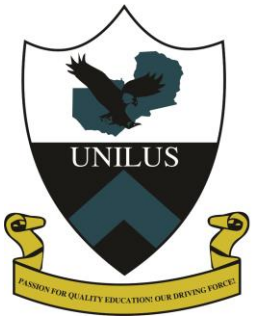

UNIVERSITY OF LUSAKA

School of Postgraduate Studies

ASSESSING THE EFFECT OF INBOUND AND OUTBOUND LOGISTICS ON ORGANIZATIONAL PERFORMANCE, A CASE OF SMES IN LUSAKA CBD.

A

Dissertation presented to the school of postgraduate

in Partial Fulfilment for requirement of the program

Master of Science in Procurement, Logistics and Supply Chain Management (MSCPLSM)

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DECLARATION

I Masuzyo Shaba do solemnly declare that the data presented in this paper titled Assessing the effects of inbound and outbound logistics on organizational performance: A case study of small and medium enterprises (SME's) in Lusaka CBD is my own work.

I declare that this thesis is solely my work and has not been submitted in whole or in part to any organization or institution for academic or other obligations. This research paper is being submitted to the University of Lusaka (UNILUS) in partial fulfilment of a post graduate degree of Masters of Science in Procurement, Logistics and Supply Chain management.

Masuzyo Shaba.

Researcher.

This dissertation has been submitted for examination with my approval as Supervisor.

Supervisor name: Dr. John Sichuundu

Signature: 

DEDICATION

This research paper is dedicated to the memory of my late father Mr. Misheck Shaba. He's firm belief and drive to educational excellence is what has made this paper a reality today. In he's many years of lecturing when I was a boy, he would say, son, no matter what happens in your life, always pursue an education and do not be defeated when you do not understand the concepts in the books because tomorrow is another day to read and try a new approach.

I would also love to dedicate this dissertation to my mother and two sisters for their unwavering support and words of encouragements during this research process. My sisters Mwanida and Faith have never left my side and are very special to me

I also dedicate this paper to all my friends, course mates and church family for their support and editing work. I appreciate each and every one for the assistance rendered and care given.

Above all, special thanks and gratitude to God almighty for making this dream a reality for me.

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LIST OF ACRNOMYS

AMOS: Analysis of Moment Structures

CBD: Central Business District

CFA: Confirmatory Factor Analysis

DR: Democratic Republic

ERP: Enterprise Resource Planning

GDP: Gross Domestic Product

PACRA: Patents and Companies Registration Agency

PLS: Partial Least Squares

PLSSEM: Partial Least Squares Structural Equation Modeling

RBT: Resource-Based Theory

ROA: Return on Assets

SCM: Supply Chain Management

SE: Standard Error

SEM: Structural Equation Modeling

SMEs: Small and Medium Enterprises

SPSS: Statistical Package for the Social Sciences

VIF: Variance Inflation Factor

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ABSTRACT

The purpose of this study was to evaluate the effect inbound logistics, outbound logistics, operational expenses, gender and workforce size have on the performance metrics of small and medium enterprises (SMEs) that are located in the Central Business District (CBD) of Lusaka. The study which had its origins in Resource-Based Theory, Value Chain Theory and Transaction Cost Theory investigated the impact that logistical and operational factors had on the accomplishment of organisational success. A quantitative approach was applied and a sample targeting 398 SMEs from a population of 84000 was surveyed with descriptive and regression methods used to analyse the data collected. It was established that receiving and dispatching logistics and operational expenses mostly affected the performance of SMEs with operational expenses being the most important. Gender and number of employees had little influence which was further reduced when logistical variables were included.

These findings underscored the importance of improved logistical functionality and cost control in achieving competitive advantages and sustainability within resource constrained conditions. This study enriched the existing literature by offering practical knowledge to the SMEs in the context of a developing economy. Some of the recommendations such as the use of advanced logistics technologies, improvement of supply chain partnerships and use of cost cutting measures were noted to be appropriate.

***Keywords**: Inbound Logistics, Outbound Logistics, Operational Costs, SME Performance, Resource-Based Theory, Value Chain Theory, Transaction Cost Theory, Lusaka, Developing Economies.*

CHAPTER ONE:

INTRODUCTION AND BACKGROUND

1.0 Introduction

Business landscapes and effective logistics management have become essential components of an organization's success (Nilsson & Christopher, 2018). In the realm of transportation, logistics plays a crucial role in facilitating the smooth transfer of goods and services throughout the supply chain encompassing both incoming and outgoing activities. Zambrana and Iftikhar (2020) highlight that inbound logistics, encompasses the consolidation of raw materials and arrival of components at the company is frequently considered a critical area for realising significant cost savings, optimising inventory levels and enhancing production efficiency. Conversely, outbound logistics which focuses on the transfer of goods from finished inventory to the consumer presents opportunities for expedited order fulfilment, reduced waiting times and enhanced customer satisfaction (Rajahonka & Bask, 2016).

Scholars have identified numerous challenges in both inbound and outbound logistics. These challenges encompass high costs, lack of visibility, supplier reliability, inventory management, regulatory compliance and process inefficiencies (Manninen 2023). In a similar vein, Ayantoyinbo and Gegeleso (2018) highlighted several challenges faced in logistics service management: lack of defined delivery timeframes, deficiencies in the transportation process, difficulties in sourcing reliable suppliers, reliance on inadequate inventory management systems, navigating regulatory requirements and constraints imposed by the current operational environment.

By delving into the intricate relationship between inbound and outbound logistics and organisational performance, this research endeavours to illuminate pathways for companies to harness their logistic functions for competitive advantage through a thorough examination of key performance indicators like cost efficiency, service quality and responsiveness. This research study aimed to offer invaluable insights into the strategic significance of logistics in shaping overall business prosperity and the essential roles of logistics within a business organisation as a competitive factor by analysing its spending efficiency, service and flexibility among other aspects. A comprehensive understanding of the relationships between inbound logistics, outbound logistics and performance is essential for any organisation to make informed

decisions so as to enhance logistics and promote growth in dynamic and interconnected markets

1.1 Background of the Study

The historical narrative of inbound and outbound logistics unveils a remarkable evolution in the realm of business logistics and supply chain management. Initially rooted in rudimentary labour-intensive processes, logistics primarily focused on enhancing manual loading and transportation efficiency (Wisner et al., 2021). The development of operations research and industrial engineering especially because of World War II was a turning point where analytics started to be used for military operational solutions. This innovation set the stage for later advances in logistics (Mehmeti, 2016).

The transition from the industrial age to the information age in the 1980s precipitated a paradigmatic shift in logistics characterised by the emergence of innovative technologies and intensified competition spurred by industry deregulation (Kotabe, 2024). This era saw the rise of third-party logistics providers offering novel avenues for businesses to manage their transportation networks and optimise supply chain operations. A bigger picture of logistics management was shown by the name change from the National Council of Physical Distribution Management to the Council of Logistics Management. This change meant that the focus was no longer just on incoming logistics but also on outgoing and reverse flows of goods and information (Rimmer & Kam, 2018).

In the 1990s, a technological revolution changed the way supply chain management was done. For example, enterprise resource planning (ERP) systems and the ability for company databases to work together seamlessly are examples of this. This period witnessed a pronounced emphasis on amalgamating various logistics components and strategizing for globalised manufacturing as exemplified by the burgeoning industrial prowess of nations like China (Frazzon et al., 2019). Li and Liu (2019) say that the term "supply chain management" became more popular as logistics strategies became more integrated and strategic. These changes meant that logistics efforts were more in line with overall business strategies and it became clearer how important it is to have centralised planning supported by distributed execution. This historical trajectory underscores the iterative nature of logistics evolution which is characterised

by the relentless pursuit of adaptation and innovation to meet the evolving demands of the business milieu and global markets.

In 2016, Zambia's international tourism landscape witnessed a significant concentration of arrivals from key markets with the top 20 international markets contributing to 84% of all arrivals (Nsanzya & Saarinen, 2022). Among these markets, African nations such as Tanzania, Zimbabwe, the Democratic Republic of Congo (DRC) and South Africa played substantial roles highlighting the importance of regional travel within Africa. European markets including the UK, Germany, the Netherlands, France and Italy collectively accounted for 80% of arrivals from Europe emphasising the significance of European tourism flows to Zambia (Liswaniso, 2022). Road transport emerged as the predominant mode of travel with 69% of international visitors choosing this option. Leisure and holiday trips constituted the majority of visits at 58% followed closely by business trips at 42% reflecting Zambia's appeal as both a leisure destination and a business hub.

Several studies have investigated the impact of inbound and outbound logistics operations on organisational performance. Odunjo's (2020) study found a significant and positive effect of these operations on organisational performance. However, Ayantoyinbo and Gegeleso (2018) revealed that small-scale businesses have not efficiently used inbound and outbound logistics services and they have not effectively employed the actors involved in outbound logistics activities. Khan (2019) found that inbound logistics skills have a negative relationship with intangible firm performance indicators like customer satisfaction. On the other hand, they have a positive relationship with tangible firm performance indicators like return on assets (ROA) and cost reduction. In Zambia, Chileshe and Phiri (2022) conducted a study on supply chain management practices' impact on small and medium enterprises (SMEs) in developing countries particularly in the agro sector showing that implementing supply chain management practices resulted in increased performance for SMEs.

Existing research highlights the crucial relationship between logistics operations and organisational performance particularly in small-scale businesses and developing economies like Zambia. While studies have shown the positive impact of both inbound and outbound logistics on organisational performance, there remains a gap in understanding how efficiently small-scale businesses utilise these logistics services

and their overall contribution to their performance. Also, different studies have found different links between inbound logistics skills and company performance measures which means that the topic needs more research. Because supply chain management is always changing especially in developing economies, a full study on small and medium-sized businesses in Zambia could teach us a lot about how to make them more competitive, improve their operations, and ensure long-term growth.

1.2 Statement of Problem

Small and Medium Enterprises (SMEs) are widely recognised as pivotal drivers of economic development playing a crucial role in fostering employment creation, income generation and GDP growth in countries across the globe. In Zambia, SMEs form a substantial portion of the business landscape constituting a backbone of entrepreneurial activity and serving as engines of economic vitality (Mensahet al.2015). Despite their significant contributions, SMEs grapple with a myriad of challenges that impede their operations and hinder their growth trajectory. Among these challenges, limited access to markets stands out as a formidable barrier, particularly for SMEs in remote or rural areas where infrastructure and connectivity may be lacking (Fungwe & Kabubi, 2019).

Inbound and outbound logistics are essential components of supply chain management that play a crucial role in the efficient movement of goods and materials within a business's operations. According to Qadir and Ali (2017), the efficiency and effectiveness of logistics both inbound and outbound, play a crucial role in determining the overall performance and competitiveness of organisations particularly small and medium-sized enterprises (SMEs) operating in Lusaka Central Business District (CBD). While studies such as Odunjo's (2020) and Khan's's (2019) have indicated the positive correlation between logistics and organisational performance, including metrics such as cost reduction, improved delivery times and enhanced customer satisfaction. However, there is a gap in research focusing on the specific impact of inbound and outbound logistics on the organisational performance of SMEs in Lusaka CBD. Understanding how these logistics functions influence performance is essential for SMEs to optimise their operations and enhance their competitive advantage.

Therefore, this research endeavour seeks to bridge this gap by meticulously exploring the intricate dynamics through which these logistics functions influence various facets of SMEs' operational efficiency, productivity, customer satisfaction and overall performance within the dynamic environment of Lusaka CBD.

1.3 Research Objectives

1.3.1 General Objective

To assess the effect of Inbound and Outbound logistics on organizational performance among SMEs in Lusaka CBD.

1.3.2 Specific Objectives

1. To assess the effect of inbound logistics practices on organizational performance among SMEs in Lusaka CBD.
2. To analyse the effect of outbound logistics practices on organizational performance among SMEs in Lusaka CBD.
3. To investigate the effect of operational cost on the organisational performance.

1.4 Research Hypotheses

H0: There is no significant effect between inbound logistics and organisational performance.

H1: There is a significant positive effect between inbound logistics and organisational performance.

H0: There is no significant effect between outbound logistics and organisational performance.

H2: There is a significant positive effect between outbound logistics and organisational performance.

H0: There is no significant effect between operational costs and the organisational performance.

