EFFECT OF PROCUREMENT MANAGEMENT PRACTICES ON PERFORMANCE OF THE KENYA TEA DEVELOPMENT AGENCY FACTORIES

BY

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DECLARATION

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere for a degree in any other university. I also declare that this contains no materials written or published by other people except where due reference is made and author duly acknowledged.

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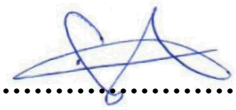
Signature  **Date** 08/12/2021

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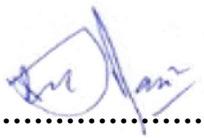
Signature  **Date** 08 -12 - 2021

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ABSTRACT

Procurement management practices play an important role in the performance of an organization. The general objective of the study was to examine the effects of procurement management practices on the performance of Kenya Tea Development Agency (KTDA). The specific objectives of the study were to assess the effect of supplier alliance on the performance of the KTDA; determine the effect of procurement cost control practices on the performance of the KTDA; examine the effect of procurement risk management practices on the performance of the KTDA and; explore the effect of technology adoption in procurement processes on the performance of the KTDA. This study was premised on resource-based view theory, balanced score card theory, systems theory and transaction cost theory. The descriptive research design was used with data being collected using quantitative and approaches. The target population of the study was the staff working in all the 66 Tea Factories under KTDA. The unit of observation was each factory while the unit of analysis was the employees. In these factories, there are 594 workers. These can be categorized broadly into Procurement officers, operational officers, and finance officers. Stratified proportionate random sampling techniques was utilized to choose the sample and estimate overall population parameters more precisely, resulting in a more representative sample. Simple random sampling was utilized to choose 198 respondents for the study. A questionnaire was used to collect data for analysis. To draw inferences and make generalizations about the population, the researcher used descriptive statistics. SPSS software was used to obtain mean, frequencies, descriptive, and inferential statistics for the study. To link the independent factors to the dependent variable, a multiple linear regression model was utilized. The findings show that there were significant relationships between the Performance of KTDA Factories and independent variables as follows: supplier alliance, $r=0.892$, $p<0.05$; cost control practices, $r=0.827$, $p<0.05$; risk management practices, $r=0.862$, $p<0.05$; and technology adoption, $r=0.844$, $p<0.05$). Also, the combined influence of the independent variables could statistically and significantly predict Performance of KTDA Factories ($F= 305.931$, $p<0.05$). In this regard, it can be concluded that supplier alliance, cost control practices, risk management practices and technology adoption affected the performance of KTDA factories. The study recommends that KTDA should keep databases of key suppliers so as to enhance their contribution to the performance of KTDA factories. Regular meetings and forums should be put in place to create rapport with existing and emerging key suppliers. KTDA should continuously review any areas of wastage in the factories. Budgets should be regularly reviewed to ensure that costs are reduced. In addition, effort should be put in place to procure high quality goods to reduce maintenance costs of machines and items. There should be due diligence to enhance risk management practices. Staff should be regularly trained on risk management strategies. In addition, there should be effort to ensure that all emergent risks are promptly identified and ways of dealing with them explored. KTDA should always ensure that new technologies are adopted. All obsolete technologies should be passed out systematically and replaced with new ones. A search of the market place for new technology that could create competitive advantages should be undertaken and such technologies promptly adopted.

Keywords: Supplier Alliance, Procurement Cost Control Practices, Procurement Risk Management Practices, Technology Adoption, Procurement Processes

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This study is dedicated to my family for their dedicated and unwavering support during the entire study period.

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ACRONYMS AND ABBREVIATIONS

CEO	Chief Executive Officer
COVID 19	Corona Viruses 2019
ERM	Enterprise Risk Management
EU	European Union
GDP	Gross Domestic Product
HRT	Heavy Rail Transit
IC	Intellectual Capital
KNBS	Kenya National Bureau of Statistics
KPIs	Key Performance Indicators
KTDA	Kenya Tea Development Agency
LRT	Light Rail Transit
MFI	Microfinance Institution
OEPM	Offshore Engineering Project Management
PLS-SEM	Partial Least Squares Structural Equation Modeling
PMP	Procurement Management Practices/Performance
SME	Small and Medium Enterprises
URT	Urban Rail Transit
USA	United States of America

OPERATIONAL DEFINITION OF TERMS

Performance: This refers to an organization's results as compared to the predicted results for the period (Bayaraa0, 2017).

Procurement Cost Control: This is the control of costs of procurement (Munyimi, 2019).

Procurement Risk Management: This entails the management of risks associated with the procurement process (Yang & Anwar, 2018).

Supplier Alliance – these are alliances formed with key supplies that a firm frequently procures from (Zhou & Chen, 2019).

Technology Adoption: This is the adoption and utilization of technologies along the supply chain (Chivandire, Botha, & Mouton, 2019).

Procurement Management Practices: This entails measures aimed at enhancing compliance with procurement laws, streamlining procurement practices, enhancing cooperation with suppliers as well as information sharing and better inventory management (Viswanathan, 2019).

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In today's competitive business environment, procurement management has become a focus of attention and discussion in many organizations throughout the world. Most organizations spend huge chunks of their budgets on procurement. In Europe, for example, public procurement accounts for 16% of the GDP of the European Union (EU); this translates to more than 2 trillion Euros per year (Wakim, & Van den Akker, 2019). Particularly in light of the supply chain disruption caused by the COVID 19 outbreak and the accompanying economic crisis, procurement is becoming a more crucial aspect of a company's strategy (Ighobor, 2020).

A study by Bartik, Bertrand, Cullen, Glaeser, Luca, and Stanton (2020) in the USA posits that procurement practices have a big impact on how well a company operates. This is because businesses operate in a competitive environment, and if they want to stay afloat in today's market, they must overcome numerous obstacles and risks (Bartik et al., 2020). Consequently, performance is a critical factor in determining whether or not a company will succeed. It is a factor that determines how successfully a company achieves its objectives (Goggin, 2021).

According to a study by Bayaraa (2017) in Mongolia, financial performance refers to an organization's results as compared to the predicted results for the period. Profitability, sales volume, and a balanced scorecard are frequently used to evaluate financial success (Kuloba, 2016). However, Tewodros (2016) argues that non-financial variables such as organizational culture can also be used to assess an organization's performance. As such, magnifying the role procurement plays strategically in a

company’s profitability. Thus, a strategic procurement function can assist the organization in becoming more competitive.

Procurement strategy, among other things, improves cross-functional integration among supply chain operations and supports organization-environment alignment for mutual benefit (Pellathy, 2016). Therefore, procurement serves as a vital link between external suppliers and internal customers in the creation and delivery of value to external clients (Gartenstein, 2018). However, the link between the alliance with suppliers and customers and the performance was not expressly studied (Gartenstein, 2018).

Singh, Darwish, and Potonik (2016) point out that procurement is virtually the same as repetitious purchase in a study centered on Saudi Arabia, Jordan, Brunei, and India. The way a company conducts its procurement process has an impact on the company's performance (Coviello, Guglielmo, & Spagnolo, 2017). This emphasizes the importance of research that link procurement management methods to a company's performance.

1.1.1 Procurement Management Practices

In Italy, a study by Belisari, Binci, and Appolloni, (2020) show that excellent procurement management practices (PMP) through technology aids in the stimulation of crucial information flow between the purchaser and supplier, the stabilization of purchasing processes, and the improvement of competitive advantage as well as enhanced financial performance (Belisari et al., 2020). However, the level to which the findings from the former study could be applied to firms in developing countries is hard to unravel without focused studies.

One important research direction has been the influence of technology as PMP and its influence on the performance of firms. A study by Magnus (2016) in Sweden shows that businesses with efficient procurement processes have the propensity to establish quality standards and excellence in customer service. For example, a company might harness the power of big data analytics and cloud computing to integrate suppliers and distributors in procurement practices (Viswanathan, 2019). This shows the central role played by Procurement Management Practices (PMP) in technology adoption.

In India, a study by Kumar, and Ganguly, (2020) posits that technology connects all operations in procurement, including information sources. Presently, competition is dictated by how well organizations connect their operations with their supply chain partners. This is because technology builds strong long-term business relationships with vendors and other strategic partners as attested by a study in China by Chen, Xiao, and Zhu, 2021); resulting in the benefits, such as reduced delivery times, enhanced financial efficiency, increased customer loyalty, and supplier confidence. In the same accord, a study in Ghana by Anane (2019) shows that partnership with key suppliers plays pivotal roles in reducing costs; which goes on to enhance the performance of the firm. However, most studies have not examined the combined effects of various Procurement Management Practices on the performance of organizations.

In Ghana still, a study by Asante (2017) examined "the factors affecting Procurement performance in Public Sectors in Ghana with reference to the Kintampo Municipal Assembly." The study established that poor management of procurement practices increased the risks of wastage of financial resources. This necessitated the need for use of monitoring policies and laws as well as the use of technology (Asante,

2017). However, the study was not focused on Kenya or the manufacturing sector for that matter. The findings may thus not expressly relate to this current study.

Madzimure, Mafini, and Dhurup (2020), in South Africa, found that procurement practices in small and medium businesses (SMEs) created competitive advantages when backed up by technology. In this regard, the adoption of e-procurement improved the optimization of supplier partnerships and improved company performance in the country. Madzimure et al. (2020) concentrated on SMEs rather than industries, as is the case with this current study.

In Somaliland, a study by Ahmed (2019) investigated the link between procurement management and performance. Focused on the telecommunication industry in Hargeisa, the study established that ethical procurement reduces risks and contributed to the overall performance of the firm. However, the study did not narrow down to the performance of the firm and may not expressly relate to this current study.

The impact of procurement procedures on a company's financial success in Kenya has also been the attention of numerous studies. According to Okong'o (2016), procurement practices have a significant impact on the performance of public enterprises in Kenya since they help save money that would otherwise be lost. Samoei and Ndede (2018) found that procurement methods, especially when coupled with technology are crucial in improving the performance of public institutions. In this light, there is a strong link between procurement practices and a company's total performance. In Kenya, however, studies on the relationship between procurement management practices and performance are either lacking or unavailable. This study proposes to examine the impact of procurement practices on the Kenyan tea industry.

1.1.2 Kenya Tea Development Agency (KTDA)

The Kenya Tea Development Authority was formed by “legal notice No.42 of 1964 and it took over the Special Crops Development Authority (SCDA)'s liabilities and functions to promote and foster tea production on small farms, which had previously been deemed unviable due to the production costs.” Kenya Tea Development Authority was transformed to Kenya Tea Development Agency Limited due to privatization and was incorporated as a private company on June 15, 2000, under the laws of Kenya (CAP 486), becoming one of the largest private tea management agencies in the world (KTDA, 2015).

The company provides management services to Kenya's small-scale tea industry. The business is run by a board of directors made up of representatives from Kenya's twelve tea-growing zones. Factories can be found in each district. A factory's board of directors is made up of six farmers who are chosen by the farmers. At the zonal level, the elected directors meet to elect a KTDA board member. KTDA is responsible for the operation of 66 factories (KTDA, 2015). Every factory follows the same business model. The company is in charge of purchasing tea leaves from small-scale producers, refining the tea, and ensuring that it is properly marketed. Both of these activities include value addition and complex supply chains, which necessitate effective PMP. Without proper PMP, KTDA factories may be unable to function profitably, as their supply chains may become derailed, resulting in losses (KTDA, 2015).

1.1.3 Performance of the Kenya Tea Development Agency Factories

Kenya's tea industry has grown rapidly in the post-independence era, making it one of the country's most important foreign earners. Kenya is the world's second-largest tea exporter, behind Sri Lanka (Subramani, 2019). Currently, small-scale tea growers under

the KTDA account for 60% of total tea production, with multinationals and large-scale growers accounting for 40% (Karuri, 2021).

However, the tea industry is currently under pressure from several factors. The first challenge is the weakening trend in tea export prices (KNBS, 2020). This export price problem has arisen due to global tea export rises that have outpaced global consumption according to KNBS (2020). This is because there has been a steady surplus of tea supply in the world market for the past ten years, which has depressed auction prices. Other problems include high labor costs, which account for roughly two-thirds of ex-factory production costs; output fluctuations as high as 285 million kilograms to 300 million kilograms due to drought; lack of credit facilities for small-scale growers; and loss of income by growers due to brokerage firms and competing beverages (Wambeti, 2017).

The involvement of multinationals operating upstream and downstream in the tea trade has exposed the Kenya Tea Development Agency (KTDA) to global competition. To gain a competitive edge over the tea markets, multinationals have ensured that they compete on cost, efficiency, technology, customer loyalty, and other strategies. This may be a problem for KTDA as it seeks to gain a competitive edge in regional and global markets. Hence, KTDA may also increasingly integrate excellent PMP in their business operations to ensure that they also compete favorably. This study sets out to investigate the effects of PMP and performance on the financial performance of KTDA.

