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**ADDIS ABABA UNIVERSITY
SCHOOL OF COMMERCE**

LOGISTICS AND SUPPLY CHAIN MANAGEMENT PROGRAM UNIT

**EFFECTS OF LOGISTICS PRACTICES ON OPERATIONAL
PERFORMANCE: THE CASE OF HABESHA CEMENT SHARE
COMPANY**

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Declaration

I, Nigussie Sida, carried out the thesis work entitled **“The Effect of Logistics practice on Operational Performance: The Case of Habesha Cement Share Company”** submitted by me for the award of the Master of Art in Logistics and Supply Chain Program at Addis Ababa, University, School of Commerce, is my original work which is not submitted by the others graduating class before.

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Abbreviations and Acronyms

FDRE	Federal Democratic Republic of Ethiopia
CRM	Customer Response Management
FTL	Full truck load
ICT	Information Communication Technology
IBL	Inbound Logistic
INL	Internal Logistic
IT	Information Technology
JIT	Just In Time
LS	Logistic Services
OL	Outbound Logistic
OP	Organizational Performance
SC	Share Company
SCM	Supply Chain Management
SSCM	Strategic Supply Chain Management
SPSS	Statistical Package for the Social Sciences
US	United States
VFI	Variance Inflation Factor

Abstract

This study seeks to investigate the effect of logistic practice on operational performance of Habesha Cement Share Company. This research studied logistic practices in the area of internal logistics, inbound logistics and outbound logistics. Explanatory design and questioner used to collect necessary data. We used 118 employees of Habesha Cement who were working in logistic department of Habesha cement share Company. The study used questionnaire as primary data collection tool. The data collected was interpreted using descript analysis. In addition, correlation and multiple linear regressions were used. The result shows the logistics practice influenced organizational performance positively. The correlation result shows that there is positive and significant relationship between all logistic services (internal logistic, inbound logistic and outbound logistic) and organizational performance. The result of regression also revealed that all predictor variables (internal logistic, inbound logistic and outbound logistic) have statistically significant contribution on organizational performance. The adjusted R² of 0.502 indicates 50.2% of the variance in organizational performance can be predicted by logistic services of the company. From point of this, it can be concluded that improved logistics practices are significantly influencing operational performance. Therefore, the management of Habesha Cement Share Company should improve its internal logistics, inbound logistics and outbound logistics practices to speed up company performance.

Key Words: Internal Logistic, Inbound Logistic, Logistic Services, Outbound Logistic, Organizational Performance

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Companies are today facing increasing levels of competitive pressure and difficulty with regard to maintaining and improving their performance. The management of these companies are being forced to seek and implement innovative strategies with which to advance their company's competitive advantage as well as their organizational performance (Chase, 2004).. These circumstances and the increasingly complex nature of logistics operations, are causing companies, such as those in the manufacturing sector, to focus on their core competencies, while others provide, for example, some or many of their logistics services (CSCMP, 2013). Companies are also coming to realize the importance logistics in their organizations and therefore the need for specialist input therein.

Furthermore, companies forced by globalization to increase their efficiency and effectiveness to reduce incur cost. These pressures divert attention given to logistic practices (Lia, 2005). Identifying & managing the important role logistics in the company is thus of utmost importance.

The term logistics is used to describe the entire process of materials and products moving into, through and/or out of a company. Logistics according to (Blanchard, 2010).is a concept based on total system view of the material goods and services flow activity from the source of supply chain through to the final point of consumption. Logistics thus includes any activity involved in the management of inventory at rest (awaiting production into finished goods or distribution at the final point of sale) or in motion (during transportation) (Frazzle, 2002).

Logistics has competitive advantage and importance factor for improving the firm performance [Chase, R. (2004). On other hand, according to Odhiambo et al, (2017) in effective logistics causes competitive loss in the journey to market and now a days intense competition and market saturation forced manufacturing industries to give due attention on logistics activities to access new revenue generation markets and maintain already existed markets everywhere in the world.

A vast variety of previous studies affect the organizational performance. Most of these studies are well-recognized supply chain imperatives (Lynch, et al, 2000; Koh, 2007 and Lia, 2005). Particularly, logistics service has positive influence on the organizational performance for retail firms (Hadi and Setiawan, 2013 and Mensah, 2014). In addition, evidence on the important role

of logistics service has also been found in some developing countries, (Koh, 2007; Hoang and Nguyen, 2019; Abdul, et al, 2019). In our country, this result is supported by finding of Dawit (2020), mentioning that there is a positive relationship between the logistics service and organizational performance.

Having the above facts in mind which showed the necessity of logistics excellence to exist in the Competitive marketing environment, it is inevitable to measure logistics services in terms of its activities parallel with its impact on overall organizational performance to give organized insight to logistics services for a better decision making. This in turn allows seeing where the company is in terms of its logistics services; i.e., internal logistics, inbound logistics, outbound logistics, supporting activities, and logistic cost and further effects on overall organizational performance.

Logistic management has emerged as a common practice across industries and cement industry is one of the sectors that has growing interest in logistic management practices (Okoth 2011). Different actors are involved in cement value chain from quarry sites to final consumption destination including support industries that supplies basic inputs such alternative energy source, packaging and spare parts including associated business among others (Isabel, 2011). Cement companies must transform their logistic services to be responsive in emerging markets. Especially in Ethiopia there are emerging markets for the cement factories are expected to play significant role in terms of supplying variety of cement products for the booming construction and infrastructure development (Belay, 2011). In addition, in today's dynamic and very variable; companies need to consider their logistic services as of strategic objective in a way of improving their logistic performance increased (Fasika, et al, 2014).

The cement industry in Ethiopia is characterized by great price volatilities that expose cement companies to a massive commodity price risk. In addition, the cement supply chain includes a lot of challenges due to globalization, long lead times and nature of oil (FDRE Ministry of Industry, 2015). More so, through broadening the marketplace and increasing competition, globalization led customers in this industry to place greater demands on manufacturers to increase quality, service ability and flexibility, while maintaining competitive costs. One of the ways of improving efficiency on cement manufacturing firms was to improve logistics performance. That is why if cement manufacturing firms in Ethiopia needed to become efficient and flexible in their manufacturing methods, they needed different strategies to manage the flow of goods from the

point of production to the end user (Belay 2011). More so, the researcher hardly finds enough literature on the current supply chain practice in the Ethiopian Cement Industry. It is my particular interest because of all above factor to study context of Habesha Cement Share Company.

Based on the above fact we will explore the factors of logistics practices that impact the organizational performance of Habesha Cement Share Company.

1.2. Background of the Organization

Habesha Cement Share Company, with a capital of 3,854,134,643.48 birr, was founded in September 2008 by more than 16000 stockholders. Habesha Cement has purchased a plant site with a total size of 29.8 hectares. Habesha began with an undisclosed total investment amount and now employs over 600 permanent and temporary people, including eight important executives. The manufacturing factory is located in the Oromia regional state's Welmera wereda near Holeta town, 35 kilometers from Addis Ababa, at an ideal distance from raw material sources and the main cement market, Addis Ababa, and its surroundings. On June 21, 2017, the company began production.

It was founded with the vision of becoming East Africa's leading integrated cement and other construction inputs supplier, and with the mission of producing and marketing high-quality cement and related construction inputs while meeting national and international standards and customer expectations at an affordable price, and maximizing shareholder wealth on a long-term basis through high standards of transparency, accountability, and responsibility. Habesha Cement's ultimate goal is customer happiness. Habesha Cement's main objective is to get into the fast-growing Ethiopian cement market and capitalize on the opportunity. Habesha Cement's Core Values include customer-focused product delivery, teamwork, safety first, honesty and integrity, commitment to quality, and commitment to environmental protection.

1.3 Statement of the Problem

In today's competitive global business world, logistics and supply chain management strategies are seen as important success factors for businesses. According to Walfried et al. (2009), the actual competition will be between supply chains, not between enterprises. As a result, logistic and supply chain management are topics of ongoing academic debate (Hoang and Nguyen, 2019), and numerous research studies have been undertaken on this topic all over the world. In contrast to discrete industries, process industries deal with huge and complicated supply chain. Cement is an important aspect of the global economy as part of the process industry. This subject has attracted Ethiopian interest in recent decades as well (Desta, 2016). Unfortunately, according to a literature review, there is not enough study on logistics and supply chain management strategies in Ethiopia's major cement business and most of the existing studies on logistic and supply chain management strategies in Ethiopia focus on either the manufacturing (Gudeta, 2021 and Kumsa, 2018) or service sectors, such as banking (Abel, 2017); Telecom (Tsegaye 2018); humanitarian (Messay, 2018); brewing (Fikrte, 2019) and construction (Dawit, 2020). However, the cement industry is critical to the country's economy, and the issue of logistics management methods is significant for cement production enterprises.

Unfortunately, Ethiopia's logistic system, in general, and the cement sector, in particular, are plagued by inefficient logistics methods (Fekadu, 2013). According to Belay (2011), the Ethiopian cement industry's supply chain management practices are almost poor, with demand/supply fluctuations at the market level posing a serious challenge to supply chain asset configuration, capacity synchronization, and lead-time management as a strategic challenge from a market dimension perspective. Furthermore, according to the FDRE Ministry of Industry Report (2020), in recent years, demand for cement has greatly exceeded supply, and customers have had to wait in long queues to get cement. This has led to producer complacency, as they can offer their products at any price they want, causing them to become less customer-focused. On the other hand, despite the fact that customer happiness is the very essence of supply chain management, cement customers in Ethiopia are extremely unsatisfied with existing non-availability (Desta, 2016), and if the opportunity arises, they may switch to new entrants owing to a previously built animosity. This reality, as well as the potential challenges for the industry unless it is strategically handled, particularly in terms of logistics management.

Habesha Cement S.C is not an exception for all the facts. Currently, there has been a great challenge on the part of managers in Habesha Cement S.C on determining how exactly they can attain maximum benefits from its logistic practices. According to company annual reports and the preliminary assessment conducted by the researcher, the company has faced with challenges of underutilized cement production capacity, high inbound and outbound logistic cost; higher production cost, poor infrastructure status of country mingled with high trade and logistic cost, make import of energy inputs and distribution of cement very expensive, which further escalate the production and distribution cost. Moreover, there is no earlier study related to logistic management practices of Habesha Cement S.C in general.

