delivery centers, organizations help in increasing the technical capability of the suppliers to meet its supply needs, organization undertaking to increase the cost management capabilities of its strategic supplies, organization training suppliers on new technology, help of strategic market alliance to improve delivery time and whether frequent engagement of suppliers in identifying strategic procurement requirements, development of procurement specification and training suppliers on new technology improves procurement performance.

Table 4.5: Strategic alliance descriptive statistics

Aspect	Min	Max	Mean
Strategic suppliers are frequently engaged in identifying organization strategic procurement requirements	2	5	4.00
Frequent engagement of suppliers in identifying strategic procurement requirements improves procurement performance	2	5	4.14
Strategic suppliers helps in development of procurement specifications	2	5	4.22
Development of procurement specification improves procurement performance	2	5	4.33
The organization engages its suppliers in identifying distribution/ delivery centers	2	5	4.36
The organization helps in increasing the technical capability of the suppliers to meet its supply needs	2	5	4.26
The organization undertakes to increase the cost management capabilities of its strategic supplies to meet its supply needs	1	5	4.24
The organization trains its suppliers on new technology	2	5	4.14
Training suppliers on new technology improves procurement performance	2	5	4.50
Strategic market alliance helps to improve delivery time	1	5	4.46

Results in Table 2 depicted an average of 4.00 for strategic suppliers frequently engaged in identifying organizational strategic procurement requirements for the Firm, 4.14 obtained from frequently engagement of suppliers in identifying strategic procurement specification and standardization requirements which improves procurement performance,4.22 Strategic suppliers help in development of procurement specifications and standardization, 4.33 Development of procurement specification which improves procurement and supplier performance 4.36 of the organizations engages its suppliers in identifying distribution delivery centers and new market entry,4.26 of the organizational helps in increasing the technical capability of the suppliers to meet its supply needs, 4.24 of the organization undertakes supplier evaluation to increase the cost management capabilities of its strategic supplies to meet its supply needs, 4.14 trains its suppliers on new technology use, 4.50 conduct trainings of suppliers on new technologies which improves procurement and supplier performance, 4.46 of the strategic joint planning improves delivery of goods and lead time of materials.

4.3.5 Procurement performance

Procurement performance aspects investigated using descriptive statistics comprised of customer satisfaction by the goods and services received from the Firm, user departments requirements procured in the right quality, customer satisfactions help to retain customers in the Firm.

Supplier relationship management practices help in achieving customer satisfaction, whether introduction of supplier relationship management practices leads to; reduction in product and material costs, delivery of goods and services to the organization as fast as possible or within the specified time, if suppliers take shorter time when supplying goods and services, whether the procurement function of the firm is quick in responding to strategic supplies, the organization has realized a reduction in unit procurement cost and if quality products are supplied by the strategic suppliers.

Table 4.6: Procurement performance descriptive statistics

Aspect	Min	Max	Mean
Customers are satisfied by the goods and services they receive from the Firm	1	5	3.12
Customer satisfaction helps to retain customers in the Firm	1	5	4.06
All user departments requirements are procured in the right quality	1	5	3.72
Supplier relationship management practices helps achieve customer satisfaction	2	5	4.12
Introduction of supplier relationship Management practices will lead to reduction in product and material costs	1	5	2.68
Introduction of supplier relationship management practices will lead to delivery of goods and services to the organization as fast as possible or within the specified time	2	5	4.04
Suppliers take shorter time when supplying goods and services	1	5	3.78
The procurement function of the firm is quick in responding to strategic supplies	1	5	3.58
The organization has realized a reduction in unit procurement cost	1	5	2.86
Quality products are supplied by the strategic suppliers	1	5	3.30

Results in Table 4.6 depicted an average of 3.12 for customer satisfaction by the goods and services received from the Firm, 3.72 for user departments requirements procured in the right quality, 4.06 for customer satisfactions help to retain customers in the Firm, 4.12 for supplier relationship management practices help in achieving customer satisfaction, whether introduction of supplier relationship management practices leads to; reduction in product and material costs at 2.68, delivery of goods and services to the organization as fast as possible or within the specified time at 4.04, if suppliers take shorter time when supplying goods and services at 3.78, whether the procurement function of the firm is quick in responding to strategic supplies at 3.58, the organization has realized a reduction in unit

procurement cost at 2.86 and if quality products are supplied by the strategic suppliers at 3.30.

The results implied that with an approximate mean of 3, then the respondents were neutral on whether introduction of supplier relationship management practices leads to; reduction in product and material costs, the organization has realized a reduction in unit procurement cost and that quality products are supplied by the strategic suppliers. However, an approximate value of for indicated that they agreed that user departments requirements are procured in the right quality, customer satisfactions help to retain customers in the Firm, supplier relationship management practices help in achieving customer satisfaction, there is delivery of goods and services to the organization as fast as possible or within the specified time, suppliers take shorter time when supplying goods and services and that the procurement function of the firm is quick in responding to strategic supplies.

4.4 Correlation analysis

Given the variables were measured on likert-scale that involves ranking on a scale of 1 to 5, Spearman's rank correlation analysis was used to establish the association between the independent variables of information sharing (IS), supplier Training (ST), contract management (CM), strategic alliance (SA) and the dependent variable of procurement performance (Y).