1.2 Statement of the Problem

Procurement is viewed as an important part of a company's overall strategy for achieving effective performance and boosting profits (Clemens & Douglas, 2016). In

practice, if the procurement process is well-planned and executed, it may be a powerful success tool. However, there is a lack of understanding at KTDA when it comes to procurement practices. In this regard, the lack of good procurement practices has resulted in procurement spending losses. For example, with the procurement of Continuous Fermenting Machines, KTDA lost a total of Kshs. 130,000,000 (Gitonga & Nyasato, 2006). This is because increasingly indirect procurement is a challenge for most managers (Kavoo & Gichure, 2016). Consequently, some procurement managers are unable to handle indirect procurement processes, which have a detrimental impact on supply chain sustainability (Okong'o, 2016).

Organizations spend immense resources in procurement. Public procurement accounts for 16% of the GDP of the European Union (EU); which translates to more than 2 trillion Euros per year (Wakim & Van den Akker, 2019). Consequently, procurement becomes critical for businesses, particularly those in the manufacturing sector, because purchasing represents a major expense especially in Kenya where the procurement of raw materials in the manufacturing firms reveals a significant effect on organizational performance (Samoei & Ndede, 2018). However, most studies focus on the general performance in organizations and do not narrow down to performance. This creates a knowledge gap that can only be bridged by focused study.

Several studies have been conducted on procurement management practices (PMP). Eldin, Ragab, Ragheb, and El Mokadem (2019) examined "the effect of procurement practices on performance in the manufacturing sector." Odero and Shitseswa (2017) sought to "establish the effect of procurement practices on the procurement performance of public sugar manufacturing firms in Western Kenya." Ngatia (2011) researched "the link between supply chain management practices and the output of the KTDA tea factories." The present study differs from the above studies on

the context, focus, and depth of coverage. This study thus proposes to examine the effect of procurement management practices on the performance of KTDA.

1.3 Research Objectives

1.3.1 General Objective of the Study

The general objective of the study was to examine the effects of procurement management practices on the performance of KTDA.

1.3.2 Specific Objectives of the Study

The specific objectives of the study were to:

(i) Assess the effect of supplier alliance on the performance of the Kenya Tea Development Agency

(ii) Determine the effect of procurement cost control practices on the performance of the Kenya Tea Development Agency

(iii) Examine the effect of procurement risk management practices on the performance of the Kenya Tea Development Agency

(iv) Explore the effect of technology adoption in procurement processes on the performance of the Kenya Tea Development Agency

1.4 Research Questions/hypothesis

The study sought to answer the following research questions.

(i) What is the effect of key alliance with suppliers on the performance of the Kenya Tea Development Agency?

(ii) What is the effect of procurement cost control practices on the performance of the Kenya Tea Development Agency?

(iii) How do procurement risk management practices affect the performance of the Kenya Tea Development Agency?

(iv) In which ways does technology adoption in procurement processes affect the performance of the Kenya Tea Development Agency?

1.5 Justification of the Study

The importance of good procurement practices in an organization cannot be gainsaid. This emanates from the fact that poor procurement practices could affect the overall performance of organizations. As such, understanding the effects of procurement management practices on the performance of KTDA could be beneficial not only to the agency but also to other organizations. It will provide a basis gaining an in-depth understanding ways in which the firms could streamline procurement practices. This is timely since in the wake of COVID-19 pandemic that has resulted to a tough working environment and disrupted supply chains (Bartik et al., 2020), efficiency along the supply chain cannot be taken for granted by any competitive organization. The study provides a basis for policy recommendations on ways in which procurement efficiency could be enhanced. This would go on to streamline work processes at KTDA as well as other state corporation while reducing wastage of resources in procurement processes.

1.6 Significance of the Study

Procurement management practices are one of the most important factors in strategic decisions in an organization/company. This study focuses to examine the effect of procurement management practices on the performance of KTDA. The findings of the study would be beneficial to procurement managers of organizations, scholars, and business people at large

1.6.1 Tea Factories

The study will avail information to state corporations such as the KTDA on how procurement management practices influence the performance of a firm. These findings will also be beneficial to non-state manufacturing firms as well as other business entities that undertake procurement activities.

1.6.2 Researchers

The findings were beneficial to researchers. These would obtain an important repository of literature for subsequent studies. The gaps identified by this study would also form a basis for further study.

1.6.3 Policy makers etc.

Policymakers would also obtain important information that could be used in mitigating challenges facing procurement processes in government parastatals. This could entail a review of existent policies and statutes related to procurement management practices.

1.7 Scope of the Study

This study set out to examine the effect of procurement management practices on the performance of KTDA. It focused on four study variables. These included alliances with key suppliers, cost control practices, risk management practices, and technology adoption. The study only focused on procurement managers who have worked for at least three (3) years in the firm (2018-2021) serving the 66 KTDA factories spread in various parts of Kenya.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the theoretical and empirical literature reviews as well as the conceptual framework. Literature was reviewed in line with the study objectives. Lastly, the operationalization of the study variables was also undertaken.

2.2 Theoretical Review

A theory is an idea used to account for a situation or justify a course of research action (Nilsen, 2015). This chapter presents the hypothetical foundation that guides this study especially on how procurement management practices impact the performance of organizations. This study will be premised on resource-based view theory, balanced score card theory, systems theory and transaction cost theory.

2.2.1 Resource-Based View Theory

The resource-based view theory is pertinent in explaining technology and supplier alliance as resources within procurement management practices that could enhance the performance of companies. According to Clark (2011), “a resource is the total means of increasing production or profit available to the company.” This theory is therefore “used to explain why certain companies in the same industry outperform others. The reasons for this would range from internal strengths as well as resources advantage which would provide a competitive edge for a firm that considers resource availability to the company as a pedestal for growth” (Covin & Miles, 2007).

These resources come in different forms which may include assets, skills, organization processes, or information that is classified as tangible and immaterial

(Dickinson et al, 2010). The theoretical foundation is “to cultivate resources that are wholly under control or owned by the focus organization, to improve their contribution to the competitive advantage of the organization within its industrial environment” (Hoffman & Sandilands 2005). This theory links the research variable, in which we wish to answer the question of how the company performs following the adoption of green production (Li & Geiser, 2005).

A resource is” rare if there are fewer companies in a competitive arena with a resource than the number needed for competition” (Pfeffer, 2003). Using this as a foundation, the resource-based view allows businesses to identify their key competencies. In this light, procurement practices will often have the attributes that can enable them to be sources of sustained competitive advantage for an organization.

2.2.2 Balanced Score Card Theory

The balanced scorecard theory explains the role of cost control and its potential to enhance organizational performance. The balanced scorecard was created by Kaplan and Norton (1992) “to reduce reliance on obsolete accounting procedures. Non-financial measurements should be included in non-financial measures to improve efficiency. The balanced scorecard divides an organization's mission into precise, measurable goals.” According to Kaplan & Norton (1992), “the Balanced Score Card is a comprehensive strategy of evaluating an organization's performance to ensure predictability and the right activities are done to create the desired future.”

This research looks at operational costs, super alliances, quality management, and technology use in procurement. The implementation of procurement best practices requires financial support as well as top-level management assistance. The performance management concept of the Balanced Score Card connects a company's strategy with

managerial actions. When reducing costs, make sure the reduction has a good impact on finances, suppliers, customers, and the company's growth. Not only should Key Performance Indicators (KPIs) be prioritized, but so should other aspects of the business. Only 30% of KPIs are financial in nature; the rest are concerned with customers, suppliers, and the company's growth. The purpose of the Balanced Score Card method is to achieve the organization's ultimate goal. KPIs are usually aligned with strategy. KPIs guarantee that the objectives are in accordance with the company's overall plan.

2.2.3 Systems Theory

According to the system theory, supplier alliances affect organizational performance. Prior to being introduced into management in the late 1950s, this approach was originally employed in sectors such as science and engineering. Systems theory is a philosophy for understanding organization and management, rather than a collection of ideas to be followed. An organization is a structure made up of numerous interrelated components. Section operations are affected by either internal, external, or both external variables. It is possible to have an open or closed system. The vast majority of businesses, regardless of their size, are open systems since they are contingent on the environmental elements outside of the company (Parry & Roehrich, 2009). Suppliers are considered part of the procurement system in this study.

For Deming (1986), “A system is a series of functions or activities within an organization that work together toward the goal of attaining the organization's objectives. These functions or activities work in tandem, making sure that input requirements are matched with output. Thus, a constant flow of material and information takes place.” In order to create something, an organization uses input from

the outside world and converts it into output, and then takes the result back out into the world. In order for an organization to acquire the input it requires, it must obtain the input from its suppliers. Goods, information, or human capital can be used as inputs. Failing to have an adequate number of outsourced partners will prevent the company from reaching its operational capacity, and as a result, it will be unable to effectively carry out its activities.

Systems theory has important implications in procurement, as it showed how the company and its environment are connected (which includes suppliers). To ensure a fluid conversion of inputs to outputs, it is important to have well-managed relationships. Systems theory considers “the organization as a whole, and it can help one identify organizational issues in a more holistic way” (Deming, 1986). System thinking is “a valuable concept for organizations since suppliers have the power to impact the organization's performance.”

2.2.4 Transaction Cost Theory

The Transaction Cost Theory is concerned with cost containment and its impact on an organization's performance. Coase was the one who came up with the theory (1937). It refers to the expense of procuring a good or service from outside the company rather than from within the company. Transaction costs include “search and information costs, bargaining and decision costs, and policing and enforcement costs,” according to Coase's 1937 article “The Problem of Social Cost” (Williamson, 1986). It observes that “while market prices regulate relationships between firms, they also regulate decisions within firms. Entrepreneurial coordination is used to make decisions.” A deeper explanation of the actions of the purchasing function is given in order to understand how Transaction cost pertains to the crucial decision points of purchasing. Controlling

expenses in procurement processes could have an impact on the firm's performance in this study.

Transaction cost economics focuses on “five processes: category strategy, supplier strategy, quotation supplier selection and negotiation, operational procurement, and supplier assessment.” The buyer puts equal products into one pool (Schiele et al., 2011) in the first procedure, category strategy, and then determines a strategy for this pooled group. To design a supplier strategy, one can first determine the purchasing volume and level of dependence on the provider. One might pick between competitive bidding and negotiation for supplier selection and negotiation (Papazoglou & Heuvel, 2007). It is feasible to control costs by obtaining the correct suppliers competitively, which can then influence the firm's performance.

2.3 Empirical Review

According to Kumar, (2005), in “an empirical literature review, the analysis should look at the research work done by others with a focus on the interaction between the dependent variables as well as the independent variables.” The literature will be reviewed in line with the study variables namely: cost control practices, risk management practices, technology adoption as well as alliance with key suppliers and their effect on organizational performance at KTDA.

2.3.1 Alliance with Suppliers

Vandaie and Zaheer (2015) carried out a study titled “Alliance Partners and Firm Capability: Evidence from the Motion Picture Industry” in the United States.” The findings demonstrate that “the number of major partners has an inverted U-shaped effect on the capacity of an independent studio. In addition, the study found that the

alliance experience of an independent studio with major associates strengthens the relationship" (Vandaie & Zaheer, 2015). The former study highlights some of the key possibilities surrounding the benefits resource-poor firms receive from their resource-rich partners. However, these findings might not be generalized in the tea sector. "Also, the former study was undertaken in the United States of America, the findings may thus not expressly relate to this current study that is focused on Kenya. Therefore, this study thus sets out to examine the level to which the former study can be generalized to Kenya."

Moatti, Ren, Anand, and Dussauge (2015) in "Disentangling the performance effects of efficiency and bargaining power in horizontal growth strategies: an empirical investigation in the global retail industry" sought to establish the factors that influence organization performance. The findings show that "Mergers and acquisitions boost bargaining position in the short while organic growth increases operating efficiency over the long term." The study by Moatti et al. (2015) "was focused on a global scale as opposed to this current study that focuses on Kenya. This means that the findings may not apply expressly to the KTDA context and therefore need to carry out a local study."

Zhou and Chen (2019) studied "Factors Affecting Collaborative Innovation Performance of Online Knowledge Communities: Empirical Evidence from Shipping Industry." The study grouped the respondents into knowledge providers and knowledge pursuers. The study then looked "at the relationship between motivation and performance of the two groups" (Zhou & Chen, 2019). The findings show that "motivational factors have a strong effect on the performance of online knowledge communities." It is however pertinent to test the veracity of these findings KTDA. "This is particularly so since the study by Zhou and Chen was based on the online learning

community which has its uniqueness. The former study was also undertaken two years ago, it may thus not show any changes related to alliance with suppliers in the last two years. This underlines the pertinent of studies such as this current one."

Yu, Xu, and Dong (2019) in "Vertical vs. Horizontal: How Strategic Alliance Type Influence Firm Performance?" examined how "alliance types might influence the public equity markets." The result reveals that "vertical symmetric alliances gain more abnormal returns than others. In addition, the findings demonstrate that sharing information between upstream and downstream companies is more essential so that companies may quickly alter their innovation strategy" (Yu et al., 2019). When companies listen to their suppliers and consumers through a cooperative problem-solving system, their respect for the partners will be favorably appreciated, allowing them to retain strong ties with them, according to the study. "This current study investigates the exactness of these findings at KTDA. This is important since Yu and others was not focused on KTDA or Kenya for that matter limiting the applicability to the studies to this current study."

