

**THE STRATEGIC ROLE OF THIRD-PARTY LOGISTICS PROVIDERS IN  
ENHANCING PROCUREMENT PERFORMANCE: A CASE STUDY OF COCA  
COLA BEVERAGES LTD NAMANVE**

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**UGANDA CHRISTIAN  
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## DECLARATION

I Mutesi Jackline, declare that this research dissertation titled ‘‘The Role of Third-Party Logistics Providers in Enhancing Procurement: A Case study of CocaCola Beverages Ltd Namanve’’ is my original work and has never been submitted to any other institution for any academic award.

Signed: 

Date: 20th May 2025

## APPROVAL

This is to certify that this dissertation titled "The Role of Third-Party Logistics Providers in Enhancing Procurement: A Case study of CocaCola Beverages Ltd, Namanve" has been submitted with approval as the University Supervisor.

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*21/5/2025*

## **DEDICATION**

This dissertation is lovingly dedicated to my dear parents, whose unwavering support, encouragement and sacrifices have been the cornerstone of my academic journey and my supervisor Mr. Muloosi Pascal for his sacrifices and guidance and support though out the entire journey. I also dedicate it to all procurement and logistics professionals striving to improve efficiency and transparency in supply chain management across Uganda.

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## TABLE OF CONTENTS

DECLARATION.....	i
APPROVAL.....	ii
DEDICATION .....	iii
ACKNOWLEDGEMENT .....	iv
TABLE OF CONTENTS .....	v
LIST OF TABLES .....	viii
LIST OF ABBREVIATIONS.....	ix
ABSTRACT.....	x
CHAPTER ONE .....	1
INTRODUCTION .....	1
1.0. Introduction.....	1
1.1 Background of the study .....	1
1.2 Statement of the problem .....	3
1.3. Research Objectives.....	4
1.4 Research Questions.....	4
1.5.1 Geographical scope.....	5
1.5.2 Time scope. ....	5
1.6 Significance of the study.....	5
CHAPTER TWO .....	8
LITERATURE REVIEW .....	8
2.0 Introduction.....	8
2.1 Third Party Logistics (3PL) .....	8
2.2 Theoretical Framework.....	9
2.3 The Role of 3PL in Enhancing Procurement .....	10

2.3.1. Key benefits of 3PL adoption .....	10
2.3.1.1. Cost Reduction.....	10
2.3.1.2. Improved Lead Times and Dependability in Delivery .....	10
2.3.1.3. Flexibility and Scalability .....	10
2.3.1.4. Access to Specialized Expertise and Technology .....	11
2.3.1.5. Streamlined Sourcing and Supplier Management.....	11
2.4 Impact on the Fulfillment Rate through 3PL Services .....	11
2.5 Impact on Transportation Efficiency of 3PL Services .....	11
2.6 Critical Success Factors for 3PL Implementation in procurement.....	12
2.7 Research gaps.....	13
2.8 Conclusion .....	13
CHAPTER THREE.....	14
RESEARCH METHODS .....	14
3.0 Introduction.....	14
3.3 Sample Size and Sampling Technique .....	15
3.3.1 Sample Size.....	15
3.3.2 Sampling Techniques .....	15
3.4. Data Collection methods.....	16
3.4.1 Primary Data .....	16
3.4.2 Secondary Data .....	16
3.5 Data Analysis .....	16
3.6 Validity and Reliability .....	17
3.6.1 Validity.....	17
3.6.2 Reliability.....	17
3.7 Ethical considerations .....	18
CHAPTER FOUR.....	19

DATA ANALYSIS, PRESENTATION AND INTERPRETATION .....	19
4.0 Introduction.....	19
4.1 Demographic Characteristics of Respondents. ....	19
4.2 Role of Third-Party Logistics Providers .....	20
CHAPTER FIVE .....	23
SUMMARY, CONCLUSION, AND RECOMMENDATIONS .....	23
5.0 Introduction.....	23
5.1 Summary of key Findings.....	23
5.1.1 Role of Third-Party Logistics Providers .....	23
5.1.2 Challenges Associated with 3PL Usage.....	24
5.1.3 Procurement Performance Outcomes.....	24
5.2 Conclusions.....	25
5.3 Recommendations.....	25
5.3.1 For Coca Cola Beverages Ltd .....	25
5.3.2 For the Logistics and Manufacturing Industry in Uganda .....	26
5.4 Areas for Further Research .....	26
REFERENCES .....	27
APPENDICES .....	29
APPENDIX A: QUESTIONNAIRE.....	29

## **LIST OF TABLES**

Table 4.1. Respondents' Demographic Characteristics.....	19
Table 4.2. Role of Third-Party Logistics Providers in Enhancing Procurement.....	20
Table 4.3. Challenges Associated with Third-Party Logistics Providers .....	21
Table 4.4. Procurement Performance Outcomes Resulting from 3PL Engagement .....	22

## **LIST OF ABBREVIATIONS**

3PL - Third-Party Logistics

ERP - Enterprise Resource Planning

KPI - Key Performance Indicator

GDP - Gross Domestic Product

LPO - Local Purchase Order

SLA - Service Level Agreement

SD - Standard Deviation

SPSS - Statistical Package for the Social Sciences

UCU - Uganda Christian University

## **ABSTRACT**

This study investigated the role of third-party logistics providers (3PLs) in enhancing procurement performance, focusing on Coca Cola Beverages Ltd, Namanve. The objectives of the study were to examine the contributions of 3PLs to procurement efficiency, identify challenges faced in utilizing 3PL services, and assess procurement performance outcomes associated with outsourcing logistics operations. A descriptive research design was employed, and data were collected using structured questionnaires administered to 50 staff members across various departments. The findings revealed that 3PLs significantly reduce procurement and logistics costs, improve delivery reliability, and allow internal staff to focus on core procurement functions. However, the study also highlighted challenges such as delays, communication gaps, cost fluctuations and quality issues. The study concluded that while 3PLs play a strategic role in improving procurement processes, effective communication, contract management, and technological integration are crucial for maximizing their impact. It recommends that Coca Cola Beverages Ltd should strengthen its service level agreements and performance evaluation systems to better manage its logistics partners.