Table 4.7: Correlation Analysis results

Variable		IS	ST	CM	SA	Y
IS	Correlation Coefficient	1.000	.295*	.147	-.046	.152*
	Sig. (2-tailed)	.	.037	.308	.751	.029
	N	50	50	50	50	50
ST	Correlation Coefficient	.295*	1.000	.019	.304*	.151*
	Sig. (2-tailed)	.037	.	.898	.032	.042
	N	50	50	50	50	50
CM	Correlation Coefficient	.147	.019	1.000	-.072	.217*
	Sig. (2-tailed)	.308	.898	.	.619	.013
	N	50	50	50	50	50
SA	Correlation Coefficient	-.046	.304*	-.072	1.000	.211*
	Sig. (2-tailed)	.751	.032	.619	.	.014
	N	50	50	50	50	50
Y	Correlation Coefficient	.152*	.151*	.217*	.211*	1.000
	Sig. (2-tailed)	.029	.042	.013	.014	.
	N	50	50	50	50	50

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

Y-Procurement performance, *IS*-Information sharing, *ST*-Supplier Training, *CM*-Contract management, *SA*-Strategic alliance

Table 4.7 results indicated correlation coefficients of 0.152 for information sharing and procurement performance, 0.151 for supplier training and procurement performance, 0.312 for contract management and procurement performance and 0.211 for strategic alliance and procurement performance. The coefficients had p-values of less than 0.05 i.e. 0.029, 0.042, 0.013 and 0.014 for information sharing, supplier training, contract management and strategic alliance respectively. The association was discussed in line with the specific objectives as in sections 4.4.1 to 4.4.4.

4.4.1 Information sharing and procurement performance

The association between information sharing and procurement performance of private sugar processing firms in Kenya is given by the Spearman correlation coefficient of 0.152 with a p-value of 0.029 that is less than 0.05. This implied that there was a significant positive association between information sharing and procurement performance. That is, increased information sharing with strategic suppliers enhances procurement performance. The findings are similar to those of Okore and Kibet (2019), Gebisa and Ram (2021), Khan and Siddiqui (2018) amongst other researchers who established a positive association in the tourism business in Kakamega County, some Ethiopian enterprises and Pakistani pharmaceutical manufacturing enterprises respectively.

4.4.2 Supplier training and procurement performance

A correlation coefficient of 0.151 with a p-value of 0.042 that is less than 0.05 for supplier training and procurement performance indicated that there was a significant positive association between supplier training and procurement performance of private sugar firms in Kenya. That is, increased supplier training for strategic suppliers improves procurement performance. This conformed to the findings of Nabiliki et al. (2018), Oyamo and Nyakeyo, (2019), who established a positive association between supplier training and procurement performance for Nakuru East Sub- County food and beverage manufacturing enterprises and Rongo University.

4.4.3 Contract management and procurement performance

The association between contract management and procurement performance of private sugar processing firms in Kenya is given by the Spearman correlation coefficient of 0.217 with a p-value of 0.013 that is less than 0.05.

This implied that there was a significant positive association between contract management and procurement performance. That is, enhanced contract management improves procurement performance of private sugar firms in Kenya. Conform to the results of Kariuki and Nyang'au (2019), Muinde (2022), Ogembo and Muturi (2019) and Gatari et al. (2022) who noted that contract management had a significant positive association with procurement performance in county governments, Kenyan public universities and Kenyan state organizations.

4.4.4 Strategic alliance and procurement performance

A correlation coefficient of 0.211 with a p-value of 0.014 that is less than 0.05 for strategic alliance and procurement performance indicated that there was a significant positive association between strategic alliance and procurement performance of private sugar firms in Kenya. That is, enhanced strategic alliance with strategic suppliers improves procurement performance. The findings are similar to what was established by Charles et al. (2021), Warutere and Shale (2018) and Emami et al. (2022), who found that strategic alliance had a positive and significant association with performance of MFIs in Rwanda, Kenya's devolved government and small entrepreneurial firms in the telecommunication sector respectively.

4.5 Regression analysis diagnostics

The study sought to establish whether the classical assumptions of regression were violated or not based on the tests of autocorrelation, multicollinearity, heteroscedasticity and residual normality. Autocorrelation was based on Durbin Watson test which had a value of 1.514 as in Table 4.9. This implied that there was no problem of autocorrelation since the value was approximately 2.

Based on the variance inflation factors (VIF) in Table 4.11, none of the VIF and tolerance values was greater than 10 and 1 respectively an indication that none of the independent variables were highly correlated and hence there was no problem of multicollinearity.

Table 4.8: Residual Normality Test

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
Unstandardized Residual	.082	50	.200*	.968	50	.191

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

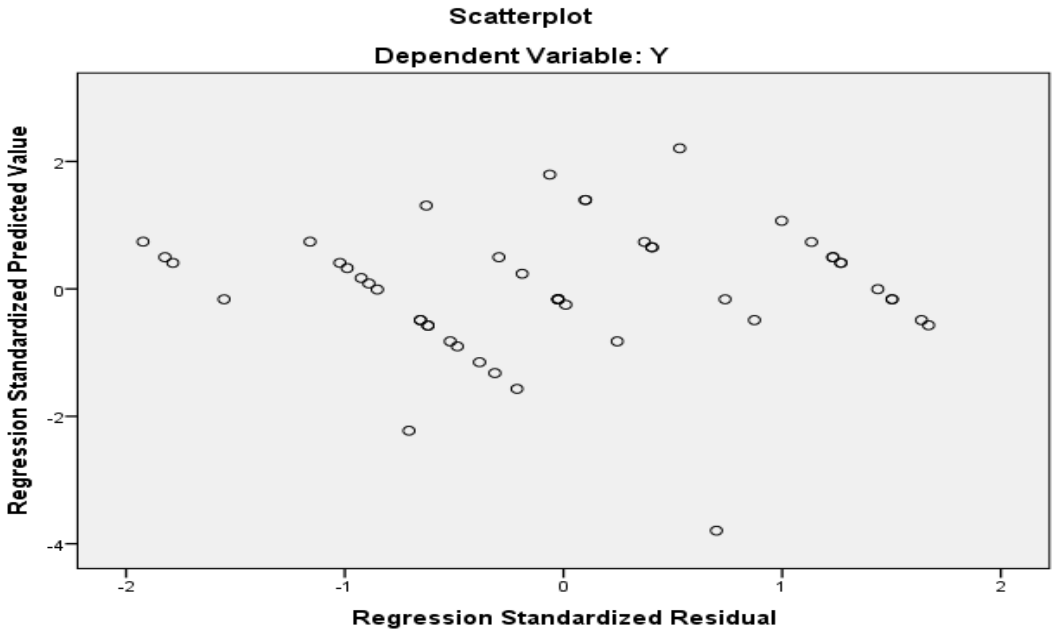

Figure 4.1: Heteroscedasticity residual plot

On residual normality as in Table 4.8 given the p-values of Kolmogorov-Smirnov and Shapiro-Wilk tests of 0.200 and 0.191 which are greater than 0.05 implied that the residuals were normally distributed. The residual plot in Figure 4.1 that does not depict a regular pattern was an indication that there was no problem of heteroscedasticity i.e. the residuals has a constant variance.