Fang, Lee, Palmatier, and Guo (2016) carried out a similar study titled "Understanding the Effects of Plural Marketing Structures on Alliance Performance." The study used "two complementary studies to test the performance of plural and dyadic structures in high-tech industries." The findings show that "plural structures outperform dyadic structures for the upstream firm when marketing alliances extend to product-related tasks. However, dyadic structures perform better when the upstream market is more competitive" (Fang et al., 2016). Furthermore, results on "multiple structured alliances show that horizontal integration can be extremely advantageous for two or more businesses." Increased market power or market share, decreased competition, and other synergies are only a few examples. "The former study attempts

to determine the effect of plural marketing structures on alliance performance in the tech industry. The findings might not necessarily apply to KTDA, hence the need to carry out this study."

Pascal, Mersland, and Mori (2017) in "The influence of the CEO's business education on the performance of hybrid organizations: The case of the global microfinance industry," sought to investigate how "the education of CEO influences the fiscal and social performance Micro-Finance Institutions. The findings show that the educational level of the CEO has a positive influence on the financial and social wellbeing of Microfinance Institutions (MFI)" (Pascal et al., 2017). "The former study was focused on MFI rather than the tea industry. It may thus not expressly relate to this current study which focuses on the tea industries in Kenya. As a result, testing the applicability of its finding may remain untenable without focused studies hence the need for this study."

Muthoka and Oduor (2018) studied "Effects of Strategic Alliances on Organizational Performance: Supermarkets and Their Alliances in Kenya." The study employed "a correlational research design to investigate five big supermarkets and 95 of their strategic alliances" (Muthoka & Oduor, 2018). The findings show "a strong relationship between strategic alliances and supermarket performance, implying that strategic alliances help boost supermarket performance." The study by Muthoka and Oduor was "focused on Supermarkets and their alliances as opposed to this study which focused on KTDA. It is important to verify these findings at KTDA. This is particularly so since the study by Muthoka and Oduor looked at supermarkets."

Medforth (2020) carried out a study titled "Strategic Alliance Practices and Organization Performance of Selected Companies in the Energy Sector in Kenya." The study used "a descriptive research design and conducted a cross-sectional survey of 88

employees in selected 22 energy companies" (Medforth, 2020). The findings show that "strategic alliance practices influence the overall organizational performance of firms. The former study is relevant to this current study since it was also based on primary data sources. However, it did not delve into factories in the tea sector. It is however pertinent to test the veracity of these findings at KTDA factories."

2.3.2 Procurement Cost Control Practices

Mohr (2017) in "Cost accounting at the service level: An analysis of transaction cost influences on indirect cost measurement in the cost accounting plans of large US cities" undertook a comprehensive study of U.S. cities' cost accounting to examine "the influence of economic transaction costs on the measurement of indirect cost measurement for services" (Mohr, 2017). The findings indicate that "incidental cost assessment is constrained by operation costs arising from asset usefulness at the service level, but measurement inconsistency is connected to a higher probability of observing an indirect cost driver." The study shows how "transaction costs affect performance measurement. Since the former study was carried out in a different context, it may not expressly show how cost control practices are likely to improve the performance of KTDA factories in Kenya. This emanates from the fact that it was focused on firms in the United States of America which has different characteristics from firms in Kenya. This study sets out to bridge this empirical gap."

Zhao, Li, Zhang, and Palmer (2018) carried out a study titled "Cost of an urban rail ride: A nation-level analysis of ridership, capital costs and cost-effectiveness performance of urban rail transit projects in China. Comparative analysis was conducted to find out how Heavy Rail Transit (HRT) and Light Rail Transit (LRT) performed and the cost involved." The results indicate that fixed assets had an impact

on the usage of URT and the usage was affected by distance from the City Centre. In addition, “the findings show that it is profitable to operate Urban Rail Transit (URT) in densely populated cities” (Zhao et al., 2018). To this end, some LRT lines are cheaper to run than HRT lines. The study’s key contribution is the demonstration of the factor that influences the customer to use the service, hence company performance. “However, this study was focused on the rail business in China as opposed to this current study that focuses on the tea sector. This means that the findings may not expressly be applicable in the Kenyan context and therefore need to carry out a local study.”

Munyimi (2019) studied the “Role of procurement specifications in curbing wrong deliveries of construction materials in the construction sector in Zimbabwe.” The study adopted “a cross-industry survey method to study construction companies. Using purposive sampling, a total sample of 56 procurement practitioners was selected randomly. The findings show that to curb wrong deliveries of construction materials, procurement specifications should be followed i.e. performance specifications, brand or trade name specifications, and sample specifications” (Munyimi, 2019). In addition, the research hypothesizes that procurement specification practices give businesses the ability to make the right deliveries which reduce costs and increases their performance. “The former study closely relates to this current study since it was also based on primary data. However, the study focused on the construction sector as opposed to the tea industry. This creates an evident empirical gap.” Furthermore, “the former study was undertaken in Zimbabwe. This current study investigates the exactness of these findings in Kenya which may not share similar characteristics with Zimbabwe.”

Adigbole, Adebayo, and Osemene (2020) conducted a study titled “Strategic Cost Management Practices and Organizational Performance: A Study of

Manufacturing Firms in Nigeria." Data was collected and analyzed using "the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach utilizing a survey research methodology" (Adigbole et al., 2020). "The findings show that strategic cost management strategies improve performance and competitiveness. However, the former was undertaken in Nigeria and hence may not be relevant to Kenya. The focus of the former study was the manufacturing sector. This is unlike this current study which looks into the impact of procurement practices on the Kenya Tea Development Agency's performance."

Ombara (2019) in "Transport Infrastructure Development in Kenya: How Connectivity Impacts Eastern Africa Regional Integration", sought to examine how the transport road network in Kenya impacted the performance of businesses. The results reveal that road networks directly affected the competitiveness of businesses as they affected the cost of doing business in the country. The study by Ombara (2019) "has attempted to link cost effects to performance." Though also undertaken in Kenya, "the study by Ombare was focused on the transport sector. The sector has different characteristics to the tea industry. This means that the study may not directly relate to this current study." In this regard, "this study sought to test the applicability of the findings of the former study to the KTDA factories as the transport infrastructure has been cited as one of the main challenges the tea sector faces."

Ongosi and Otinga (2020) in their research sought to "unravel the impact of financial management practices on the financial performance of Micro Finance Institutions in Kenya." The findings show that "financial management practices positively affected the financial performance of MFI's. It may thus not expressly relate to this current study which focuses on KTDA factories despite the fact that both studies were focused on Kenya. As a result, testing the applicability of its finding may remain

untenable in regards to the tea sector without focused studies hence the need for this study."

2.3.3 Procurement Risk Management Practices

Will, Linderkamp, and Von der Schulenburg (2017) studied "Reputational Risk Management in the German Insurance Industry." The study recognized that the management of reputational risks showed different levels of maturity. Most of the interviewed insurance companies revealed a significant backlog, due to their failure in prioritizing reputational risks. However, "the study's scope was limited to only insurance companies. It may thus not show the prevailing state of issues in the tea sector hence, more research is needed to support these findings. Conditions in Germany are quite different to those in Kenya which challenges the direct general applicability of the findings to Kenyan firms."

Parvaneh, et al., (2021) studied "The influence of enterprise risk management on firm performance with the moderating effect of intellectual capital dimensions" in Iran. Using a questionnaire survey data was collected from 84 firms in the financial sector. The findings show that the overall intellectual capital (IC) had a moderating effect on enterprise risk management (ERM) of the organizational financial performance (Parvaneh, et al., 2021). The study examined "the impact of ERM on non-financial performance and the role of intangible assets in ERM." The current study examines |how procurement management practices affect KTDA's financial performance. Though based on secondary data sources, the studies are clearly different since their focuses are different with the former being focused on Iran unlike this current study which focuses on Kenya."

Yang and Anwar (2018) carried out a study titled “Enterprise Risk Management Practices and Firm Performance, the Mediating Role of Competitive Advantage and the Moderating Role of Financial Literacy” in Pakistani. The study used |a structured questionnaire to collect data from 304 SMEs. The findings show that enterprise risk management methods have a considerable impact on competitive advantage and SME performance” (Yang & Anwar, 2018). As such, organizations are recommended to adopt formal enterprise risk management processes to obtain a competitive edge and improve performance. Since the former study looked at SMEs, “this study sets out to investigate the possibility of applying the findings to the tea industry. Also, the former study was focused on firms in Pakistan and may not relate to this study which is focused on Kenya.”

Horvey and Ankamah (2020) carried out a study titled “Enterprise risk management and firm performance: Empirical evidence from Ghana equity market” in Ghana.” The study analyzed “30 listed firms on Ghana Stock Exchange between 2010 and 2016. The findings show that ERM propels firm performance at both the firm level and market-level performance.” Consequently, the study recommends, firms should implement fundamental robust measures and dynamic risk management techniques to get better ERM outcomes (Horvey & Ankamah, 2020). “The former study was undertaken in a different context. It was also focused on various firms listed in “the Ghana Stock Exchange” as opposed to this study which was focused on KTDA. In this light, the level to which the findings can be generalized to KTDA factories is thus hard to fathom without studies such as this one.”

Li (2019) in “Risk Analysis Model of Offshore Engineering Project Management Based on Fuzzy Membership Function” sought to establish the possible risks in OE projects. The findings show that in “the offshore engineering PM (OEPM),

external aspects are likely to be risky, and the PM organization may wish to put more emphasis on them" (Li, 2019). Furthermore, "it is important to reduce risk events and prevent risks as much as possible by pre-control and by reducing risk losses. The former study was however focused on a single entity. The findings may thus not show the state of affairs in KTDA."

Mwambafula (2020) carried out a study titled "the effects of procurement risk management on organizational performance of private manufacturing firms in Tanzania." The study used "a case study research approach with a sample size of 77 respondents. Coca-Cola Kwanza Limited provided data through surveys and interviews." According to the findings, "the risk identification process had a significant impact on organization performance, indicating that there are several sources of risk that influence organization performance, including technological risk, organizational and societal risk, market risk, financial risk, and regulatory risk" (Mwambafula, 2020). The study may not relate to this study in context since "it was focused on different industry. This means that it may not expressly answer all the questions under investigation in this study and thus need to carry out further study in the Kenyan tea sector."

Onsongo, Muathe, and Mwangi (2020) in "Financial Risk and Financial Performance: Evidence and Insights from Commercial and Services Listed Companies in Nairobi Securities Exchange, Kenya," sought out to "assess the implications of financial risk on the performance of these companies." The study used the descriptive research design. The results reveal that "listed companies on the Nairobi Stock Market increased their appetite for credit to increase performance although during the same time the companies incurred losses" (Onsongo et al., 2020). Looking at their financial statement, "one could notice that the liabilities were more than the assets. Therefore,

the companies failed to pay for their supplies in due time. The former study was more generalized. The level to which the findings can be generalized to KTDA is thus hard to fathom without studies such as this one."

2.3.4 Technology Adoption

Mao and Zhang (2019) carried out a study titled "Design and Implementation of Port Bulk Storage Management System Based on Internet of Things Technology." This study sought to build a warehouse material management system and used it to acquire data. The findings show that the system is effective in improving the organization's performance. The former study is "relevant to the current study; therefore, this study will attempt to test the veracity of these findings in KTDA." However, "the former study was not based on primary datasets and may not relate to this current to this study which is solely based on primary data."

Zakaria, Mamun, Nawi, and Razak (2016) studied "Service operations practice and performance of local authorities in Malaysia." The study aimed at "investigating the association between operational practices and the performance of local authorities. A cross-sectional plan was used to carry out the research. The result shows that the magnitudes of management practices have a major impact on the performance of organizations" (Zakaria et al., 2016). Furthermore, organizational values and beliefs have a strong effect on general performance. "Since the former study was carried out in Malaysia, this current study investigates the reality of these findings at KTDA to validate the results. The former study was also focused on the service industry which limits its application to KTDA."

Canevez, Maitland, and Rantanen (2020) in "A Dynamic Perspective of Internet Service Provider Adoption of Emergent Network Technology: A Case Study of Tribal

Digital Village." The study sought to find extensions to the model, specifically emotional replay during mediation and their association to the aspects of intermediation procedure (Canevez et al., 2020). In essence, this method highlighted the intricacies of market dynamics and how they influence the adoption of technologies by companies. "However, since the context of the study was not in Kenya, this study sets out to investigate the possibility of these findings in KTDA."

Wu (2015) conducted a study titled "Effects of female managers' leadership on teamwork and organizational performance in the catering industry." Data were collected through a survey questionnaire responded to by 477 Taiwanese firms. The findings show that positive leadership affects teamwork and general organizational performance. "The former study was focused on Taiwan. The level to which the findings can be generalized to KTDA in Kenya is thus hard to fathom without studies such as this one."