## CHAPTER ONE

### INTRODUCTION

#### 1.0. Introduction

This study was about third parties as the independent variable and its role in enhancing procurement or supply chain performance in Uganda as the dependent variables. This chapter presents the background of the study, statement of the problem, the purpose of the study, objectives of the study, research questions, scope of the study, geographical scope, time scope and the significance of the study

#### 1.1 Background of the study

In today's rapidly evolving business environment, organizations constantly seek ways to improve operational efficiency, reduce costs, and enhance service delivery. One strategic approach that has gained prominence globally is the outsourcing of logistics functions to the Third-Party Logistics(3PL) providers. Third-Party Logistics refers to the use of external companies to perform logistics services that traditionally were handled within an origination's internal logistics department (Rushton et al., 2017). These services often include transportation, warehousing, inventory management, distribution and sometimes procurement support, depending on the needs of the client.

The concept of third-party logistics emerged in the United States during the 1970s as firm began to recognize the cost and efficiency benefits of outsourcing non-core activities (Mangan et al.,2016). Initially, 3PL services were limited to basic transportation and warehousing. However, over the decades, the scope of services expanded to include value-added activities such as packaging, order fulfillment, customs clearance, and information management. globally the logistics outsourcing market has grown significantly, driven by globalization, advances in technology and the increasing complexity of supply chains (Lieb & Bentz,2005).

In Africa, the adoption of 3PL services gained momentum in the early 2000s as multinational corporations and regional businesses sought to overcome infrastructural and logistical challenges. Countries like South Africa, Kenya, Nigeria witnessed early uptake. Largely driven by industries such as fast-moving consumer goods (FMCG), Pharmaceuticals and telecommunications (Adebayo, 2017). In Uganda, the concept of third-party logistics is relatively recent, with increased recognition over the past decade due to the growing demands of international trade, urbanization,

and the entry of multinational firms requiring reliable supply chain solutions (Nanyondo & Bananuka,2020).

Within the Ugandan context, Coca-Cola Beverages, particularly its Namanve plant, represents one of the largest and most advanced manufacturing and distribution hubs in East Africa. The company faces significant logistical challenges ranging from poor road infrastructure to complex regulatory requirements. To address these, Coca -Cola has increasingly partnered with 3PL providers for functions such as transportation, warehousing, and procurement support. This strategic move has allowed the company to focus on its core competencies while leveraging the expertise and infrastructure of third-party providers. (Kakooza & Mugenyi, 2021)

Our independent variable, Third-Party Logistics (3PL), is a suite of logistics solutions outsourced with the aim of making the process efficient and cost-saving. They are not merely box-moving activities, they involve complex planning, computerizing, and maximizing the usage of resources. The need for engaging the 3PL provider is the need for enhanced efficiency, decreased costs, and enhanced customer satisfaction. Take the example of the case of coca cola, with the large network for distribution, it has some challenges in the distribution of its products for the retailers in timely manner in diversified geographical terrain. Engaging the 3PL service providers helps them reap the benefit of the expert knowledge in the optimization of routes, the warehousing, and the handling of inventories, while such can help them gain an edge among the business firms with poorly optimized logistics operations. Such outsourcing strategy is important in managing the complexities for the supply chain (Rushton et al., 2017).

The impact of 3PL on procurement and supply chain performance is considerable. Outsourcing the non-core logistics activities to the experts frees the organization to concentrate on the core business activities and procurement strategy. 3PL operators bring in the know-how in transport optimization, warehousing operations, and stock control, leading to substantial cost saving and high service delivery rates. For example, for Coca Cola Beverages Ltd, it translates into an agile and responsive distribution system that delivers their products efficiently and effectively into the retailer (Christopher, 2016). For instance, in comparison with competitors who distribute in-house, through the use of 3PL, Coca Cola is able to make deliveries faster and lower its operational costs.

It is clear from the research that offers that firms utilizing 3PL experience 10-20% reduction in the operational costs on average (Langley et al, 2017).

To make sense of the reason for such outsourcing move, the framework founded on Transaction Cost Economics (TCE) must be taken into consideration. As TCE suggests, companies make such a choice in a bid to reduce the cost of transactions, including the cost of searching for the counterparty, contracting, monitoring, and enforcement of the contract. Taking the cue from TCE, outsourcing logistics operations to 3PL providers is the reasonable option when the in-house cost of carrying out the operations is higher compared to contracting out these operations externally to specialists. By leveraging the economies and experience 3PL providers bring to the table, Coca Cola Beverages Ltd can significantly lower the cost of operations and promote supply chain efficiency, thus adhering to the advice given in the framework under TCE (Williamson, 1985).