Regarding the literature gaps identified, the researcher was able to realize that even if some attention has been given in exploring the extent of the relationship between logistics practices and organizational performance, there has been little evidence to prove the impact of logistic practices on organization performance (Abdul, et al., 2019). Whereas majority of the studies (Liu and Luo, 2008; Musau, et al., 2017 and) demonstrate a positive impact of logistic services on performance, other scholars (Lenny et al., 2007; Ristovska, et al., 2017 and Dawit, 2020) indicated a weak association between logistic management and performance. Therefore, the empirical evidence adduced in literature linking logistic practices with performance does not unequivocally rule out context-dependence results. With the hanging clouds of inconsistencies, it is difficult, without multiple evidences across different contexts and over time to conclusively affirm the nature and strength of influence logistic services has on performance (Abdul, et al., 2019). Furthermore, it was obvious from the reviewed relevant literature that there were relatively few studies that empirically examined the effects of logistics practices on business performance in Ethiopia, notably in the domain of the cement industry. The study therefore aims to fill this gap of literature by studying the impact of logistics practices on the firm performance with the case of Habesha Cement.

1.4 Research Questions

On the basis of the problem, the study was framed to answer the following research questions:

- What are the effects of **internal logistics** practices on operational performance of Habesha Cement S.C?
- What are the effects of **inbound logistics** practices on operational performance of Habesha Cement S.C?
- What are the effects of **outbound logistics** practices on operational performance of Habesha Cement S.C?

1.5 Objective of the study

1.5.1 General objective

The general objective of this study was to investigate the effect of logistics practices on operational performance of Habesha Cement S.C.

1.5.2 Specific objectives

The specific objectives of this study were: -

1. .To assess the effects of **internal logistics** practices on organizational performance of Habesha Cement S.C.
2. To investigate the effects of **inbound logistics** practices on organizational performance of Habesha Cement S.C.
3. To examine the effects of **outbound logistics** practices on organizational performance of Habesha Cement S.C

1.6 Hypotheses of the Study

The study empirically tested the following hypothesis

- H1: Internal logistics practices has significant effect on the operational performance of Habesha Cement S.C.
- H2: Inbound logistics practices has significant effect on the operational performance of Habesha Cement S.C.
- H3: Outbound logistics practices has significant effect on the operational performance of Habesha Cement S.C.

1.7 Significance of Study

This study will examine the effect of logistic practices on operational performance of Habesha Cement S.C, assess and explore its shortcomings and solutions to mitigate the problems. In doing so, in addition to fulfilling the academic requirement of the researcher, the results of the study will have several benefits. Primarily, the research helps the management in case company in general and the Logistic and Supply Chain Department Head in particular, to take corrective measures to improve and revise the its logistic system. The study will also add knowledge on the literature of the Ethiopian cement industry practices on how to manage the logistics service so as to improve organizational performance. More so, the study also helps as a secondary source for further study on the area.

1.8 Scope of the Study

The scope of this study is delimited in terms of subject (concept) and area (geography). The conceptual scope of this study will focus on some selected logistic services. In view of that, the study comprises three major logistic practices components: internal logistics, inbound logistics and outbound logistics. Regarding the geographical area coverage, the study was limited to employees of Habesha Cement S.C production plant at Holeta town and the company head office at Addis Ababa. More so, in term of time scope, the study is intended to cover views of current staff members of the Habesha Cement S.C.

1.9. Limitation of Study

First, the study was only focus on one company and encompass the view and opinion of employees in head office in Addis Ababa. Data was collected from sample employees drawn from the company production plant at Holeta and head office in Addis. Thus, the finding of the study may not be inferred to the whole cement industry in the country. More so, the study was also conducted based on cross-sectional approach and thus, data was collected at single time rather than frequent observation over the same sample. Accordingly, the method cannot examine changes over time which needs more strong empirical investigation. It is difficult to generalize the finding of the study to all other logistics activities that are described by different researchers and authors.

1.10 Definition of Terms

The following definitions are provided to ensure uniformity and understanding of these items throughout the study.

- 1) **Logistics** is the movement within the supply chain (Gattorna et al., 1991).
- 2) **Logistics management** - is logistic coordination to deliver best service and quality at lowest possible cost (Martin, 2011).
- 3) **Logistics Activities:** interdependent activities performed within logistics discipline to make sure inputs to production are ready, smooth flow of process is held and finally outputs are delivered to potential customers to realize aimed level of sales volume by the manufacturer (Frazzle, 2002).
- 4) **Internal logistics** is cooperation and effective information share among various departments, as well as effective internal decision-making (Council of Supply Chain Management Professionals, 2013).
- 5) **Inbound logistics** is all materials to inventory management, from providers to purchasing firms (Council of Supply Chain Management Professionals, 2013).
- 6) **Outbound logistics** is from final production line to final end users
- 7) **Organizational performance or firm performance** is a subset of organizational effectiveness that covers both operational and financial outcomes (Selvam et al., 2016)
- 8) **Supply chain** is a network of partners who collectively convert a basic commodity (upstream) into a finished product (downstream) that is valued by end-customers, and who manage returns at each stage (Harisson, 2008).

1.11 Organization of the study

The study cover the following five chapters. Introduction part, literature review, research methodology, results and discussion and of the finding, conclusions, recommendations and further research suggestions.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter includes related literature reviews which are found to be essential to the research inquiry. Thus, the first section discusses the conceptual and theoretical literatures related to the study variables which are considered in order to lay solid foundation for the research. Besides, related studies concerning the effect of logistic practices on organizational performance are also discussed in this chapter. In the final analysis, the conceptual framework of the study is presented.

2.2. Theoretical Literature Review

2.2.1. What is Logistics?

First of all, it is essential to understand what is meant by ‘logistic’. Many authors have defined logistic in several ways. Here after going to discuss the various definition of logistic.

Christopher, (2005) “logistic is the process of strategically managing the procurement, movement, and storage of materials, parts and finished inventory through the organization and its marketing channels in such a way that current and future profitability are maximized through the cost-effective fulfillment of orders”. Logistics can be also defined as the “flow of materials, information, and money between consumers and suppliers” (Frazelle, 2002). In lines of the definition provided by Tilanus (1997), and accepted for the purpose of this research, a logistic can be defined as “the process of anticipating customer needs and wants; acquiring the capital, materials, people, technologies, and information necessary to meet those needs and wants; optimizing the goods- or service-producing network to fulfill customer requests, and utilizing the network to fulfill customer requests in a timely way’. Simply to say, ‘logistics is customer-oriented operation management’.

2.2.2. Logistic practice

The scope of logistics services in the twenty-first century has expanded beyond traditional transportation and warehousing to encompass a wide range of other services under the umbrella of inbound and outbound logistics. Inbound logistic services handle the movement of goods and materials from a supplier to a warehouse until they are required for manufacturing. Outbound logistic services, on the other hand, pay close attention to the movement and storage of production outputs, such as finished items straight after manufacturing or from a warehouse as required by the customer (Luchen and Notteboom, 2011).

Manufacturing firms are frequently challenged with keeping track of inventories and ensuring that their products are delivered to clients in a timely manner. This workflow typically entails several types of logistics, each of which works in a somewhat different way. According to (Ristovska, et al, 2017), there are several types of logistics services:

2.2.2.1. Inbound Logistics

Inbound logistics, as defined by (Lerner, 2019), is the movement and handling of incoming shipments of raw materials, semi-finished items, and finished goods to the organization. Inbound logistics refers to the flow of all supplies, collections, shipments, and inventory management from suppliers to buyers (Bowersox, et al, 2002). Inbound logistics, according to Tracy (2004), is one of the key logistics processes that focuses on procuring and organizing the inbound transportation of materials, parts, and/or finished inventory from suppliers to manufacturing or assembly plants, warehouses, or retail stores. Inbound logistics services, according to Fugate et al (2010), are primarily used for efficient firm performance

Inbound logistics, according to Porter (1985), refers to all the processes/activities involved in receiving, storing, and dispersing raw materials, inputs, components, and parts needed in the manufacturing process. The following activities were recognized by Porter (1985) as significant components of incoming logistic services.

- i. **Raw Material Inspection** - The raw materials used in manufacturing should be of acceptable quality, and they must be carefully maintained and handled. This is because the quality of the raw materials used in the manufacturing process has a direct impact on the finished product's appearance.

- ii. **Storage** - The storage and handling of raw materials will play an important role in determining a plant's layout and equipment needs.
- iii. **Materials handling** - the movement and storage of materials at the lowest possible cost through the use of correct processes and equipment is known as materials handling. It is possible to handle the situation manually or automatically. Raw materials or inputs, including as fabric, trims, accessories, and buttons, should be stored and handled carefully with the necessary handling systems after receiving them from suppliers, as their efficient handling is a vital aspect of logistics and manufacturing.
- iv. **Inventory control** refers to the monitoring of things' storage, supply, and accessibility in order to maintain a sufficient supply while avoiding undue oversupply (Miller, 2010). It refers to policies and practices aimed at making the most of an organization's inventory. The cost of holding stock, the cost of placing an order, and the cost of a shortfall are the decision-making elements in inventory control. Businesses can determine how much inventory they can hold to avoid markdowns and losses if they have enough data on these three variables.

Inbound logistics is a complex and important part of every internal operation, depending on the nature of the shipment and external factors that influence movement and activity. There are a few crucial factors for inbound logistics that are critical for implementation attention to ensure the operation's success in logistics. If the company needs crude materials to make a specific product, it will need a consistent supply of those materials to keep the production yield on track. Every company must work and personalize inbound logistics to meet and satisfy customers' requirements via warehousing and other internal operations to ensure the customer's order delivery in order to boost efficiency and profitability (Lerner, 2019).

2.2.2.2. Outbound Logistics

Outbound logistics refers to the process of storing and transporting the finished product, as well as the information that travels from the end of the production line to the end user (Tracy, 2004).

It is the delivery or movement of raw materials, semi-finished products, and finished products to the final consumer or client who has placed an order, and it is the means through which the output reaches its destination. However, some companies outsource inbound or outbound logistics to a third party to perform the shipment activity with high efficiency and effectiveness,

such as delivering raw materials to a company for production, and some also work in delivering output to final consumers and distribution centers for final users. Companies are focusing on transporting raw materials to final output and getting them into sales centers or shops as a core competency or as a good competitor to expand the accessibility of the product by ultimate clients (Lerner, 2019).

Outbound logistics, according to Porter (1985), includes activities such as finished goods warehousing, material handling, delivery vehicle operation, order processing, and scheduling that are associated with collecting, storing, processing orders, transporting, and physically distributing products to final consumers. The following actions were recognized by Porter (1985) as significant components of outbound logistic services.

- i. **Warehousing and distributions of finished products:** Outbound logistic is also considered as physical distribution. All actions connected with the control of the flow of completed goods to customers are referred to as physical distribution (Chandra, 1997). The concept of physical distribution has evolved into a broader concept known as supply chain management (SCM). It entails obtaining the appropriate inputs (raw materials, components, and capital equipment), properly transforming them into finished goods, and dispatching them to their final destinations (Poirier, 1998). The factory is where physical distribution begins. Managers select a group of warehouses (stocking stations) and transportation providers that will deliver goods to final destinations on time or at a low overall cost (Arthur, 1997).
- ii. **Transportation of finished products:** Transportation is also included in physical distribution, however this time it is outbound from the factory or storage facility to clients (Alan, 2000). The management of finished goods inventory, as well as protective packaging of items to reduce damage in transit (marketing deals with the style of packaging designed to attract customers and sell products), and storage and materials handling, are all covered here (Carl, 1986).