4.6 Regression analysis

The regression analysis results were presented based on the model summary, ANOVA and coefficients results.

Table 4.9: Model summary results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.793[a]	.629	.553	1.310	1.514

a. Predictors: (Constant), SA, CM, IS, ST

b. Dependent Variable: Y

Y-Procurement performance, *IS*-Information sharing, *ST*-Supplier Training, *CM*-Contract management, *SA*-Strategic alliance

Table 4.10: ANOVA results

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	57.415	4	14.354	19.062	.002[b]
	Residual	33.865	45	0.753		
	Total	91.280	49			

a. Dependent Variable: Y

b. Predictors: (Constant), SA, CM, IS, ST

Y-Procurement performance, *IS*-Information sharing, *ST*-Supplier Training, *CM*-Contract management, *SA*-Strategic alliance

Table 4.9 results indicated a multiple correlation coefficient of 0.793 and a coefficient of determination of 0.629. This implied that the independent variables of *IS*-information sharing, *ST*-supplier training, *CM*-contract management and *SA*-strategic alliance explained 62.9% of variations in the dependent variable of procurement performance of private sugar firms in Kenya. ANOVA results in Table 4.10 having an F-statistic of 19.062 with a p-value of 0.002 which is less than 0.05 indicated that the regression model was statistically significant at 5% level of significance.

That is, the independent variables of *IS*-information sharing, *ST*-supplier training, *CM*-contract management and *SA*-strategic alliance jointly explained changes in procurement performance of private sugar firms in Kenya an indication that supplier relationship management practices significantly affect procurement performance of private sugar firms in Kenya.

Table 4.11: Regression coefficients

Model		Unstandardized Coefficients		T	Sig.	Collinearity Statistics	
		B	Std. Error			Tolerance	VIF
1	(Constant)	2.920	0.720	4.056	.017		
	IS	.046	.012	3.833	.021	.718	1.392
	ST	.176	.024	7.333	.045	.709	1.410
	CM	.354	.021	16.857	.007	.854	1.172
	SA	.482	.068	7.088	.038	.902	1.108

From Table 4.11, a regression model (4.1) is extracted to show the relationship between supplier relationship management practices and procurement performance.

$$Y = 2.920 + 0.046IS + 0.176ST + 0.354CM + 0.482SA \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (4.1)$$

The constant value of 2.92 indicated that holding the supplier relationship management practices constant and procurement performance of the private sugar firms still remains positive. The regression coefficients are discussed in line with the specific objectives as in sections 4.6.1 to 4.6.4.

4.6.1 Information sharing and procurement performance

A regression coefficient of 0.046 with a t-statistic and p-value of 3.833 and 0.021 respectively indicated that there was a significant positive relationship between information sharing and procurement performance at 5% level of significance given the t-statistic was greater than 2 and p-value was less than 0.05.

This implied that increased information sharing with strategic Suppliers increases procurement performance of private sugar firms in Kenya by 4.6%. This may be attributed to holding of regular meetings with strategic suppliers where there are good communication channels to enhance access to critical information like sales forecast promotion strategy and production runs. The findings are similar to those of Khan and Siddiqui (2018) amongst other researchers who established a positive relationship between information sharing and procurement performance among the tourism business in Kakamega County, Ethiopian enterprises and Pakistani pharmaceutical manufacturing enterprises respectively.

4.6.2 Supplier Training and Procurement Performance

A regression coefficient of 0.176 with a t-statistic and p-value of 7.333 and 0.045 respectively indicated that there was a significant positive relationship between supplier training and procurement performance at 5% level of significance given the t-statistic was greater than 2 and p-value was less than 0.05. This implied that training of strategic suppliers leads to an increase in procurement performance of private sugar firms in Kenya by 17.6%. This may be attributed to holding of regular procurement workshops and seminars with strategic suppliers and training of suppliers improves capacity of suppliers to deal with supplies issues. This conformed to the findings of Nabiliki et al. (2018), Oyamo and Nyakeyo, (2019), who established a positive relationship between supplier training and procurement performance for Nakuru East Sub- County food and beverage manufacturing enterprises and Rongo University.

4.6.3 Contract management and procurement performance

A regression coefficient of 0.354 with a t-statistic and p-value of 16.857 and 0.007 respectively implied that there was a significant positive relationship between contract management and procurement performance at 5% level of significance given the t-statistic was greater than 2 and p-value was less than 0.05. This implied that enhanced contract management with strategic suppliers' increases procurement performance of private sugar firms in Kenya by 35.4%.

This may be attributed to the private sugar firm's use of appropriate procedures to resolve possible differences, existence of appointed contract implementation teams to supervise contracts, conducting of periodical quality inspections on its running contracts and creation and maintenance of positive relationship with the contractors. The outcome conforms to the results of Kariuki and Nyang'au (2019), Muinde (2022), Ogembo and Muturi (2019) and Gatari et al. (2022) who noted that contract management had a significant positive association with procurement performance in county governments, Kenyan public universities and Kenyan state organizations.