While TCE provides the primary theoretical lens, it is also important to acknowledge the relevance of other perspectives. For instance, the Resource-Based View (RBV) highlights the potential for 3PL providers to act as valuable resources, enhancing a firm's competitive advantage. Additionally, Network Theory underscores the importance of the collaborative relationships fostered by 3PL providers in connecting various stakeholders within the supply chain. However, these theories serve to enrich our understanding of the findings from the TCE perspective, rather than taking center stage (Barney,1991; Hakansson & Snehota, 1995). In essence, this study aims to unravel the intricate role of 3PL providers in enhancing procurement and supply chain performance within the unique context of Coca Cola Beverages Ltd in Namanve, Uganda. By grounding our investigation in Transaction Cost Economics, we seek to provide valuable insights into how strategic outsourcing can drive efficiency and effectiveness in a dynamic and developing economy, addressing real-world logistics challenges and providing a comparative analysis within the beverage industry

## **1.2 Statement of the problem**

Coca-cola Beverages LTD Namanve faces persistent procurement and supply chain inefficiencies, including warehousing constraints, transport delays, and poor inventory visibility, which result in elevated operational costs, extended lead times and frequent stockouts (Christopher,2016). These challenges are particularly detrimental in the fast-moving beverage sector, where responsiveness to fluctuating consumer demand is essential, globally, firms are increasingly adopting third party

logistics (3PLs) providers to address such inefficiencies, leveraging their expertise in warehousing, transportation, and integrated supply chain management (Langley et al., 2017). However, while the general advantages of 3PL partnerships are well documented, there remains a significant gap in the literature regarding their specific impact on beverage manufacturers in Uganda. Existing studies rarely offer detailed analyses of how 3PL services affect the performance metrics such as order fulfilment rates, inventory turnover, and logistics responsiveness in emerging market contexts (McKinnon et al., 2015). Thus, there is a need to investigate the role of 3PL providers in enhancing procurement and supply chain performance at CCBL. This study seeks to fill this gap by generating context specific insights to guide strategic logistics decisions in Uganda's beverage and industry (Rushton et al., 2017)

### **1.3. Research Objectives**

The objectives of the study are;

1. To evaluate the impact of 3PL services on the order fulfilment rate of Coca-Cola Beverages Ltd Namanve.
2. To analyze the influence of 3PL services on transportation efficiency.
3. To identify the critical success factors for effective integration of 3PL services in enhancing supply chain performance at Coca-Cola Beverages Namanve.

### **1.4 Research Questions**

1. How does the utilization of 3PL services affect the order fulfilment rate of Coca Cola Beverages Ltd Namanve and what is the quantifiable impact?
2. To what extent do 3PL providers contribute to reducing transportation lead times for Coca-Cola Beverages Ltd Namanve and what are the specific logistical improvements achieved?
3. What are the key factors that contribute to the successful integration of 3PL services in enhancing supply chain performance at Coca-Cola Beverages Ltd Namanve?

### **1.5 Scope of the study**

The scope of this study on evaluating the role of third-party logistics providers in enhancing procurement and supply chain performance at Coca Cola Beverages Uganda, will encompass the following dimensions;

The research will analyze data and case studies from the past three to five years to understand recent trends, developments and the impact of 3PL integration on supply chain performance.

The study will investigate the key functions of the supply chain that are impacted by 3PL services, including; procurement processes, inventory management, transportation and logistics operations.

The research will involve multiple stakeholders, including management and procurement teams at Coca Cola Beverages Uganda, third party logistics providers currently engaged with Coca Cola Beverages, suppliers and vendors.

The study will explore themes related to 3PL providers for example cost efficiency, service quality, customer satisfaction, flexibility etc.

### **1.5.1 Geographical scope**

The study will focus on the Coca Cola Beverages Ltd Namanve plant and its immediate surrounding areas in Uganda, with particular attentions to logistical challenges faced in the remote regions of the country where transportation infrastructure issues are more prominent.

### **1.5.2 Time scope.**

The research will focus on data collection over the past two years (2023-2024) to capture the most recent trends, challenges and impacts of 3PL integration on CCBL's supply chain performance. This period has been chosen to ensure that the analysis reflects current market dynamics and operational practices. The study will specifically examine the key supply chain functions impacted by 3PL services at CCBL, including; procurement processes, the efficiency of sourcing raw materials (such as sugar, concentrates, and packaging) from both local and international suppliers. Inventory Management, the effectiveness of inventory control, including stock levels, turnover rates, and the management of stock outs and overstocking. Transportation and Distribution, the impact of 3PL services on transportation costs, lead times, route optimization and delivery reliability, particularly for reaching remote areas in Uganda.

### **1.6 Significance of the study.**

This research holds significant implications for various stakeholders within the beverage industry and the broader logistics sector in Uganda.

Firstly, the business managers at Coca Cola Beverages Ltd Namanve and similar manufacturing firms, this study will provide actionable insights into specific contributions of 3PL providers to enhancing supply chain performance. By quantifying the impact of 3PL services on key metrics such as order fulfilment rates, inventory turnover, and transportation lead times, managers can make data driven decisions regarding 3PL adoption and strategic partnerships. The findings will enable them to identify optimal 3PL service configurations, streamline logistics operations, and reduce operational costs thereby improving overall competitiveness and profitability.

The study will provide a clear set of critical success factors that can be used to improve 3PL integration.

For Policy makers, the research will contribute to a better understanding of the role of 3PL providers in facilitating efficient trade and Logistics operations within the country. The findings will highlight the potential of 3PL services in addressing bottlenecks in the supply chain, which can inform the development of policies aimed at improving logistics infrastructure and regulatory frameworks. By providing empirical evidence on the impact of 3PL adoption, this study can support the formulation of policies that promote the growth of the logistics sector, enhance trade competitiveness, and ultimately contribute to economic development. The research can shed light on the effect of current logistics regulations on 3PL efficacy.

For the scholars and researchers, the research will be an important contribution towards the existing body of literature on 3PL adoption, as well as the handling of the supply chain in the emerging economies. The research will, through the deep case analysis of Coca-Cola Beverages Ltd Namanve, unlock in-depth insights into the unique challenges and opportunities for beverage companies in Uganda. Future research can build on the said research through an analysis of the long-run impacts of 3PL alliances, the use of technology in 3PL operations in the area, or the durability of 3PL provision. The research can be used as the foundation for comparative analysis with other sectors and geographical locations, thereby increasing the existing body of knowledge on 3PL phenomena in other settings. The research will further serve as the foundation for further sector-specific analysis, especially in the beverage industry and 3PL service companies.