H3: There is a significant effect between the operational cost and the performance

1.5 Significance of Study

This research held a significant importance to SMEs in Lusaka Central Business District (CBD). Firstly, SMEs are vital for economic development and enhancing the understanding of logistics effect on operational efficiency, growth and sustainability

thereby positively influencing economic prosperity. Secondly, efficient logistics processes are crucial for SMEs to streamline operations and reduce costs. By assessing the effect of logistics on organizational performance, this study provided insights into optimizing supply chain management practices, enhancing inventory control and minimizing operational challenges faced by SMEs in Lusaka CBD. Thirdly, the study illuminated how effective logistics management enhances competitiveness and drives growth in a competitive business environment. Additionally, insights will inform policy initiatives supporting small businesses. Lastly, contributing to the existing body of knowledge, the study will contribute to the empirical evidence and valuable insights for academics, practitioners and policymakers in logistics and supply chain management.

1.6 Scope of the Study

The study explored the scope to which inbound and outbound logistics affect the organizational performance of SMEs in Lusaka CBD. The research concentrated on small and medium enterprises (SMEs) operating within the Central Business District (CBD) of Lusaka, Zambia. Lusaka's Central Business District (CBD) is the main commercial and administrative area of Lusaka, the capital city of Zambia. It is located in the capital city and serves as the primary centre for economic activities including banking, retail and government services. The study concentrated on the direct relationship between inbound logistics and outbound logistics operations and organizational performance for small and medium scale businesses in Lusaka's central business district.

1.7 Definition of Key Words

Logistics: According to the council of logistics management (CLM) (1991), logistics is the process of planning, implementing and controlling the efficient and effective flow of goods, services and related information from the point of origin to the point of consumption in order to meet customer requirements

Inbound logistics: According to Ayantoyinbo and Gegeleso (2018), inbound logistics involves the processes of sourcing, receiving, storing and distributing raw materials or goods from suppliers to a company's manufacturing or production facilities.

Outbound logistics: Outbound logistics involves the movement and distribution of goods from a company's location to its customers or end-users, encompassing

activities such as order processing, warehousing, transportation and delivery (Ruusunen, 2018).

Organizational Performance: this is the measure of how effectively and efficiently an organization achieves its goals and objectives across various dimensions such as financial outcomes, operational efficiency, customer satisfaction and market competitiveness (Taouab & Issor, 2019).

1.8 Organisations of the Report

Chapter one: This chapter introduced the research topic, provided the background information on logistics operations within small and medium enterprises in Lusaka's Central business district. It identified the gaps in understanding the efficiency of logistics usage among Small and Medium Enterprises and its effect on organizational performance. The research objectives and hypotheses were outlined to explore the relationship with the study's significance lying in its potential to drive economic development, inform policies and contribute to academia. The scope was limited to Small and Medium Enterprises in Lusaka central business district and the key terms were defined for clarity throughout the study.

Chapter two: Chapter two presented an extensive examination of literature related to the research subject, diving deep into scholarly articles and journals and laying down the theoretical groundwork for the study. It ended by introducing the conceptual framework which acts as a guide directing the research methodology and analysis.

Chapter three: In chapter three, the methodology for the study was thoroughly outlined covering aspects such as the chosen research approach, the design of the study and the specific analysis techniques to be employed. It provided a comprehensive framework for how data was collected, processed and interpreted to address the research objectives effectively.

Chapter four: This chapter presents the findings obtained from the data analysis conducted in the study, showcasing the relationship inbound and outbound logistics practices and organizational performance have.

Chapter five: In this chapter, the study's findings are thoroughly discussed and analysed considering their implications and significance within the context of the research objectives. Through critical examination and interpretation, the discussion

sheds light on the effect of Inbound and Outbound logistics on organizational performance among Small and Medium Enterprises in Lusaka Central Business District.

Chapter Six: Finally, this chapter covers the conclusion and recommendations of the study.

1.9 Chapter Summary

This chapter introduced the research study, it delved into the significance of examining the effect of inbound and outbound logistics on organizational performance within small and medium enterprises (SMEs) operating in Lusaka's Central Business District (CBD). It also presented the background of the small and medium enterprises in the central business district emphasized the importance and significance of logistical operations in enhancing their supply chain, competitiveness and sustainability. The statement of the problem identified the gap in understanding the efficiency of logistics utilization among Small and Medium Enterprises in Lusaka Zambia’s central business district and its specific influence on organizational performance prompting the need for empirical research. Research objectives were outlined to assess the influence of inbound and outbound logistics on small and medium enterprise performance while hypotheses are formulated to test the relationship between logistics operations and key performance indicators. The study's significance was in its potential to enhance operational efficiency, inform policy decisions and contribute to academic understanding. The scope was defined to focus on the Small and Medium Enterprises in Lusaka Central Business District excluding other districts of Zambia and key terms were defined to ensure clarity and consistency in terminology throughout the research.

CHAPTER TWO:

LITERATURE REVIEW

2.0 Introduction

This chapter focused on the literature review which aimed to explore the complex interplay between inbound and outbound logistics on organizational performance. It aimed to address and discuss the several different empirical studies, theories and conceptual framework's that have been in alignment with this study and it also identified the possible areas of common ground or gaps perhaps for further research. The analysis of a number of previously conducted studies yielded important insights into the relevance of improving and simplifying the procedures involved in inbound and outbound logistics in order to improve the performance of a company. This part of the research was conducted with the intention of enhancing our understanding of this essential component of supply chain management.

2.1 Non-Empirical Review

2.1.1 Definition of In-bound and Out-bounds Logistics

The process of inbound logistics includes the various activities related to sourcing, receiving, storing and managing the raw materials or goods essential for production or distribution. The emphasis is on the uninterrupted flow of materials from vendors to the organization guaranteeing that the supply chain process operates efficiently. The Small and Medium Enterprises (SMEs) should ensure efficient inbound logistics which are crucial for reducing disruptions from delays or shortages that directly impact productivity and costs. As noted by Christopher (2016), efficient inbound logistics minimizes waste and enhances resource utilization especially for resource-limited enterprises such as SMEs.

Outbound logistics focuses on the process of delivering finished goods to customers or distribution centers. The process includes procedures like packaging, order processing and transportation. Efficient and dependable outbound logistics significantly elevates customer satisfaction, strengthens brand loyalty and enhances the organization's competitive standing in the marketplace. Mentzer et al. (2015)

highlight that for small and medium-sized enterprises, efficient outbound logistics can set them apart in fiercely competitive environments such as Lusaka CBD.

The relationship between inbound and outbound logistics plays a vital role in the effectiveness and efficiency of an organization. The effective integration of these two functions leads to decreased operational expenses, shorter lead times and improved inventory management (Fawcett et al, 2021). Small and medium-sized businesses in Lusaka's central business district are still having trouble with logistics especially when it comes to infrastructure. This shows how this integration could greatly improve performance and competitiveness.

2.1.2 Challenges of Logistics in SMEs

The Small and medium-sized enterprises face a variety of obstacles in overseeing their inbound and outbound logistics. The significant challenges that they encounter are elevated transportation expenses, restricted access to quality infrastructure and interruptions in the supply chain (Mentzer et al., 2015). When it comes to Zambia, inadequate road infrastructure and elevated fuel prices substantially raise the expenses associated with transporting goods, causing several challenges for SMEs in maintaining competitive viability (Zambia Development Agency, 2022).

Inbound logistics frequently face challenges due to inconsistent suppliers and delays in the procurement process. therefore, the identified issues interfere with production timelines resulting in inefficiencies and heightened operational expenses (Rushton et al., 2020). On the outbound side, small and medium-sized enterprises face challenges in sustaining customer satisfaction as a result of delayed deliveries and inadequate order fulfilment rates (Christopher, 2016). In regions such as Lusaka CBD where customer expectations are elevated, these challenges may lead to missed business opportunities.

The COVID-19 pandemic revealed significant weaknesses in the logistics systems of SMEs, underscoring the necessity for more robust supply chains (Ivanov et al., 2019). Expanding supplier networks and improving logistics infrastructure are essential approaches for tackling these challenges and boosting SME performance.

2.1.3 Importance of Logistics for SMEs

Logistics plays a key role in supply chain management especially when it comes to small and medium-sized enterprises that function with limited resources. The effective

logistics systems allow small and medium-sized enterprises to lower expenses, accelerate delivery times and boost customer satisfaction (Lambert & Cooper, 2021). In the context of Zambia, small and medium-sized enterprises play a crucial role in GDP and employment thus enhancing logistics processes is vital for maintaining their contribution to economic development (Zambia Development Agency, 2022).

Inbound logistics allows small and medium-sized enterprises to cultivate robust relationships with suppliers which is essential for maintaining consistent quality and pricing of materials (Ivanov et al, 2019). Conversely, effective outbound logistics offers small and medium-sized enterprises a strategic edge by enhancing customer service and facilitating prompt product delivery (Mentzer et al, 2015). This concept holds significant relevance in urban environments such as Lusaka CBD where there is a strong demand from customers for swift and dependable service.

However, numerous small and medium-sized enterprises encounter challenges related to logistics such as inadequate infrastructure, elevated transportation expenses and restricted access to technology (Rushton et al, 2020). Therefore, confronting these challenges is essential for enhancing the performance of SMEs. Collaboration with third-party logistics providers (3PLs) can assist SMEs in addressing resource constraints and enhancing efficiency in both inbound and outbound logistics (Christoher, 2016).

2.1.4 The Role of Technology in Logistics

The integration of technology in logistics management has transformed the operational landscape for businesses particularly SMEs. Automated inventory management systems, GPS tracking and data analytics tools have empowered SMEs to enhance their logistics operations and refine decision-making processes (Fawcett et al, 2021). For example, warehouse management systems (WMS) improve inventory visibility, minimize waste and guarantee timely stock replenishment (Lambert & Cooper, 2021).

Outbound logistics has significantly gained from advancements like route optimization tools and last-mile delivery technologies. These tools allow SMEs to provide products effectively even in regions with intricate road systems such as Lusaka CBD (Ivanov et al, 2019). Furthermore, integrating software for managing customer relationships with logistics systems enables small and medium-sized enterprises to monitor customer orders, collect feedback and improve customer satisfaction (Christopher, 2016).

Even with these advancements, the uptake of technology by SMEs in Zambia continues to be low primarily due to high costs and a lack of digital literacy (Zambia Development Agency, 2022). Therefore, government initiatives including subsidized access to technology and training programs for SME owners can significantly contribute to closing this gap and empowering SMEs to use logistics technologies efficiently.

2.3 Empirical Review

An empirical review is a type of literature review that focuses on summarizing and synthesizing existing research studies, experiments or observations that have collected empirical data (Hennink & Kaiser, 2022).

2.3.1 Global Perspective

The study by Mensah et al. (2015) looked at how inbound logistics capability affects a company's performance in terms of benefits that can be seen and felt. (2015) Confirmatory Factor Analysis (CFA) was used to test the relationship between the variables that were seen and the latent constructs that were not seen. Primary data was collected using Five-point Likert scale questionnaire. The research employed statistical packages for social science research (SPSS) version 20 and a structural equation model (SEM) based on AMOS version 23 to analyze the data surveyed in the 120 garment factories located in the export processing zone as well as domestic factories in the capital city of Dhaka, Bangladesh. The results found that inbound logistics capabilities were positively associated with tangible performance. For example, return on assets, reduced costs and improved productivity whereas they were negatively associated with intangible firm performance such as customer satisfaction. The findings of this research highlight the incorporation of inbound logistics capabilities in the garment industry.

Using the Pakistani textile sector as a case study, Hashim, Baig, Amjad, Nazam and Akraim (2020) evaluated the effect of Supply Chain Management techniques on organizational performance through the moderating function of creative culture. The study employed clever Partial Least Squares (PLS) estimation techniques to estimate responses from a total of 236 respondents to the provided questions. They came to the conclusion that SCM procedures significantly affect how well an organization performs. Hai and Son (2019) evaluated and assessed the impact of logistical services

on a firm's financial performance in a similar vein. Using factor analysis and multiple regression, they came to the conclusion that there is a strong positive correlation between a firm's financial success and its internal, external and inbound logistics.

Khalil, Khalil and Kha (2019) carried out an investigation on the connection between the practices of supply chain and the organizational performance of 207 small and medium businesses in Pakistan. The study utilized partial least square (PLS) estimation techniques to test the hypothesis. They came to a conclusion that the level of information sharing, the quality of information sharing, the internal supply chain process and lean practice were the factors that had the most significant impact on the performance of the organization. Strategic partnerships with suppliers and logistical vendors did not have any impact on the organization's performance. Nevertheless, each and every one of the excellent supply chain management techniques had a good and important influence on the different kinds of lean management styles and innovations.

Khan and Rattanawiboonsom (2019) used data based on research from the Bangladesh Garment Industry to examine and better understand the impact of inbound logistics capabilities on a firm's success. The study focused on 120 clothing and concrete manufacturers and their intangible advantages. Using a structural equation model, the results indicated that an organization’s ability to manage incoming logistics effectively has a positive correlation with its performance in terms of return on asset (ROA), cost reduction, productivity and a negative correlation with its tangible performance in terms of customer satisfaction. Additionally, the research did not examine the effects of inbound logistics factors, which may have revealed which variables affected the firm's performance.