4.6.4 Strategic alliance and procurement performance

A regression coefficient of 0.482 with a t-statistic and p-value of 7.088 and 0.038 respectively indicated that there was a significant positive relationship between strategic alliance and procurement performance at 5% level of significance. This implied that enhanced strategic alliance with strategic Suppliers increases procurement performance of private sugar firms in Kenya by 48.2%. This may be ascribed to frequent engagements with strategic suppliers, strategic suppliers help in development of procurement specifications, Suppliers engagement in identifying distribution/ delivery centers and training of suppliers on new technology and strategic market alliance to improve on delivery time. The findings are similar to what was established by Charles et al. (2021), Warutere and Shale (2018) and Emami et al. (2022), who found that strategic alliance had a positive and significant association with performance of MFIs in Rwanda, Kenya's devolved government and small entrepreneurial firms in the telecommunication sector respectively.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter gives the summary, conclusion and recommendations in line with the specific objectives.

5.2 Summary

The general objective of this study was to establish the influence of supplier relationship management practices in private sugar processing firms in Kenya. This was based on the specific objectives of determining, examining, determining and establishing the effect of information sharing, supplier training, contract management and strategic alliance on procurement performance of private sugar processing firms in Kenya. In general, a multiple correlation coefficient of 0.793 and a coefficient of determination of 0.629 implied that information sharing, supplier training, contract management and strategic alliance explained 62.9% of variations in the procurement performance of private sugar firms in Kenya.

5.2.1 Information sharing and procurement performance

The first objective of this study was to determine the effect of information sharing on procurement performance of private sugar processing firms in Kenya which was based on the null hypothesis that information sharing has no significant effect on procurement performance of private sugar processing firms in Kenya. Based on descriptive statistics, the respondents strongly agreed that information sharing between the sugar firms and suppliers improves procurement performance.

A Spearman correlation coefficient of 0.152 with a p-value of 0.029 between information sharing and procurement performance implied that there was a significant positive association between information sharing and procurement performance. Further, a regression coefficient of 0.046 with a p-value of 0.021 indicated that there was a significant positive relationship between information sharing and procurement performance at 5% level of significance. This implied that increased information sharing will arise in an increase in procurement performance of private sugar firms in Kenya by 4.6%.

5.2.2 Supplier training and procurement performance

The second objective of this study was to examine the effect of supplier training on procurement performance of private sugar processing firms in Kenya which was based on the null hypothesis that supplier training has no significant effect on procurement performance of private sugar processing firms in Kenya. From the descriptive statistics, the respondents agreed that that supplier training through workshops and seminars and administering training programs for strategic suppliers improves sugar firms' procurement performance.

A correlation coefficient of 0.151 with a p-value of 0.042 between supplier training and procurement performance indicated that there was a significant positive association between supplier training and procurement performance of private sugar firms in Kenya. More importantly, a regression coefficient of 0.176 with a p-value 0.045 indicated that there was a significant positive relationship between supplier training and procurement performance at 5% level an indication that training of strategic suppliers leads to an increase in procurement performance of private sugar firms in Kenya by 17.6%.

5.2.3 Contract management and procurement performance

The third specific objective of this study was to determine the effect of contract management on procurement performance of private sugar processing firms in Kenya which was based on the null hypothesis that contract management has no significant effect on procurement performance of private sugar processing firms in Kenya. From the descriptive statistics, the respondents agreed that dispute resolution between an organization and contractor and quality inspection of running contracts improves procurement performance of private sugar firms' in Kenya.

The association between contract management and procurement performance of private sugar processing firms in Kenya is given by the correlation coefficient of 0.217 with a p-value of 0.013 that is less than 0.05 which showed that there was a significant positive association between contract management and procurement performance.

More importantly, a regression coefficient of 0.354 with a p-value of 0.007 implied that there was a significant positive relationship between contract management and procurement performance at 5% such that enhanced contract management with strategic suppliers increases procurement performance of private sugar firms in Kenya by 35.4%.

5.2.4 Strategic alliance and procurement performance

The fourth objective of this study was to establish the effect of strategic alliance on procurement performance of private sugar processing firms in Kenya which was based on the null hypothesis that strategic alliance has no significant effect on procurement performance of private sugar processing firms in Kenya. Based on descriptive statistics, respondents agreed that frequent engagement of suppliers in identifying strategic procurement requirements and development of procurement specification improves sugar firms' procurement performance while they strongly agreed that training suppliers on new technology improves sugar firms' procurement performance.

A correlation coefficient of 0.211 with a p-value of 0.014 for strategic alliance and procurement performance indicated that there was a significant positive association between strategic alliance and procurement performance of private sugar firms in Kenya. Further, a regression coefficient of 0.482 with a p-value of 0.038 indicated that there was a significant positive relationship between strategic alliance and procurement performance at 5% level of significance such that enhanced strategic alliance with strategic suppliers increases procurement performance of private sugar firms in Kenya by 48.2%.

5.3 Conclusion

5.3.1 Information sharing and procurement performance

The first objective of this study was to determine the effect of information sharing on procurement performance of private sugar processing firms in Kenya which was based on the null hypothesis that information sharing has no significant effect on procurement performance of private sugar processing firms in Kenya.

A positive regression coefficient indicated that there was a significant positive relationship between information sharing and procurement performance at 5% level of significance given the t-statistic was greater than 2 and p-value was less than 0.05. This implied that a percentage increase in information sharing with strategic Suppliers increases procurement performance of private sugar firms in Kenya. The null hypothesis was therefore rejected given the existence of a significant positive relationship between information sharing and procurement performance i.e. information sharing affected procurement performance where by enhanced information sharing improves procurement performance.

5.3.2 Supplier training and procurement performance

The second objective of this study was to examine the effect of supplier training on procurement performance of private sugar processing firms in Kenya which was based on the null hypothesis that supplier training has no significant effect on procurement performance of private sugar processing firms in Kenya. A positive regression coefficient respectively indicated that there was a significant positive relationship between supplier training and procurement performance at 5% level of significance given the t-statistic was greater than 2 and p-value was less than 0.05. This implied an increase in training of strategic suppliers leads to an increase in procurement performance of private sugar firms in Kenya. The null hypothesis was rejected in the sense that there was a significant positive relationship between supplier training and procurement performance of private sugar firms in Kenya. That is, supplier training affected procurement performance of private sugar processing firms in Kenya.