Briefly, it will not only equip business managers with the instruments through which enhanced logistics operations may be achieved, but it will also instruct policy makers in how best to improve logistics infrastructure and policy. It will serve as an important reference work for second-round research into the function 3PL undertakes in the newly industrializing economies, hence contributing fully towards the improvement in logistics practice in Uganda and similar economies.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.0 Introduction

The objective of the chapter is critically to review literature on third party logistics (3PL) and its impact on the supply chain, with the emphasis being on how it can be employed in enhancing procurement and logistics performance. The chapter will provide the theory for the study, summarize the major concepts and models for application in the research, and review empirical literature for 3PL adoption in industrialized and developing economies, including the beverage industry specifically. The review will further seek to establish the challenges that firms such as Coca-Cola Beverages Ltd (CCBL) in Uganda face, and how 3PL operations can be applied to solve them.

#### 2.1 Third Party Logistics (3PL)

Third party logistics (3PL) entails outsourcing logistics and supply chain management activities to third party service firms. Such activities may be anything ranging from transportation, warehousing, and inventory handling to order fulfillment and delivery. With the help of 3PL operators, firms can focus on core activities, such as the production of products, while benefitting from the experience and infrastructure base of the logistics operators (Hertz & Alfredsson, 2003).

The development of 3PL solutions is characterized by their ability to provide scalable, tailor-made and tech-enabled solutions maximizing the efficiency of the supply chain (Marasco,2008). Utilizing the 3PL service providers' international networks, infrastructure and experience in particular areas, companies minimize the cost of operations, improve the quality of the service and become responsive in the wake of varying market requirements (Langley et al.,2016).

Particularly in low-income countries like Uganda, the 3PL operations help companies circumvent critical logistics issues like inadequate infrastructure, bureaucratic hurdles, and limited access to modern transport networks (Rushton, Croucher,& Baker, 2017).

## 2.2 Theoretical Framework

Several theoretical models account for 3PL adoption. The overall model used in our work is the Transaction Cost Economics (TCE) model advocated in the work of Williamson (1981), whose goal is reducing the expense of business transactions. Under the model advanced in the framework of the TCE, firms contract out their non-core activities if the cost for transacting the activities in the firm is higher compared to contracting the activities out from specialist service providers (Williamson, 1981).

As it would become clear from the TCE, firms pursue cost minimization in their transaction, perhaps owing to uncertainty, opportunism, and the need for governing systems. Outsourcing logistics helps firms like the Coca-Cola Company in avoiding the investment in large quantities of in-house infrastructure and resources and the associated risk owing to volatile market conditions and regulatory challenges.

Some theories that can be applied besides TCE include Network Theory and the Resource-Based View (RBV) whose focus is on the priority of acquiring resources and building relationships while strategizing. RBV emphasizes the utilization of external competence in an effort to acquire competitive superiority. Competitive superiority, in the eyes of RBV, is created through utilizing valuable, rare, inimitable, and non-substitutable resources (Barney, 1991). Firms may acquire higher logistics competence and technology from 3PL players, which would prove costly and time-consuming to acquire internally.

Meanwhile, Network Theory highlights the significance of company relationships and interfirm alliances in enhancing the performance of the supply chain (Doz, 1996). Collaborative relationships with 3PL providers can enable firms to innovate, share risks, and access new markets more effectively.

While RBV and Network frameworks are useful for understanding the strategic value of outsourcing, TCE remains the most applicable to this study due to its focus on cost efficiency and operational rationalization in outsourcing decisions.

## **2.3 The Role of 3PL in Enhancing Procurement**

Procurement as a function of supply chain management is crucial for acquiring the necessary materials, goods and services to sustain production. 3PL services have become increasingly vital for businesses seeking to optimize their procurement and supply chain performance.

### **2.3.1. Key benefits of 3PL adoption**

#### **2.3.1.1. Cost Reduction**

By outsourcing logistics operations to 3PL providers, companies can avoid substantial capital investments in transportation fleets, warehouses, and technology systems. This is particularly important for companies operating in resource-constrained environments, such as Uganda, where logistics costs represent a disproportionately high percentage of total business expenses due to infrastructural deficiencies, 3PL services become an economically prudent strategy. (McKinnon, 2010).

#### **2.3.1.2. Improved Lead Times and Dependability in Delivery**

Shortening lead times and delivering dependability is among the primary purposes for outsourcing to 3PL service. 3PL companies have the experience and the knowledge in optimizing the route, improving warehousing and using technology in the tracking of deliveries thereby delivering the service better. It can help companies such as the Coca-Cola lower their delivery times, an essential factor in the matter of responding to market need, making the products available as well as satisfying customers. (Christopher, 2016).

#### **2.3.1.3. Flexibility and Scalability**

Thirdparty logistics firms offer flexible and scalable solutions that allow businesses to respond to the changing market place conditions. It is especially helpful for those selling in the emerging markets, where demand may switch rapidly and market conditions continue to remain unstable. For example, the 3PL service can be used for Coca-Cola to scale up and scale down according to seasonal demand or the movement in consumer preference, all without incurring redundant operational costs.

#### **2.3.1.4. Access to Specialized Expertise and Technology**

3PL operators commonly own advanced logistics management systems and specialist knowledge in the field, both adding greatly to visibility and decision-making in the supply chain. Having access to such advanced technology and expertise is particularly valuable for businesses in the emerging economies, wherein infrastructures and regulatory regimes often prove to be complex and prone to disruption (Rushton et al., 2017).