Hassan (2023) conducted another study to identify the effects of Supply Chain Management practices on organizational performance in textile firms located in Karachi. The study employed a quantitative and explanatory research approach utilizing a correlational research design. The researcher used the simple random and convenience sampling technique with a sample size of 240 and the questionnaire was survey-based. The researcher utilized distribution techniques to interpret the findings of the study. For statistical analysis, the researcher applied Cronbach’s alpha to test reliability using reliability analysis and multiple linear regression analysis was used to

determine the supply chain practices affecting organizational performance in the textile sector. The analysis of the study measured the role of supply chain practices (customer relationship, quality of information sharing, strategic supplier partnership, and post organizational performance) in textile firms in Karachi, Pakistan.

The results of the study found a significant relationship between the quality of information sharing and strategic supplier partnership on organizational performance in textile firms. Furthermore, customer relationships and postponement have an insignificant role in organizational performance. However, results show that the quality of information sharing and strategic supplier partnerships impacts organizational performance in the textile sector (Hassan, 2023). Therefore, the study's conclusion was based on and covered the region of Pakistan. So the findings of the study can differ from the current study in the Zambian context.

2.1.2 Regional Perspective

Ayantoyinbo and Gegeleso (2018) conducted a study to assess the impact of inbound and outbound logistics on small-scale businesses. The research was carried out among small-scale businesses in Ogbomoso North Local Government Area of Oyo State, Nigeria. The population of the study consisted of 20 bakers identified in Ogbomoso North Local Government Area, Oyo state. Five (5) bread bakers were chosen for the study, selected purposively due to their location within the study area. The data collected were analysed using regression analysis. The analysis indicated that inbound and outbound logistics services had not been efficiently utilized by small-scale businesses. The analysis also revealed that small-scale businesses had not effectively used the actors involved in outbound logistics activities. Finally, small-scale businesses could embrace the benefits that can be derived from the system in order to make adequate decisions on how to leverage their profit and improve performance in the competitive environment for more customers' satisfaction.

Odunjo (2022) conducted another study to examine the impact of inbound and outbound logistic operations on organizational performance at Dangote Cement industry. The study utilized a survey research design and purposive and simple random sampling methods to select the sample size. A five-point Likert scale questionnaire was used to collect primary data. A total of 96 respondents were used for the study ranging from senior, junior to management staff. Descriptive statistics,

Ordinary Least Square and Pearson Moment correlation techniques were employed. Findings revealed that logistic inbound and outbound operations positively and significantly affect organizational performance ($\beta = 0.308$, $\rho < 0.01$ and $\beta = 0.281$, $\rho < 0.01$) respectively. Also, a positive and significant relationship exists between logistic inbound operations and organizational performance ($r = 0.403^{**}$, $\rho < 0.01$) and also between logistic outbound operations and organizational performance ($r = 0.409^{**}$, $\rho < 0.01$). The study recommended that companies should encourage modern logistics operation techniques in terms of transportation, inventory and warehousing and also adopt up-to-date inventory management systems to avoid issues relating to overstocking and stock out during production.

A study by Adelwini, et al., (2023) looked at how logistics management affected the way Ghanaian roofing sheet manufacturers operated as an organization. The study specifically aimed to ascertain the effects of inventory, warehousing, transportation, physical distribution and information flow management on the functioning of the organization. Multiple linear regression analysis was the data analysis technique used. The results demonstrated that warehouse management, physical distribution and inventory management are the facets of logistics management that positively affect organizational performance. When it comes to helping organizations achieve their goals of having more effective management systems, logistics is crucial. Manufacturing companies will perform better if inventory management, transportation management, physical distribution and warehouse management processes are implemented more effectively in logistics management. The report also recommends that lawmakers and policymakers consider the need to support and create regulations that enhance the application of transport and logistics plans. Lastly, it's critical to monitor and evaluate a detailed examination of all logistics and transportation protocols necessary for manufacturing companies to achieve excellent operations management.

Another study by Ristovska, et al, (2017), looked at how logistics management techniques affected the productivity of businesses. The study's specific goal was to examine how a company's logistics management which includes inventory, storage, packaging, transportation and information management affects productivity and efficiency. An empirical study including eighty examinees from eighty distinct firms in the Republic of Macedonia was carried out. The survey results completely collaborate

and support the overall idea. Logistics managers set high goals for themselves in terms of lowering total business expenses including adequate storage, warehousing, transportation and information management. The requirement for logistics managers to oversee all logistical operations properly in order to boost customer happiness, competitiveness and corporate efficiency is one of the findings. The report recommended that managers implement backward integration to reduce transportation costs which will raise product prices. In order to control the pricing of their items, they should also construct warehouses to store their inventory as it moves out of the building.

Ogbeide and Isokpan (2022) investigated the effect of logistics costs on the financial performance of listed manufacturing businesses in Nigeria. The study specifically looks into how the performance of quoted manufacturing enterprises in Nigeria is impacted by the cost of acquiring raw materials, the cost of processing orders, the cost of maintaining inventory (warehouse) and the cost of fulfilling orders (finished goods). Between the fiscal years of 2015 and 2019, information was gathered from ten (10) of the sample quoted manufacturing enterprises, yielding fifty observations. A panel regression approach with fixed and random effects was used to the data. The analysis revealed that, in contrast to the cost of processing orders and the cost of delivery orders, which had no significant relationship with the performance of quoted manufacturing firms in Nigeria, the cost of ordering raw materials and the cost of keeping inventory (warehouse) had a significant negative relationship with the performance of quoted manufacturing firms in Nigeria. The study suggested that unless such raw materials are not accessible locally (in Nigeria), management of the involved manufacturing enterprises should thoroughly address expenses associated with obtaining raw materials and costs associated with storing inventory (warehouse).

Gyula (2015) looked at how the performance of the supply chain affected the general performance of the organization. Utilizing a dataset of Romanian businesses, the study calculated the effect of several performance domains within the framework of a supply chain on the overall performance of the organization. Using a balanced scorecard technique, the analysis identifies four performance areas related to supply chain. Financial performance in a supply chain is gauged by logistics revenues and costs. In the context of a supply chain, the article selects customer happiness, delivery reliability, speed and flexibility as the primary coordinates of marketing performance.

operational effectiveness within the balanced scorecard-defined supply chain performance category. The findings demonstrate that innovation, marketing and finances do positively and statistically significantly affect the total success of the organization. Although every calculated coefficient has the anticipated sign, the study does not include all performance areas and metrics that are statistically significant.

2.1.3 Local Perspective

Chileshe and Phiri (2022) conducted a study on the impact of supply chain management practices on the performance of small and medium enterprises in developing countries focusing specifically on agro-dealers in Zambia. The study employed a quantitative survey design to address relational questions between variables. Questionnaires were utilized to collect data, which were then analyzed using SPSS and regression analysis to establish relationships and impacts between variables.

The target population for the study comprised small and medium enterprises in the agro-sector registered with PACRA. The Yamane formula was employed to calculate a sample size of 151 which was then used to distribute the questionnaires for data collection. Multiple linear regression was utilized for data analysis. The research findings indicate that the application of supply chain management practices influences performance according to competitive priorities. An increase in SCMPs would lead to an increase in competitive advantage within a business, consequently boosting business performance.

Chileshe (2022) conducted another study that sought to establish the impact of supply chain management practices on the performance and competitive advantage of Small and Medium Enterprises (SMEs) in the agro sector with a focus on Lusaka. The study utilized a quantitative paradigm and a descriptive study design. The population of interest included all small and medium agro dealers in Lusaka registered with the Patents and Companies Regulatory Act (PACRA) as of April 2020. Questionnaires were used to collect primary data from the SMEs. A total of 245 SMEs in the agro-sector were found to be registered with PACRA. A sample size of 171 was determined using the Yamane formula, and questionnaires were distributed of which 151 were returned.

SPSS was the tool used to analyse the data collected from the questionnaires and the researcher employed multiple linear regression and Pearson correlation to analyse the results. From the literature review, the most important dimensions that capture SCM practices chosen were: strategic supplier relationships, customer relationships, quality of information sharing and level of information sharing for which variables were significant using the 95% significance level. From the results obtained using regression analysis, it was shown that the implementation of SCM practices resulted in increased performance of the SMEs in the agro sector (Chileshe, 2022).

2.3 Research Gap

Despite the growing recognition of inbound and outbound logistics as a critical driver of organizational performance, there remains a significant gap in understanding their specific impact on SMEs operating in Lusaka's Central Business District (CBD). Existing research on logistics and supply chain management has predominantly focused on large corporations and multinational firms overlooking the distinct logistical challenges faced by SMEs in developing economies. While studies such as those by Ayantoyinbo and Gegeleso (2018) and Odunjo (2022) have explored logistics efficiency, they have largely examined these factors in industrial and large-scale commercial enterprises. As a result, the extent to which SMEs in Lusaka optimize their logistics processes, mitigate operational costs and leverage supply chain efficiencies for sustained performance remains underexplored. This study aims to fill this empirical gap by providing localized insights into how logistical inefficiencies and cost management strategies affect the survival and growth of SMEs in Zambia.

Furthermore, prior research has not sufficiently examined the interplay between inbound logistics, outbound logistics and operational costs within the SME sector in Zambia particularly in a competitive urban setting like Lusaka CBD. While Transaction Cost Theory, Resource-Based Theory and Value Chain Theory have been applied to logistics management studies, there has been limited contextual application to SMEs in emerging economies where infrastructure constraints, financial limitations and regulatory challenges significantly shape business operations. This study addresses this gap by empirically investigating how SMEs can enhance their logistics operations to improve customer satisfaction, operational efficiency and financial sustainability. By doing so, it contributes to both academic literature and practical policymaking by offering evidence-based recommendations tailored to SMEs in a developing economy.

2.4 Theoretical Review

2.4.1 Transaction Cost Theory

Transaction cost theory, developed by economist Oliver E. Williamson (1995, 1981) who highlighted the role of transaction costs in promoting vertical and organizational trust. Such elements of the transaction cost theory are evidence supporting the role of supply chain management within organizations. Economic transactions incur transaction costs beyond the price of goods or services, covering negotiation, monitoring, enforcement and information-related expenses. Firms exist because they can internally organize activities, reducing these costs compared to market transactions. The choice between market and hierarchical transactions hinges on minimizing transaction costs, influenced by factors like uncertainty, asset specificity, transaction frequency and opportunistic behaviour.

This theory is relevant for the study because it helped to understand whether firms should internally manage these activities or outsource them based on minimizing transaction costs. By analysing these costs, SMEs can optimize their logistical strategies to enhance efficiency, reduce costs and maintain quality in their supply chains thus improving overall organizational performance.

2.4.2 Resource Based Theory

Resource-based theory (RBT) is a widely recognized approach in strategic management commonly employed to identify vital resources necessary for a company to sustain its competitive edge. It serves as a fundamental framework for understanding and predicting the primary factors influencing a firm's performance and competitive advantage (Utami & Alamanos, 2023).

This theory was utilized to evaluate the effect of inbound and outbound logistics on organizational performance as it highlights the significance of internal resources and capabilities in achieving sustained competitive advantage.