Li, Han, Ding, and Zhang (2018) carried out a study titled "The Operation Evaluation of China's Marine Industry Technology Innovation System." The study "builds a system to assess the process efficiency of the technology innovation system in China's marine industry" (Li et al., 2018). The findings accurately showed "the specific operating performance of the system and demonstrated areas of weaknesses as well as areas of improvement. However, since the context of the study was China, this study determines to show the possibility of these findings in KTDA."

Jalagat & Al-Habsi (2017) studied the impacts of IT usage on the output of organizations. The study used a descriptive research design. The questionnaire was used to collect data in the survey. The findings show that desktop computers were the main IT devices used by the targeted organizations. Furthermore, the result revealed IT use and organizational performance correlate positively (Jalagat & Al-Habsi, 2017).

Therefore firms should put more emphasis on data management system as it significantly impacts organizational performance. “However, the former study was focused on the education sector. Therefore, further studies due to its limitations of scope and other constraints should be carried out in the tea sector.”

Chivandire, Botha, and Mouton (2019) in “The Impact of Capital Structure on Mobile Telecommunication Operators in Africa”, sought to look at “the effect of capital structure on the financial performance of organizations in Africa.” The findings show that firms in the telecommunication industry must turn their attention to aspects that have a strong influence on fiscal performance (Chivandire et al., 2019). To be profitable they should adopt digital transformation, business models. “The former was undertaken in the telecommunication sector and may not necessarily relate to this study. This current study investigates the reality of these findings in KTDA.”

Ibrahim, Adam, and Sare (2019) in a similar study looked at “the factors that direct FDI inflows, with respect to the ICT and fiscal sector.” Using the generalized method of moments (GMM), the study covered forty-six nations on the Africa continent from 1980 to 2016. The finding shows that “foreign direct investment was more likely encouraged by a good ICT infrastructure in the country” (Ibrahim et al., 2019). Since the former study was carried out in a different context, “it may not expressly show in the KTDA context. This study sets out to bridge this empirical gap.”

Chege, Wang, and Suntu (2020) conducted a study “to check the association between technology innovation and firm performance in Kenya. Using structural equation modeling analysis, the study looked at 240 enterprises.” The findings show “that technology innovation has a positive effect on the performance of the enterprise” (Chege et al., 2020). The former study was |more generalized and may thus not expressly relate to this current study which focuses on KTDA. Thus, testing the

applicability of its finding may remain untenable in regards to the tea industry without focused studies hence the need for this study."

2.3.5 Research Gaps

Several studies were examined. The majority of the research reviewed focused on a variety of organizations rather than KTDA specifically. Moatti et al. (2015) focused on "a global scale as opposed to this current study that focuses on Kenya." This means that the findings may not apply expressly to the KTDA context and therefore need to carry out a local study." The study by Zhou and Chen (2019) was based on "the online learning community which has its uniqueness and may not relate to KTDA." The study by Muthoka and Oduor (2018) as well as Medforth (2020) were focused on organizational performance generally which means the level to which they relate to KTDA may be hard to fathom without focused studies.

Zhao et al. (2018) focused on "the rail business in China" as opposed to this current study that focuses on the tea sector. This means that "the findings may not expressly be applicable in the Kenyan context and therefore need to carry out a local study." Munyimi (2019) focused "on manufacturing firms in Zimbabwe which may differ with Kenya." The study by Adigbole et al. (2020) focused on "Nigeria hence the findings may not be relevant to Kenya. This applies to Ombara (2019) as well as Ongosi and Otinga (2020) who also focused on other sectors in Kenya rather than KTDA."

The study by Will et al. (2017) was limited to insurance companies. Horvey and Ankamah (2020) focused on Ghana. Li (2019) focused on a single entity. Mwambafula (2020) focused on Tanzania. Onsongo et al. (2020) focused on "Commercial and Services Listed Companies in Nairobi Securities Exchange, Kenya." It is thus clear that

“none of the studies were focused on KTDA or on all the variables under investigation in this study together which creates a clear gap.”

Other studies such as Mao and Zhang (2019) focused on China; Zakaria et al. (2016) focused on Malaysia; Wu (2015) focused on Taiwan while Jalagat and Al-Habsi (2017) though focused on Kenya did not narrow down to KTDA. Based on the foregoing discussion, various studies were reviewed. However, “none of the research evaluated take a holistic approach to all of the variables under consideration in this study.” The studies tend to be “focused on various parts of the world without any special attention to African countries or Kenya for that matter.”

Moreover, “the studies undertaken are based on several research designs. Some of the studies were focused on desk-review of existing literature. The studies based on primary data adopted designs such as exploratory, correlational among others. Though some of the studies were based on the descriptive survey design, most are as already pointed out limited in terms of scope and may not expressly relate to this current study.”

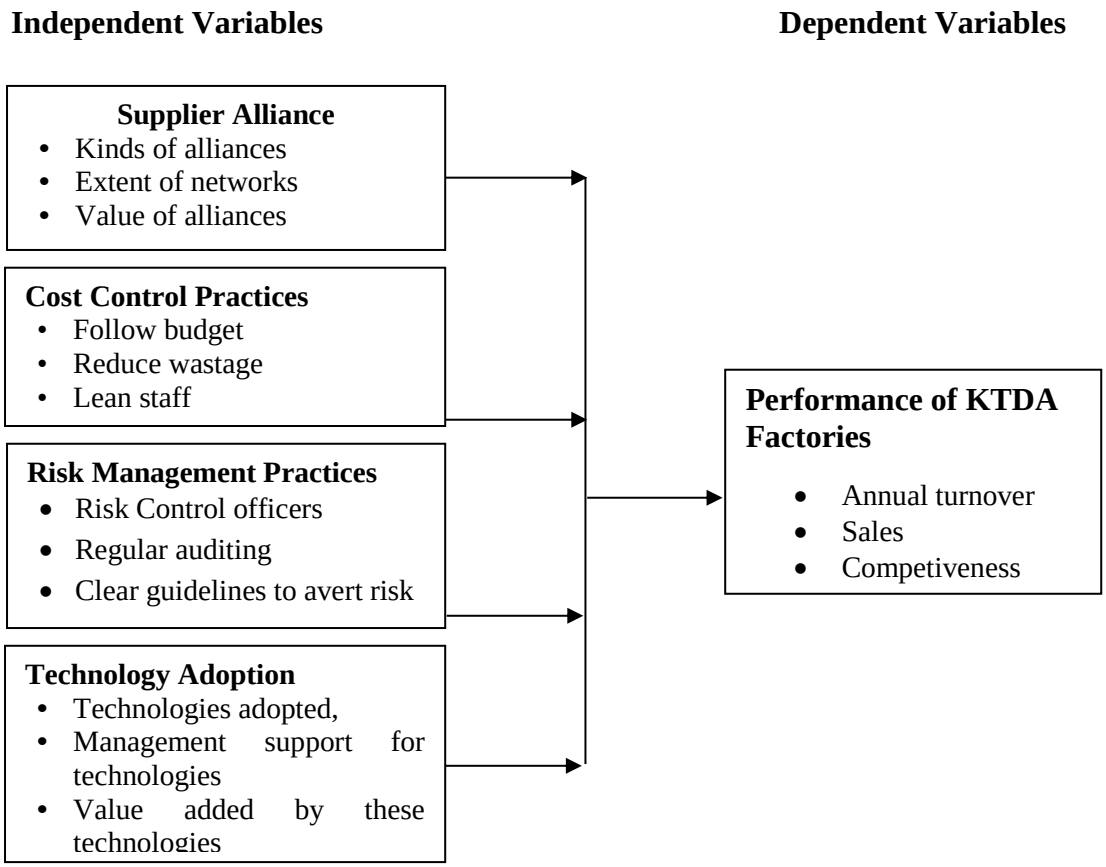
Another point worth considering was is that fact that some of the studies were quite dated. Since the procurement discipline is “very dynamic in the wake of the rise and rise of new technologies, some of the studies may not cast light on the subject under investigation in terms of time scope. “This means that the examined literature cannot be used to answer all of the research questions. This creates a knowledge gap that is hard to bridge without a focused study. This underlines the need for this current study.

2.4 Conceptual Framework

In this study, it is conceptualized that alliance with key suppliers, cost control practices, risk management practices, and technology adoption (independent variables) affect the overall organizational performance of KTDA (dependent variable). Alliance with key

suppliers will be measured through “an assessment of kinds of alliances, extent of networks and the value of the alliances” (Vandaie & Zaheer, 2015). Cost control will be measured by “the amount of money saved, cost control measures, and review of budgets” (Mohr, 2017). Risk management will be indicated by “types of risks, risk management strategies, and risks averted” (Parvaneh, et al., 2021). Technology adoption will be measured “by technologies adopted, management support for technologies, and value-added by these technologies” (Li et al., 2018). The overall performance of organizational performance will be measured by annual turnover, sales, and competitiveness among others.

Figure 2.1 EFFECT OF PROCUREMENT MANAGEMENT PRACTICES ON PERFORMANCE OF KTDA FACTORIES



Source: Researcher (2021)

2.5 Operationalization of Variables

Table 2.1 operationalizes the study variables and shows their definition as well as how they will be measured.

Table 2.1 OPERATIONALIZATION OF VARIABLES

Variable	Definition	Indicator	Measure
Alliance with Key Suppliers	This involves forming alliances with key suppliers to create synergy in procurement processes.	• Assessment of kinds of alliances • extent of networks • value created	Ordinal
Procurement Cost Control Practices	These are procurement control practices implemented.	• Money saved • Cost control measures • Review of budgets	Ordinal
Procurement Risk Management Practices	This is the extent to which risk management practices are embedded into procurement.	• Types of risks • Risk management strategies • Risks averted	Ordinal
Technology Adoption	This is the adoption of modern technologies in procurement practices.	• Technologies adopted, • Management support for technologies • Value added by these technologies	Ordinal
Procurement Performance	This is the attainment of the organization's procureemnt goals	• Annual turnover • Sales • Competitiveness	Ordinal

Source: Researcher (2021)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research design, study population and sampling techniques, research instruments, validity and reliability of the instrument, data collection methods, and data processing and analysis.

3.2 Research Design

Kothari (2017) defines a research design as "a master plan specifying the methods and procedures used for collecting and analyzing the needed information. A descriptive research design was used in this study." A descriptive research is used to figure out how often something happens or what the relationship between variables is (Saunders, Lewis & Thornhill, 2009). This method is ideal for this study since the researcher wishes to gather extensive information through description, and it is beneficial for identifying variables and potential drawbacks. This method provides descriptions of the variables in order to answer the research questions in the study.

The study used questionnaires in data collection. The choice of questionnaires is informed by the fact that they are easy and cost-effective in collecting data within a short period of time. According to Aaker, Kumar & George (2000), the choice of the research design is a crucial decision since it dictates how relevant the information for study was gathered. Cooper and Schinder (2003) recommend descriptive research design be used to make inferences from sample data on what might happen in general conditions. This is because "descriptive research portrays an accurate profile of persons, events, or situations" (Saunders, Lewis & Thornhill, 2009), and makes it easier to reach conclusions about associations between variables (Chanoknath & Louangrath, 2015).

In examining the effects of procurement management practices on the performance of KTDA this was deemed an appropriate design. This emanates from the fact that it can describe the subject under investigation as accurately as possible without the need for manipulation of the study variables (Cooper &Schindler, 2003).

3.3 Target Population

According to Mugenda and Mugenda (2011), "the target population is a group, individual or object from which samples are taken for study measurement." The target population of the study was the staff working in all the 66 Tea Factories under KTDA. The unit of observation was each factory while the unit of analysis was the employees. In these factories, there are 594 workers. The study targets 1 procurement officer, 1 operations officer and 1 finance officer from each factory since they can represent the factories adequately. This makes a total of 198 persons. The target population is shown in Table 3.1.

TABLE 3.1 TARGET POPULATION

Category	**Number**
Procurement officers	66
Operations officers	66
Finance officers	66
Total	**198**

Source: KTDA (2021)

3.4 Sampling and Sampling Procedure

A subset of the population is referred to as a sample. According to Kothari (2017) "sampling is the process by which a relatively small number of individuals, objects, or events is selected and analyzed to find out something about the entire population from

which is selected." The sampling technique, on the other hand, refers to the procedure used to pick a sample that is considered representative of the community. The results of a larger sample are more representative of the population (Patton, 2002).

Stratified proportionate random sampling techniques was utilized to choose the sample and estimate overall population parameters more precisely, resulting in a more representative sample. Simple random sampling was utilized to choose 120 respondents for the study. The sample error in the population was decreased by using a random sampling frequency.

This study used Yamane's (1967) equations, which yield the desired sample from the formulae stated below.

$$n = \frac{N}{1 + Ne^2}$$

Where

N=Target Population

n= Sample Size

e= level of precision set at 10%

TABLE 3.2 SAMPLE DESIGN

Category	**Target Population**	**Sample size**
Procurement officers	66	40
Operations officers	66	40
Finance officers	66	40
Total	**198**	**120**

Source: Author (2021)

3.5 Research Instruments

A questionnaire was used to collect data for analysis. The questionnaire was based on the study variables and was organized into 5 sections. Section 1 collected data on the demographic characteristics of the study participants. Sections 2 to 5 collected data on each of the independent variables while section six collected data on the dependent variable of the study. The questions in sections 1 to 6 were based on a 5-point Likert Scale. Questionnaires were preferred because they are easy to administer. They can also collect a lot of information in line with the gaps identified in the literature review.