2.2.2.3. Internal Logistics

Internal Logistics oversees the organization's internal supply chain, including storage, transportation, and distribution of commodities, in order to meet domestic demand and assist manufacturing (Shepherd and Günter, 2010). The cycle of support to manufacturing operations, according to Bowersox et al (2002), is closely tied to internal logistics, i.e., planning and production control. Thus, the major goal of logistical support for production is to build and maintain an efficient and orderly flow of materials and stocks in process in order to satisfy the production sector's timetables. Handling and storage of products, materials, components, and semi-finished parts are the operational responsibilities of the logistics support production. Logistics service concepts have evolved in response to changes in the corporate environment, and many concerns have been added to operational logistics activities such as packaging, outsourced inventory management, bar code, and information systems. Internal logistics were evaluated for these operational logistics duties, and these operations should "interact with other functional domains" (Teixeira, et al., 2012). Internal logistics, on the other hand, refers to logistics activities that take place within an organization's walls, such as internal transportation, materials handling, storage, and packaging.

Internal logistics, in general, is the planning, implementation, and control of a company's physical movement and internal information in order to maximize profit by optimizing resources, processes, and services (Shepherd and Günter, 2010).

2.2.3. Firm Performance

Firm performance is difficult to assess, because no common definition exists. Performance refers to an organization's ability to deal with the four systemic processes (inputs, outputs, transformations, and feedback effects) in order to meet its objectives.

Company's performance is like a mirror. According to Richard et al. (2009), performance refers to an organization's actual output or results as compared to its expected outputs (or goals and objectives). It can be defined as a company's efficiency and productivity in relation to the market in which it operates. It is determined by how well a company uses its assets in its primary job of conducting business and generating income (Omondi & Muturi, 2013). The outcomes obtained in satisfying a firm's internal and external goals are referred to as performance (Liao et al., 2010).

Various techniques of assessing performance are used by different companies, all of which are based on their organizational objectives. This performance metric can be evaluated in both monetary and nonmonetary terms (Bergin-Seers & Jago, 2007). The majority of businesses, on the other hand, choose to measure their performance using financial metrics (Beccalli, 2007). Financial performance, according to Omondi & Muturi (2013), is the use of financial indicators to assess the extent to which objectives have been met, as well as the bank's contribution to providing investment opportunities. It assesses how well a corporation can use assets from its principal method of operation to produce revenue (Heremans, 2007).

Financial factors, however, are not the only way to assess a company's performance. Bergin-Seers and Jago (2007) suggested using a combination of financial and non-financial indicators. Firm performance refers to how successfully an organization meets both market-oriented and financial goals for the purposes of this study. This term encompasses both financial and operational results.

2.2.4. Relevant Theories to the study

The following three main theories namely; Resource Based View Theory, Transactions Theory and Theory of Constraints have generally oriented and framed the present investigation.

2.2.4.1. Resource-based view (RBV)

Wernerfelt (1984) first proposed this notion, which was later expanded upon by Barney (1991). According to the theory, the tangible and intangible resources accessible in a given business are the ultimate sources of competitive advantage (Tukamuhabwa, et al., 2011). These resources, according to the theory, should be well linked so that they complement each other in achieving the desired goals. To reap the most benefits, the organization should strive to diversify and enhance the number of resources it owns.

The theory assumes that each firm contains resources that are unique to that firm and that, if properly employed, will provide an additional competitive advantage. However, because resources are varied, and corporations are prone to having their resources duplicated by competitors, this is not always the case. As a result, operational advantage can only be gained when the available resources are unique and unlikely to be duplicated (Karia & Wong, 2011).

Business activities are highly connected thanks to advances in logistics services (Seuring et al., 2010). The resources developed through logistics and transportation integration are more valuable than the resources of individual companies. According to the theory, organizations who participate in resource integration receive higher benefits. However, the influence of these logistics and transportation tactics on operational performance will be limited by the firm's available resources. Through strategic management, infrastructure management, and resource management, the logistics distinct capability can be achieved (Karia & Wong, 2011).

2.2.4.2. Transactions Theory

Williamson was the first to propose the Transactions Theory (1985). The theory tries to improve vertical integration and corporate trust. According to the theory, several expenses are incurred during the execution of operations. If these costs are not adequately handled, they may result in losses rather than predicted gains (Gunasekaran & Kobu, 2007). Only when costs are minimized, primarily through asset specificity and the reduction of uncertainty, can operational efficiency be achieved (Williamson, 1985).

The significance of the theory is that it demonstrates the potential benefits of implementing logistics and transportation methods into companies. As a result, transportation and logistics will improve the firm's operational performance by not just enhancing efficiency but also lowering operational costs.

According to Platje (2013), three types of logistical flows have historically been identified: products, information, and money. The goal of transaction cost economics in relation to information flows is to lower the costs of information access, processing, use, and so on. This flow includes both pre-contractual information gathering and post-contractual agreement monitoring. Monitoring and enforcement costs associated with late or non-payment emerge when using various types of credit or when clients are not required to pay promptly. Insurance and other instruments are merely transaction charges for minimizing the risk of payment commitments not being met. In this discipline, the development of logistics services aims to lower transaction costs by providing safeguards against potential opportunistic behavior associated to inaccurate information and monetary flows.

The cost of transportation and the cost of production (from the production of raw materials to the creation of finished items) are both included in the flow of commodities

Logistics can speed up the flow of commodities while lowering transportation and manufacturing expenses.

2.2.4.3. Theory of Constraints

Goldratt established the theory of constraints (TOC), which has been applied in a variety of management disciplines (Cyplik, et al., 2009). According to the theory, every organization has at least one limitation that prevents it from achieving its established targets and goals. As a result, the theory not only initiates but also implements breakthrough improvements.

The theory proposes that companies face challenges in conveying their products between the parties involved. As a result, incorporating transportation and logistics into the supply chain will ensure that all partners are connected. TOC is thus valuable in assessing the impact of transportation management, inventory management, and order procedures on manufacturing company performance..

2.3. Empirical Literature

Despite the fact that many empirical researches have been conducted on the effects of logistics services on firm performance, the available literature contains mixed evidence and yields inconclusive findings. The majority of studies found a favorable and significant effect, whereas some found insignificant effects. This section covers prior research on the impact of logistics services on firm performance.

Previous studies have linked better organizational performance to proficiency in performing logistics operations and capabilities. For example, Zhang and Lim (2005) published a research titled

Li et al. (2006) used their instrument for measuring supply chain practices (developed in 2005) in studying the impact of SCM practices on organizational performance and competitive advantage in South Korea. They discovered that SCM practices as a multidimensional concept cover upstream and downstream supply chains as well as internal supply chains. Their research also found that SCM methods have a significant impact on organizational performance and competitive advantage. Higher levels of SCM practice, according to the findings, can lead to increased competitive advantage and greater organizational performance. Furthermore, competitive advantage can have a direct and positive impact on the performance of an organization.

South African postal services organization, there is a significant relationship between inbound logistics activities and the business's operational performance (Tabien 2006). According to the findings of this study, inbound logistics operations and revenue production are strongly associated.

Kim (2006) investigates the causal relationships between supply chain management (SCM) practice, competition capability, supply chain integration level, and firm performance. He discovered that the role of SC integration as a critical intervening variable between SCM practice or competition capability and firm performance is highly emphasized in small firms, whereas the infrastructure role of SC integration, which drives the strong interrelationship between SCM practice and competition capability, is highly emphasized in large firms. This indicates that large firms have already achieved significant levels of SC integration, and that, as a result of this high level of SC integration, a closer interrelationship between SCM practice and competition capability, as well as a more significant direct effect of these two constructs on performance, may be possible. His findings suggest that efficient SC integration may be more important for performance improvement in small organizations, whereas in large firms, the close link between SCM practice and competition competence may have a greater impact on performance improvement.

Hyvönen (2007) conducted research on logistics in Finnish businesses. Data was collected and analyzed using descriptive statistics. According to the study's findings, when information technology was used to logistics management, sales and customer satisfaction improved. However, other than information technology, the study was unable to determine the impact of other areas of logistic management on performance.

Lenny et al. (2007) investigated the links between SCM practices, operational performance, and SCM-related organizational performance in Turkey. Data for this study was gathered from a sample of 203 manufacturing SMEs in Istanbul, Turkey, that specialize in the production of fabricated metal goods and general-purpose machinery. Their research uncovered a set of 12 SCM practices: Close collaboration with suppliers, close collaboration with customers Just-in-time delivery, Supply chain benchmarking, strategic planning There are only a few suppliers, Subcontracting, E-procurement, Outsourcing, third-party logistics, and holding safety stock There are numerous vendors. CM practices were shown to have a direct and beneficial impact on

operational performance; however, SCM practices were not found to have a direct and significant impact on SCM-related organizational performance.

Liu and Luo (2008) customer-focused capabilities and information-focused capabilities both have a direct and indirect impact on business performance.

Vijayaraghavan and Raju (2008) investigated the impact of transportation and logistics on performance in Indian-based businesses. The study looked at a ten-year period to see if there were any notable changes before and after transport and logistics techniques were implemented. According to the study's findings, there was a favorable relationship between the organizations' logistics capabilities and their performance. The goal of this research is to see if the same favorable relationship exists in locally based businesses.

Green et al. (2008), evaluated the impact of transportation and logistics on the performance of US manufacturing enterprises. The research was conducted as a cross-sectional survey, with data acquired through primary sources. According to the study's findings, increased efficiency in transportation and logistics methods led to increased organizational performance and product innovation. As a result, the supply chain has seen an increase in innovation. The study, on the other hand, was unable to ascertain the type and strength of the relationships between the research variables.

Mugo (2013) examined into the logistics and transportation of Kenyan mobile service providers. The study took a random sample of all Kenyan mobile phone carriers and analyzed them using descriptive statistics. The study found that logistics improve operational efficiency by boosting company activities, lowering aggregate costs, reducing business risks, and allowing organizations to acquire a competitive edge. However, due to differences in organizational structures with mobile service providers, the study's findings may not be applicable to describing the influence of logistics and transportation in the milk sector.

Formulating and designing order processing logistics strategies to improve performance should be the core business of the company. According to them, inventory control logistics management aids in the reduction of stock maintenance costs, the maintenance of product quality, the improvement of production flow, and the reduction of breakage costs. This, in turn, leads to

increased client loyalty and sales volume, resulting in an overall improvement in the company's success.