2.4.3 Value Chain Theory

This study relies on the Value Chain theoretical frame proposed by Michael Porter in 1985, which was first utilized in his book called Competitive Advantage: Creating and Sustaining Superior Performance. The value chain theory according to Nweke (2017), explained the activities and operations of business ventures which are tied to its survival in the competitive business arena. These activities are bifurcated into primary

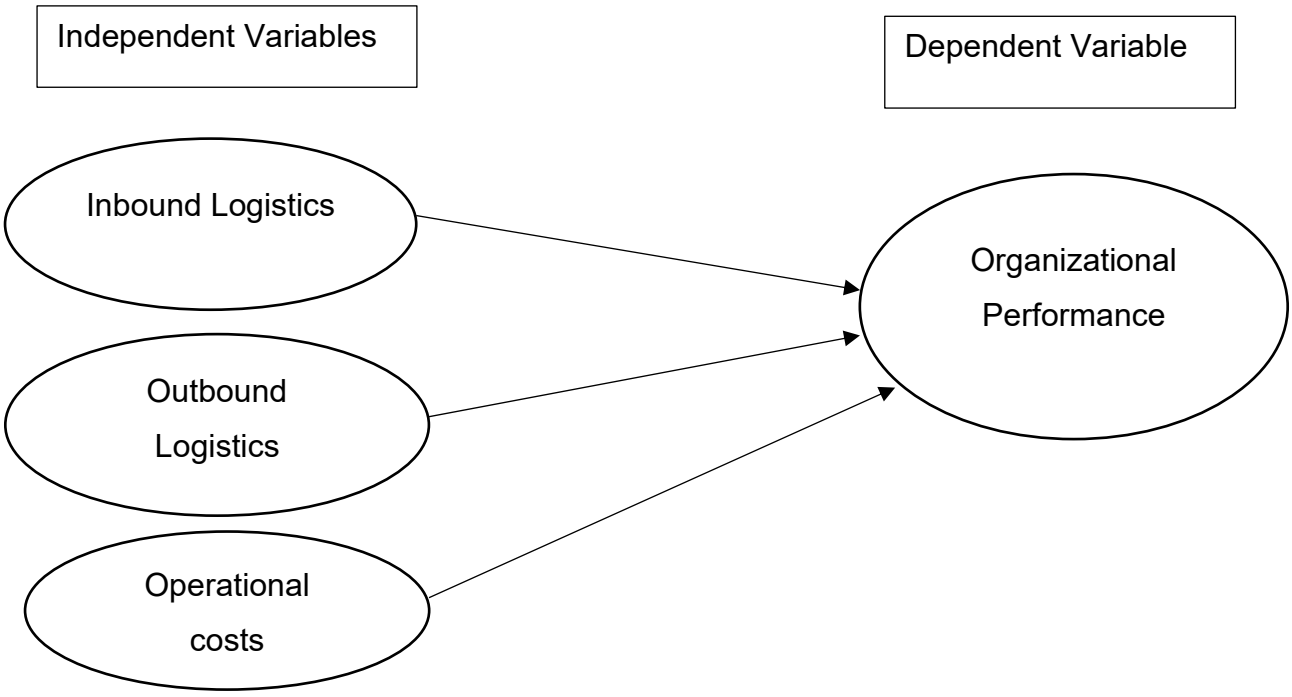
and secondary activities. The primary activities according to Lysons and Farrington (2006) are subsumed into the following, marketing and sales, inbound logistics, and outbound logistics, amongst others. The secondary activities include the structural systems of the organization, which involves; technological input, human resource management and information system amongst others (Lysons and Farrington, 2006).

As a core mandate of the business organization, the value chain theory tends to explain profit making activities and various systems involved in achieving its core purpose. Also, the theory possesses the capacity in its explanation of identifying and categorizing different operations in the supply chain structure and how to optimize organisations financial performance by means of establishing value relevance to goods and services in the transitional process from suppliers to customers (Nweke, 2017).

2.5 Conceptual Framework

The conceptual framework is the link between the study's independent variable and the dependent variable that is depicted diagrammatically (Mugenda, 2003). According to McGaghie et al. (2001), the conceptual framework sets the stage for the presentation of the specific research question that drives the investigation reported based on the problem statement.

Figure 1: Conceptual Framework



Source: (Odunjo, 2022).

2.6 Conceptualization

Inbound Logistics

Inbound logistics refers to anything that is coming inside a company (Ayantoyinbo & Gegeleso, 2018). Inbound logistics is one of the primary processes of logistics concentrating on purchasing and arranging the inbound movement of materials, parts or unfinished inventory from suppliers to manufacturing or assembly plants, warehouses or retail stores. According to Hassan (2023) Inbound logistics comprises all activities that secure the supply for manufacturing and assembly or sales. These activities range from order placement and order allocation between suppliers to a chosen delivery and transportation concept for the receipt and storage or immediate use of the materials.

The movement, storage and delivery of items arriving at a company site is known as inbound logistics, whereas the movement of goods departing from a business location is known as outbound logistics.

Outbound Logistics

Outbound logistics refers to anything that is going outside of a company which means end customer or end user logistics. Outbound processes are vital for companies as they connect them directly with their customers in the value chain (Klumpp and Heragu, 2019).

Outbound logistics is the process related to the movement and storage of products from the end of production line to the end consumer. A manager working in outbound logistics is focused on two issues namely storage and transportation. The managers use warehousing techniques to keep the finished goods safe and accessible. Having as little product stored as possible can be advantageous since these products are not making money. Therefore, the outbound logistics manager often has balance company cost savings with consumer demand. The transportation function is by far the most complex part of outbound logistics. And without transport, there is no logistics. For that reason, it is important to be able to move the product from one location to another location in the fastest, most cost-effective and efficient way possible.

Operational Cost

Operational costs are a significant determinant of organizational performance because they directly affect the bottom line. High operational costs can erode profit margins, limiting the organization's ability to reinvest in its operations, innovate or compete effectively on the market. On the other hand, organizations that manage their operational costs effectively by optimizing processes, reducing waste or leveraging technology can improve their performance metrics such as profitability, return on investment and customer satisfaction. A study by Chen and Wong (2020) found that cost efficiency plays a critical role in enhancing organizational performance. The research showed that firms with better cost control mechanisms tended to achieve higher profitability and greater market competitiveness thus minimizing operational Costs and improving Financial Performance. Johnson and Kaplan (2018) highlighted that organizations that invest in cost reduction strategies without compromising on quality often report better financial performance, including improved profit margins and shareholder value.

Organisational Performance (Dependent Variable)

Organisational performance refers to how well an organization achieves its market-oriented goals as well as its financial goals (Kim & Choi, 2014). There are two aspects which must be considered when attempting to define performance, its time frame and its reference point. It is possible to differentiate between past and future performance and past superior performance does not guarantee that it will remain superior in the future (Yoo & Kim, 2012).

Organisational performance is divided into constructs of operational and organizational performance which was identified as a typical way of measuring firm performance in past studies on supply chain management fit (Bair & Palpacuer, 2015). Liang and Shan (2015) provide extensive reviews of typical operational performance measures that cover typically lead times, on-time deliveries, work in-process inventories, finished goods inventories, value additions and in-stock rates. Typical corporate performance measures are firm average profit, profit growth, market share growth and sales (Richey, et al., 2011).

The profit margin is an accounting measure designed to gauge the financial health of a business or industry (McKinsey, 2014). In general, it is defined as the ratio of profits earned to total sales receipts (or costs) over some defined period. The profit margin is a measure of the amount of profit accruing to a firm from the sale of a product or service. It also provides an indication of efficiency in that it captures the amount of surplus generated per unit of the product or service sold (Eljelly, 2015). In order to generate a sizeable profit margin, a company must operate efficiently enough to recover not only the costs of the product or service sold, operating expenses and the costs of debt but also to provide compensation for its owners in exchange for their acceptance of risk. Profit margin measures the flow of profits over some period compared with the costs, or sales, incurred over the same period.

2.7 Summary

This chapter provides a comprehensive review of the literature relevant to the research topic, establishing the theoretical foundation for the study. It concluded by presenting the conceptual framework, which serves as a roadmap guiding the research methodology and analysis.

CHAPTER THREE:

METHODOLOGY

3.0 Introduction

Chapter three outlines the methodology adopted for the study covering various aspects such as the research approach, design, population/sample size determination, data collection methods, instruments, instrument reliability assessment, data analysis procedures and ethical considerations.

3.1 Research Approach

To test hypotheses in greater depth and conduct in-depth data collection, analysis and interpretation, researchers employ a research strategy (Creswell, 2014). It's often referred to ensure the study runs smoothly by incorporating several different logical assumptions. Three primary research methodologies exist which are quantitative, qualitative and mixed-method studies (Creswell, 2014).

The quantitative technique was used in this study to compile the data for this study and that relies on statistical methods to produce results that can be understood objectively (Creswell, 2014). The quantitative approach aims to generate statistical results in the form of numerical or statistical data allowing for the quantification of correlations between phenomena and it seeks to analyse and identify quantifiable correlations between components when there is uncertainty about the scope and characteristics of a recognized problem (Creswell, 2014). Quantitative approach in this study aimed to measure and analyse numerical data to understand the relationships between inbound logistics, outbound logistics and organizational performance. This approach allows for statistical analysis to test hypotheses and draw objective conclusions based on quantitative evidence.

3.2 Research Design

A research design sets out the specific details on how to answer the questions laid down for this research. The selection of an appropriate design is crucial in arriving at valid findings, comparisons and conclusions (Kumar, 1999). This study utilised a correlation research design for its methodology. A correlation design helped in analyzing the relationship between the variables of organizational performance by testing the independent and dependent variables in the hypotheses. By employing this

design, the researcher aims to quantify the degree and direction of association between various logistics variables. Utilizing statistical techniques within the correlation research design such as Pearson's correlation coefficient, the study systematically examined the strength and significance of relationships between the variables shedding light on how improvements in logistics processes may affect organizational performance outcomes.

For the objective of researching and clarifying phenomena within the natural setting of their respective environments, this study design is considered to be acceptable. Another favourable aspect of this study design is that it is able to make use of a wide variety of research methods in order to investigate its variables (Leavy, 2022).

3.3 Study Population

A study population refers to the entire group of individuals or elements that possess certain characteristics and are the focus of a research study. It is essential to distinguish the study population from the sampling frame, as the population represents the broader target group, while the sampling frame consists of elements from which the sample is drawn (Martin, 2014).

At the time of the study, the most recent available estimate of SMEs in Lusaka was 84,000, as reported by Shah (2021). This figure was used as the study population because it was the most comprehensive and verifiable secondary data available during the research period. While more recent estimates may exist, they were either inaccessible, unpublished, or inconsistent across different sources, making the 2021 data the most reliable and appropriate for this study. The use of secondary data from a recognized source ensured consistency and comparability with previous studies on SMEs in Lusaka, allowing for meaningful analysis and interpretation.

3.4 Sample Size

A sample, in the future study, will be a subset of the population sharing similar features with the entire population and serving as representatives of the population (Martin, 2014). It involves selecting elements from a population to make generalizations about the whole population (Creswell, 2014).

For this study, the sample size was calculated using the Rao soft Calculator given by

Equation 1: Sovlin Formula (Rao Soft)

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

$$n = \frac{84,000}{1 + 84{,}000(0.05)^2}$$

$$n = \frac{84{,}000}{211}$$

$n = 398$ SMEs.

In which n is the sample size, N being the population and e is the margin of error (0.05). Therefore, the sample size of 398 SMEs was appropriate for the study.

3.5 Sampling Technique

Simple random sampling technique was used for this study. Simple random sampling ensures that every member of the population has an equal chance of being selected for the sample. This technique helps to minimize bias and increase the generalizability of the findings to the larger population. Additionally, simple random sampling is relatively easy to implement and allows for statistical analysis that accurately reflects the characteristics of the population.

3.6 Data Collection

The study utilized both primary and secondary data.

3.6.1 Primary Data

Primary data is defined as data that is collected directly by the researcher for the purpose of the current research study (Ajayi, 2017). Academic researchers engage in the collection of primary data in order to effectively address specific research inquiries and achieve predetermined research objectives. Emma Bell (2022) identified various conventional techniques for collecting primary data that encompass surveys, interviews, observations, experiments and focus groups. For this study the collection of primary data was conducted through the distribution of a closed ended questionnaire that was administered to the SMEs owners in Lusaka.

4.6.2 Secondary Data

According to Boslaugh (2007), secondary data can be defined as every data set that the author did not originally generate. The secondary data utilized in this study

encompassed textbooks, journals and other scholarly published articles that were significant to the present topic.

The study collected secondary data from various sources, including libraries, archived records from the industrial development cooperation department, government publications, online information, textbooks, tax code and newspapers. This was attributed to its accessibility and comprehensibility as it encompassed a substantial body of extensively researched material.

3.7 Reliability Instrument

According to Kaluai & Muathe (2020), assessing the reliability of an instrument involves determining whether the findings of a study can be replicated.

3.7.1 Validity

To enhance internal validity, the research design was carefully aligned with the study objectives and accurately measured the effect of Inbound and Outbound logistics on organizational performance among SMEs in Lusaka CBD.

External validity was addressed by ensuring that the findings generalized to the broader organizational performance of SMEs in Zambia. Content validity was ensured through expert reviews and pilot testing of research instruments to confirm their relevance and comprehensiveness.

3.7.2 Reliability

The reliability of the study was strengthened through consistent and standardized data collection methods, ensuring that the research instruments yielded consistent results over time. Inter-rater reliability addressed by training and calibrating research assistants involved in data collection. Additionally, test-retest reliability was considered by conducting pilot studies and reapplying measurements to a subset of participants to assess the consistency of results over time. Validity was assessed through Cronbach's Alpha, having the scale below:

Table 1: Alpha Coefficient Scale

Alpha Coefficient Range	Interpretation
$\alpha<0.5$	Not acceptable
$\alpha>0.5$	Poor
$\alpha>0.6$	Questionable
$\alpha>0.7$	Acceptable
$\alpha>0.8$	Good
$0.9<\alpha\leq 0.95$	Excellent

Source: Pallant (2014).