5.3.3 Contract management and procurement performance

The third specific objective of this study was to determine the effect of contract management on procurement performance of private sugar processing firms in Kenya which was based on the null hypothesis that contract management has no significant effect on procurement performance of private sugar processing firms in Kenya.

A positive regression coefficient implied that there was a significant positive relationship between contract management and procurement performance at 5% level of significance given the t-statistic was greater than 2 and p-value was less than 0.05. This implied that employing contract management with strategic Suppliers increases procurement performance of private sugar firms in Kenya. The study rejected the null hypothesis implying that contract management affected procurement performance of private sugar processing firms in Kenya is given existence of a significant positive relationship between contract management and procurement performance. Employing contract management strategies enhances procurement performance.

5.3.4 Strategic alliance and procurement performance

The fourth objective of this study was to establish the effect of strategic alliance on procurement performance of private sugar processing firms in Kenya which was based on the null hypothesis that strategic alliance has no significant effect on procurement performance of private sugar processing firms in Kenya. A positive regression coefficient with a t-statistic and p-value of 7.088 and 0.038 respectively indicated that there was a significant positive relationship between strategic alliance and procurement performance at 5% level of significance. This implied that a percentage enhanced strategic alliance with strategic Suppliers increases procurement performance of private sugar firms in Kenya. Establishment of a significant positive relationship between strategic alliance and procurement performance indicated that the null hypothesis for rejected such that strategic alliance affected procurement performance of private sugar firms in Kenya. Embracing of strategic alliances therefore enhances and procurement performance of private sugar firms in Kenya.

5.4 Recommendations

5.4.1 Information sharing and procurement performance

Information sharing was positively correlated to performance of sugar firms and thus implied that a percentage increase in information sharing belief with strategic Suppliers increases procurement performance of private sugar firms in Kenya. The private sugar

firms in Kenya therefore need to embrace information sharing with suppliers as it has the potential of increasing performance as demonstrated from the findings.

5.4.2 Supplier training and procurement performance

Supplier training was positively and significantly associated to performance of sugar firms. Thus, training strategic suppliers leads to an increase in procurement performance of private sugar firms in Kenya. This implies that it enactment has far reaching positive advantage to the sugar firms something they ought to implement for better performance in order to realize the positive effect of supplier training. This may be done through holding of regular procurement workshops and seminars with strategic suppliers and training of suppliers to deal with supplies issues.

5.4.3 Contract management and procurement performance

Concerning contract management, enhanced contract management with strategic Suppliers increases procurement performance of private sugar firms in Kenya. Therefore, Private Sugar firms in Kenya need to adopt contract management strategies in order to enhance procurement performance. This can be done by use of appropriate procedures to resolve possible differences, appointing contract implementation teams to supervise contracts, conducting periodical quality inspections on its running contracts and creation and maintenance of positive relationship with the contractors.

5.4.4 Strategic alliance and procurement performance

As pertaining strategic alliance variable, increased strategic alliance with strategic Suppliers increases procurement performance of private sugar firms in Kenya. It is therefore necessary for the firms to embrace strategic alliances with suppliers if they intend to enhance procurement performance. This may be realized through frequent engagements with strategic suppliers, engaging strategic suppliers in development of procurement specifications and in identifying distribution/ delivery centers and training of suppliers on new technology and strategic market alliance to improve on delivery time.

5.5 Areas of Further Research

Information sharing, supplier training, contract management and strategic alliance could only explain 62.9% of variation in procurement performance of private sugar firms that leaves 37.9% of variation being explained by other factors not captured by the study which could form basis for future studies to be conducted. The study focused on private sugar firms which are manufacturing entities thereby leaving out service entities which could also be units of study for future studies.

REFERENCES

Adesanya, Bin Iqdara, & Yang. (2020). Improving sustainability performance through supplier relationship management in the tobacco industry. Supply Chain Management. *An International Journal*, 413-426.

Alsamarraie, & Ghazali. (2022). Evaluation of organizational procurement performance for public construction projects: systematic review. *International Journal of Construction Management*, 1-10.

Amiri, V., Kamrani, S., Ahmad, A., Bhattacharya, P., & Mansoori, J. (2021). Groundwater quality evaluation using Shannon information theory and human health risk assessment in Yazd province, central plateau of Iran. *Environmental Science and Pollution Research*, 28(1), 1108-1130.

Asiamah, Mensah, & Oteng. (2017). General, target, and accessible population: Demystifying the concepts for effective sampling. The Qualitative Report. 1607-1621.

Attia, & Essam . (2018). Organizational learning, knowledge management capability and supply chain management practices in the Saudi food industry. *Journal of Knowledge Management*, 1217-1242.

Bag, Gupta, & Telukdarie, . (2018). Importance of innovation and flexibility in configuring supply network sustainability. *An International Journal*.

Bimbola, A. E., Lahanmi, A., Babalola, A. A., & Iyabo, F. (2020). Evaluating the Effect of Strategic Alliance Procurement Method on Construction Financial Performance in Nigeria. *Proceedings of the 2nd African International Conference on Industrial Engineering and Operations Management*, (pp. 3404-3417). Harare, Zibwabwe.

Bloomfield, & Fisher. (2019). Quantitative research design. *Journal of the Australasian Rehabilitation Nurses Association*, 27-30.

Casagrande, A., Fabris, F., & Girometti, R. (2022). Fifty years of Shannon information theory in assessing the accuracy and agreement of diagnostic tests. *Medical & Biological Engineering & Computing*, 60(4), 941-955.

Chakraborty. (2013). *Research Methodology*. New Delhi: Sage.