Bwari et al. (2016) conducted supply chain research in East African Breweries Limited in Kenya. The research was conducted using a descriptive research approach. The study focused on all of EABL's 1653 workers. The survey took a 10% sample from each strata, resulting in a total of 165 respondents. Inventory control, distribution management, and transportation management all had a significant impact on supply chain performance, according to the study, whereas warehousing management services had a small impact. The study, on the other hand, did not look into the relationship between the research factors. Wathe (2016) looked at the impact of logistics, which was the independent variable, on the performance of manufacturing enterprises, which was the dependent variable. Both descriptive and explanatory research designs were used in this study. An e-mail survey and hand delivery were used to distribute a semi-structured questionnaire. According to the findings, there is a link between logistics and manufacturing company performance in Kenya.

Kumsa (2018) conducted a study in Ethiopia to evaluate the impacts of logistics operations on organizational operation in case of ponder on Modjo dry port. A relationship examination found four logistics operations, namely: Transportation management, inventory management, distribution management, and customer service are the four categories. These four variables had a significant and favorable impact on organizational success. The administration of transportation had a significant positive impact on organizational performance. The most basic activities for organizational performance are transportation management and inventory management. The dependent variable is organizational performance, and the independent variables are the rate of variation in execution clarified by inventory management, and the coefficient for inventory management development is significant.

Tsegaye (2018) investigated the impact of logistics management strategies on Ethio Telecom's performance in terms of supply chain function, and all have predictive power on Ethio Telecom's organizational performance, according to the study Gudeta (2021) did a study on the impact of logistics management on organizational performance at Wonji Sugar Factory in Ethiopia.

The study's major objective was to examine the impact of logistics activities on organizational performance. The study's findings suggest that logistics, inventory, and warehouse management

have a favorable and statistically significant impact on organizational performance. This study suggests that, because the results reveal that logistical activities have a substantial impact on organizational performance, the management of the organization should include the activities under study into all elements of the factory, as this will increase the factory's performance.

2.4. Research Gap

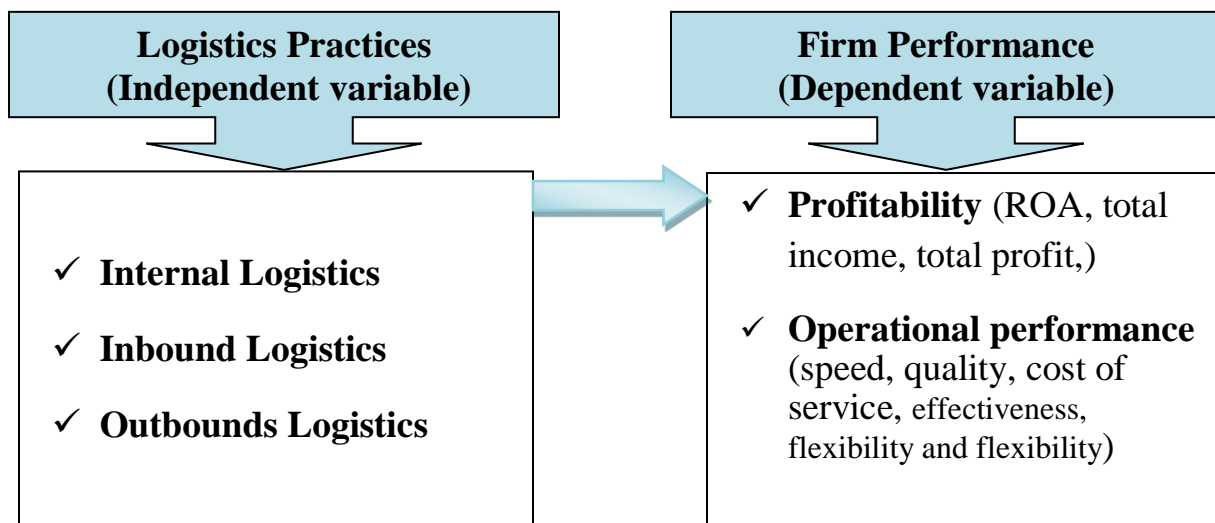
It could be seen from the above explained empirical literatures that the impact of logistic practices on the performance of provides mixed evidences and inconclusive result. As a result, it's critical to remember that research on logistics practices and their impact on organizational performance has little or no systematic data with internationally acknowledged results. As a result, it provides a fertile field for academics, researchers, and practitioners to learn empirically about the impact of logistics services on company performance. Furthermore, it was obvious from the reviewed relevant literature that there were relatively few studies that empirically examined the effects of logistics practices on business performance in Ethiopia, notably in the domain of the cement industry. The study therefore aims to fill this gap of literature by studying the impact of logistics practices on the organizational performance with the case of Habesha Cement.

2.5. Conceptual Framework of the Study

From the above literatures gathered, it is possible to come up with conceptual frame work of the paper.

The below conceptual frame work shows that Logistics practices plays a significant role in the companies firm performance if the three logistic practices (internal logistics, inbound logistics and out bound logistics) implemented in an advanced and improved manner. Improved logistic practice will improve the company's profitability by incurring the total profitability.it also enhance companies return on asset and increase income. Beside that it will increase competences by speed up the flexibility and effectiveness firm performance to be best agile. Continuous improvement of logistic practice enhance companies' firm performance effectiveness and efficiency. Therefore improved logistic practice is important for firm performance by gaining value relative to their costs.

Figure 2.1 Conceptual Framework



CHAPTER THREE

METHODOLOGY OF THE STUDY

3.1 Introduction

The term "research methodology" refers to a method for highlighting scientific operations in a way that is appropriate for the situation. It is a general standard that specifies the methodologies used in performing the research study, as well as how and what analysis should be performed on the data acquired (Akinyele, 2016).

3.2 Research Design and Approach

The aim of the research was to look at the impact of logistic practices on Habesha Cement S.C.'s organizational performance. The researcher was use an explanatory research design using a survey questionnaire to attain this objective. The goal of an explanatory research design is to explain the patterns of interactions between variables by analyzing a context or a specific problem. It aids in comprehending the nature of the independent and dependent variables' connection. Explanatory study is used to determine the cause and effect of logistic practice on organizational performance. More specifically, survey design was chosen because of its cost-effectiveness, convenience of data collection and interpretation via standardized questionnaires, and capacity to comprehend the features of the subject under investigation. As a result of the foregoing definitions, descriptions, and strengths, it is justified that an explanatory survey is the most suitable and acceptable design for this study.

Regarding the research approach, the research project was followed quantitative approach because the study requires an analysis of the logistic practices which impact on organizational performance in Habesha Cement S.C. The relationships among variables statistically tested, which required a quantitative approach to determine the relationship among the study variables.

3.3 Unit of Analysis

The unit of analysis is the major entity that you are analyzing in the study. The unit of analysis is a matter of the 'actor' or the 'entity' to be studied. As the study aimed to investigate the effect of logistics practice on organizational performance of Habesha Cement S.C., the unit of analysis for this study was Habesha Cement Company. The unit of observation for this study was individual who were worked in supply chain management finance and marketing department.

The target population from whom data needs to be collected and analyzed is the work unit under the Supply Chain Management Department and are directly responsible for the company's logistics practice. This department has a direct involvement on logistic practice assumed to be study individually.

3.4 Population and Sample

The complete collection of units for whom survey results are utilized to make conclusions is referred to as the target population of the survey (Smyth, 2004). As a result, the target population for this study is warehousing, procurement, truck operation, facilities, inventory, and products transportation personnel working in the head office in Addis Ababa and the main factory in Holeta. These work units are organized under the Supply Chain Management Department and are directly responsible for the company's logistics. There are 130 employees in total in these working units. Due to the limited size of the study population, this study was conduct a census survey and send questionnaires to all employees of the Supply Chain Management Department, regardless of their position, educational status, or type of job they are doing.

3.5 Study variables and their Operationalization

The study as was to investigate the effect of logistics practice on the organizational performance of Habesha Cement S.C. Thus, logistic practices were the independent variable, while organizational practice was the dependent variable. Logistic practices were further operationalized into internal logistics, inbound logistics and outbound logistics. The dependents variable organizational performance was operationalized into profitability (ROA, total income, and total profit) and operational performance (speed, quality, cost of service, effectiveness, flexibility and flexibility).

Here we operationalize the variables by giving a survey to the participant and ask them to fill it up on their perception on their motion and compassion on the effect of the three logistic practice on companies performance and measure it using descriptive and inferential analysis.

3.6. Data Types and Sources

Both primary and secondary data sources were used in this research. Primary data, according to Kothari (2004), are those that are obtained for the first time and hence have an original nature. The primary data collection instrument for the study was a questionnaire. Because of its simplicity and ease of administration, a questionnaire is preferred.

The questionnaire was be carefully created and evaluated with a small sample of the population to see where it can be improved. Each item was meticulously designed to collect the desired data, satisfy study objectives, and be connected to the broader research topic. The questionnaire was created based on the literature, conceptual framework, and research question in order to examine the relationship between logistics and organizational performance. The majority of the questions in the study are closed-ended. This is because closed-ended questions are frequently used in surveys since they yield greater response rates.

In addition, secondary data was employed in the study. According to Dawson (2009), secondary research data is information gathered from studies conducted by other researchers on a certain subject. Secondary data was gathered from a variety of sources, including reports, manuals, books, periodicals, journal articles, websites, research findings, and any other relevant sources, in order to extract any necessary information to support the study conclusions.

3.7. Data Collection Procedure

Primary data was collected by administering questionnaires to Habesha Cement S.C. employees. Because the study is designed as a census, all supply chain and logistics department personnel were included in the population of the study. A pilot survey was conducted for a sample of respondents prior to the full-scale survey. The goal of the pilot survey is to see if the questionnaire produces the intended results and to detect and rule out any potential problems with the content of the questions and wordings. During the full-scale survey, the researcher was personally contact the target group and administer the questionnaire. Respondents were politely

asked to complete the survey. Permission from organizations and staff were be sought, and approval was granted.

3.8. Data Analyzing

The primary data for this study was collected from a distributed questionnaire. After the questionnaires have been collected, the data was edited, cleaned, encoded, and checked for errors. This is a concern with data processing. This aided in the compression and grouping of data into manageable chunks for study and analysis. In addition, to assess the relationships between variables, inferential statistics such as correlation and multiple linear regression analysis were utilized.

3.9. Statistical Model

To examine if selected logistic practices influence performance of Habesha Cement S.C. Regression analysis is a statistical tool for the investigation of relationships between variables. The following equation was used to examine the effect of selected logistic practices on performance of Habesha Cement S.C.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where Y - organizational performance of the company

X₁, X₂, and X₃ represent the independent variables: internal logistic, inbound logistic and outbound logistic, respectively.