3.7.3 Reliability Test Results

Table 2: Reliability Test Results

The reliability table 2 provided reflects the internal consistency of the constructs measured as indicated by their respective Cronbach's Alpha values. A high Cronbach's Alpha value signifies that the items within a construct reliably measure the same underlying concept. These values are critical in determining the validity and dependability of the results derived from the data.

3.7.3.1 Organizational Perspective

For the construct of Organizational Performance, the Cronbach's Alpha of 0.913 indicates excellent reliability. This suggests that the items effectively capture the essence of organizational performance which includes the efficiency of inbound and outbound logistics, the management of operational costs, and the impact on customer satisfaction and financial performance. This high reliability ensures that the findings related to organizational performance can be trusted and provide meaningful insights. The data strongly supports the notion that logistics operations are integral to achieving operational and financial excellence as well as enhancing customer loyalty.

3.7.3.2 Inbound Logistics

Similarly, the construct of Inbound Logistics demonstrates excellent reliability with a Cronbach's Alpha of 0.902. The items under this construct focus on supplier relationships, cost reduction and operational improvements facilitated by efficient inbound logistics practices. This high level of internal consistency indicates that these items cohesively reflect the role of inbound logistics in promoting organizational success. The implications of this finding are significant as they highlight the critical

importance of managing inbound logistics to ensure inventory efficiency, cost control, and overall organizational effectiveness.

3.7.3.2 Outbound Logistics

For Outbound Logistics, the Cronbach's Alpha of 0.871 reflects strong internal consistency among the items measuring this construct. These items address timely product delivery, customer satisfaction and the flexibility of logistics practices in responding to dynamic customer demands. The results indicate that improvements in outbound logistics substantially enhance customer retention and market competitiveness, which in turn contributes to the overall performance of the organization. The strong reliability of this construct ensures that these observations can be used confidently to improve logistics operations.

3.7.3.3 Operational Costs

The construct of Operational Costs also shows a high reliability score with a Cronbach's Alpha of 0.863. This construct encompasses challenges such as inadequate infrastructure, high transportation costs, communication inefficiencies and difficulties in regulatory compliance. The data demonstrates that these factors significantly impact logistics practices and by extension organizational performance. The reliability of this construct ensures that the data collected accurately reflects the challenges associated with operational costs and their implications for logistics efficiency.

Overall, the consistently high Cronbach's Alpha values across all constructs indicate that the instrument used is robust and reliable for measuring the intended variables. These findings underscore the critical role of logistics management in organizational success, emphasizing the need for strategic investments in inbound and outbound logistics as well as the management of operational costs. Decision-makers can confidently rely on these results to design and implement strategies that enhance logistics efficiency, reduce operational challenges, and ultimately drive organizational performance.

Table 2: Reliability Test Results

Variables	Items	Cronbach's Alpha
Organisational Performance	1. Our inbound logistics processes effectively support our operational efficiency and overall performance	0.913

	2. Our outbound logistics consistently meet customer expectations, contributing positively to our organizational performance 3. The logistics strategies we implement help us manage costs effectively, enhancing our financial performance. 4. Improvements in our logistics operations have led to higher customer satisfaction and loyalty	
Inbound Logistics	1. Strong relationships with our suppliers through effective inbound logistics contribute significantly to our organizational success 2. Our inbound logistics practices enable efficient inventory management, positively impacting our overall performance. 3. Our inbound logistics practices help reduce costs, thereby improving our financial performance. 4. Effective inbound logistics practices have led to measurable improvements in our organizational performance	0.902
Outbound Logistics	1. Our outbound logistics practices ensure timely delivery of products, significantly enhancing our organizational performance. 2. Effective outbound logistics contribute to high levels of customer satisfaction and retention in our business. 3. The flexibility of our outbound logistics practices allows us to respond quickly to changing customer demands, improving our market competitiveness. 4. Improvements in our outbound logistics practices have led to noticeable enhancements in our overall organizational performance.	0.871
Operational Costs	1. Inadequate infrastructure significantly hinders our inbound and outbound logistics practices. 2. Rising transportation costs pose a major challenge to our outbound logistics operations. 3. Poor communication among logistics partners negatively impacts the effectiveness of our logistics practices 4. Navigating regulatory compliance presents significant challenges for our inbound and outbound logistics	0.863

3.8 Data Analysis

Upon completion of the data collection exercise, all completed research instruments were assembled, coded, summarized, entered into the computer and analysed using statistical package for social science (SPSS). SPSS stands out as the preferred statistical analysis software for the researcher, widely recognized and utilized across various disciplines such as sociology, economics and medicine. The primary focus of statistical analysis revolved around regression and Pearson coefficient correlation methods. Correlation analysis helped to identify relationships between different logistics variables and organisational performance indicators. Regression analysis was utilised to examine the strength effect of inbound and outbound logistics on organisational performance while controlling for relevant variables.

3.9 Ethical Consideration

In evaluating the effect of Inbound and Outbound logistics on the performance of organizations within SMEs in Lusaka CBD, numerous ethical considerations were emphasized. Firstly, it was ensured that the privacy and confidentiality of sensitive information gathered during the research process was paramount. Ensuring the confidentiality of participants and their feedback in surveys or interviews was crucial for upholding trust and adhering to ethical guidelines. Furthermore, it is essential to maintain transparency in methodology, ensuring that clear information regarding the purpose, procedures and potential impacts of the study is provided to participants (Saunders, 2015). These ethical considerations collectively contributed to the responsible and respectful conduct of research that respects the rights and well-being of all parties that were involved.

3.10 Chapter Summary

This chapter outlined the study's methodology, detailing the research approach, design and analysis technique that was utilized.

CHAPTER FOUR:

DATA ANALYSIS AND INTERPRETATION OF FINDINGS

4.0 Introduction

This chapter presents an analysis and interpretation of the data gathered during the study with the aim of addressing the research objectives and answering the core questions posed. It offers a detailed exploration of the findings, focusing on uncovering patterns and relationships among the variables examined. The analysis begins by providing descriptive statistics which give an overview of the data's key characteristics. This is followed by inferential analyses that investigate deeper associations and possible causal relationships ensuring the findings align with the research objectives.

The findings outlined in this chapter serve as a basis for drawing meaningful conclusions and developing practical recommendations in later sections. Each result is carefully analysed to emphasize its importance within the context of the research problem, ensuring the discussion remains relevant and insightful. By integrating theoretical frameworks with empirical data, this chapter provides a solid foundation for understanding the issues studied and addressing the research questions comprehensively.

4.1 Demographic Profile

The data provided paints a detailed picture of the demographic and operational characteristics of the respondents, shedding light on key trends and patterns relevant to the study.

4.1.1 Gender

Starting with gender, the majority of respondents (63.7%) are males with females making up 36.3% of the sample. This disparity suggests a gender imbalance, potentially reflective of the industries or sectors being studied. It highlights the possible dominance of men in business ownership or leadership roles within the sampled context, an aspect worth considering when analyzing industry dynamics or workforce inclusivity. Addressing this imbalance could present an opportunity for initiatives aimed at empowering women entrepreneurs or professionals in these sectors.

4.1.2 Number of Employees

Looking at the size of businesses by the number of employees, it is evident that most organizations are small to medium enterprises. Half of the respondents (50.3%) have between 10 and 20 employees while 31.1% have 30 to 50 employees. The smallest segment covers those with 1 to 9 employees, comprises 18.7%. This distribution indicates a concentration of businesses that are moderately scaled, possibly reflecting the nature of the industry or economic constraints influencing scalability. These findings suggest a need for targeted support and resources to help smaller enterprises grow and expand their workforce.

4.1.3 Annual Revenue

The annual revenue data reveals that over half of the businesses (52.6%) generate less than ZMW 50,000 annually. A further 25.6% earn between ZMW 50,000 and ZMW 100,000, with only 0.8% exceeding ZMW 500,000 in annual revenue. These figures underscore the predominance of micro and small enterprises with limited financial capacity, pointing to potential challenges in scaling operations and accessing broader markets. This financial distribution highlights the importance of interventions such as access to credit or financial advisory services to enhance the growth and sustainability of these businesses.

4.1.4 Business Sector

The business sector analysis shows a strong representation from the manufacturing sector, which accounts for 58.8% of respondents. This is followed by the services sector (21%), retail (13.5%), and agriculture (6.7%). The manufacturing dominance suggests a focus on production and related industries, possibly influenced by the study's scope or the region's economic composition. This sectoral focus could guide policymakers and stakeholders in developing strategies to support and diversify economic activity, particularly in underrepresented areas such as agriculture and retail.

4.1.5 Years of Experience

In terms of experience, the largest group (43.5%) has been in operation for 5 to 10 years, with 38.3% having 1 to 5 years of experience. Only 5.7% have been in business for less than a year, and 1% for over 15 years. This indicates that most respondents have a moderate level of experience, with relatively few newcomers or very

established entities. The data suggests a stable middle ground where businesses have moved past the initial survival phase but still require support to reach long-term sustainability. Providing mentorship and training opportunities tailored to this experience range could help bridge the gap to greater longevity and success.

Table 3: Demographics of Respondents

Variables	Description	Frequency	Percent
Gender	Male	246	63.7
	Female	140	36.3
	Total	386	100
Number employees	1-9 Employees	72	18.7
	10-20 Employees	194	50.3
	30-50 Employees	120	31.1
	Total	386	100
Annual revenue	Less than ZMW 50,000	203	52.6
	ZMW 50,000 - ZMW 100,000	99	25.6
	ZMW 100,001 - ZMW 300,000	48	12.4
	ZMW 300,001 - ZMW 500,000	33	8.5
	Over ZMW 500,000	3	0.8
	Total	386	100
Business sector	Retail	52	13.5
	Manufacturing	227	58.8
	Agriculture	26	6.7
	Services	81	21
	Total	386	100
Years of Experience	Less than 1 year	22	5.7
	1-5 years	148	38.3
	5-10 years	168	43.5
	10-15 years	44	11.4
	Over 15 years	4	1
	Total	386	100

4.2 Correlation Analysis

4.2.1 Gender

The weak but significant positive correlation (.132**) between gender and the dependent variable, coupled with a mean of 1.36 and a standard deviation of 0.481, suggests that gender plays a minor role in influencing outcomes within the studied

context. While the consistent responses indicate a stable understanding of gender-related impacts, the relatively low mean highlights the limited importance attributed to this variable. The findings imply that gender disparities may exist but are not primary drivers of organizational performance. This suggests an opportunity to explore underlying factors that could strengthen gender-related contributions to outcomes such as fostering diversity and inclusivity. While previous research in organizational studies has debated the extent to which gender impacts performance, most literature focuses on gender disparities in leadership or wage gaps. This study, however, shifts the focus to how gender contributes (or does not contribute) to logistical efficiency and cost management in organizational success. This nuanced finding suggests that future discussions on gender diversity in management should move beyond representation to examine how inclusivity in decision-making affects core operational functions.

4.2.2 Number of Employees

The weak positive correlation (.121*) between workforce size and the dependent variable suggests that while the number of employees is relevant, it is not a dominant factor in organizational success. With a mean of 2.12 and a standard deviation of 0.695, the variability reflects the range of organizational sizes included in the study. The implication is that increasing workforce size alone may not substantially enhance performance unless paired with strategic workforce planning and skill development. This highlights the need for organizations to focus on not just the quantity but also the quality and deployment of human resources.

Many existing studies emphasize workforce size as a determinant of productivity, yet this research shows that sheer numbers are insufficient. Instead, the study highlights strategic workforce deployment as the more critical factor, aligning with contemporary HRM theories that stress the importance of skill alignment over employee count. This adds to literature on workforce optimization in emerging economies where labour-intensive models often take precedence over efficiency-driven ones.

4.2.3 Inbound Logistics

The strong positive correlation (.611**) and high mean score of 4.296 suggest that efficient inbound logistics significantly contribute to organizational outcomes. The moderate variability (standard deviation of 0.55595) reflects a shared recognition of the importance of managing inbound logistics effectively. This implies that improving

supply chain processes, such as inventory management and supplier relationships, can lead to substantial performance gains. Organizations should prioritize investments in technologies and practices that optimize inbound logistics to maintain a competitive advantage. Unlike traditional studies that examine supply chain efficiencies in large multinational corporations, this study provides empirical evidence from local Zambian organizations. It highlights how inbound logistics in emerging economies contribute to competitive advantage, reinforcing the growing importance of localized supplier networks and adaptive inventory management systems.