Charles, N., Kule, W., & Kapaya, S. (2021). Effect of Strategic Alliance Management On the Performance of Microfinance Institutions In Rwanda. *International Journal of Scientific and Research Publications*, 167-188.

Connor, Yang, & Jiang. (2018). Challenges in gaining supply chain competitiveness: Supplier response strategies and determinants. Industrial Marketing Management. 138-151.

Coviello, Moretti, & Valbone. (2018). Court efficiency and procurement performance. *The Scandinavian Journal of Economics*, 826-858.

Creswell. (2017). *Research Design: Qualitative,Quantitative and Mixed Methods Approaches*. London: Sage Publications.

Dannels. (2018). esearch design. In The reviewer's guide to quantitative methods in the social sciences. 402-416.

Deloitte's Procurement Performance Survey. (2021). *Deloitte Global 2021 Chief Procurement Officer Survey*. Nairobi.

Dillinger, F., Bernhard, O., & Reinhart, G. (2022). Competence requirements in manufacturing companies in the context of lean 4.0. *Procedia CIRP*, 106, 58-63.

Dubey, Gunasekaran, & Papadop. (2019). Supplier relationship management for circular economy: Influence of external pressures and top management commitment. 679-790.

Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of management review*, 14(1), 57-74.

Ekipighe, G., & Emeka, O. (2020). Supplier Selection a Strategic Tool of the Purchasing Function: Its Role in Profit Maximization. *International Journal of Research and Innovation in Social Science*, Volume IV, Issue V.

Emami, A., Welsh, D., Divari, A., & Arash, R. (2022). Examining the relationship between strategic alliances and the performance of small entrepreneurial firms in telecommunications. *The International Entrepreneurship and Management Journal*, 18(2):637–662.

Freeman, R., & Reed, D. (1983). Stockholders and stakeholders: A new perspective on corporate governance. *California management review*, 25(3), 88-106.

Freeman, R., Phillips, R., & Sisodia, R. (2020). Tensions in stakeholder theory. *Business & Society*, 59(2), 213-231.

Freudenreich, B., Lüdeke-Freund, F., & Schaltegger, S. (2020). A stakeholder theory perspective on business models: Value creation for sustainability. *Journal of Business Ethics*, 166, 3-18.

Gatari, C. N., Shale, N., & Osoro, A. (2022). Procurement Contract Management and Sustainable Performance of State Corporations in Kenya. *International Journal of Supply Chain and Logistics*, 6(2), 25-37.

Gebisa, D. A., & Ram, T. (2021). The Effect of Information sharing and Inventory Management in the Supply Chain Practices on Firms' Performance: Empirical Evidence from Some Selected Companies of Ethiopia. *International Journal of Industrial Engineering and Operations Management*, pp. 1 - 15.

Helo, & Hao. (2019). Blockchains in operations and supply chains: A model and reference implementation. Computers & Industrial Engineering. 242-251.

Hochbein, & Smeaton. (2018). An Exploratory Analysis of the Prevalence of quantitative research methodologies. *Internal journal of education, policy and leadership*, 1-7.

Holmemo, M. D., Ingvaldsen, J., & Powell, D. (2022). Beyond the lean manager: Insights on how to develop corporate lean leadership. *Total Quality Management & Business Excellence*, 1-13.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360.

Jones, T., Harrison, J., & Felps, W. (2018). How applying instrumental stakeholder theory can provide sustainable competitive advantage. *Academy of Management Review*, 43(3), 371-391.

Jones, T., Wicks, A., & Freeman, R. (2017). Stakeholder theory: The state of the art. *The Blackwell guide to business ethics*, 17-37.

Jong, K. (2019). Multicollinearity and misleading statistical results. *Korean Journal of Anesthesiology, 72*(6), 588.

Jung, H. S. (2014). Stratified Fisher's Exact Test and its Sample Size Calculation. *Biometric Journal, 56*(1), 129-140.

Kang, & Sung. (2017). How symmetrical employee communication leads to employee engagement and positive employee communication behaviors: The mediation of employee-organization relationships. *Journal of Communication Management*, 82-102.

Kariuki, J. G., Makokha, E., & Namusonge, S. (2018). Influence of Supplier Selection on Procurement Performance in Technical Institutions in Trans-Nzoia County in Kenya. *International Journal of Recent Research in Social Sciences and Humanities*, Vol. 5, Issue 4, pp: (11-22).

Kariuki, S., & Nyang'au, S. p. (2019). Influence of contract management practices on procument performance of county governments in Kenya. *International Journal of Recent Research in Commerce Economics and Management*, 6(4):22-228),.

Kenton. (2021). *American Institute of Certified Public Accountants.* New York.

Kenya Sugar Board. (2021). *Report on Cost of Cane and Sugar Production.* Nairobi.

Khan, A., & Siddiqui, D. (2018). Information Sharing and Strategic Supplier Partnership in Supply Chain Management: A Study on Pharmaceutical Companies of Pakistan. *Asian Business Review*, Vol. 8 No. 3 .

Kiarie. (2017). The Influence of supplier relationship management practices on operational performance of large manufacturing organizations in Kenya.

Kothari, C.R. (2014). Research Methods and Techniques (Revised Second Edition ed.). NewDelhi. *New Age International journal*, 39-67.

Kumar, & Reinartz. (2018). *Customer relationship management. Springer-Verlag GmbH Germany, part of Springer Nature.*

Kumar, R. (2017). *Research methodology; A step by step guide for beginners.* New Delhi: Sage.

Lan, L. L., & Heracleous, L. (2010). Rethinking agency theory: The view from law. *Academy of management review*, 35(2), 294-314.

Lesne, A. (2014). Shannon entropy: a rigorous notion at the crossroads between probability, information theory, dynamical systems and statistical physics. *Mathematical Structures in Computer Science*, 24(3), e240311.