β_0 - is the constant,

β_1 , β_2 and, β_3 - represent corresponding coefficients or parameters for the respective independent variables to be estimated and

e - Represent the error term that captures all relevant variables not included in the model.

3.10. Ethical Consideration

The researcher did his best to address the ethical issues of confidentiality, privacy, and informed consent as much as possible. Consent was obtained from the administrative of the enterprise after explaining the relevance of the study before any data is collected, all study participants were informed of the study's goal and verbal agreement was sought from all study subjects. Participants were also be notified that they have the option to withdraw from the study at any time.

3.11. Reliability and Validity tests

3.11.1 Instrument Validity

Validity test of the questionnaires was done on its content. The clarity of the instrument items to the respondents was established so as to enhance the instrument's validity. To establish the validity of the research instrument the researcher required opinions of experts in the field of study and reviewed the appropriateness of questions and the scales of measurement.

3.11.2 Instrument reliability

A reliability coefficient (alpha) of 0.70 is considered acceptable. The reliability of the questionnaire was tested using the Cronbach's alpha correlation coefficient with the aid of Statistical Package for Social Sciences (SPSS) software. Accordingly, the logistic service dimensions and employee performance were tested as depicted below, inbound logistics and outbound logistics

Table 3.1: Reliability Test Result

Variables	Cronbach Alpha	No. of Items
Internal logistics	0.843	8
Inbound Logistic	.861	7
Outbound Logistic	0.799	8
Firm Performance	0.832	10

Source: (Survey Data, 2022)

As Tavakol (2001) stated that, there are different reports about the acceptable values of alpha, ranging from 0.70 to 0.95. Hence, the Cronbach 's alpha coefficient of all the above variables was fall within the stated range and concluded that there is consistency among each question in the questionnaire

Chapter Four

Results and discussion

4.1 Introduction

This chapter presents the discussions of the results of the study. As mentioned earlier, the purpose of the study was to investigate the effect of logistic practices on organizational performance of Habesha Cement S.C. The first part presents an analysis of the demographic information such as gender, age, education, employee category and duration of work with Habesha Cement Share Company. The second part explored finding from descriptive statistics regarding the data designed to respond to the research question. Then, results and discussions from correlation analysis and multiple linear regressions are presented

4.2 Response Rate

Table 4.1 indicates the response rate. When distributing the questionnaire, the aim was to gather data from 130 employees Habesha Cement employees.

Table 4.1: Response Rate

Questionnaires distributed	Questionnaires returned	Questionnaires rejected	Usable Questionnaires	Response rate
130	125	7	118	90.8

Out of these 130 copies of the questionnaire distributed, 125 copies were returned. To make the raw data that was collected through questionnaire ready for conducting statistical analysis data cleaning was performed by checking the data for completeness and outliers. Thus, out of the 125 collected copies of questionnaire, 7 were rejected because they were incomplete. Nevertheless, the usable copies helped to achieve a response rate of 90.8%, which is considered very good response rate according to Mugenda (2003).

4.4 Demography Information of the Respondents

This section presents general information of respondents. Respondents were asked about their gender, age, level of education attained, work position and tenure in present company. This information is not necessarily important for addressing research objectives but they provided

important information that helps the researcher to determine the ability of the respondent to contribute meaningfully to the investigation. The result is presented in Table 4.2.

Table 4.2 General Information of the respondent

Main factor	Factor level	Frequency	Percentage
Gender	Male	92	78.0
	Female	26	22.0
	Total	118	100
Age	18 – 29 years	45	38.1
	30 - 39 years	40	33.9
	40 - 50 years	22	18.6
	Over 50 years	11	9.3
	Total	118	100
Educational qualification	Primary	7	5.9
	Secondary	41	34.7
	Diploma	31	24.3
	Degree	38	30.5
	Master and above	3	2.5
	Total	118	100.0
For how long have you been employed in this company?	Under 1 years	6	5.1
	1 - 3 years	43	36.4
	4 - 5 years	42	35.6
	6 – 10 years	23	19.5
	above 10 years	4	3.3
	Total	118	100.0
Position in the Organization?	Clerical	35	29.7
	Professional	76	64.4
	Managerial	7	5.9
	Total	118	100.0

Source, (Survey data, 2022)

Table 4.2 above shows the gender distribution of the respondents who participated in the study. From table 4.2 show that 78.0% were males while 22.0 % were females. This shows that there is a noticeable disparity in representation between the two sexes in the sample population. This visible gap in gender representation was not due to sampling and or non-sampling errors; instead,

it was due to the un-proportional representation of males and females in the organization, which is 78% males and 22% females. Generally, it is the reflection of the total population structure.

To maintain representativeness of the study's sample population, sample elements were taken from diverse age structures of the company's employees, which is for the purpose of this research, they were classified into four age groups as depicted in Table 4.2. Respondents represented customers from a range of ages. Of the four age classes, the first class is termed as the youth group and all the others are groups of the adult population. From the adult population, the first age group 30-39 years of age is considered early adulthood, the 40-50 years represent middle adulthood and above 50 years of age represents late adulthood. Demographically, 29 years of age is considered the upper bound for the youth age group, and 30 years is the beginning of early adulthood. This implies that the company has a youth and early adulthood dominated population structure. This is again a reflection of the total population.

In terms of educational qualification, the sample population was classified into five categories, ranging from primary to highest academic qualification. Table 4.2 displays the different levels of educational qualification for the sample population along with their corresponding percentage. Regarding the educational qualification, 34.7% of the respondents were having secondary education and 30.5% respondents were having first Degree, 26.3% of the respondents were having Diploma while 2.5% were having Master or above. This implies that the respondents were represented from various education levels; hence, the sample represented employees from professional semi-professional and clerical positions.

Concerning the work experience of respondents, 5.1% of the sample population have worked for less than 1 year, 36.4% worked for 1-3 years, 35.6% worked for 4-5 years, 19.5% worked for 6 - 10 years, and the remaining 3.4% worked for more than 10 years. This implies that most (77.1%) of the respondents have short tenure, i.e., 1-5 years. Higher percentages of the respondents were less than five years tenure, which indicates high turnover. Regarding the position status of respondents, Table 4.2 indicates that 29.7% of the sample is clerical staff, 64.4% is professional staff, the remaining 5.9% were the managerial staff.

4.5 Descriptive analysis of the Logistics Practices and Performance of Habesha Cement Share Company as perceived by the respondents

This section discusses the descriptive statistics of measures of the three major logistic practices components (internal logistic, inbound logistic and outbound logistic) and organizational performance that were collected by the questionnaire

In line with the objectives articulated under chapter three here effort was made to analyze respondents view on the provided a five scale Likert types of questions. Respondents' feedbacks were captured along the 24 items were introduced to measure the study area under each of the three major logistic services components: internal logistic, inbound logistic and outbound logistic. In this regard the descriptive parts of this study were analyzed based on using a descriptive statistic of mean and standard deviation. A range of mean was constructed by using itemized Likert rating scale. The researcher was used (Shrestha, 2015) guide to interpret the result which is presented in the Table 4.3. The mean of each individual item ranging from 1 - 5 falls within the following interval:

Table 4.3: Descriptive statistics result interpretation guide

Interval of Means	Interpretation
1.00 – 1.80	Very Low
1.81 – 2.60	Low
2.61 – 3.40	Medium
3.41 – 4.20	High
4.21 – 5.00	Very High

Source: (Shrestha, 2015)

4.5.1 Logistics practices of Habesha Cement Share Company

4.5.1.1 Internal Logistics

Building design, equipment, systems, manpower, and process design are the five primary components of the internal logistics system. Internal logistics can also be seen to cover tasks in each company, such as internal transportation, material handling, storage, and packaging (Teixeira, et al, 2012). The study assesses the perception of employees towards internal logistic service of the Habesha Cement PLC. To assess the company internal logistic service, the study made an attempt to develop a five scale Likert types of questions and employees were invited to indicate their views for each of the questions. Based on these, respondents were asked about internal logistic service, the result mean score value and standard deviation presented the table 4.4.

Table 4.4: Respondents view on the Internal Logistic service

Indicators	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)	Mean	SD
	1	2	3	4	5		
Cooperation activities among departments in the company are smooth	3	35.6	10.2	46.6	5.1	3.16	1.05
The company has sufficient resources on transport, human resources, warehouses, and yards to serve the production and business activities	0	28.8	25.4	40.7	5.1	3.22	.926
In the company there is smooth flow of information to support effective internal decision-making for logistics functions	1.7	45.8	19.5	30.5	2.5	2.86	.960
Every functional unit makes its information easily accessible for the other units.	2.5	55.1	7.6	31.4	3.4	2.78	1.03

There is enough inventory level at stock, every time, to satisfy your customers order	0	33.9	32.2	28.0	5.9	3.06	.92
Complaint handling process is quick.	1.7	48.3	16.1	30.5	3.4	2.86	.989
Internal distribution of Inputs is handled properly	12.7	34.7	9.3	31.4	11.9	2.95	1.28
There technology in use allows strong link and coordination among functional units	9.3	44.9	10.2	26.3	9.3	2.81	1.19
Average						2.96	1.04

Source: (Survey data, 2022)

Question was asked on whether cooperation activities among departments in the company are smooth. The finding showed that 51.7% were agreed, while only 38.1% were disagreed. Mean response was 3.16 with a scattered standard deviation of 1.05 implied that cooperation activities among departments in the company are moderately smooth. The finding showed that 45.8% were agreed and 28.8% were disagreed, while 25.4% were neutral. Mean response was 3.22 indicating that the company has moderate resources. When respondents were asked whether there is smooth flow of information to support effective internal decision-making for logistics functions, 47.5% were disagreed and 33% were either agreed, while around one-fifth (19.5%) were neutral. Mean response was 2.86 with standard deviation of 0.96 implied that most of respondents were less agreement regarding smooth flow of information to support effective internal decision-making for logistics functions in company. Question was also asked whether every functional unit in company makes its information easily accessible for the other units. The finding showed that 57.6% were disagreed, while 34.8% were agreed. The average response was 2.78, suggesting that respondents agreed less with the statement that every functional unit in the organization makes its information widely accessible to other functional units.

Respondents were also asked if there is always adequate inventory on hand to fulfill the customer's request. In this regard, 33.9% were disagreed, 33.9% were agreed while 32.2% were neutral. The average response was 3.06, suggesting that respondents indifferent with the

statement that there is enough inventory level at stock, every time, to satisfy your customer's order. When respondents were asked whether the company complaint handling process is quick, 50% were disagreed and 33.9% were disagreed, while 16.1% were neutral. Mean response was 2.86 indicating that the company has limitation in terms quickly handling complaint process.