4.2.4 Outbound Logistics

With a high mean score of 4.3329 and a strong positive correlation (.629**), outbound logistics emerge as a critical determinant of success. The moderate consistency in responses (standard deviation of 0.5591) indicates general agreement on its importance. The implication is that efficient outbound logistics such as timely deliveries and customer-centric practices are pivotal for enhancing customer satisfaction and retention. Organizations should focus on improving the flexibility and responsiveness of their outbound logistics to meet evolving market demands and sustain high levels of performance.

This study builds on existing supply chain literature by focusing specifically on how outbound logistics drive customer retention and competitive advantage in a developing market. Most prior research in logistics focus on cost reductions but this study highlighted that outbound logistics' role in service quality is just as critical, particularly in customer-centric industries.

4.2.5 Operational Costs

Operational costs stand out as the most significant variable, with the highest mean score (4.364), the strongest positive correlation (.688**) and low variability (standard deviation of 0.49768). This indicates that respondents universally agree on the critical importance of managing costs to drive organizational success. The data implies that cost control is a cornerstone of operational efficiency, impacting profitability and resource allocation. Organizations should prioritize strategies to minimize costs without compromising quality such as adopting cost-effective technologies and streamlining processes to improve overall efficiency. Unlike studies that broadly link cost control to profitability, this research specifically identifies which cost-management

strategies matter most in an emerging market setting. The study highlights that cost efficiency is not just about reducing expenses but about optimizing resource allocation without sacrificing service quality, adding depth to existing financial management literature.

4.2.5 General Implications

The data underscores the multifaceted nature of organizational success where logistics and cost management play central roles supported by workforce considerations and demographic factors. Each variable presents opportunities for strategic intervention to optimize performance and achieve sustainable growth. The findings guide organizations to allocate resources effectively and focus on high-impact areas like operational costs and logistics for maximum outcomes.

Table 4: Correlation and Central Tendency

	Variable	Mean	Std. Deviation	1	2	3	4	5	6
1	Organisation Performance	4.296	0.55595	--					
2	Gender	1.36	0.481	.132**	--				
3	Number employees	2.12	0.695	.121*	0.09	--			
4	Inbound Logistics	4.3329	0.5591	.611**	.156**	.102*	--		
5	Outbound Logistics	4.364	0.49768	.629**	.168**	.220**	.650**	--	
6	Operation Costs	4.4152	0.52387	.688**	-0.048	.149**	.510**	.601**	--
	** Correlation is significant at the 0.01 level (2-tailed).			* Correlation is significant at the 0.05 level (2-tailed).					

4.3 Regression Analysis

The table presented the results of a stepwise regression analysis that examined how control and independent variables contribute to predicting the dependent variable. Each model was built upon the previous one by adding new predictors progressively increasing the model's explanatory power. The analysis included important metrics such as beta coefficients (β), standard errors (SE), variance inflation factors (VIF), F-statistics, R-squared, and adjusted R-squared values, offering a thorough understanding of the relationships within the data.

4.3.1 Gender

Gender, which was one of the control variables, showed a significant positive effect in Model 1 ($\beta = 0.141$, $SE = 0.058$, $p < 0.05$), suggesting that gender differences initially play a small role in influencing the outcome. However, this significance diminishes in Models 2 and 3 as stronger predictors are added, re-emerging in Model 4 with a weaker effect ($\beta = 0.1$, $SE = 0.039$, $p < 0.05$). The VIF for gender was 1.084, indicating no multicollinearity issues. These findings implied that gender differences have a

modest influence but are largely overshadowed by variables like logistics and operational costs as the model evolves. These finding challenge traditional assumptions about gender-based performance differentials. It suggested that gender-inclusive policies may not directly impact financial outcomes but could instead influence indirect factors such as team dynamics and innovation.

4.3.2 Number of Employees

The number of employees demonstrated a small but significant positive relationship with the dependent variable in Model 1 ($\beta = 0.088$, SE = 0.04, $p < 0.05$). However, its significance disappeared in later models as additional variables are introduced. By Model 4, the beta coefficient became non-significant ($\beta = -0.016$, SE = 0.027). The VIF of 1.06 confirmed that no multicollinearity concerns. These results suggested that workforce size may initially correlate with performance, but its impact diminishes once operational factors like logistics and costs are accounted for, highlighting the limited role of workforce size in isolation. The study strengthened the argument that scaling a workforce without strategic deployment does not drive performance, shifting emphasis towards quality over quantity in workforce strategies.

4.3.3 Inbound Logistics

Inbound logistics emerged as a strong and consistent predictor of the dependent variable, with a highly significant effect in Model 2 ($\beta = 0.596$, SE = 0.041, $p < 0.001$). Although its effect size decreased slightly in Models 3 and 4 ($\beta = 0.347$ and $\beta = 0.245$, respectively, both $p < 0.001$), it remained as one of the most impactful variables throughout. The VIF of 1.83 confirmed no multicollinearity issues. These findings underscored the foundational role of inbound logistics in driving performance outcomes, particularly through efficient inventory management and supplier coordination. The slight reduction in its beta coefficients reflected the shared variance with other predictors rather than a decline in its importance.

This study contributed to literature by providing empirical evidence that inbound logistics was not only a cost-saving mechanism but also a key driver of performance particularly in developing markets. Unlike previous studies that predominantly focused on supply chain efficiencies in multinational corporations, this research highlighted the importance of localized supplier networks and adaptive inventory management for businesses operating in Zambia. It demonstrated that organizations could achieve a

competitive advantage by improving supplier coordination, streamlining procurement processes and adopting technology-driven inventory systems.

H1: There is a positive significant effect between the inbound logistics and the performance. This hypothesis was supported

4.3.4 Outbound Logistics

The Outbound logistics enters the analysis in Model 3, showing a significant positive effect ($\beta = 0.448$, $SE = 0.056$, $p < 0.001$). While its influence decreases slightly in Model 4 ($\beta = 0.203$, $SE = 0.054$, $p < 0.001$), it remained a key factor. The VIF of 2.205 was slightly higher but still acceptable, indicating minimal multicollinearity. These results suggested that efficient outbound logistics, such as timely deliveries and customer satisfaction strategies, play a significant role in improving organizational outcomes. Its introduction highlighted the importance of logistics in sustaining competitive advantages and enhancing performance.

The study added to literature by shifting the perception of outbound logistics from a mere cost center to a strategic function that directly influenced customer retention and market competitiveness. While existing research often framed outbound logistics in terms of cost reduction, this study demonstrated that its impact extended beyond expenses to service quality and customer satisfaction. In the context of developing markets, where unreliable delivery systems were a common challenge, businesses that prioritized flexible and efficient outbound logistics strategies gained a considerable advantage in customer loyalty and long-term sustainability.

H2: There is a positive significant effect between the outbound logistics and the performance. This hypothesis was supported

4.3.5 Operational Costs

The operational costs were introduced in Model 4 and show the strongest relationship with the dependent variable ($\beta = 0.488$, $SE = 0.046$, $p < 0.001$). The low VIF of 1.705 indicates no multicollinearity concerns, confirming the variable's independent contribution to the model. Operational costs significantly enhance the model’s explanatory power, emphasizing their critical role in driving organizational success. These findings highlighted the need for organizations to focus on cost management strategies to optimize performance outcomes.

This study contributed to literature by moving beyond the conventional argument that cost-cutting leads to improved profitability. Instead, it demonstrated that cost optimization, rather than cost reduction alone, was the key to performance improvement. Unlike prior research that emphasized broad cost minimization strategies, this study provided a more nuanced perspective by showing that strategic allocation of resources and investments in efficiency-enhancing technologies played a pivotal role in business success. Furthermore, in emerging economies where financial constraints were common, the study highlighted how organizations could achieve sustainable growth by balancing cost control with value-driven spending.

H3: There is a positive significant effect between the operational costs and the performance. This hypothesis was supported

4.3.6 Model Performance

The progressive improvement in the models is evident from the increasing F-statistics, R-squared and adjusted R-squared values. Model 1, which includes only the control variables, explains a minimal 2.9% of the variance in the dependent variable (R-squared = 0.029, F = 5.8, $p < 0.01$). Adding inbound logistics in Model 2 dramatically increases the explained variance to 37.8% (R-squared = 0.378, F = 77.255, $p < 0.001$). Outbound logistics in Model 3 raises the R-squared to 46.6% (F = 83.14, $p < 0.001$) and operational costs in Model 4 further boost it to 59% (F = 109.426, $p < 0.001$). Adjusted R-squared values closely align with these results, affirming the robustness of the models.

The largest R-squared change occurs in Model 2 (0.348), driven by inbound logistics. Smaller yet meaningful contributions come from outbound logistics (0.088) in Model 3 and operational costs (0.124) in Model 4. These results demonstrated the central importance of logistics and cost efficiency in explaining performance with control variables playing a much smaller role.

4.3.7 Implications

The findings emphasized that inbound and outbound logistics along with operational cost management are the primary drivers of organizational performance. Inbound logistics provide a foundational advantage while outbound logistics and cost management build upon this foundation to further enhance outcomes. Control variables like gender and workforce size contribute modestly but become less

significant as stronger predictors are introduced. These results underscore the importance of prioritizing operational efficiency and cost management strategies to achieve superior organizational outcomes while recognizing the supplementary role of demographic and structural factors.

Table 5: Hierarchical Regression

	MODEL 1		MODEL 2		MODEL 3		MODEL 4		VIF
Control Variables	Beta	SE	Beta	SE	Beta	SE	Beta	SE	
Gender	0.141*	0.058	0.038	0.047	0.012	0.044	0.1*	0.039	1.084
Number Employees	0.088*	0.04	0.046	0.033	-0.003	0.031	-0.016	0.027	1.06
Independent Variables									
Inbound Logistics			0.596***	0.041	0.347***	0.049	0.245***	0.044	1.83
Outbound Logistics					0.448***	0.056	0.203***	0.054	2.205
Operation Costs							0.488***	0.046	1.705
F	5.8**		77.255***		83.14***		109.426***		
F Change	5.8		213.722		63.113		115.034		
R	0.171		0.615		0.683		0.768		
R Squared	0.029		0.378		0.466		0.59		
Adjusted R Squared	0.024		0.373		0.46		0.585		
R Squared Change	0.029		0.348		0.088		0.124		

***sig<0.001 (0.1 percent), **sig<0.01 (1 percent), *sig<0.05 (5 percent)

4.4 Chapter Summary

Chapter 4 focused on analysing the data collected to explore how control and independent variables impacted the dependent variable. The analysis revealed that inbound logistics, outbound logistics and operational costs were rated highly by respondents with consistent responses indicating their importance. In contrast, variables like gender and workforce size showed weaker influence and more varied perceptions. Regression results demonstrated that gender and workforce size had small effects in the initial model but lost significance as stronger predictors such as inbound logistics and operational costs were introduced.

The final model showed that operational costs were the most influential factor followed closely by inbound and outbound logistics. Together, these variables explained 59% of the variance in the dependent variable, emphasizing their critical role in organizational success. Control variables like gender and workforce size played a

smaller role but still provided useful context. These findings underscored the importance of focusing on logistics and cost management to improve performance and achieve organizational goals.

CHAPTER FIVE:

DISCUSSION OF THE FINDINGS

5.0 Introduction

This chapter provided an in-depth discussion of the findings from Chapter Four, bordered about the research objectives outlined in Chapter One of this study. By integrating these results with the literature reviewed in Chapter Two, this chapter explored how inbound logistics, outbound logistics, operational costs and demographic factors such as gender and workforce size contribute to the performance of SMEs in Lusaka's CBD.

5.1 To examine the effect of Inbound Logistics on the Organisational Performance of SMEs

The study revealed a significant positive relationship between inbound logistics and organizational performance with a beta coefficient of 0.245 ($p < 0.001$) in the regression analysis. This confirmed that efficient inbound logistics contribute to improved inventory management, reduced procurement delays and enhanced operational efficiency aligning with findings from Ayantoyinbo and Gegeleso (2018). Previous research primarily examined inbound logistics in large corporations but this study uniquely extended the discussion to SMEs in a developing economy where logistical inefficiencies pose greater operational challenges.

A key contribution of this study was its empirical validation of how supplier relationships, inventory systems and procurement efficiency collectively shape SME performance in Lusaka. Unlike prior studies that focused on global supply chain optimization, these findings highlighted the importance of localized supply chain management tailored to the constraints and opportunities within developing markets. The study reinforced Resource-Based Theory by demonstrating that SMEs with optimized inbound logistics gained a strategic advantage by leveraging internal efficiencies. This study recommended that SMEs invest in supply chain management software and build collaborative relationships with suppliers to mitigate inefficiencies and sustain operational performance.