Liu, & Koufteros. (2021). CSR orientation incongruence and supply chain relationship performance—a network perspective. *Journal of Operations Management*, 237-260.

Luthra, Govindan, & Mangla. (2017). An integrated framework for sustainable supplier selection and evaluation in supply chains. *Journal of cleaner production*, 1686-1698.

Makokha, A. N. (2019). Information Sharing and Supplier Performance in the Sugar Processing Firms. *International Journal of Social Sciences and Information Technology*, Vol V Issue III, pp 62-69.

Mariko, H. (2021). *The Effect of Supplier Development on Procurement Performance of Manufacturing Firms In Uganda a Case Study of Kamira Sugar Factory in Ninja District.* Ninja.: Repository of Basitema University.

Marks, E. J. (2007). The Relative Importance of Supplier Selection Criteria: A Review and Update. *Journal of Supply Chain Management*, 30(2), 34-41.

Mitnick, B. M. (2015). Agency theory. *Wiley encyclopedia of management*, 1-6.

Mitrega, Forkmann, & Henneb. (2017). Networking capability in supplier relationships and its impact on product innovation and firm performance. *International Journal of Operations & Production Management*, 577-606.

Muinde, M. N. (2022). *Contract Management on Procurement Performance in Public Universities in Kenya*. Junja: Repository of JKUAT.

Nabiliki, J., Wanyoike, M. D., & Mbeche, N. W. (2018). Influence of Supplier Development Practices on Procurement Performance in Food and Beverage Manufacturing Firms in Nakuru East Sub - County, Kenya. *International Journal of Science and Research* , pp. 26-34.

Nemani, Pokharel, & Sayed. (2018). Impact of competitive conditions on supplier evaluation: a construction supply chain case study. Production planning & control. 217-235.

Ngigi, & Kawira. (2015). Internal Control System as Means of Fraud Control in Deposit Taking Financial Institutions in Imenti North Sub-County. *Research Journal of Finance and Accounting*.

Nurzannah, Ginting, & Setiawan. (2020). Implementation Of Integrated Quality Management In The Islamic Education System. In Proceeding International Seminar Of Islamic Studies. 1-9.

Ogembo, M. F., & Muturi, W. (2019). Influence of contract management on procurement performance in devolved governments of Kenya: a case of Kisii County. *International Journal of Social Sciences and Information Technology*, 5(5), 118-129.

Oliveira, Marins, & Rocha. (2017). The ISO 31000 standard in supply chain risk management. *Journal of Cleaner Production*, 616-633.

Onikoyi, & Babafemi. (2017). Effect of Inventory Management Practices on Financial Performance of Larfage Wapco Plc. Nigeria. *European journal of business and management*.

Panda, B., & Leepsa, N. M. (2017). Agency theory: Review of theory and evidence on problems and perspectives. *Indian journal of corporate governance*, 10(1), 74-95.

Parmar, B., Freeman, R., Harrison, J., Wicks, A., Purnell, L., & De Colle, K. (2010). Stakeholder theory: The state of the art. *Academy of Management Annals*, 4(1), 403-445.

Price water Coopers Report. (2019). *Global supply chain survey in Japan.*

Rashid-Issa, M. (2019). Contract management and performance characteristics: An empirical and managerial implication for Indonesia. *Management Science Letters*, 9(8), 1289-1298.

Scuotto, Caputo, & Villasalero. (2017). A multiple buyer–supplier relationship in the context of SMEs' digital supply chain management. Production Planning & Control. 1378-1388.

Shannon, C. E. (1948). A Mathematical Theory of Communication. *Bell System Technical Journal*, Volume: 27, Issue: 3, pp 379 - 423.

Shao. (2019). nteraction effect of strategic leadership behaviors and organizational culture on IS-Business strategic alignment and Enterprise Systems assimilation. *International journal of information management*, 96-108.

Skinner. (2018). Issues in Census taking. *Annual Review of Statistics and its Applications*, 49-63.

Stefanone, & Gay. (2023). Social information sharing in a CSCL community. In Computer Support for Collaborative Learning. 43-50.

Taherdoost, & Brard. (2019). Analyzing the process of supplier selection criteria and methods. Procedia Manufacturing. 1024-1034.

Umar, A. M. (2020). The role of strategic alliances in organizational performance: A review. *The Strategic Journal of Business & Change Management*, 7(4):919 –934.

Vitolla, F., Raimo, N., & Rubino, M. (2020). Board characteristics and integrated reporting quality: An agency theory perspective. *Corporate Social Responsibility and Environmental Management*, 27(2), 1152-1163.

Warutere, D., & Shale, N. (2018). Role of Strategic Supplier Relationship Management on Supply Chain Performance in Dvolved System of Government in Kenya: A Case of Murang'a County Government. *International Journal of Recent Research in Commerce Economics and Management*, 18-32.

World Bank Report. (2021). *Report on procurement performance of sugar manufacturing firms in Kneya*. Nairobi.

Zhang, Pawar, & Bhardwaj. (2017). Improving supply chain social responsibility through supplier development. Production Planning & Control. 500-511.

Zimon, Tyan, & Sroufe. (2020). Drivers of sustainable supply chain management: Practices to alignment with un sustainable development goals. *International Journal for Quality Research*.

APPENDICES

Appendix I: Introductory Letter

Dear Sir/Madam

RE: Request for Participation in Data Collection

I am a Master student at Kaimosi Friends University (KAFU) undertaking a masters course in business administration (supply chain management option) my name is **CELESTINE IMBUHILA OKAN'GA, REG NO.DGS/MBA/G/0020/2020**. As partial fulfillment of requirement for the award of the degree, I am conducting an academic research on **'Supplier relationship management practices, (SRM) on procurement performance of sugar processing firms in Kenya.'**

I have chosen your firm to participate in this study as it meets my definition of sugar manufacturing firm in Kenya. The purpose is to investigate the impact of using SRM practices on your organizational performance, it will also bring out the various SRM practices that different manufacturing firms are adopting today and the challenges they experience in the process of adopting those practices. The information gathered was treated with utmost confidentiality as your organization will remain anonymous and no specific reference was made to individuals involved.