When respondents were asked whether internal distribution of inputs is handled properly, 47.5% were disagreed and 43.3% were agreed, while 9.3% were neutral. Mean response was 2.95 implied that there is still limitation in terms of handling internal distribution of inputs properly. Question was also asked whether the technology in use allows for strong links and coordination among functional units. The finding showed that 54.2% were disagreed, while 34.6% were agreed. The average response was 2.81, suggesting that the technology in use had limitation in terms of allowing for strong links and coordination among functional units.

Over all, the grand mean response for internal logistic practices of Habesha Cement was 2.96. According to Shrestha (2015), this considered to be medium. It is an indication that there are lots of areas that company need to improve in terms of its internal logistic practices. In particular, the company had limitations/shortcomings in terms of its functional unit's ability to make information easily accessible for other units; the use of modern technology that allows strong link and coordination among functional units; a smooth flow of information to support effective internal decision-making for logistics functions; and the ability to quickly handle complaint processes.

4.5.1.2 Inbound Logistic Practice

Inbound logistics refers to the flow of all supplies, collections, shipments, and inventory management from suppliers to buyers (Bowersox, et al, 2002). Inbound logistics, according to Tracy (2004), is one of the key logistics processes that focuses on procuring and organizing the inbound transportation of materials, parts, and/or finished inventory from suppliers to manufacturing or assembly plants, warehouses, or retail stores. The study assesses the perception of employees towards inbound logistic service of the Habesha Cement PLC. To assess the company logistic service, the study made an attempt to develop a five scale Likert types of questions and employees were invited to indicate their views for each of the questions. Based on these, respondents were asked about inbound logistic service, the result mean score value and standard deviation implied below 4.5 in the table.

Table 4.5: Respondents view on the Inbound Logistic Services

Indicators	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)	Mean	SD
	1	2	3	4	5		
Material transportation process for production is favorable.	9.3	22.9	9.3	55.9	2.5	3.19	1.11
Order time and material transportation ensure the production progress.	4.2	35.6	11.0	43.2	5.9	3.11	1.09
Company Storing goods according to recommended guide line.	6.8	30.5	7.6	44.9	10.2	3.21	1.18
The company has good relationships with raw material suppliers	5.9	29.7	5.9	47.5	11.0	3.28	1.17
Product defect (such as technical defect, packing defect, faulty quantity, missing product) occur rarely when dealing with raw material suppliers.	2.5	14.4	25.4	45.8	11.9	3.50	.967
Order requisition procedures are effective and easy to use	16.1	30.5	9.3	38.1	5.9	2.87	1.25
In company the movement and storage of materials are made at the lowest possible cost through the use of proper methods and equipment.	9.3	39.0	20.3	26.3	5.1	2.79	1.09
Average						3.13	1.12

Source, (Survey data, 2022)

Question was asked on whether material transportation process for production is favorable. The finding showed that 58.4% were agreed, while only 32.2% were disagreed. Mean response was 3.19 with a scattered standard deviation of 1.11 implied indicating a moderately favorable material transportation method for production. Question was also asked whether order time and material transportation ensure the production progress. The finding showed that 39.8 were

disagreed and 49.1% were agreed, while 11% were neutral. Mean response was 3.11 indicating that order time and material transportation only to limited extent ensure the production progress.

When respondents were asked whether company storing goods according to recommended guide line, 55.1% were agreed and 37.3% were disagreed. Mean response was 3.21 with standard deviation of 1.18. Although a several respondents disagreed with the statement, the majority of respondents claimed that the company stores items according to recommended guidelines. Question was also asked whether the company has good relationships with raw material suppliers. The finding showed that 58.5% were agreed, while 35.6% were disagreed. The average response was 3.28, suggesting that majority of respondents agreed with the statement that the company has good relationships with raw material suppliers.

Respondents were also asked if product defect (such as technical defect, packing defect, faulty quantity, missing product) occur rarely when dealing with raw material suppliers. In this regard, 57.7% were agreed, 16.9% were disagreed while 25.4% were neutral. The average response was 3.5, suggesting that respondents more agreement with the statement that product defect (such as technical defect, packing defect, faulty quantity, missing product) occur rarely when dealing with raw material suppliers. When respondents were asked whether order requisition procedures are effective and easy to use, 46.6% were disagreed and 44% were disagreed, while 9.3% were neutral. Mean response was 2.87 indicating that there is limitation in requisition procedures. More so, when respondents were asked whether the movement and storage of materials in company are made at the lowest possible cost through the use of proper methods and equipment, 48.3% were disagreed and 31.4% were agreed, while 20.3% were neutral. The mean response was 2.79, implying that there are still limitations/shortcoming in terms of moving and storing products in the company at the lowest feasible cost using proper methods and equipment.

Over all, the grand mean response for inbound logistic practices of Habesha Cement was 3.13. The According to Shrestha (2015), this considered to be medium. It is an indication that there are numerous areas in which the company's inbound logistic practices could be improved. The company, in particular, has limitations/weaknesses in terms of moving and storing products in the company at the lowest possible cost utilizing correct methods and equipment, as well as the application of simple requisition procedures.

4.5.1.3 Outbound Logistics Practices

The final phase of the delivery process is included in outbound logistics. Outbound logistics refers to the process of storing and transporting the finished product, as well as the information that travels from the end of the production line to the end user (Tracy, 2004). The study assesses the perception of employees towards outbound logistic service of the Habesha Cement PLC. To assess the company outbound logistic service, the study made an attempt to develop a five scale Likert types of questions and employees were invited to indicate their views for each of the questions. The result of mean score value and standard deviation presented the table 4.6.

Table 4.6: Respondents view on the Outbound Logistic service

Indicators	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)	Mean	SD
	1	2	3	4	5		
Packing process and product delivery are convenient.	5.1	28.8	7.6	44.9	13.6	3.33	1.17
Packing and product storage is well done.	9.3	15.3	8.5	47.5	19.5	3.53	1.23
In the company there is on time delivery order for customers.	13.6	33.1	17.8	29.7	5.9	2.81	1.17
Good relationship between company and its business partners.	0	16.1	27.1	43.2	13.6	3.54	.921
A little of mistakes (such as the number of products, product patterns) in delivery	3.4	20.3	16.9	47.5	11.9	3.44	1.05
Through transportation management practice products are made available to the customers desired location	3.4	22.9	27.1	41.5	5.1	3.22	.971
The company's products are delivered using the right mode of transportation	0	17.8	27.1	44.9	10.2	3.47	.903
The company spends at a minimum cost to transport products to customers	1.7	23.7	21.2	44.9	8.5	3.35	.942
Average						3.37	1.04

Source: (Survey data, 2022)

Question was asked on whether packing process and product delivery are convenient. The finding showed that 58.5% were agreed, while only 33.9% were disagreed. The mean response was 3.33, with a standard deviation of 1.77, indicating that the majority of respondents thought the packaging process and product delivery were convenient. Question was also asked whether packing and product storage is well done. The finding showed that 67% were agreed and 24.6% were disagreed. The average response was 3.53, suggesting that most of respondents thought the packing and product storage was done properly.

When asked whether the company delivers orders on time for clients, 46.6 percent disagreed, 35.6 percent agreed, and 17.8 percent were neutral. The mean response was 2.81, with a standard deviation of 1.17, indicating that the majority of respondents were not in agreement with the company's on-time delivery of orders to customers. Question was also asked whether there is good relationship between company and its business partners. The finding showed that 56.8% were agreed, while 43.2% were disagreed. The average response was 3.54, suggesting that there is good relationship between company and its business partners.

Respondents were also questioned if there were any minor errors in delivery (such as the number of products or product patterns) in their company. In this regard, 59.4% were agreed, 23.7% were agreed while 16.9% were neutral. The average response was 3.44, indicating that the majority of respondents believe there are minor delivery errors (such as the number of products or product patterns). When respondents asked whether products are made available to customers at their intended location by transportation management practices, 46.6 percent agreed, 26.3 percent disagreed, and 27.1 percent were neutral. The average response was 3.22, suggesting that the majority of respondents believed that transportation management practices make company products available to customers at their intended location.

When respondents were asked whether the company's products are delivered using the right mode of transportation, 55.1% were agreed and 17.8% were disagreed, while 27.1% were neutral. Mean response was 3.47 implied that majority of respondents were reported that the company's products are delivered using the right mode of transportation. Question was also asked whether the company spends at a minimum cost to transport products to customers. The

finding showed that 53.4% were agreed, 25.4% were disagreed, while 21.2% were neutral. The average response was 3.35, suggesting that majority of respondents were reported that the company spends at a minimum cost to transport products to customers.

Over all, the grand mean response for outbound logistic practices of Habesha Cement was 3.37. According to Shrestha (2015), this considered to be moderately high. It is an indication that the company relatively perform better in outbound logistic practices, though there are some areas that company need to improve in terms of its outbound logistic practices. The company, in particular, has limitations/shortcomings in terms of supplying customers with on-time delivery orders and implementing transportation management systems that make company products available to customers at their intended location.

4.5.2. The Performance of Habesha Cement Share Company

In order to measure the company performance, questions regarding various measures of organizational performance were asked. When respondents were asked whether the company is able to achieve stated goals, around have of respondents were agreed. Furthermore, the finding shows that around four out of ten of the participants reported that each section understands the role it plays in achieving organizational goals. When respondents were asked whether the organization functions smoothly with a minimum of internal conflict, half of respondents were agreed.

Table 4.7 Respondents opinion on financial performance of commercial bank

Performance Indicators	Mean	STD
Financial Performance	3.49	0.86
Amount of company net income has been increasing over years.	3.71	.786
The company annual revenue has been increasing over the years.	3.81	.773
The company return on assets has improved over time.	3.51	.875
The company market share has increased over time.	2.95	1.045
Average sales volume increase over the past year	3.48	.855
Operational performance	3.19	0.925
The customers have been increasing over the years.	3.68	.815
The reputation and brand image of the company has improved.	3.37	.968

The company product and service quality has improved over the year.	3.21	.950
The satisfaction of customers has improved over the years	2.79	.950
Products are delivered to customers on time meeting the customers' requirements.	2.91	.943
Grand Mean	3.34	0.82

Source: (Field Survey, 2022)

The grand mean score for general company staffs' opinion on the company financial performance was 3.49 on a 5-point scale. This would indicate that the company's financial performance has considerably improved over the years. The average standard deviation was 0.86, indicating that at least 68% of the responses were within one standard deviation of the mean. In terms of specific financial performance indicators, the statement that the company's yearly revenue has been increasing over time has the greatest mean value (3.81), while the statement that the company's market share has been increasing over time has the lowest mean value (2.95).

The grand mean score for general company staffs' opinion on the company operational performance was 3.19 on a 5-point scale. The average standard deviation was 0.95. This would indicate that the company's operational performance has moderate. In terms of specific operational performance indicators, the statement that the company customers' have been increasing over the years has the greatest mean value (3.68), while the statement that the satisfaction of customers has improved over the years has the lowest mean value (2.79). The grand mean score for general company staffs' opinion on the company overall performance was 3.34 on a 5-point scale, which is an indication that the company has perform good.