5.2 TO assess the effect of Outbound Logistics on the Organisational Performance of SMEs

Outbound logistics also showed a significant positive effect on organizational performance with a beta coefficient of 0.203 ($p < 0.001$). This result aligns with literature from Adelwini et al. (2023) and Ristovska et al. (2017) who stressed the importance of efficient delivery systems and customer-focused logistics for improving business outcomes. Value Chain Theory reinforces these findings by identifying outbound logistics as a key process that adds value to the final product or service enhancing customer satisfaction and loyalty.

The data from Chapter Four revealed that respondents placed strong emphasis on the importance of outbound logistics highlighting its role in ensuring timely deliveries and maintaining customer trust. For SMEs in Lusaka, efficient outbound logistics are essential for meeting customer expectations in a competitive market. These findings suggest that SMEs should invest in technology like route optimization tools, improve their transportation systems and focus on responsive customer service to enhance delivery efficiency and organizational performance.

This study's contribution lay in contextualizing outbound logistics within SME constraints emphasizing the need for scalable and cost-effective delivery strategies. While Value Chain Theory identifies outbound logistics as a crucial component of value addition, this research provided empirical evidence that SMEs in Lusaka struggled to maintain competitive delivery standards without strategic investments in transportation and logistics technology. The findings suggested that SMEs should prioritize route optimization tools, vehicle maintenance programs and customer-centric logistics strategies to maintain competitiveness in a rapidly evolving market.

5.3 To evaluate the influence of Operational Costs on the Organisational Performance of SMEs

Operational costs emerged as the most significant factor influencing organizational performance with a beta coefficient of 0.488 ($p < 0.001$). This finding is consistent with the work of Chen and Wong (2020), who showed that effective cost management directly enhances profitability and competitive standing. Similarly, Odunjo (2022) highlighted the critical impact of managing logistics-related costs such as transportation and warehousing on organizational efficiency.

The data in Chapter Four indicated that operational costs had the highest mean score reflecting widespread agreement among respondents about their importance. SMEs in Lusaka face challenges like rising fuel prices, inefficient transportation systems and high warehousing costs making cost management a priority. Transaction Cost Theory supports this perspective, emphasizing that minimizing operational expenses improves overall performance. The results suggest that SMEs should focus on cost-saving strategies such as using fuel-efficient vehicles, optimizing warehousing operations and leveraging economies of scale to improve financial sustainability.

A novel contribution of this study was its identification of fuel costs, inefficient transportation systems and warehousing expenses as the primary financial burdens for SMEs, which were exacerbated by infrastructure deficits. Prior research on cost management largely focused on large firms with access to economies of scale, whereas this study emphasized the necessity for SMEs to adopt lean cost strategies, including bulk purchasing, shared logistics networks and digital tracking systems to remain financially sustainable. Transaction Cost Theory provided a strong theoretical basis for these findings, reinforcing that minimizing operational costs without compromising efficiency was key to enhancing SME performance.

5.5 Chapter Summary

The findings clearly demonstrate that logistics efficiency and operational cost management are central to driving organizational performance as emphasized by Resource-Based Theory, Value Chain Theory and Transaction Cost Theory. The analysis shows that while inbound and outbound logistics provide the foundation for improving operations. Operational costs emerge as the most influential factor, demographic factors like gender and workforce size play supporting roles offering additional context rather than serving as primary drivers of performance.

For SMEs in Lusaka, these results underscore the need to focus on improving logistics processes, adopting innovative technologies and implementing cost-saving measures. By prioritizing these areas, SMEs can enhance customer satisfaction, improve operational efficiency and achieve sustainable financial growth. The findings offer actionable insights for policymakers, industry stakeholders and SME owners laying the groundwork for targeted recommendations in the next chapter.

CHAPTER SIX:

RECOMMENDATIONS AND CONCLUSIONS

6.0 Introduction

This chapter wraps up the study by summarizing the key findings and discussing their significance. It highlights how the research objectives were addressed and explains the contributions this study makes to both theory and practice. Practical recommendations are provided for SMEs, policymakers and other stakeholders focusing on strategies to improve logistics and operational efficiency.

The chapter also draws conclusions from the findings emphasizing the importance of logistics and cost management for SME success. Finally, it suggests areas for future research to build on this study, addressing gaps and exploring new directions for enhancing SME performance and sustainability.

6.1 Summary of the Study

The study explored the impact of inbound logistics, outbound logistics, operational costs, gender and workforce size on the organizational performance of SMEs in Lusaka's CBD. Guided by Resource-Based Theory, Value Chain Theory and Transaction Cost Theory. The research investigated how logistical and operational factors influence performance in resource-constrained environments. The findings revealed that inbound logistics, outbound logistics and operational costs significantly impact organizational performance with operational costs emerging as the most influential factor. Control variables such as gender and workforce size showed limited influence indicating their supplementary role compared to logistical and operational factors. The results emphasized the need for SMEs to prioritize logistics efficiency and cost control to achieve sustainable performance.

6.2 Contributions to Knowledge

This study contributes to both theory and practice. Theoretically, it extends the application of Resource-Based Theory, Value Chain Theory and Transaction Cost Theory by demonstrating their relevance to SMEs in Lusaka. It highlights how internal resources, value-adding logistics activities and cost management are interlinked with organizational outcomes in developing economies.

Practically, the study provides empirical evidence of the critical role of logistics and cost management in SME performance, offering actionable insights for business owners and policymakers. It also sheds light on the specific challenges faced by SMEs in Lusaka such as limited access to cost-effective logistics solutions and infrastructure constraints. These contributions add to the growing body of knowledge on SME sustainability and competitiveness, particularly in emerging markets.

6.3 Conclusions

This study concludes that inbound and outbound logistics, along with operational cost management are critical drivers of small and medium enterprises (SME) performance in Lusaka CBD. The findings reinforce the significance of aligning logistical strategies with cost management practices to enhance competitiveness and operational efficiency especially with inventory management, supplier or vendor management, supply and demand planning as well as the general picture of supply chain management. While gender, age and workforce size contribute somewhat significantly to organizational performance, their role is mostly supplementary compared to the more impactful logistical and operational factors.

The study, therefore validates the theoretical frameworks applied, particularly highlighting the relevance of Resource-Based Theory, Value Chain Theory and Transaction Cost Theory in explaining small and medium enterprise (SME) performance. These findings underline the importance of addressing logistical and operational inefficiencies to ensure the sustainability and growth of SMEs in resource-constrained environments.

6.4 Recommendations

The findings lead to important recommendations for SMEs, policymakers, and stakeholders.

1. SMEs should adopt modern logistics technologies like supply chain management systems, route optimization tools, and cost-tracking software to improve efficiency and reduce costs. Building strong relationships with suppliers and enhancing customer service are crucial for optimizing inbound and outbound logistics. Additionally, implementing cost-saving measures such as fuel-efficient transportation, streamlined warehousing, and leveraging economies of scale can help maximize profitability.

2. Policymakers should focus on improving infrastructure, including transportation networks and warehousing facilities, to ease logistical challenges faced by SMEs. Providing financial support in the form of subsidies, grants, or low-interest loans will help SMEs invest in necessary operational improvements. Furthermore, training programs tailored to enhance SME owners' and managers' skills in logistics management and cost optimization are critical for fostering growth.
3. Industry stakeholders, such as logistics providers and larger firms, should collaborate with SMEs to share resources, expertise, and best practices. Introducing innovative solutions, like shared logistics platforms and last-mile delivery technologies, can help streamline SME operations. Capacity-building initiatives should also be promoted to encourage the adoption of advanced logistical and operational practices, improving SME performance and sustainability.

6.4 Future Research Suggestions

- Future studies should expand to include small and medium enterprises (SMEs) from various regions and industries, enabling comparisons and providing a broader understanding of how logistics and operational costs impact performance.
- Industry-specific research focusing on sectors like manufacturing, retail, or agriculture could reveal unique challenges and solutions tailored to those fields.
- Longitudinal studies are needed to explore the long-term effects of logistical and operational strategies on (small and medium enterprise) SME performance, capturing trends and sustained impacts over time.
- Comparative research between (small and medium enterprises) SMEs in developed and developing economies would offer insights into shared and unique challenges, helping to identify global best practices.
- A focused cost-benefit analysis of investments in logistics technologies and operational improvements would provide SMEs with practical guidance for resource allocation and strategy development.

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7. APPENDIX

7.1 Time Frame of Activity

MONTH ACTIVITY	March- April 2024	May-June 2024	July-Sept 2024	Oct-Nov 2024	December 2024	January 2025
Proposal Preparation						
Feedback/corrections for proposal						
Prepare Chapters 123						
Data Collection						
Data entry						
Data analysis						
Draft Report Writing						
Report Submission						

7.2 Questionnaire

UNIVERSITY OF LUSAKA

RESEARCH QUESTIONNAIRE

Dear respondent,

The purpose of this questionnaire is to obtain data on **ASSESSING THE EFFECT OF INBOUND AND OUTBOUND LOGISTICS ON ORGANIZATIONAL PERFORMANCE, A CASE OF SMES IN LUSAKA CBD.** Responses to this survey will only be used for academic research and will be kept strictly confidential. Individuals' names will not be disclosed in any report, so as to prevent anyone from coming to any damage as a result of this research. You are strongly urged to express your thoughts in an open and honest manner. I am grateful to you for working with me on this.

Please direct any queries to;

Name: **Masuzyo Shaba**

Phone:

Email:

Section A: Demographic Profile

1. Gender
    a. Male
    b. Female
2. How many employees does your business have?

- [ ] 1-9 (Micro)
- [ ] 10-49 (Small)
- [ ] 50-99 (Medium)

3. What is your annual revenue?

- [ ] Less than ZMW 50,000
- [ ] ZMW 50,000 - ZMW 100,000
- [ ] ZMW 100,001 - ZMW 300,000
- [ ] ZMW 300,001 - ZMW 500,000
- [ ] Over ZMW 500,000

4. Which sector does your business operate in?

- [ ] Retail
- [ ] Manufacturing
- [ ] Agriculture
- [ ] Services
- [ ] Other (please specify): _____

5. How many years has your business been operating?

- [ ] Less than 1 year
- [ ] 1-5 years

☐ 5-10 years

☐ 10-15 years

☐ Over 15 years

6. Does your business use any technology for logistics management?

☐ Yes

☐ No

Section B

SECTION B: DEPENDENT VARIABLE

In this section, please indicate the extent to which you agree or disagree with each statement based on your experiences and perceptions. For each statement, please select the response that best reflects your opinion or experience. The Likert scale ranges from 1 to 5, where: 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, and 5= strongly agree**.**

Organisation Performance

#	Items	1	2	3	4	5
1	Our inbound logistics processes effectively support our operational efficiency and overall performance					
2	Our outbound logistics consistently meet customer expectations, contributing positively to our organizational performance					
3	The logistics strategies we implement help us manage costs effectively, enhancing our financial performance.					
4	Improvements in our logistics operations have led to higher customer satisfaction and loyalty					

SECTION C: INDEPENDENT VARIABLES

In this section, please indicate the extent to which you agree or disagree with each statement based on your experiences and perceptions. For each statement, please select the response that best reflects your opinion or experience. The Likert scale ranges from 1 to 5, where: 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, and 5= strongly agree.

Inbound logistics practices

#	Items	1	2	3	4	5
1	Strong relationships with our suppliers through effective inbound logistics contribute significantly to our organizational success					
2	Our inbound logistics practices enable efficient inventory management, positively impacting our overall performance.					
3	Our inbound logistics practices help reduce costs, thereby improving our financial performance					
4	Effective inbound logistics practices have led to measurable improvements in our organizational performance					

Outbound logistics

#	Items	1	2	3	4	5
1	Our outbound logistics practices ensure timely delivery of products, significantly enhancing our organizational performance.					
2	Effective outbound logistics contribute to high levels of customer satisfaction and retention in our business.					
3	The flexibility of our outbound logistics practices allows us to respond quickly to changing customer demands, improving our market competitiveness.					
4	Improvements in our outbound logistics practices have led to noticeable enhancements in our overall organizational performance.					

Operation Costs

#	Items	1	2	3	4	5
1	Inadequate infrastructure significantly hinders our inbound and outbound logistics practices.					
2	Rising transportation costs pose a major challenge to our outbound logistics operations					
3	Poor communication among logistics partners negatively impacts the effectiveness of our logistics practices					
4	Navigating regulatory compliance presents significant challenges for our inbound and outbound logistics					

END OF QUESTIONNAIRE.

THANK YOU FOR YOUR PARTICIPATION.