#### **2.3.1.5. Streamlined Sourcing and Supplier Management**

The consolidation of the 3PL service facilitates the coordination of the vendors in the sourcing process through the centralizing of procurement activities, thereby leveraging existing relationships with multiple vendors (Bolumole, Frankel, 12q& Naslund, 2007). The streamlining quickens the procurement cycles, expenditure, and responsiveness from the vendors. (Rushton et al., 2017)

#### **2.4 Impact on the Fulfillment Rate through 3PL Services**

One such procurement efficiency measurement is order fulfillment performance. 3PL service enhances order accuracy, reduces stockouts, and increases customer satisfaction with timely delivery (Christopher, 2016). Langley et al. (2017) made it clear that the application of 3PL operations in this company attains order fulfillment rates 10-20% greater than those achieved by firms undertaking logistics in-house.

Order fulfillment depends on efficient stock control systems and responsive distribution networks provided by 3PL players (McKinnon et al., 2015). In Uganda's beverage industry, it is necessary considering that distribution in the distant markets is restricted by infrastructural constraints (Nanyondo & Bananuka, 2020) note that 3PL partnerships play an important role in filling infrastructural gaps, thereby enabling beverage companies such as CCBL to achieve optimal national availability of the products.

#### **2.5 Impact on Transportation Efficiency of 3PL Services**

Transport is an important logistical function that influences the cost and procurement performance directly. 3PL operators improve the productivity in transport by streamlining the route, real-time monitoring, fleet management, and lead-time reduction in delivery (Rushton et al., 2017). It has

been demonstrated through literature that the outsourcing of transport operations increases on-time delivery, lead times, vehicle downtime, and lowered operational expenditure thereby creating company competitiveness in dealing in competitive markets. (Langley et al., 2017).

In the case of Uganda where the road state is often in poor condition and transport charges high, firms like the Coca Cola Beverages Ltd benefit from 3PL services in overcoming poor road network, logistics congestion, and acquire timely market entry. (Kakooza& Mugenyi,2021). 3PL partnerships help firms respond with agility to market needs through provision of flexible and reliable transport solutions, as stated by (Adebayo, 2017).

## **2.6 Critical Success Factors for 3PL Implementation in procurement**

The success of 3PL integration depends on several determinants, such as trust, sufficient contractual agreement, proper communication, and information exchanges (Christopher, 2016). Langley et al (2017) emphasize the imperative for performance measurement systems for monitoring the quality and productivity of 3PL.

### **1. Trust and Commitment**

Strong relational governance, built on mutual trust and clear communications foundational for effective 3PL partnerships (Christopher,2016)

### **2. Clear Contractual Agreements**

Detailed service Legal Agreements SLAs specifying performance metrics, responsibilities, and penalties for non-compliance help align expectations and mitigate risks (Langley et al.,2017)

### **3. Effective Communication and Information Sharing**

Seamless information flow between the firm and the 3PL provider fosters transparency, improves coordination, and enables proactive problem-solving.

Besides technology integration, for instance, shared information systems and tracking devices, allows real-time order and inventory visibility (McKinnon et al., 2015). For companies like the Coca-Cola Beverages Ltd, coordination of 3PL providers' operations with organizational objectives counts for the company to be responsive in the supply chain and reduce costs (Kakooza &Mugenyi 2021).

## **2.7 Research gaps**

Empirical literature supports the positive effect of 3PL services on procurement performance in the forms of enhanced order fulfillment, efficient transport, and reduced operating expenses (Rushton et al., 2017; Langley et al., 2017). Most studies, however, target developed economies, and few in the case of the emerging economies such as Uganda (Adebayo, 2017). There are few contextual studies in the literature examining the effect of 3PL service on performance indicators such as order accuracy and delivery lead times in Uganda's beverage industry (Nanyondo & Bananuka, 2020)

This work fills in the gap through the examination of the 3PL provider's contribution toward the enhancement of procurement performance in Coca Cola Beverages Ltd Namanve, creating valuable knowledge for academic and practical purposes.

## **2.8 Conclusion**

The chapter outlined the review of concepts and theories of third-party logistics (3PL) adoption and its impact on procurement and the improvement in the performance of the supply chain. It covered the benefits of 3PL service, the goals of Ugandan firms in the logistics area, as well as empirical studies on the adoption of 3PL in the beverage industry. The literature review established gaps in the existing literature, specifically challenges confronted by firms in the economy during the building stages, and formed an appropriate foundation for the research in examining the mitigation of such challenges and the smoothing of the supply chain performance in Coca-Cola Beverages Ltd in Namanve.

## **CHAPTER THREE**

### **RESEARCH METHODS**

#### **3.0 Introduction**

This chapter provides an overview of the methodological process adopted for conducting the study. It elaborates on the study design, population, the sample size, and the methods of selection, data collection methods, data analysis strategy, and ethical issues. The methodology ensures the research questions are addressed in an ordered and credible manner serving as the foundation for making credible and valid inferences.

#### **3.1 Research Design**

A descriptive cross-sectional design was employed in the study. Descriptive design was appropriate in the context that the researcher was able to collect quantitative as well as qualitative data about the impact of third-party logistics (3PL) providers on procurement performance in the case of Coca Cola Beverages Ltd Namanve. Descriptive methods are primarily applied wherever the goal is the provision of an actual portrait of things that occur, persons, or items (Saunders, Lewis, & Thornhill, 2016)

The cross-sectional design was preferred as it allows the accumulation of data at a single point and is viable for examining the correlations among variables without disrupting the environment for the study (Creswell & Creswell, 2018). It was ideal in the midst of limited time for the study and the need for capturing the snapshot of the 3PL practices and procurement performance in the contemporary world.

#### **3.2 Study Population**

The study targeted 120 employees of Coca Cola Beverages Ltd Namanve, comprising procurement officers, logistics managers, warehousemen, and random samples from third party logistics companies affiliated with the company.

It was an appropriate group as it is directly in touch with procurement and logistics operations and hence would be expected to provide authentic, experience-based information to answer the issues in the research.