3.6 Validity and Reliability of the Instrument

Kothari (2017) asserts that "the degree to which an instrument measure what it is supposed to measure and can also be thought as utility indicates the validity of the instrument." On its part, reliability is "the degree to which measures are free from error and in effect yield consistent results" (Mugenda & Mugenda, 2013).

The validity of the constructed questionnaires was ensured by adequate coverage of the topic under inquiry, as per expert recommendations. Expert opinion was used to verify the content and format of an instrument to judge its validity, according to Mugenda and Mugenda, (2013). The construct validity of the study was determined by precisely describing the variables to be measured.

The test-retest method of assessing data dependability, according to Mugenda and Mugenda, (2013), entails presenting the same instrument to the same group of individuals twice. The instruments' reliability was assessed using Cronbach Alpha reliability test. This is a coefficient that ranges from 0 to 1 with the acceptable cut-off point being 0.7 and above. The α values obtained in this study as shown in Table 3.3

ranged from 0.771 to 0.879 which shows that the questionnaire could be relied upon to produce consistent results.

TABLE 3.3 RELIABILITY TEST

Item	No. of Items	Cronbach Alpha (α)
Supplier Alliance	5	0.879
Cost Control Practices	5	0.813
Risk Management Practices	5	0.771
Technology Adoption	5	0.816
Performance of KTDA Factories	5	0.837

Source: Author (2021)

3.7 Data Collection Procedure

The researcher began by recruiting two research assistants. These were trained on how to administer the research instruments. Thereafter, the researchers visited the factories and request permission to administer the questionnaires. The procedure of dropping and picking afterward were used for the questionnaires. After 1 week the researcher and the research assistants revisited the factories and collect the questionnaires.

3.8 Data Processing and Analysis

Data must be analyzed and presented in a way that can be discussed to be valuable. To draw inferences and make generalizations about the population, the researcher used descriptive statistics. SPSS software was used to obtain mean, frequencies, descriptive, and inferential statistics for the study. To link the independent factors to the dependent variable, a multiple linear regression model was utilized as follows:

$$Y=\beta_0+\beta_1X_1+ \beta_2X_2+ \beta_3X_3+ \beta_4X_4+e$$

Where:

Y= Performance

X_1= Supplier Alliance

X_2= Cost Control Practices

X_3= Risk Management Practices

X_4= Technology Adoption

B_0= constant

$\beta_1, \beta_2, \beta_3, \beta_4$ = are regression coefficients to be estimated

3.8.1 Diagnostic Tests

Prior to the regression analysis, selected diagnostic tests was undertaken. These include normality, linearity, autocorrelation, multicollinearity test, and tests for heteroscedasticity.

CHAPTER FOUR

PRESENTATION, INTERPRETATION AND ANALYSIS OF DATA

4.1 Introduction

The goal of this study was to see how procurement management practices affected KTDA's performance. This chapter entails presentation, interpretation and analysis of data. It contains sections on response rate, demographic information of the study participants, analysis of data based on the study variables, namely supplier alliances, procurement cost control practices, procurement risk management practices, technology adoption, procurement processes and performance of KTDA factories. It also contains a section on Diagnostic Tests, correlation analysis and model fitting.

4.2 Response Rate

The sample for the study was 66 procurement officers, 66 operations officers and 66 finance officers from each KTDA factory. A total of 198 people were contacted, with 177 responding. As a result, the response rate was 89.4 percent. The research deemed this sufficient and moved on to data analysis.

TABLE 4.1 RESPONSE RATE

Sample	Responded	Percentage
198	177	89.4%

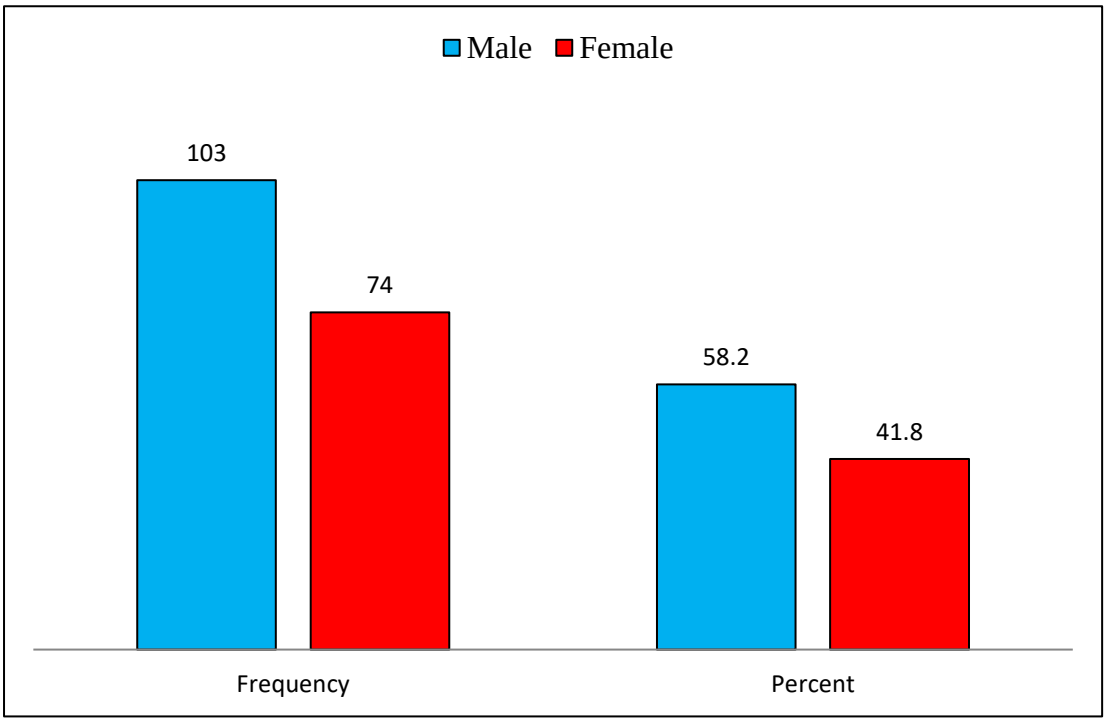
4.3 Demographic Information

The study sought to establish duration of work at KTDA, position at KTDA, academic qualification and gender of Respondents. This section presents the findings obtained.

4.3.1 Gender of Respondents

The study sought to find the gender of the respondents. The findings show that 58.2 % were male while 41.8% of the respondents were female (Figure 4.1). The analysis implies that KTDA is male dominated indicating gender imbalance in the sector.

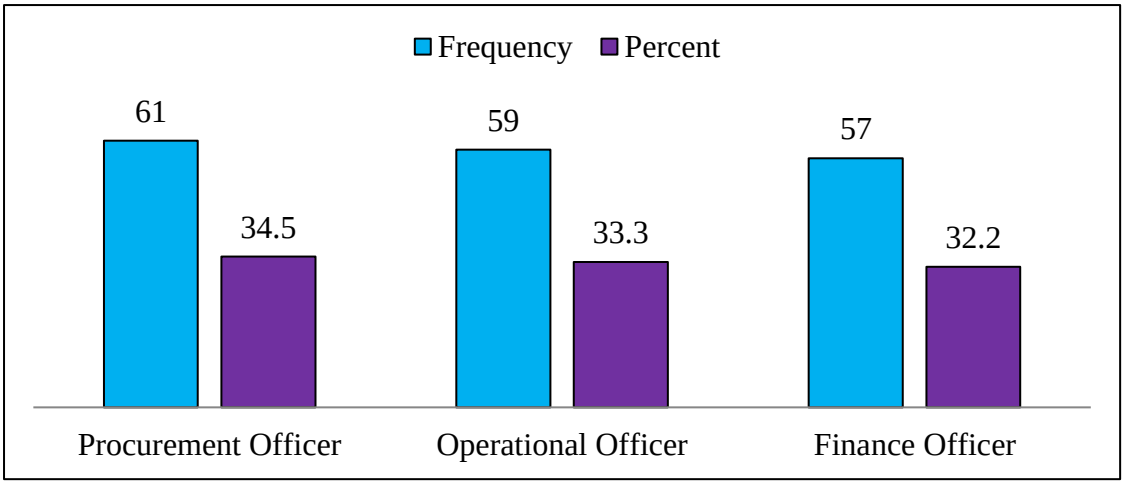
FIGURE 4.1 GENDER OF RESPONDENTS



4.3.2 Position at KTDA

The study sought to find out the various positions held by the respondents at KTDA. The findings show that 34.5% of respondents were procurement officers. Operational officers followed at 33.3% while finance officers came third at 32.4% as shown in Figure 4.2. This implies that the study targeted the right population in determining how procurement management practices affected KTDA's performance.

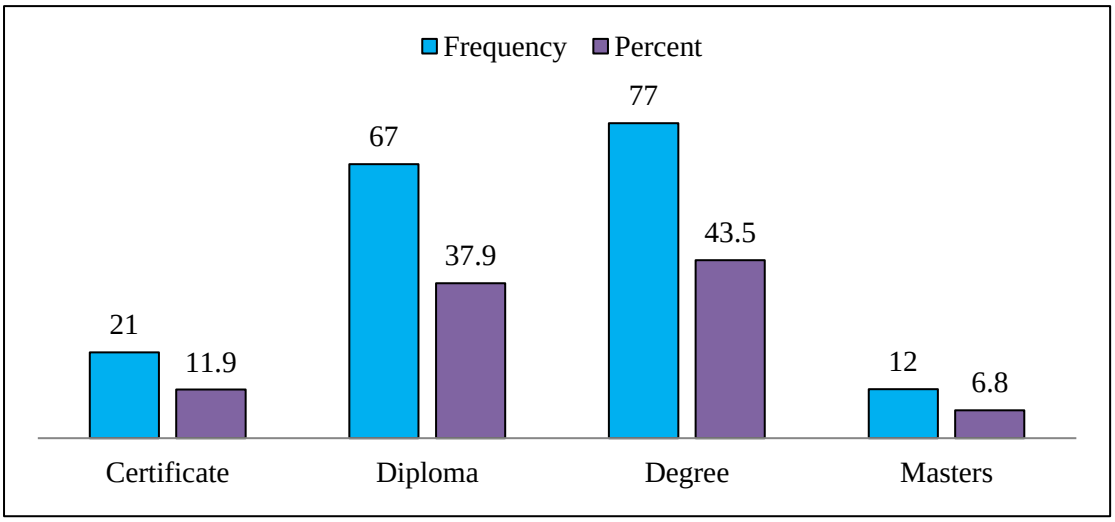
Figure 4.2 POSITION AT KTDA



4.3.3 Academic Qualification

According to the findings, the majority of respondents (43.5%) had a bachelor's degree, followed by 37.9% who had a diploma, and 11.9 percent who had a certificate. Those with a master's degree accounted for 6.8% of the total. All the respondents were well educated, thus had the necessary qualifications to carry roles in procurement as shown in Figure 4.3.

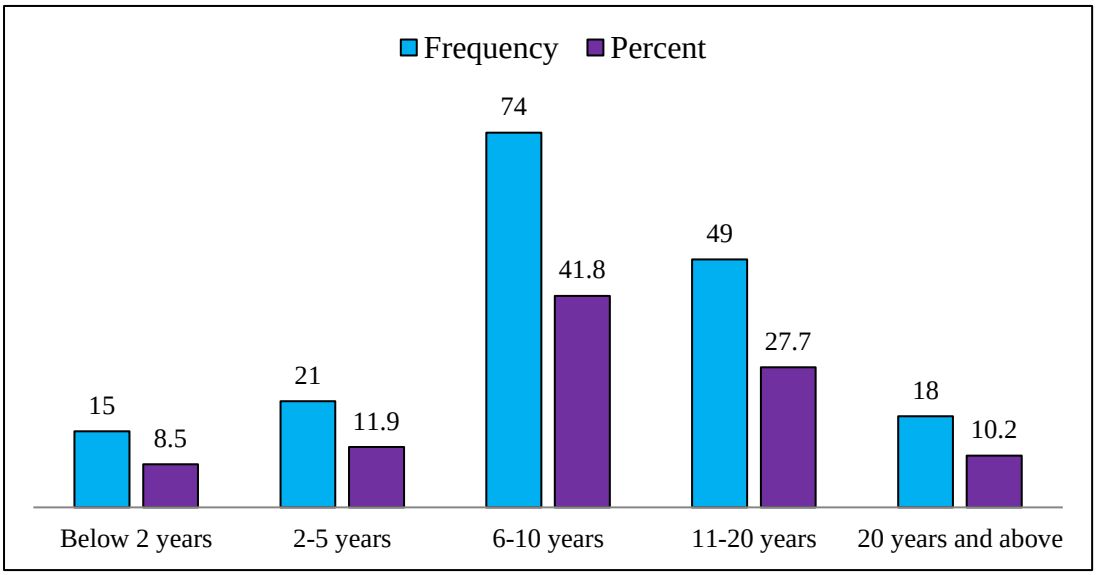
FIGURE 4.3 ACADEMIC QUALIFICATION



4.3.4 Duration of work at KTDA

The sought to find out how long the respondents had worked at KTDA. According to the findings the majority of respondents (41.8 %) had worked for the same company for 6-10 years. This was followed by 27.7 % who had been employed for 11 to 20 years. They were followed by individuals who had worked for 2 to 5 years, who accounted for 11.9 % of the total. As indicated in Table 4.5, just 8.5 % had worked for less than two years, while 10.2 % had worked for more than 20 years. This shows that "most of the respondents had worked for KTDA long enough to make significant contributions to the subject under investigation. Also, they had worked for different periods to make informed decisions on the study subject."