4.6. The Correlation Analysis Results of the study variables

Correlation analysis is a technique used for indicating the relationship of one variable to another and can be considered as a standardized covariance that shows the extent to which a change in one variable corresponds systematically to a change in another (Zikmund et al, 2009). The study sought to identify the relationship between three explanatory variables (internal logistic, inbound logistic and external logistic) and organizational performance of Habesha Cemeny Share Company. The correlation coefficient is a number that ranges from -1 to 1. Two variables with a

positive linear correlation coefficient of +1 are perfectly correlated. A correlation of -1 indicates that two variables are negatively linearly related and a correlation coefficient of 0 indicates that there is no linear relationship between two variables. Accordingly, in order to identify whether the dependent variable and independent variables have a joint variation, a Pearson Correlation Coefficient was computed with aid of SPSS. The study used Marczyk, et al. (2005), guide to interpret the result which is presented in the Table 4.8.

Table 4.8: Correlation result interpretation guide

Correlation value in range	Interpretation
0.00 to 0.19	Weak/ very low correlation
0.20 to 0.39	Low correlation
0.40 to 0.59	Moderate correlation
0.60 to 0.79	High correlation
0.8 to 1.0	Very high correlation

Source: (Marczyk, et al., 2005)

The above interpretation guide (Table 4.8) developed by Marczyk, et al (2005) becomes handy. Accordingly, this guide has been used to interpret the results which are summarized in the coming sections. The findings of the study are presented in Table 4.9. The result shows that there are positive but relatively strong relationship between the three logistic services (internal logistic, inbound logistic and outbound logistic) and organizational performance. The results show that internal logistic services as one element of logistic services was positively correlated to organizational performance with a Pearson's Correlation Coefficient of $r = 0.564$ and was statistically significant as the p-value is less than 0.01. According to Marczyk, et al (2005), this relationship was moderately strong. The results also revealed that inbound logistic service was positively correlated to organizational performance with a Pearson's Correlation Coefficient of $r = 0.573$ and was statistically significant as the p-value is less than 0.01. According to Marczyk, et al (2005), this relationship was moderate. Lastly, outbound logistic service was positively correlated to organizational performance with a Pearson's Correlation Coefficient of $r = 0.606$ and was statistically significant as the p-value is less than 0.01. According to Marczyk, et al (2005), this relationship was highly correlated.

Table 4.9: Pearson Correlation Logistic Services and organizational performance

		Internal Logistic	Inbound Logistic	Outbound Logistic	Organizational Performance
Internal Logistic	Pearson Correlation	1	.451**	.507**	.564**
	Sig. (2-tailed)		.000	.000	.000
	N	118	118	118	118
Inbound Logistic	Pearson Correlation	.451**	1	.498**	.573**
	Sig. (2-tailed)	.000		.000	.000
	N	118	118	118	118
Outbound Logistic	Pearson Correlation	.507**	.498**	1	.606**
	Sig. (2-tailed)	.000	.000		.000
	N	118	118	118	118
Organizational Performance	Pearson Correlation	.564**	.573**	.606**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	118	118	118	118

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

Source: (Survey data, 2022)

Over all, all the three logistic practices (internal logistic, inbound logistic and outbound logistic) are moderately strong positive relation with organizational performance with a Pearson's Correlation Coefficient of $r > 0.5$ in all case. This indicates that logistic practices had a positive correlation with the organizational performance and the relationship is moderately strong.

4.7. Testing the Statistical Significance of the effect of Logistics practices on performance of Habesha Cement Share Company via Multiple Regression Analysis

The purpose of this study was to see how logistic service affected Habesha Cement S.C.'s organizational performance. Regression analysis were used to accomplish this. It starts with results basic assumption test and then precedes to results of the multiple linear regression models.

4.7.1. Assumptions

When deciding to use multiple regression to analyze data, part of the process entails ensuring that the data to be studied can really be analyzed using multiple regression. This is because it is only appropriate to apply multiple regressions if the data "passes" the assumptions that multiple regressions require in order to get a valid result. As a result, the variables were subjected to the necessary diagnostic tests in the next section.

4.7.1.1. Outlier, leverage and influential points

Detecting outliers, high leverage points, and highly impactful points is crucial before using multiple regression analysis. The residual analysis is used to do this. Table 4.10 contains summaries of residual statistics.

There are no outliers in the sample because the dependent variable organizational performance has standardized residual values ranging from -2.292 to 2.316 in all cases.

Table 4.10. Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Std. Residual	-2.292	2.316	.000	.987	118
Stud. Residual	-2.328	2.441	.002	1.006	118
Cook's Distance	.000	.168	.010	.019	118
Centered Leverage Value	.001	.093	.025	.018	118

a. Dependent Variable: Organizational Performance

Source: (Survey data, 2022)

The incredible part about leverages is that they can assist in identifying extreme x values that may have an impact on regression analysis (Rousseeuw, et. al, 1990). Observation with a leverage value more than 0.101 is deemed a high leverage point in this investigation. Table 4.10 reveals that the leverage value for the dependent variable organizational performance ranges from 0.001 to 0.093, which is less than the 0.101 cut-off point, which is an indication that the data is free from high leverage points.

Cook's distance is a measure of how much the residual of all records would vary if a certain record was removed from the model coefficients calculation (Rousseeuw, et. al, 1990). A popular rule of thumb, according to Wilcox (2001), is that a cook's distance higher than one should be scrutinized and possibly eliminated. Table 4.10 shows that a cook's distance for a dependent variable organizational performance range from 0 to 0.168, which is lower than the cut-off points of 1.

4.7.1.2 Multi collinearity

There was no collinearity among the independent variables based on this rule of thumb. Variance inflation factor less than 10 and tolerance greater than 0.1 indicates that Multicollinearity is not a problem

Table 4.11: Multicollinearity test for the Study Variables

Variable	Tolerance	VIF
Inbound Logistic	.699	1.430
Internal Logistic	.691	1.488
Outbound Logistic	.652	1.533

Source: (Survey data, 2022)

4.7.1.3 Homoscedasticity

In a study, homoscedasticity occurs when the variance of residuals (error term) is the same for all predicted variables (Tabachnic & Fidell, 2007). Heteroscedasticity in a study, on the other hand, occurs when the variance of the errors varies between observations (Long & Ervin, 2000). In this study, the sig-value for fitted values of dependent variable organizational performance was 0.1908, which are indicating that heteroscedasticity was not a concern.

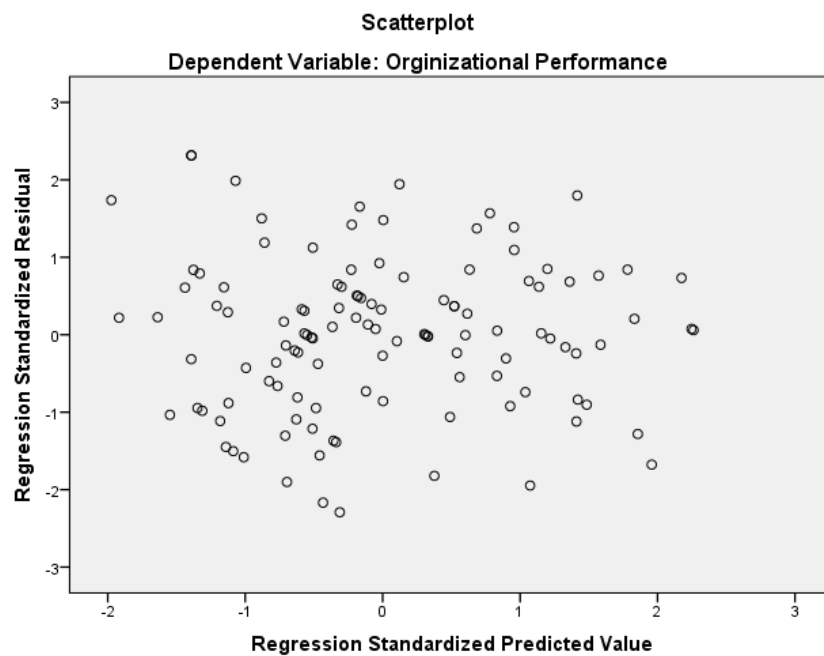
Table 4.12: Breusch-Pagan for Heteroscedasticity

<p>Breusch-Pagan / Cook-Weisberg test for heteroskedasticity Ho: Constant variance Variables: fitted values of organizational performance chi2(1) = 1.71 Prob> chi2 = 0.1908</p>

4.7.1.4 Linearity

The most frequent method for evaluating linearity is to create scatter plots and then visually evaluate them for linearity. It is a sign of linearity if the figure has no evident pattern and the points are evenly distributed above and below zero on the X-axis, and to the left and right of zero on the Y-axis. The scatter-plot of studentized residual against linearly predictive value is shown in the figures below. The figures have a horizontal band of points indicating the linear relationship.

Figure 4.1: a Studentized residual scatter



Source: (SPSS Output, 2022)

4.7.1.5 Autocorrelation

In multiple regressions, the assumption of autocorrelation (serial correlation) is a critical assumption that the error terms are independent of one another. This is especially true for time series data, which are organized chronologically. The Durbin-Watson test is used for autocorrelation. If the value of d is between 1.5 and 2.5, there is no autocorrelation, according to Cochrane (1997). The outcome revealed below that there is no autocorrelation.

Table 4.13: Durbin-Watson result

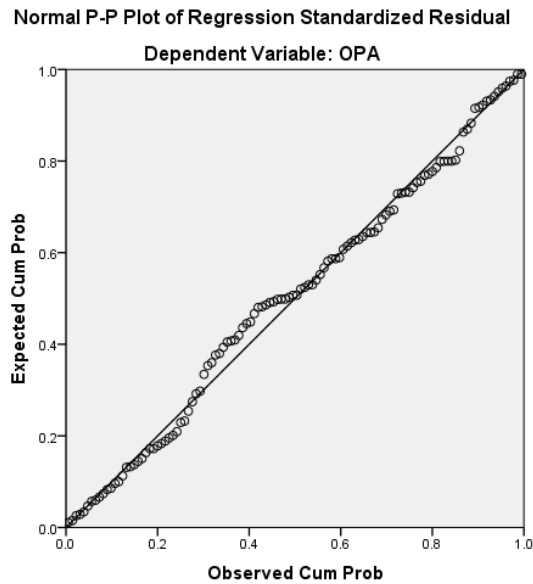
Test	Dependent variable	Value
Durbin-Watson	Organizational Performance	1.804

Source: (Survey data, 2022)

4.7.1.6. Normality

The residuals of the regression should follow a normal distribution in order to derive accurate inferences from regression analysis. The graph below illustrates Normal P-P plots for the dependent variables in which the points lie on a straight line, indicating that the data is normally distributed.