### **3.3 Sample Size and Sampling Technique**

#### **3.3.1 Sample Size**

Using Yamane (1967) formula in the computation for the sample size, the researcher calculated the sample size of 92 respondents as:

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

where

n=population size

N=population size (120)

e = Margin error (0.05)

$$n = \frac{120}{1 + 120(0.05)^2} = 92$$

Thus, the participants selected for the study were 92 in number.

This sample size provides an acceptable balance among representativeness and manageability, statistical power, and feasibility in the availability of resources and in terms of timing.

#### **3.3.2 Sampling Techniques**

Purposive sampling was utilised in the research in choosing the important interviewees like the procurement managers, the logistics officers, and the third-party logistics employees owing to their in-depth knowledge and corresponding experience.

Purposive sampling was suitable for selecting individuals who could give rich detailed information relevant to the topic for the study (Etikan et al., 2016)

The remaining staff members who were engaged in procurement and logistics functions were then sampled for selection using simple random sampling, where each member in the remaining population was given an equal opportunity for selection, removing selection bias, and making the findings generalizable within the organisation.

### **3.4. Data Collection methods**

The study employed both the primary and secondary data collection methods in order to increase the quality and extent of the data gathered.

#### **3.4.1 Primary Data**

The primary data were gathered using questionnaires and formal interviews. The questionnaire contained closed-ended and open-ended questions for the collection of data on the involvement of 3PL providers in the procurement process.

Structured questionnaires allowed quantitative responses from many responders to be obtained in identical format, permitting statistical analysis. In-depth interviews with procurement and logistics managers provided qualitative responses not provided through the questionnaire.

#### **3.4.2 Secondary Data**

The secondary data were gathered through document analysis of procurement reports, the history of logistics performance, and published literature articles related to the target topic.

The secondary data supplemented the primary data with background knowledge, contextual awareness, and historical patterns, bringing in reliability to the findings in the study.

### **3.5 Data Analysis**

The quantitative data from the provided questionnaires were coded and analyzed using statistical package for the social sciences (SPSS) software version 25. Descriptive statistics such as frequencies, percentages, and the mean scores were employed in summarizing the data while the inferential statistics such as the application of Pearson correlation and the regression analysis were

used in tests for relationships among third-party logistics and procurement outcomes such as cost, efficiency, and delivery times.

SPSS was selected because it has the ability to perform descriptive and inferential statistical analysis in an effort to analyze facts reliably and accurately. Inferential statistics were important in establishing the strength and significance of relationships between the study variables.

Qualitative interview data were subjected to thematic content analysis. Themes emerging from the data were identified, coded, and analyzed against the study objectives. Thematic analysis was suitable for the detection of patterns and themes in qualitative responses, through which further interpretation and connection with the study objectives could be established (Braun & Clarke, 2006).

### **3.6 Validity and Reliability**

#### **3.6.1 Validity**

The questionnaire was piloted among academic scholars and procurement practitioners in order to assess if it covered the objectives of the study (Creswell & Creswell, 2018). 10 respondents participated in the pilot study in order to examine the completeness, clarity, and feasibility of the instruments.

We need pilot tests and expert reviews in order to determine ambiguities and in verifying that the tool is measuring the construct it is supposed to, hence maximizing the internal validity of the research.

#### **3.6.2 Reliability**

The internal reliability among the items in the questionnaire was then established through the Cronbach's alpha coefficient. 0.70 and above was the acceptable reliability coefficient in the study (Gliem & Gliem, 2003). It ensured the items in the questionnaire were all assessing the same things, and the findings were reproducible and trustworthy.

### **3.7 Ethical considerations**

Ethical clearance was obtained from the university research ethics committee before collecting the data. Information consent was obtained from all the participants, and participation was voluntary. Confidentiality and anonymity of the data provided were guaranteed to the participants, and the data were used for academic purposes only.

Maintaining ethical standards enhances the trust among participants, guarantees their rights, and ensures the acceptability and credibility of the results (Isreal &Hay, 2006).

The study faced several limitations. First, some respondents were reluctant to provide information due to confidentiality concerns, despite assurances. Secondly, time constraints limited the depth of interviews conducted. Additionally, findings from a single case study may not be generalized to all manufacturing firms in Uganda. Acknowledging limitations helps to contextualize the findings and provides transparency regarding the study's scope and applicability.

### **3.9 Conclusion**

This chapter has described the research methodology used in the study, including the research design, study population, sampling methods, data collection tools, data analysis procedures and ethical considerations. Each methodological choice was justified based on its relevance and appropriateness to achieving the study's objectives, thereby ensuring the credibility and rigor of the research process.

## CHAPTER FOUR

### DATA ANALYSIS, PRESENTATION AND INTERPRETATION

#### 4.0 Introduction

This chapter presents and interprets the findings based on the data collected through questionnaires distributed to staff of Coca Cola Beverages Ltd Namanve. The analysis is structured around the key themes of the study; the role of third-party logistics providers (3PLs), challenges associated with 3PL usage and procurement performance outcomes. The data is presented using frequency tables, percentages, means and standard deviations.