FIGURE 4.4 DURATION OF WORK AT KTDA



4.4 Study Variables

This section presents the findings of the study. This is done in line with the study objectives.

4.4.1 Supplier Alliance

The first objective of the study was to assess the effect of supplier alliance on the performance of the Kenya Tea Development Agency. Data was collected using questionnaires. The questionnaires had psychometric test statements on a scale of 1-5 where 1-to a very low extent; 2-to a low extent; 3- to a moderate extent; 4-to a high extent and; 5-to a very high extent. Open-ended questions were also added to each section to obtain extra information on the study subject. To begin with, the level of agreement with each psychometric scale statement was examined using Means (M). The findings are presented in Table 4.2.

TABLE 4.2 SUPPLIER ALLIANCE

Descriptive Statistics					
	N	Min	Max	Mean	Std. Dev.
KTDA has alliances with key suppliers	177	4.00	5.00	4.87	.34
KTDA keeps a database of key suppliers	177	4.00	5.00	4.89	.32
Partnership with key suppliers reduces lead times	177	4.00	5.00	4.87	.34
It is possible to procure cheaply from key suppliers	177	4.00	5.00	4.89	.32
Key suppliers enhance the procurement of superior products	177	4.00	5.00	4.88	.32

When asked whether KTDA had alliances with key suppliers the respondents agreed to a high extent with a mean score of 4.87. On whether KTDA keeps a database of key suppliers the mean was 4.89. Whether KTD's partnership with key suppliers reduced lead times, they agreed to a high extend with a mean score of 4.87. When asked whether it was possible to procure cheaply from key suppliers, the respondents agreed to a high extend with a mean score of 4.89. And finally, whether key suppliers enhanced

the procurement of superior products, they agreed to a high extent with a mean score of 4.88. The findings imply that supplier alliance affected the performance of the Kenya Tea Development Agency. These findings are in general agreement with the findings of Gibbs and Humphries (2009) who posits that "supplier alliance represent a significant move of developing alternative ways of competing in response to changes in market conditions, based on the realization that more and more competencies and resources required for sustained performance are located outside the firm's boundaries, in the hands of other entities."

When asked "in which other ways do Supplier Alliance affect the financial performance of your business?" the respondents indicated that supplier alliance strengthened the business relationship. This finding is in line with the finding by Vandaie & Zaheer (2015) who posited that such partnership benefits resource-poor firms as they receive more receive from their resource-rich partners. In addition, the participants pointed out that when companies listen to their suppliers and consumers through a cooperative problem-solving system, their respect for the partners will be favorably appreciated, allowing them to retain strong ties with them. This in turn allows information sharing between upstream and downstream companies which are more essential so that companies may quickly alter their innovation strategy (Yu et al., 2019).

Furthermore, the findings show that the respondents favored horizontal integration with more than two companies because it was advantageous. It increased market power or market share, decreased competition, and other synergies especially in sourcing inputs such as fertilizers and machinery from international markets. These findings echo the findings by Fang et al., (2016) which observed that dyadic structures perform better when the upstream market is more competitive. In the tea sector, the upstream market quite competitive because of multinationals such as UNILIVER

commanding a huge market shares. Therefore, “for KTDA factories to remain competitive in the market, then they need to invest more in supplier alliance.”

4.4.2 Cost Control Practices

The second objective of the study was to “determine the effect of procurement cost control practices on the performance of KTDA.” First and foremost, the respondents were presented with likert scale statements and their level of agreement explained using Means (M). The findings are presented in table 4.3.

TABLE 4.3 COST CONTROL PRACTICES

Descriptive Statistics					
	N	Min	Max	Mean	Std. Dev.
KTDA has clear policies for controlling the cost of procurement processes	177	3.00	5.00	4.73	0.53
Procurement at KTDA undertaken within the allocated budget and rarely exceeds it	177	3.00	5.00	4.69	0.54
There are qualified procurement officers who ensures financial efficiency in procurement processes	177	3.00	5.00	4.66	0.55
KTDA regularly evaluates procurement management practices to identify potential areas for financial wastage	177	3.00	5.00	4.63	0.56
KTDA keeps a lean staff to avoid the costs associated with running procurement management practices	177	3.00	5.00	4.64	0.56

The respondents were asked whether KTDA had clear policies for controlling the cost of procurement processes, they agreed to a high extent with a mean score of 4.73. On whether procurement at KTDA was undertaken within the allocated budget and rarely exceeded the mean score was 4.69. Whether there were qualified procurement officers who ensured financial efficiency in procurement processes, they agreed to a high extent with a mean score of 4.66. When asked whether KTDA regularly evaluated procurement management practices to identify potential areas for financial

wastage, the respondents agreed to a high extent with a mean score of 4.63. And finally, whether KTDA kept a lean staff to avoid the costs associated with running procurement management practices, they agreed to a high extent with a mean score of 4.64. The analysis implies that "procurement cost control practices affected the performance of KTDA to a high extent." These findings are in general agreement with the findings of Rugutt (2018) who posits that "financial performance of KTDA managed tea factories in terms of performance continue being poor procurement cost control."

When asked "In which other ways do procurement cost control practices affect the financial performance of your business?" the participants pointed out that transaction cost was the main factor. The findings indicate that transaction costs affected performance of KTDA. The respondents also pointed out that" fixed assets had an impact on the performance of KTDA" and that "some factories were lying idle. In addition, the findings showed that factories with big out grower farms were profitable to operate." This is in agreement with the findings by Zhao et al., (2018) who showed that "Urban Rail Transit (URT) in densely populated cities was profitable."

4.4.3 Risk Management Practices

The third objective of the study was to "examine the effect of procurement risk management practices on the performance of KTDA." The study findings from psychometric scale statement are shown in Table 4.4.

TABLE 4.4 RISK MANAGEMENT PRACTICES

Descriptive Statistics					
	N	Min	Max	Mean	Std. Dev.
KTDA has clear guidelines on how to mitigate procurement risks which is crucial in enhancing the performance of procurement	177	3.00	5.00	4.71	0.54
KTDA has risk and quality control officers which has translated into efficiency in the supply chain	177	3.00	5.00	4.67	0.55
KTDA invests in regular auditing of procurement processes to mitigate the risk associated with procurement	177	3.00	5.00	4.63	0.56
Reduction in procurement risks has led to enhanced performance at KTDA	177	3.00	5.00	4.58	0.63
There are regular training initiatives on how to control procurement risk at KTDA	177	3.00	5.00	4.56	0.63

The respondents were asked whether KTDA had clear guidelines on how to mitigate procurement risks which is crucial in enhancing the performance of procurement, they agreed to a high extent with a mean score of 4.71. On whether KTDA had risk and quality control officers which translated into efficiency in the supply chain, the mean score was 4.67. Whether KTDA invested in regular auditing of procurement processes to mitigate the risk associated with procurement, they agreed to a high extent with a mean score of 4.63. When asked whether reduction in procurement risks had led to enhanced performance at KTDA, the respondents agreed to a high extent with a mean score of 4.58. And finally, whether "there were regular training initiatives on how to control procurement risk at KTDA," they agreed to a high extent with a mean score of

4.56. The analysis implies that procurement risk management practices had a great effect on the performance of KTDA. This finding is in agreement with Russill (2008) who indicated that “ignoring procurement risk management can have serious economic effects and the organization may underperform or may not survive, as a consequence.”

When asked “In which other ways do procurement risk management practices rates affect the performance of your business?” the majority of respondents highlighted numerous procurement risk management techniques that have an influence on the organization's performance. Procurement risk management methods such as dual sourcing and regular talks with suppliers, for example, may be used to anticipate supply risks such as quality and supply chain interruptions. This is in agreement with the fact that there is a need for a structured risk management capability within the procurement organization since procurement has become a major focal point for companies’ risk management concerns (Accenture, 2010).

The respondents also discussed the advantages of procurement risk management for an organization, emphasizing the relevance of procurement to a company's strategic agenda and the value the procurement profession can bring to strategic commercial choices. For example, contributing to choices such as outsourcing business processes and operations, this may be made without procurement experience. Such decisions always have “a beneficial influence on the performance of an organization's supply network” (CIPS, 2013).

4.4.4 Technology Adoption

The last objective of the study was to explore the effect of technology adoption in procurement processes on the performance of KTDA. The findings from psychometric scale statements are presented in Table 4.5.

TABLE 4.5 TECHNOLOGY ADOPTION

Descriptive Statistics					
	N	Min	Max	Mean	Std. Dev.
KTDA has invested on various technologies to enhance efficiency along the supply chain	177	3.00	5.00	4.55	0.63
KTDA has a dedicated procurement management system through which one can track activities along the supply chain	177	3.00	5.00	4.65	0.61
There is elaborate research on potential technologies to deploy in procurement processes.	177	3.00	5.00	4.63	0.62
The integration of technologies in procurement processes has contributed to better performance	177	3.00	5.00	4.55	0.66
There is regular training of employees on the use of technologies in procurement processes at KDTA	177	3.00	5.00	4.58	0.57

The respondents were asked whether KTDA had invested on various technologies to enhance efficiency along the supply chain, they agreed to a high extent with a mean score of 4.55. On whether KTDA had a dedicated procurement management system through which one could track activities along the supply chain, the mean score was 4.65. Whether there was elaborate research on potential technologies to deploy in procurement processes, they agreed to a high extent with a mean score of 4.63. When asked whether the integration of technologies in procurement processes had contributed to better performance, the respondents agreed to a high extent with a mean score of 4.55. And finally, whether there was regular training of employees on the use of technologies in procurement processes at KDTA, they agreed to a high extent with a mean score of 4.58. The analysis implies that technology adoption in procurement processes had a great effect on the performance of KTDA. This finding is

in agreement with the findings of Belisari et al. (2020) in Italy. The researchers posited that that "excellent procurement management practices (PMP) through technology aids in the stimulation of crucial information flow between the purchaser and supplier, the stabilization of purchasing processes, and the improvement of competitive advantage as well as enhanced financial performance." Similarly, Magnus (2016) in Sweden showed that "businesses with efficient procurement processes (technology) had the propensity to establish quality standards and excellence in customer service."

The respondents were asked "in which other ways does technology adoption affect the performance of your business?" They highlighted numerous effects of technology adoption on the performance the business. Majority of the respondents observed that procurement processes, when backed up with technology created competitive advantages. In this regard, the use of e-procurement enhanced the optimization of partnerships with suppliers and contributed to the performance of firm. This is in line with Madzimure et al., (2020) who posited that "in South Africa, e-procurement enhanced the performance of SMEs."

Furthermore, the respondents were in agreement that technology connects all operations in procurement, including information sources. This is crucial in procurement because currently, "competition is dictated by how well organizations connect their operations with their supply chain partners" (Kumar & Ganguly, 2020). This is because technology builds strong long-term business relationships with vendors and other strategic partners resulting in the benefits, such as reduced delivery times, enhanced financial efficiency, increased customer loyalty, and supplier confidence (Chen, Xiao, & Zhu, 2021). The respondents also observed that "partnership with key suppliers played pivotal roles in reducing costs; which goes on to enhance the performance of the firm" (Anane, 2019).

4.4.5 Performance of KTDA Factories

The dependent variable in the study was performance of KTDA factories. Data was collected using psychometric scale statements as presented in Table 4.6 in addition to open-ended questions.

TABLE 4.6 PERFORMANCE OF KTDA FACTORIES

Descriptive Statistics					
	N	Min	Max	Mean	Std. Dev.
Procurement management processes have translated into increased profits at KTDA	177	3.00	5.00	4.58	0.65
There have been increases in production at KTDA factories due to efficiency in procurement management	177	3.00	5.00	4.55	0.66
There has been an increase in sales at KTDA due to efficiency in procurement management	177	3.00	5.00	4.59	0.57
There are increased returns on investments at KTDA due to efficient procurement management practices	177	3.00	5.00	4.52	0.66
The assets of KTDA have increased significantly due to efficient procurement management practices	177	3.00	5.00	4.51	0.66

The participants were asked whether procurement management processes had translated into increased profits at KTDA, they agreed to a high extent with a mean score of 4.58. On whether there had been increases in production at KTDA factories due to efficiency in procurement management, the mean score was 4.55. Whether KTDA invested in regular auditing of procurement processes to mitigate the risk associated with procurement, they agreed to a high extent with a mean score of 4.63. When asked whether there had been an increase in sales at KTDA due to efficiency in procurement management, the respondents agreed to a high extent with a mean score of 4.59. On whether there were increased returns on investments at KTDA due to efficient procurement management practices, the respondents agreed to a high extent

with a mean score of 4.52. And finally, whether the assets of KTDA had increased significantly due to efficient procurement management practices, they agreed to a high extent with a mean score of 4.51. The analysis implies that procurement management practices had a great effect on the performance of KTDA. These findings are in agreement the findings by Muthoka and Oduor (2018) who showed that "procurement management contributes positively towards organization performance." Similar studies by Adigbole, et al., (2020) showed that "strategic procurement management specifically, cost management strategies improved performance and competitiveness of organization."