7.3 Cronbach's Alpha

Organization Performance

Case Processing Summary

		N	%
Cases	Valid	386	100.0
	Excluded[a]	0	.0
	Total	386	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.913	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Organisation Performance (Our inbound logistics processes effectively support our operational efficiency and overall performance.)	12.92	2.812	.853	.868
Organisation Performance (Our outbound logistics consistently meet customer expectations, contributing positively to our organizational performance.)	12.89	2.719	.889	.855
Organisation Performance (The logistics strategies we implement help us manage costs effectively, enhancing our financial performance.)	12.85	2.776	.818	.881
Organisation Performance (Improvements in our logistics operations have led to higher customer satisfaction and loyalty.)	12.89	3.145	.653	.936

Inbound logistics

Case Processing Summary

		N	%
Cases	Valid	386	100.0
	Excluded[a]	0	.0
	Total	386	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.902	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Inbound Logistics (Strong relationships with our suppliers through effective inbound logistics contribute significantly to our organizational success.)	13.07	3.221	.572	.947
Inbound Logistics (Our inbound logistics practices enable efficient inventory management, positively impacting our overall performance.)	12.97	2.815	.855	.846
Inbound Logistics (Our inbound logistics practices help reduce costs, thereby improving our financial performance.)	12.94	2.783	.878	.838
Inbound Logistics (Effective inbound logistics practices have led to measurable improvements in our organizational performance.)	13.01	2.803	.840	.851

Outbound Logistics

Case Processing Summary

		N	%
Cases	Valid	386	100.0
	Excluded[a]	0	.0
	Total	386	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.871	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Outbound Logistics (Our outbound logistics practices ensure timely delivery of products, significantly enhancing our organizational performance.)	13.10	2.571	.513	.920
Outbound Logistics (Effective outbound logistics contribute to high levels of customer satisfaction and retention in our business.)	13.15	2.263	.807	.802
Outbound Logistics (The flexibility of our outbound logistics practices allows us to respond quickly to changing customer demands, improving our market competitiveness.)	13.06	2.067	.873	.771
Outbound Logistics (Improvements in our outbound logistics practices have led to noticeable enhancements in our overall organizational performance.)	13.05	2.400	.739	.830

Operation Costs

Case Processing Summary

		N	%
Cases	Valid	386	100.0
	Excluded[a]	0	.0
	Total	386	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.863	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Operation Costs (Inadequate infrastructure significantly hinders our inbound and outbound logistics practices.)	13.25	3.273	.395	.935
Operation Costs (Rising transportation costs pose a major challenge to our outbound logistics operations.)	13.25	2.339	.809	.783
Operation Costs (Poor communication among logistics partners negatively impacts the effectiveness of our logistics practices.)	13.28	2.274	.862	.759
Operation Costs (Navigating regulatory compliance presents significant challenges for our inbound and outbound logistics.)	13.20	2.444	.815	.782

Correlation Analysis

Descriptive Statistics

	Mean	Std. Deviation	N
Organisation_Performance	4.2960	.55595	386
Gender	1.36	.481	386
Number employees	2.12	.695	386
Inbound_Logistics	4.3329	.55910	386
Outbound_Logistics	4.3640	.49768	386
Operation_Costs	4.4152	.52387	386

Correlations

		Organisation_Performance	Gender	Number employees	Inbound_Logistics
Organisation_Performance	Pearson Correlation	--			
	N	386			
Gender	Pearson Correlation	.132**	--		
	Sig. (2-tailed)	.010			
	N	386	386		
Number employees	Pearson Correlation	.121*	.090	--	
	Sig. (2-tailed)	.017	.077		
	N	386	386	386	
Inbound_Logistics	Pearson Correlation	.611**	.156**	.102*	--
	Sig. (2-tailed)	<.001	.002	.045	
	N	386	386	386	386
Outbound_Logistics	Pearson Correlation	.629**	.168**	.220**	.650**
	Sig. (2-tailed)	<.001	<.001	<.001	<.001
	N	386	386	386	386
Operation_Costs	Pearson Correlation	.688**	-.048	.149**	.510**
	Sig. (2-tailed)	<.001	.351	.003	<.001
	N	386	386	386	386

**. Correlation is significant at the 0.01 level (2-tailed).

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

Regression Analysis SPSS Tables

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Number employees , Gender[b]	.	Enter
2	Inbound_Logistics[b]	.	Enter
3	Outbound_Logistics[b]	.	Enter
4	Operation_Costs[b]	.	Enter

a. Dependent Variable: Organisation_Performance

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					R Square Change	F Change	df1	df2
1	.171[a]	.029	.024	.54915	.029	5.800	2	383
2	.615[b]	.378	.373	.44032	.348	213.722	1	382
3	.683[c]	.466	.460	.40837	.088	63.113	1	381
4	.768[d]	.590	.585	.35826	.124	115.034	1	380

a. Predictors: (Constant), Number employees , Gender

b. Predictors: (Constant), Number employees , Gender, Inbound_Logistics

c. Predictors: (Constant), Number employees , Gender, Inbound_Logistics, Outbound_Logistics

d. Predictors: (Constant), Number employees , Gender, Inbound_Logistics, Outbound_Logistics, Operation_Costs

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.498	2	1.749	5.800	.003[b]
	Residual	115.498	383	.302		
	Total	118.996	385			
2	Regression	44.934	3	14.978	77.255	<.001[c]
	Residual	74.062	382	.194		
	Total	118.996	385			
3	Regression	55.459	4	13.865	83.140	<.001[d]
	Residual	63.537	381	.167		
	Total	118.996	385			
4	Regression	70.224	5	14.045	109.426	<.001[e]
	Residual	48.773	380	.128		
	Total	118.996	385			

a. Dependent Variable: Organisation_Performance

b. Predictors: (Constant), Number employees , Gender

c. Predictors: (Constant), Number employees , Gender, Inbound_Logistics

d. Predictors: (Constant), Number employees , Gender, Inbound_Logistics, Outbound_Logistics

e. Predictors: (Constant), Number employees , Gender, Inbound_Logistics, Outbound_Logistics, Operation_Costs

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	3.917	.115		34.023	<.001	3.691	4.143		
	Gender	.141	.058	.122	2.408	.017	.026	.255	.992	1.008
	Number employees	.088	.040	.110	2.183	.030	.009	.168	.992	1.008
2	(Constant)	1.563	.186		8.419	<.001	1.198	1.928		
	Gender	.038	.047	.033	.806	.421	-.055	.131	.970	1.031
	Number employees	.046	.033	.057	1.403	.162	-.018	.110	.984	1.016
	Inbound_Logistics	.596	.041	.600	14.619	<.001	.516	.677	.968	1.033
3	(Constant)	.828	.195		4.240	<.001	.444	1.213		
	Gender	.012	.044	.010	.263	.793	-.075	.098	.965	1.037
	Number employees	-.003	.031	-.003	-.088	.930	-.063	.058	.946	1.058
	Inbound_Logistics	.347	.049	.349	7.053	<.001	.250	.444	.573	1.745
	Outbound_Logistics	.448	.056	.401	7.944	<.001	.337	.559	.550	1.818
4	(Constant)	.091	.185		.493	.622	-.272	.454		
	Gender	.100	.039	.086	2.524	.012	.022	.177	.923	1.084
	Number employees	-.016	.027	-.020	-.589	.556	-.069	.037	.944	1.060
	Inbound_Logistics	.245	.044	.247	5.551	<.001	.158	.332	.547	1.830
	Outbound_Logistics	.203	.054	.182	3.725	<.001	.096	.310	.453	2.205
	Operation_Costs	.488	.046	.460	10.725	<.001	.399	.578	.587	1.705

a. Dependent Variable: Organisation_Performance

Excluded Variables[a]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Inbound_Logistics	.600[b]	14.619	<.001	.599	.968	1.033	.968
	Outbound_Logistics	.628[b]	15.239	<.001	.615	.929	1.076	.929
	Operation_Costs	.695[b]	18.972	<.001	.697	.974	1.026	.969
2	Outbound_Logistics	.401[c]	7.944	<.001	.377	.550	1.818	.550
	Operation_Costs	.527[c]	13.311	<.001	.563	.712	1.405	.707
3	Operation_Costs	.460[d]	10.725	<.001	.482	.587	1.705	.453

a. Dependent Variable: Organisation_Performance

b. Predictors in the Model: (Constant), Number employees , Gender

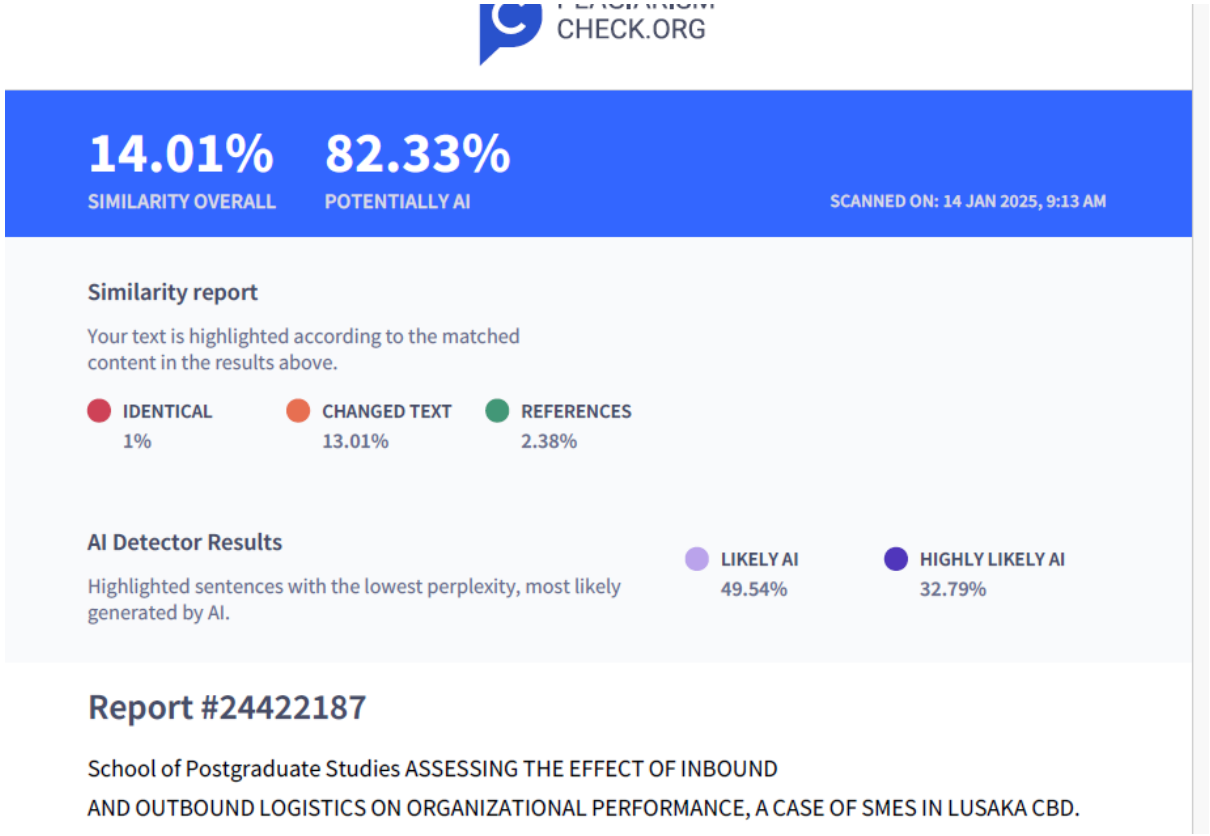
c. Predictors in the Model: (Constant), Number employees , Gender, Inbound_Logistics

d. Predictors in the Model: (Constant), Number employees , Gender, Inbound_Logistics, Outbound_Logistics

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	Gender	Number employees	Inbound_Logistics	Outbound_Logistics	Operation_Costs
1	1	2.866	1.000	.01	.01	.01			
	2	.095	5.503	.00	.63	.46			
	3	.039	8.567	.99	.36	.53			
2	1	3.840	1.000	.00	.01	.01	.00		
	2	.095	6.364	.00	.65	.42	.00		
	3	.057	8.231	.06	.34	.57	.07		
	4	.008	21.755	.94	.00	.01	.92		
3	1	4.826	1.000	.00	.00	.00	.00	.00	
	2	.095	7.115	.00	.71	.34	.00	.00	
	3	.065	8.600	.02	.29	.63	.02	.01	
	4	.008	24.141	.86	.00	.01	.38	.03	
	5	.005	31.892	.12	.00	.02	.60	.96	
4	1	5.811	1.000	.00	.00	.00	.00	.00	.00
	2	.097	7.735	.00	.77	.21	.00	.00	.00
	3	.073	8.913	.01	.14	.76	.01	.00	.01
	4	.008	26.341	.58	.00	.01	.46	.03	.03
	5	.006	30.102	.41	.06	.00	.22	.02	.69
	6	.004	36.651	.00	.02	.02	.30	.95	.27

a. Dependent Variable: Organisation_Performance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