#### 4.1 Demographic Characteristics of Respondents.

This chapter presents and discusses the results of the analysis that has been done

*Table 4.1. Respondents' Demographic Characteristics*

+	Details	Frequency	Percentage (%)
Gender	Male	28	62.2
	Female	15	33.3
	Prefer not to say	2	4.4
Age.	18-25	8	17.8
	26-35	20	44.4
	36-45	12	26.7
	Above 45	5	11.1
Education	Diploma	10	22.2
	Bachelor's Degree	25	55.6
	Master's degree	8	17.8
	Other certificates	2	4.4
Position	Junior staffs	15	33.3
	Supervisor	12	26.7
	Manager	10	22.2
	Senior management	8	17.8
	Less than 1	6	13.3

Years of experience.	2-3	18	40.0
	4-6	14	31.1
	Above 6	7	15.6

#### 4.2 Role of Third-Party Logistics Providers

*Table 4.2. Role of Third-Party Logistics Providers in Enhancing Procurement*

<b>Role of 3PLs</b>	Strongly Disagree	Disagree	Neutral	Agree	strongly Agree	Mean	SD
help to reduce procurement and logistics costs	1(2%)	2(4%)	5(10%)	24(48%)	18(36%)	4.12	0.89
improves delivery speed and reliability	0 (0%)	3 (6%)	6(12%)	20(40%)	21(42%)	4.18	0.82
Coca Cola uses 3PLs for warehousing and inventory	2(4%)	3(6%)	7(14%)	22(44%)	16(32%)	3.94	0.97
allows focus on core activities	1(2%)	2(4%)	4(8%)	26(52%)	17(34%)	4.12	0.84
improves planning and coordination	0(0%)	3(6%)	5(10%)	27(54%)	15(30%)	4.08	0.78

A majority of respondents agreed or strongly agreed that 3PLs reduce costs with 48% and 36%, improve delivery with a percentage of 40% and 42% and allow staff to focus on core activities with a percentage of 52% and 34%. The average mean score across the statements is above 4.0, indicating strong agreement on the role of 3PLs in enhancing procurement.

### 4.3 Challenges Associated with 3PL Usage

Table 4.3. Challenges Associated with Third-Party Logistics Providers

challenges Associated with 3PL	strongly Disagree	Disagree	Neutral	Agree	strongly Agree	Mean	SD
reduce internal control over logistics	2(4%)	4(8%)	6(12%)	25(50%)	13(26%)	3.86	0.99
delays from 3PL affect procurement timelines	1 (2%)	3 (6%)	4(8%)	28(56%)	14(28%)	4.02	0.87
communication gaps exist with some 3PLs	2(4%)	3(6%)	6(12%)	23(46%)	16(32%)	3.96	0.97
cost fluctuations affect budgeting	0(0%)	2(4%)	4(8%)	30(60%)	14(28%)	4.12	0.77
quality issues sometimes arise	1(2%)	3(6%)	6(12%)	29(58%)	11(22%)	3.92	0.85

Respondents acknowledge several challenges in working with 3PLs especially delays with a percentage of 65% and 28%, communication issues and budget unpredictability with a percentage of 46% and 32% and cost fluctuations having 60%. This shows how 3PLs are challenging to use in one way or the other. The mean scores ranging from 3.86 to 4.12 suggest moderate to strong agreement on the existence of these challenges.

#### 4.4 Procurement Performance Outcomes

Table 4.4. Procurement Performance Outcomes Resulting from 3PL Engagement

Procurement Performance outcomes	strongly Disagree	Disagree	Neutral	Agree	strongly Agree	Mean	SD
procurement cycle times have improved	0(0%)	2(4%)	5(10%)	28(56%)	15(30%)	4.12	0.75
inventory availability and stock accuracy	1 (2%)	2 (4%)	6(12%)	27(54%)	14(28%)	4.02	0.85
supplier relationships improved	0(0%)	3(6%)	5(10%)	26(52%)	16(32%)	4.1	0.83
customer satisfaction has increased	1(2%)	2(4%)	6(12%)	25(50%)	16(32%)	4.06	0.88
better procurement performance tracking	0(0%)	1(2%)	4(8%)	29(58%)	16(32%)	4.2	0.72

The responses reflect positive procurement outcomes as a result of 3PL use. Notably, improved procurement tracking and reduced cycle times received the highest ratings hence making it flexible and attractive to adopt.

## CHAPTER FIVE

### SUMMARY, CONCLUSION, AND RECOMMENDATIONS

#### 5.0 Introduction

This chapter presents a comprehensive summary of the study findings, draws meaningful conclusions, and proposes actionable recommendations based on the research objectives. The study investigated how third-party logistics providers (3PLs) influence procurement performance, the challenges faced in outsourcing logistics functions, and the overall impact on organizational efficiency. The chapter concludes with suggestions for future research to address emerging gaps and broaden the understanding of logistics outsourcing in Uganda's manufacturing sector.

#### 5.1 Summary of key Findings

##### 5.1.1 Role of Third-Party Logistics Providers

The study revealed that 3PL providers play a significant and strategic role in enhancing procurement operations. Majority of respondents acknowledged that outsourcing logistics services led to;

- A measurable reduction in procurement and logistics costs
- Enhanced speed and reliability in product deliveries
- Improved warehousing and inventory management systems
- Increased focus on core procurement activities by internal staff
- Better planning and coordination across procurement functions

These findings are supported by consistently high means scores across related variables (above 4.0), indicating a strong consensus that 3PLs are instrumental in achieving procurement objectives at Coca Cola Beverages Ltd. The data suggests that the use of 3PLs has moved beyond tactical outsourcing to become a strategic enabler of performance

### **5.1.2 Challenges Associated with 3PL Usage**

Despite the aforementioned benefits, the study also uncovered critical challenges that hinder the optimal utilization of 3PL services. These include.

- Reduced internal control over logistical operations leading to dependence on external providers.
- Occasional delays by 3PLs which negatively affect procurement schedules and responsiveness
- Communication breakdowns between the company and logistics providers often leading to inefficiencies
- Price volatility in 3PL contracts which disrupts procurement budgeting and cost planning
- Quality issues in service delivery, particularly in handling warehousing and last mile distribution.

These challenges indicate that while outsourcing provides numerous benefits, it also introduces complexity and risk that must be carefully managed.