When asked "in which other ways has procurement management affected the performance of KTDA?" the respondents highlighted numerous procurement management practices that affected the performance of KTDA. The respondents were in agreement that "organizational performance encompassed three specific areas of firm outcomes as highlighted" by Richard et al., (2009): financial performance (profits, return on assets, return on investment.); product market performance (sales, market share.); and Shareholder return (total shareholder return, economic value added. business policy. Majority of the participants pointed out that procurement management policy affected the performance of KTDA. Corporate governance characteristics were the main determinants of how employees in the procurement department executed their work and hence KTDA performance. In this regard, "the lack of good procurement practices had resulted in procurement spending losses. For example, with the procurement of Continuous Fermenting Machines, KTDA lost a total of Kshs. 130,000,000" (Gitonga & Nyasato, 2006).

4.5 Diagnostic Tests

Various diagnostic tests were carried in this study prior to regression analysis. These included tests for normality, heteroscedasticity, autocorrelation in addition to multicollinearity.

4.5.1 Normality Test

Kolmogorov-Smirnov and Shapiro-Wilk normally tests were carried out. The findings as presented in Tables 4.7 show that since the significance value of Shapiro-Wilk Test was <0.05, "the data significantly deviated from normal for all factors against the dependent variable" (Performance of KTDA Factories).

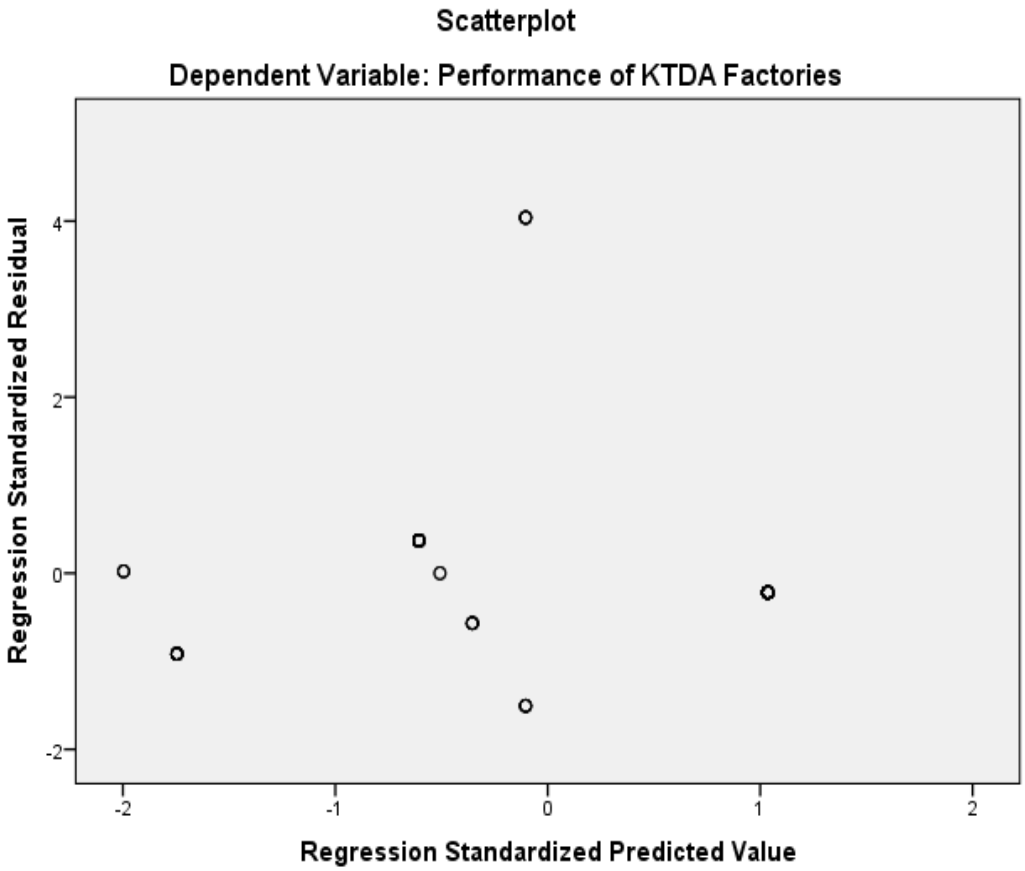
TABLE 4.7 NORMALITY TEST

Tests of Normality[a]							
	Technology Adoption	Kolmogorov-Smirnov[b]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Performance of KTDA Factories	To a high extent	.502	58	.000	.457	58	.000
	To a very high extent	.540	104	.000	.190	104	.000
a. Performance of KTDA Factories is constant when Technology Adoption = To a moderate extent. It has been omitted.							
b. Lilliefors Significance Correction							

4.5.2 Heteroscedasticity

As shown in Figure 4.6, there was no heteroscedasticity problem as shown by the lack of a clear pattern in the scatter plot. Regression analysis could thus be carried out.

FIGURE 4.5 TEST FOR HETEROSCEDASTICITY



4.5.3 Durbin-Watson Test for Autocorrelation

A value of 0.407 was obtained in the Durbin Watson statistic. This is indicative of the fact that there was a positive autocorrelation between the independent variables and Performance of KTDA Factories as presented in Table 4.8.

TABLE 4.8 DURBIN-WATSON

Model Summary[b]	
Model	Durbin-Watson
1	.407
a. Predictors: (Constant), Technology Adoption, Supplier Alliance, Cost Control Practices , Risk Management Practices	
b. Dependent Variable: Performance of KTDA Factories	

4.5.4 Test for Multicollinearity

In this study, the Variance Inflation Factor (VIF) values were all below 10. It is thus evident that there was no Multicollinearity problem. Inferential statistics could thus be carried out to test the relationships between the study variables more.

TABLE 4.9 TEST FOR MULTICOLLINEARITY

Coefficients[a]			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Supplier Alliance	.422	3.107
	Cost Control Practices	.618	5.902
	Risk Management Practices	.529	5.459
	Technology Adoption	.618	5.902
a. Dependent Variable: Performance of KTDA Factories			

4.5.5 Correlation Analysis

Pearson correlation analysis was undertaken to find out if there were significant relationships between the dependent and independent variables. The findings show that all the dependent variables had significant relationships with Performance of KTDA Factories as follows: Supplier Alliance, $r=0.892$, $p<0.05$; Cost Control Practices, $r=0.827$, $p<0.05$; Risk Management Practices, $r=0.862$, $p<0.05$; and Technology Adoption, $r=0.844$, $p<0.05$). The study went on to carry out regression analysis to find out the level to which the dependent variable could be predicted by the independent variables.

TABLE 4.10 PEARSON CORRELATION

Correlations						
		Supplier Alliance	Cost Control Practices	Risk Management Practices	Technology Adoption	Performance of KTDA Factories
Performance of KTDA Factories	Pearson Correlation	.892**	.827**	.862**	.844**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	177	177	177	177	177
**. Correlation is significant at the 0.01 level (2-tailed).						

4.6 Model Fitting

Regression analysis was carried out to find out the level to which performance of KTDA factories could be predicted. This section presents the coefficient of determination, Analysis of Variance and regression coefficients.

4.6.1 Model Summary

The findings as presented in Table 4.11 show that the independent variables (Supplier Alliance, Cost Control Practices, Risk Management Practices and Technology Adoption,) could explain 87.7% of economic growth in Kenya (R Squared = 0. 877). An adjusted R2 value of 0.874 was obtained. This shows that in this study "the population from which the study sample was obtained could explain 87.4% variance in the performance of KTDA Factories."

TABLE 4.11 MODEL SUMMARY

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.936[a]	.877	.874	.22341
a. Predictors: (Constant), Technology Adoption, Supplier Alliance, Cost Control Practices , Risk Management Practices				
b. Dependent Variable: Performance of KTDA Factories				

4.6.2 Analysis of Variance

Table 4.12 shows that the combined influence of the independent variables could statistically and significantly predict Performance of KTDA Factories (F= 305.931, $p<0.05$).

TABLE 4.12 ANALYSIS OF VARIANCE

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	61.076	4	15.269	305.931	.000[b]
	Residual	8.585	172	.050		
	Total	69.661	176			
a. Dependent Variable: Performance of KTDA Factories						
b. Predictors: (Constant), Technology Adoption, Supplier Alliance, Cost Control Practices , Risk Management Practices						

4.6.3 Regression Coefficients

From the regression coefficient, it is clear that the independent variables could statistically predict Performance of KTDA Factories (P values <0.05). Standardized Beta Coefficient (P<0.05) indicate that an increase in Supplier Alliance by 0.538; Cost Control Practices by -0.250; Risk Management Practices by 0.406 and; Technology Adoption by 0.300 would lead to increase in Performance of KTDA Factories by 1 unit each. When fitted, the regression model was as shown below.

Performance of KTDA Factories = -1.287 + 0.807 Supplier Alliance - 0.302* Cost Control Practices + 0.460*Risk Management Practices + 0.299*Technology Adoption + 0.201.*

TABLE 4.13 REGRESSION COEFFICIENTS

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.287	.201		-6.415	.000
	Supplier Alliance	.807	.069	.538	11.741	.000
	Cost Control Practices	-.302	.122	-.250	-2.471	.014
	Risk Management Practices	.460	.121	.406	3.788	.000
	Technology Adoption	.299	.057	.300	5.266	.000
a. Dependent Variable: Performance of KTDA Factories						

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This part provides a summary of the study findings. It also presents the conclusion as well as recommendations arising from such conclusions.

5.2 Summary

This section presents the summary of the study. This is done in line with the objectives of the study.

5.2.1 Supplier Alliance

The first objective of the study was to assess the effect of supplier alliance on the performance of the Kenya Tea Development Agency. The findings show that KTDA had alliances with key suppliers (mean score of 4.87). On whether KTDA keeps a database of key suppliers the mean was 4.89. Whether KTD's partnership with key suppliers reduced lead times, they agreed to a high extend with a mean score of 4.87. When asked whether it was possible to procure cheaply from key suppliers, the respondents agreed to a high extend with a mean score of 4.89. And finally, whether key suppliers enhanced the procurement of superior products, they agreed to a high extent with a mean score of 4.88. The findings imply that "supplier alliance affected the performance of the Kenya Tea Development Agency."

When asked "in which other ways do Supplier Alliance affect the financial performance of your business?" the respondents indicated that supplier alliance strengthened the business relationship. The participants also pointed out that when companies listen to their suppliers and consumers through a cooperative problem-

solving system, their respect for the partners will be favorably appreciated, allowing them to retain strong ties with them.

Furthermore, the findings show that the respondents favored horizontal integration with more than two companies because it was advantageous. It increased market power or market share, decreased competition, and other synergies especially in sourcing inputs such as fertilizers and machinery from international markets. In the tea sector, the upstream market quite competitive because of multinationals such as UNILIVER commanding a huge market shares. Therefore, "for KTDA factories to remain competitive in the market, then they need to invest more in supplier alliance."

5.2.2 Cost Control Practices

The second objective of the study was to "determine the effect of procurement cost control practices on the performance of KTDA." The respondents were asked whether KTDA had clear policies for controlling the cost of procurement processes, they agreed to a high extent with a mean score of 4.73. On whether procurement at KTDA was undertaken within the allocated budget and rarely exceeded the mean score was 4.69. Whether there were qualified procurement officers who ensured financial efficiency in procurement processes, they agreed to a high extent with a mean score of 4.66. When asked whether KTDA regularly evaluated procurement management practices to identify potential areas for financial wastage, the respondents agreed to a high extent with a mean score of 4.63. And finally, whether KTDA kept a lean staff to avoid the costs associated with running procurement management practices, they agreed to a high extent with a mean score of 4.64. The analysis implies that "procurement cost control practices affected the performance of KTDA to a high extent."

When asked “In which other ways do procurement cost control practices affect the financial performance of your business?” the participants pointed out that transaction cost was the main factor. The findings indicate that transaction costs affected performance of KTDA. The respondents also pointed out that fixed assets had an impact on the performance of KTDA and that some factories were lying idle. In addition, “the findings showed that factories with big out grower farms were profitable to operate.”