Yours faithfully,

Signature…… Date……

Celestine Imbuhila Okanga

Tel: 0727480547

Appendix II: Questionnaire

Kindly answer the following questions by ticking and responding appropriately:

Section A: General Information

1. Number of years in operation

Number of years	Below 1 year	1-5 years	6-10 years	11-20 years	Above 20 years
Tick where appropriate					

2. Highest Level of Education

Use the table below to indicate your highest level of qualification using a tick

Qualification	PhD	Masters	Bachelors	Diploma	Certificate
Highest level of qualification	5	4	3	2	1
Tick where appropriate					

3. Number of suppliers the firm has

Number of suppliers	Less than 5	6-10	10-20	More than 20
Tick where appropriate				

Section A: Information sharing on procurement performance

To what extent do you agree with the following statements in your organization on a Likert scale of 1 to 5. (Where; 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree)

	Statement	1 SD	2 D	3 N	4 A	5 SA
1.	The organization holds regular meetings with its strategic suppliers					
2.	Holding of regular meetings with suppliers improves procurement performance through information sharing					
3.	The organization uses ICT for regular communication with its strategic suppliers					
4.	Information sharing between the Firm and suppliers improves procurement performance					
5.	The Firm allows suppliers to access its critical information like sales forecast promotion strategy and production runs					
6.	The Firm has good communication channels with the suppliers					
7.	Written communication is emphasized for organization and suppliers transparent communication					
8.	Written communication improves procurement performance through transparency					
9.	Impromptu visits to suppliers premises are sometime undertaken by organization management to share information on key supplies					
10.	Organization uses teamwork for sharing information with its key suppliers					

Section B: **Supplier Training and Procurement Performance**

To what extent do you agree with the following statements in your organization on a Likert scale of 1 to 5. (Where; 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree)

No.	Statements	**1 SD**	**2 D**	**3 N**	**4 A**	**5 SA**
1.	The organization holds regular workshops with its strategic suppliers					
2.	Supplier training through workshops improves procurement performance					
3.	The organization holds regular procurement seminars with its strategic suppliers					
4.	Administering training programs for strategic suppliers enhance the Firm's procurement performance					
5.	Training of suppliers improves suppliers capacity to deal with supplies issues					
6.	Employees attend trainings to improve skills on procurement practices					
7.	Benefits of training staff on procurement practices are more than the costs					
8.	The institution's procurement staff are highly trained on procurement practices so as to get procurement skills					

9.	The organization holds regular seminars with its suppliers					
10	Regular seminars improves suppliers skills hence improving procurement performance					

Section C: **Contract Management and Procurement Performance**

To what extent do you agree with the following statements in your organization on a Likert scale of 1 to 5. (Where; 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree)

No.	Statements	**1 SD**	**2 D**	**3 N**	**4 A**	**5 SA**
1.	The organization Uses appropriate procedures to resolve possible differences with the contractor					
2.	Dispute resolution between an organization and contractor improves procurement performance					
3.	The organization always ensures that there are appointed contract implementation teams to supervise contracts					
4.	The organization periodically conducts quality inspections on its running contracts					
5.	Quality inspection of running contracts improves procurement performance					

6.	The firm always supervises its contracts by ensuring that the contractor meets the specified terms and conditions of the contract					
7.	The organization creates and maintains a positive relationship with the contractor					
8.	There regular communication between the organization and contractors					
9.	The organization maintains an updated form of the contract					
10	The organization controls and manages contract variations					

Section D: Strategic Alliance on procurement performance

To what extent do you agree with the following statements in your organization on a Likert scale of 1 to 5. (Where; 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree)

No.	**Statements**	**1 SD**	**2 D**	**3 N**	**4 A**	**5 SA**
1.	Strategic suppliers are frequently engaged in identifying organization strategic procurement requirements					

2.	Frequent engagement of suppliers in identifying strategic procurement requirements improves procurement performance					
3.	Strategic suppliers helps in development of procurement specifications					
4.	Development of procurement specification improves procurement performance					
5.	The organization engages its suppliers in identifying distribution/ delivery centers					
6.	The organization helps in increasing the technical capability of the suppliers to meet its supply needs					
7.	The organization undertakes to increase the cost management capabilities of its strategic supplies to meet its supply needs					
8.	The organization trains its suppliers on new technology					
9.	Training suppliers on new technology improves procurement performance					
10	Strategic market alliance helps to improve delivery time					

Section E: **Procurement Performance**

To what extent do you agree with the following statements in your organization on a Likert scale of 1 to 5. (Where; 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree)

No.	Statements	1 SD	2 D	3 N	4 A	5 SA
1.	Customers are satisfied by the goods and services they receive from the Firm					
2.	Customer satisfaction helps to retain customers in the Firm					
3.	All user departments requirements are procured in the right quality					
4.	Supplier relationship management practices helps achieve customer satisfaction					
5.	Introduction of supplier relationship Management practices will lead to reduction in product and material costs					
6.	Introduction of supplier relationship management practices will lead to delivery of goods and services to the organization as fast as possible or within the specified time					
7.	Suppliers take shorter time when supplying goods and services					
8.	The procurement function of the firm is quick in responding to strategic supplies					
9.	The organization has realized a reduction in unit procurement cost					
10	Quality products are supplied by the strategic suppliers					

Appendix III: List of private sugar firms in Kenya

1. West Kenya Sugar Firm
2. Butali Sugar Firm
3. Busia Sugar Firm
4. Naitiri Sugar Firm
5. Olepito Sugar Firm
6. Transmara sugar Firm
7. Sukari Sugar Firm
8. Kwale International Sugar Firm
9. Ranges Sugar Firm
10. Kisii Sugar Firm