### **5.1.3 Procurement Performance Outcomes**

- The third objective focused on examining the contribution of 3PLs to procurement performance. The study found significant improvements in key performance metrics;
- Procurement cycle times have decreased due to the efficiency of 3PL systems
- Inventory availability and accuracy have improved, supporting better operational planning
- Supplier relationships have become more strategic due to reliable delivery mechanisms.
- Procurement related customer satisfaction has increased, reinforcing the link between logistics and service quality.
- Enhanced ability to track procurement performance through integrated reporting systems

These findings highlight the transformative impact that 3PLs can have on procurement when effectively integrated into the organizational supply chain strategy.

## **5.2 Conclusions**

The study concludes that third-party logistics providers are vital to enhancing procurement functions in large scale manufacturing firms like Coca Cola Beverages Ltd Namanve. Their contributions are most evident in cost saving, operational efficiency, and improved procurement outcomes. However, the effectiveness of 3PL engagements is closely tied to how well organizations manage these partnerships.

The dual nature of 3PL usage -delivering both benefits and challenges calls for a balanced approach that leverages their strengths while mitigating associated risks. In the context of Coca Cola Beverages Ltd, the outsourcing model has yielded positive outcomes, but continuous evaluation and improvement mechanisms are necessary to sustain and maximize value.

## **5.3 Recommendations**

### **5.3.1 For Coca Cola Beverages Ltd**

To strengthen the benefits and address the challenges of 3PL partnerships, the following recommendations are proposed;

Strengthening communication and collaboration frameworks through implementation of real time communication platforms and feedback loops to ensure transparency and quick resolution of logistics issues.

Establish and Enforce Service Level Agreements (SLAs) to clearly define expectations, timelines, penalties and performance metrics to hold 3PLs accountable for service quality and delivery.

Introducing a vendor Performance Evaluation System for regular assessments of 3PL providers using key performance indicators (KPIs) will enable data driven decisions and continuous improvement

Promote Technological Integration to adopt logistics software and enterprise resource planning ERP systems that link internal operations with 3PL platforms for seamless information sharing and inventory visibility.

Negotiate Stable Pricing Agreements to engage in long term contracts that reduce exposure to market driven price fluctuations, thereby enhancing procurement planning and budgeting.

Invest in internal Capacity Building to train procurement and logistics personnel in outsourced operations management to ensure proper oversight and effective contract enforcement.

### **5.3.2 For the Logistics and Manufacturing Industry in Uganda**

Encourages strategic Partnerships such that manufacturing firms should view 3PLs not as external agents but as strategic partners contributing to overall value creation.

Develop industry Standards with regulatory bodies and industry association to set quality benchmarks and operational standards for 3PLs to ensure consistency and professionalism

Promote local 3PL Development with capacity building initiatives targeting local 3PL firms to enhance service quality, increase competition and reduce overreliance on international providers.

### **5.4 Areas for Further Research**

While this study provides valuable insights, it also highlights the need for further exploration into related areas such as

A comparative analysis of inhouse logistics vs 3PL models in Uganda's manufacturing sector.

The role of digital transformation in shaping 3PL efficiency and integration in developing economies

Assessment of environmental and sustainability practices among 3PL providers operating in Uganda

The impact of geopolitical and economic influence fluctuations and industry-based research to build more resilient and responsive logistics networks in Uganda and beyond.

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**APPENDICES**  
**APPENDIX A: QUESTIONNAIRE**  
**UGANDA CHRISTIAN UNIVERSITY**  
**SCHOOL OF BUSINESS**  
**DEPARTMENT OF UNDERGRADUATE**

A Questionnaire for the staff of Coca Cola

Dear respondent,

I Mutesi Jackline a student of Uganda Christian University carrying out academic research on the topic ‘the role of third-party logistics providers in enhancing procurement’ as part of the requirement for partial fulfilment for the award of the bachelor’s degree of procurement and logistics management. I therefore humbly request you to spare a few minutes of your time and apply to this information.

**Thank you for your positive response**

**SECTION A: Demographic information**

Kindly tick in the blank spaces, the items that best describes your choice for each question

**1. Gender**

- Male
- Female
- Prefer not to say

**2. Age Group**

- 18-25 years
- 26-35 years
- 36-45 years
- above 45 years

**3. Educational Qualification**

- Diploma
- Bachelor’s Degree
- Master’s Degree

other (specify)

**4. Position in the company**

junior staff

supervisor

Manager

Senior Management

**5. Department:**

Procurement

Logistics

Operations

Finance

other (specify)

**6. How long have you worked with coca cola beverages ltd Namanve?**

less than 1 year

1-3 years

4-6 years

more than 6 years

**SECTION B: Role of Third-Party Logistics Providers (3PLs)**

Instructions: indicate your level of agreement with each statement below.

Scale: 1=strongly Disagree,2=Disagree, 3=Neutral,4=Agree,5=Strongly Agree

Statement	1	2	3	4	5
1. 3PL providers help reduce procurement and logistics costs					
2. The use of 3PLs improves delivery speed and reliability					
3. Coca cola Namanve uses 3PLs for warehousing and inventory management					
4. Outsourcing to 3PLs allows staff to focus on core procurement activities					
5. 3PLs have improved procurement planning and coordination					

**SECTION C: Challenges Associated with 3PL Usage**

Statement	1	2	3	4	5
1. Working with 3PLs reduces internal control over logistics processes					
2. Delays from 3PL providers occasionally affect procurement timelines					
3. There are communication gaps between the company and some 3PLs					
4. Cost fluctuations in 3PL services affect procurement budgeting					
5. Quality issues sometimes arise from outsourced logistics services					

**SECTION D: Procurement Performance Outcomes**

Statement	1	2	3	4	5
1. Procurement cycle times have improved with 3PL support					
2. Inventory availability and stock accuracy have improved					
3. Supplier relationships have improved due to efficient 3PL operations					
4. Procurement related customer satisfaction has increased					
5. Use of 3PLs has contributed to better procurement performance tracking					