5.2.3 Risk Management Practices

The third objective of the study was to “examine the effect of procurement risk management practices on the performance of KTDA.” The respondents were asked whether KTDA had clear guidelines on how to mitigate procurement risks which is crucial in enhancing the performance of procurement, they agreed to a high extent with a mean score of 4.71. On whether KTDA had risk and quality control officers which translated into efficiency in the supply chain, the mean score was 4.67. Whether KTDA invested in regular auditing of procurement processes to mitigate the risk associated with procurement, they agreed to a high extent with a mean score of 4.63. When asked whether reduction in procurement risks had led to enhanced performance at KTDA, the respondents agreed to a high extent with a mean score of 4.58. And finally, whether there were regular training initiatives on how to control procurement risk at KTDA, they agreed to a high extent with a mean score of 4.56. The analysis implies that “procurement risk management practices had a great effect on the performance of KTDA.”

When asked “In which other ways do procurement risk management practices rates affect the performance of your business?” the majority of respondents highlighted

numerous procurement risk management techniques that have an influence on the organization's performance. Procurement risk management methods such as dual sourcing and regular talks with suppliers, for example, may be used to anticipate supply risks such as quality and supply chain interruptions.

The respondents also discussed the advantages of procurement risk management for an organization, emphasizing the relevance of procurement to a company's strategic agenda and the value the procurement profession can bring to strategic commercial choices. For example, contributing to choices such as outsourcing business processes and operations, this may be made without procurement experience.

5.2.4 Technology Adoption

The last objective of the study was to explore the effect of technology adoption in procurement processes on the performance of KTDA. The respondents were asked whether KTDA had invested on various technologies to enhance efficiency along the supply chain, they agreed to a high extent with a mean score of 4.55. On whether KTDA had a dedicated procurement management system through which one could track activities along the supply chain, the mean score was 4.65. Whether there was elaborate research on potential technologies to deploy in procurement processes, they agreed to a high extent with a mean score of 4.63. When asked whether the integration of technologies in procurement processes had contributed to better performance, the respondents agreed to a high extent with a mean score of 4.55. And finally, whether there was regular training of employees on the use of technologies in procurement processes at KDTA, they agreed to a high extent with a mean score of 4.58. The analysis implies that “technology adoption in procurement processes had a great effect on the performance of KTDA.”

The respondents were asked “in which other ways does technology adoption affect the performance of your business?” They highlighted numerous effects of technology adoption on the performance the business. Majority of the respondents observed that procurement processes, when backed up with technology created competitive advantages. In this regard, the use of e-procurement enhanced the optimization of partnerships with suppliers and contributed to the performance of firm.

Furthermore, the respondents were in agreement that technology connects all operations in procurement, including information sources. This is crucial in procurement because currently, competition is dictated by how well organizations connect their operations with their supply chain partners. This is because technology builds strong long-term business relationships with vendors and other strategic partners resulting in the benefits, such as reduced delivery times, enhanced financial efficiency, increased customer loyalty, and supplier confidence. The respondents also observed that partnership with key suppliers played pivotal roles in reducing costs; which goes on to enhance the performance of the firm.

5.2.5 Performance of KTDA Factories

The dependent variable in the study was performance of KTDA factories. The participants were asked whether procurement management practices had translated into increased profits at KTDA, they agreed to a high extent with a mean score of 4.58. On whether there had been increases in production at KTDA factories due to efficiency in procurement management, the mean score was 4.55. Whether KTDA invested in regular auditing of procurement processes to mitigate the risk associated with procurement, they agreed to a high extent with a mean score of 4.63. When asked whether there had been an increase in sales at KTDA due to efficiency in procurement

management, the respondents agreed to a high extent with a mean score of 4.59. On whether there were increased returns on investments at KTDA due to efficient procurement management practices, the respondents agreed to a high extent with a mean score of 4.52. And finally, whether the assets of KTDA had increased significantly due to efficient procurement management practices, they agreed to a high extent with a mean score of 4.51. The analysis implies that procurement management practices had a great effect on the performance of KTDA. When asked "In which other ways has procurement management affected the performance of KTDA?" the respondents highlighted numerous procurement management practices that affected the performance of KTDA. The respondents were in agreement that organizational performance encompassed three specific areas of firm outcomes such as financial performance (profits, return on assets, return on investment.); product market performance (sales, market share.); and Shareholder return (total shareholder return, economic value added. business policy. Majority of the participants pointed out that procurement management policy affected the performance of KTDA. Corporate governance characteristics were the main determinants of how employees in the procurement department executed their work and hence KTDA performance. In this regard, the lack of good procurement practices had resulted in procurement spending losses. For example, with "the procurement of Continuous Fermenting Machines, KTDA lost a total of Kshs. 130,000,000."

5.3 Conclusions

It is evident that procurement management practices had significant effects on the performance of KTDA. In this regard, there were significant relationships between the performance of KTDA factories and independent variables as follows: supplier alliance,

r=0.892, p<0.05; cost control practices, r=0.827, p<0.05; risk management practices, r=0. 862, p<0.05; and technology adoption, r=0. 844, p<0.05). Multivariate regression analysis shows that the dependent variable could be predicted by the independent variables. Analysis of Variance (ANOVA) shows that the combined influence of the independent variables could statistically and significantly predict performance of KTDA Factories (F= 305.931, p<0.05). This leads to the conclusion that supplier alliance, control practices, risk management practices and technology adoption affected the performance of KTDA factories. Strategies aimed at strengthening interventions around these factors could thus enhance the performance of these factories.

5.4 Recommendations

Based on the findings of the study, the following recommendations were made in accordance with the study respondents.

5.4.1 Supplier Alliance

KTDA should keep databases of key suppliers so as to enhance their contribution to the performance of KTDA factories. Regular meetings and forums should be put in place to create rapport with existing and emerging key suppliers.

5.4.2 Cost Control Practices

KTDA should continuously review any areas of wastage in the factories. Budgets should be regularly reviewed to ensure that costs are reduced. In addition, effort should be put in place to procure high quality goods to reduce maintenance costs of machines and items.

5.4.3 Risk Management Practices

There should be due diligence to enhance risk management practices. Staff should be regularly trained on risk management strategies. In addition, there should be effort to ensure that all emergent risks are promptly identified and ways of dealing with them explored.

5.4.4 Technology Adoption

KTDA should always ensure that new technologies are adopted. All obsolete technologies should be passed out systematically and replaced with new ones. A search of the market place for new technology that could create competitive advantages should be undertaken and such technologies promptly adopted.

5.5 Recommendations for Future Research

This study was focused on KTDA factories. The study recommends similar in-depth studies focused on each of the study objectives. It is also pertinent to carry out related studies in other sectors including government entities based on the study variables for comparative purposes

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APPENDIX I QUESTIONNAIRE

Dear respondent,

I am undertaking a study entitled, "the effects of procurement management practices on the performance of KTDA." Please participate in this study by filling in the blank spaces. This study is for academic purposes only and the responses shall be handled confidentially. No identifying information shall be presented in the research findings.

SECTION A: GENERAL INFORMATION

1. Sex: Male [ ] Female [ ]

2. Position at KTDA: Procurement officers [ ] Operational officers [ ] Finance officer [ ] Employee [ ]

3. Duration of work at KTDA: Below 2 years [ ] 2-5 [ ] 6-10 [ ] 10-20 [ ] 20 years and above [ ]

4. Highest academic qualification: Secondary School [ ] Certificate [ ] Diploma [ ] Degree [ ] Post Graduate Diploma [ ] Masters and above [ ] Other [ ] State

SECTION B: SUPPLIER ALLIANCE AND PERFORMANCE AT KTDA

6. On a scale of 1-5 where 1-to a very low extent; 2-to a low extent; 3- to a moderate extent; 4-to a high extent and; 5-to a very high extent, kindly (√) indicating your level of agreement with the following statements regarding supplier alliance at KTDA.

Statements	**1**	**2**	**3**	**4**	**5**
(i) KTDA has alliances with key suppliers					
(ii) KTDA keeps a database of key suppliers					
(iii) Partnership with key suppliers reduces lead times					
(iv) It is possible to procure cheaply from key suppliers					
(v) Key suppliers enhance the procurement of superior products					

7. In which other ways does supplier alliance control practices affect the financial performance of your business? ……
…….....

SECTION C: PROCUREMENT COST CONTROL PRACTICES AND PERFORMANCE AT KTDA

8. On a scale of 1-5 where 1-to a very low extent; 2-to a low extent; 3- to a moderate extent; 4-to a high extent and; 5-to a very high extent, kindly (√) indicating your level of agreement with the following statements regarding procurement cost control practices.

Statements	**1**	**2**	**3**	**4**	**5**
(i) KTDA has clear policies for controlling the cost of procurement processes					
(ii) Procurement at KTDA undertaken within the allocated budget and rarely exceeds it					
(iii) There are qualified procurement officers who ensures financial efficiency in procurement processes					
(iv) KTDA regularly evaluates procurement management practices to identify potential areas for financial wastage					
(v) KTDA keeps a lean staff to avoid the costs associated with running procurement management practices					

9. In which other ways do procurement cost control practices affect the financial performance of your business? ……
…….....
…….....

SECTION D: PROCUREMENT RISK MANAGEMENT PRACTICES AND PERFORMANCE

10. On a scale of 1-5 where 1-to a very low extent; 2-to a low extent; 3- to a moderate extent; 4-to a high extent and; 5-to a very high extent, kindly (√) indicating your level of agreement with the following statements regarding the relationship procurement risk management practices and performance in your business.

Statements	**1**	**2**	**3**	**4**	**5**
(i) KTDA has clear guidelines on how to mitigate procurement risks which is crucial in enhancing the performance of procurement					
(ii) KTDA has risk and quality control officers which has translated into efficiency in the supply chain					
(iii) KTDA invests in regular auditing of procurement processes to mitigate the risk associated with procurement					

(iv)	Reduction in procurement risks has led to enhanced performance at KTDA					
(v)	There are regular training initiatives on how to control procurement risk at KTDA					

11. In which other ways do procurement risk management practices rates affect the performance of your business?

……

……

……

……

SECTION E: TECHNOLOGY ADOPTION AND PERFORMANCE

12. On a scale of 1-5 where 1-to a very low extent; 2-to a low extent; 3- to a moderate extent; 4-to a high extent and; 5-to a very high extent, kindly (√) indicating your level of agreement with the following statements regarding the relationship between technology adoption and performance in your business.

Statements	**1**	**2**	**3**	**4**	**5**
(i) KTDA has invested on various technologies to enhance efficiency along the supply chain					
(ii) KTDA has a dedicated procurement management system through which one can track activities along the supply chain					
(iii) There is elaborate research on potential technologies to deploy in procurement processes.					
(iv) The integration of technologies in procurement processes has contributed to better performance					
(v) There is regular training of employees on the use of technologies in procurement processes at KDTA					

13. In which other ways does technology adoption affect the performance of your business? …….

……

……

SECTION F: PERFORMANCE

14. On a scale of 1-5 where 1-to a very low extent; 2-to a low extent; 3- to a moderate extent; 4-to a high extent and; 5-to a very high extent, kindly (√) indicating your level of agreement with the following statements regarding the performance of KTDA.

Statements	1	2	3	4	5
(i) Procurement management processes have translated into increased profits at KTDA					
(ii) There have been increases in production at KTDA factories due to efficiency in procurement management					
(iii) There has been an increase in sales at KTDA due to efficiency in procurement management					
(iv) There are increased returns on investments at KTDA due to efficient procurement management practices					
(v) The assets of KTDA have increased significantly due to efficient procurement management practices					

15. In which other ways has procurement affected the performance of KTDA? Please explain

……..

……..

Thank You

APPENDIX II LIST OF KTDA FACTORIES

KTDA FACTORIES		
1. CHEBUT	2. KAPKOROS	3. MUNUNGA
4. CHELAL	5. KAPTUMO	6. NDIMA
7. CHINGA	8. KAPSARA	9. NDUTI
10. EBEREGE	11. KAPSET	12. NGERE
13. GACHARAGE	14. KATHANGARIRI	15. NJUNU
16. GACHEGE	17. KEBIRIGO	18. NYAMACHE
19. GATHUTHI	20. KIAMOKAMA	21. NYANKOBA
22. GATUNGURU	23. KIEGOI	24. NYANSIONGO
25. GIANCHORE	26. KIMUNYE	27. OGEMBO
28. GITHAMBO	29. KINORO	30. OLENGURUONE
31. GITHONGO	32. KIONYO	33. RAGATI
34. GITUGI	35. KIRU	36. RIANYAMWAMU
37. IGEMBE	38. KOBEL	39. ROROK
40. IKUMBI	41. KURI	42. RUKURIRI
43. IMENTI	44. LITEIN	45. SANGANYI
46. IRIAINI	47. MAKOMBOKI	48. TEGAT
49. ITUMBE	50. MATAARA	51. THETA
52. KAGWE	53. MICHIIMIKURU	54. THUMAITA
55. KAMBAA	56. MOGOGOSIEK	57. TIRGAGA
58. KANGAITA	59. MOMUL	60. TOMBE
61. KANYENYAINI	62. MUDETE	63. TOROR
64. KAPKATET	65. KAPKOROS	66. WERU