Figure 4.2: Normal P-P Plot of residual



Source: (Survey data, 2022)

4.7.2 Analysis of Regression Results

The independent variable logistic services are operationalized through: internal logistic, inbound logistic and outbound logistic. Thus, study sought to determine the effect of each of the logistic service (internal logistic, inbound logistic and outbound logistic) on the organizational performance. The result of the regression analysis is presented in the following section.

4.7.2.1. The Multiple Coefficient of Determination R²

Coefficient of determination explains the percentage of variation (independent versus dependents). The table 4.14 below preset the model summary.

Table 4.14: Model Summary for logistic Services and the organizational performance ^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.718 ^a	.515	.502	3.42042	1.804

a. Predictors: (Constant), internal logistic, inbound logistic and outbound logistic

b. Dependent Variable: Organizational Performance

Source: (Survey data, 2022)

The result shows 50.2% of variation in an organizational performance as represented by the R² value. The remaining 49.8% of the variability in organizational performance is left unexplained by the explanatory variables used in the study.

4.7.2.2. ANOVA Interpretation

This imply that the independent variables, that are internal logistic, inbound logistic and outbound logistic, considered were relevant in explaining organizational performance of Habesha Cemennt Share Company.

Table 4.15: ANOVA for Logistic Services and the organizational performance ^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1416.600	3	472.200	40.362	.000b
1 Residual	1333.714	114	11.699		
Total	2750.314	117			

a. Dependent Variable: organizational performance

b. Predictors: (Constant), internal logistic, inbound logistic and outbound logistic

(Source: Survey data, 2022)

4.7.2.3. Regression Coefficients

According to the findings, the all three logistic services (internal logistic, inbound logistic and outbound logistic) are significant in predicting the organizational performance since the p values were less than 0.05.

Table 4.16: Coefficients for logistic services and the organizational performance

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-2.904	2.885		-1.007	.316
1 Inbound Logistic	.453	.122	.291	3.726	.000
Internal Logistic	.280	.082	.267	3.407	.001
Outbound Logistic	.611	.151	.326	4.038	.000

Source: (Survey data, 2022)

Logistic practices has positive and significant effect on company's performance.

When these beta coefficients are substituted in the equation, the model becomes

$$Y = 0.453IBD + 0.2801INL + OBL0.611 - 2.904$$

Where: Y is the Organizational Performance of Habesha Cement S.C., IBD is inbound logistic services, INL is internal logistic services and ONL is outbound logistic services.

4.8 Hypothesis Test Results

The study used multiple linear regression analysis to determine the statistical relationship between the independent and dependent variables. All three hypotheses as stated in chapter one of this study were tested using multiple linear regression models.

Table 4.17: Summary of hypotheses testing

Hypotheses	t-statistics	Sig.	Decision
H1: Internal logistics practice has significant effect on the operational performance of Habesha Cement S.C.	3.407	.001	Accepted
H2: Inbound logistics practice has significant effect on the operational performance of Habesha Cement S.C.	3.726	0.000	Accepted
H3: Outbound logistics practice has significant effect on the operational performance of Habesha Cement S.C.	4.038	0.000	Accepted

1) H1: Internal logistics practice has significant effect on the operational performance of Habesha Cement S.C.

Decision: accepted the formulated hypothesis since as show on Table 4.16 above the t-statistics for internal logistic is 3.407 which was significant at 0.001. This finding is consistence with Ristovska, et al. (2017), who found that internal logistics has significant effect on performance of manufacturing companies in Pakistan context. More so, Salem (2011), found that internal logistics has significantly affecting business process integration.

2) Inbound logistics practice has significant effect on the operational performance of Habesha Cement S.C.

Table 4.13 above the t-statistics for inbound logistic practice is 3.726 which was significant at 0.01. This finding is in line with that of Musau, et al. (2017), who found that inbound logistic has significantly affected of organizational performance among Textile Manufacturing Firms in Kenya. Similarly, in Ghana context, Mensah and Oppong (2014), in their study entitled: “Assessment of supply chain management practices and its effects on the performance of Kasapreko Company”, they found that inbound logistics practice has significant effect on the organizational performance Kasapreko Company which was measured in terms of ROA and ROE.

3) Outbound logistics practice has significant effect on the operational performance of Habesha Cement S.C.

Decision: accept the formulated hypothesis since as show on Table 4.13 above the t-statistics for outbound logistic is 4.038 which was significant at 0.00. This finding has several empirical

supports. Majority of the studies (Liu and Luo, 2008; Musau, et al., 2017) demonstrate a positive impact of outbound logistic services on performance, other scholars (Ristovska, et al., 2017) indicated a weak association between outbound logistic and performance.

Chapter Five

Summary, Conclusions and Recommendations

5.1 Introduction

The main target is to find the effects of logistics practices on operational performance of Habesha Cement S.C. with reference to internal logistic, inbound logistic and outbound logistics practices.

5.2 Summary of Findings

To address the aforementioned research objective, the literature on logistic practices has been reviewed; and subsequently, a survey was conducted. Specifically, the study has collected primary data from Habesha Cement Share Company employees through a questionnaire, and 118 were duly completed and returned for analysis. The findings of the study based on the research objectives have been summarized as follows.

The combined effect of various logistic practices influenced organizational performance of Habesha Cement positively and significantly. This finding was both supported by the correlation and regression result. The correlation result shows that there is positive and significant relationship between all logistic practices components (internal logistics, inbound logistics and outbound logistics) and organizational performance. The finding also indicates that the highest relationship was found between outbound logistic and organizational performance, while the lowest relationship was found between internal logistic and organizational performance.

The result of regression also indicates that all predictor variables or logistic practices (internal logistics, inbound logistics and outbound logistics) have statistically significant contribution on combined influence the organizational performance. The adjusted R^2 of 0.502 indicates 50.2% of the variance in organizational performance can be predicted by logistic practices by the company. Therefore, logistic practices have a positive and significant effect on organizational performance.

5.3 Conclusion

The study was undertaken to investigate the effect of logistic practices on operational performance of Habesha Cement S.C. Accordingly, based on the findings presented in the above section; the researcher makes some conclusions concerning the relationship between logistic practices and operational performance.

Results revealed that internal logistic practices has positive and significant effect on operational performance of Habesha Cement Share Company. This implies that internal logistic service was significantly important in improving operational performance of Habesha Cement Share Company

The second is to investigate the effects of inbound logistics practices on operational performance of Habesha Cement S.C. Results shows that inbound logistics practices has significant and positive effect on operationa performance of Habesha Cement S.C. The test for significance was also posetive. This means that inbound logistics service has a higher potential of improving organizational performance level of Habesha Cement S.C., so that company should therefore leverage on this service and make it a reference point for improve the operationa performance.

The third specific objective of the study aimed to examine the effects of outbound logistics practices on operational performance of Habesha Cement S.C. The finding demonstrated that outbound logistics practice has significant and positive effect on operationa performance of Habesha Cement S.C. The test for significance was showed that the effect was statistically significant. This means that outbound logistics practice has a higher potential of improving operational performance level of Habesha Cement S.C so that the company should therefore leverage on this practice and used it as an important tool for improving the operational performance.

Overall, it can be concluded that all the three logistic practices (internal logistisc, inbound logistics and outbound logistics) influence operationa performance of Habesha Cement Share Company positively and significantly. The improvement of company logistic practices in these areas has a higher potential of improving organizational performance. Thus, it can be concluded that improved logistic practices are an increasingly important tool for company to ensure higher organizational performance.

5.4 Recommendations

Based on the study's results and conclusions, the researcher makes the following recommendations to ensure that the logistic practices provided by the company contribute to the company's enhanced performance and competitive advantage.

- Regarding internal logistic the study found significant limitation. In this regard, the company should optimize its inbound logistics practices. The company should improve its functional unit's ability to make information easily accessible for other units; should employ modern technology that allows strong link and coordination among functional units; allow smooth flow of information to support effective internal decision-making for logistics functions; and improve its ability to quickly handle complaint processes. There should be accurate flow of logistics Information from Managers to employees. This will help to prevent confusions that may lead to error in meeting customers' demand. There should be investment on information technology gadgets, and information systems to process, transmit and disseminate data useful to managers in manufacturing operations to bring about quality products, reduce the cost of transformation of goods and efficiency amongst workers and contribute significantly to sustainable development for the present and future generation.
- Concerning inbound logistic practices of Habesha Cement, there are numerous areas in which the company's inbound logistic practices could be improved. The company should use proper methods and equipment to move and store products in the company at the lowest feasible cost, as well as simple requisition procedures. When choosing suppliers, the organization should consider supplier response. The company should realize that building decent relationship and communication with supplier is an important component of organization activity as it will help suppliers to understand what is expected of them during the logistics management process.
- Regarding outbound logistic practices, though the result indicated that the company relatively perform better in outbound logistic practices, there are some areas that company need to improve in terms of its outbound logistic practices. The company, in particular, has limitations/shortcomings in terms of supplying customers with on-time delivery orders and implementing transportation management systems that make

company products available to customers at their intended location. In this regard, the company should work regularly on voice of customers to make sure the company has got the updated information regarding their products i.e., availability and service i.e. on time in full deliveries so that immediate solution will be given to the customer requirements. The company should also analyze transport performance of truck deliveries (both third party and its own) and reward and recognition should be given according to performance evaluation. Strategic use of third-party logistics providers should be implemented. The company should analyze the reason behind delayed deliveries and should act accordingly since the more delayed order would be the chance to be lost sales is high. It is also recommended that company should incorporate transport management in their operations processes such as proper fleet management, vehicle scheduling, route planning, proper maintenance of vehicles in other to ensure procurement of raw materials and distribution of products in order to increase overall cost efficiency, enhanced market share, and reduced lead time thereby impacting positively on performance.

Over all, the finding showed that effective logistics creates positive impact on organizational performance. Thus, like other management areas, the company top management should consider the effective logistic management as backbone for the company performance. The company can enhance its reputation and performance by emphasizing on multiple dimensions of logistics that includes logistics effectiveness, responsiveness and logistics cost. Therefore, the management of Habesha Cement Share Company should influence its internal logistics, inbound logistics and outbound logistics as a way of improving the company performance.

5.5 Area for Further Researches

Although this research provides some significant insights into the effects of logistic practices of Habesha Cement Company, there is still a chance to extend the findings to gain a more comprehensive understanding. Research into the other factors influencing the organization performance of Habesha Cement Company should be researched on since the logistics management practices used in this study could not account for all the changes in organization performance. Due to time and budget constraints this research was delimited to only one cement company. The findings of this study cannot be adequately extrapolated to generalize the status of logistics management in the whole cement industry in Ethiopia. Similar research should be done focusing on other companies in cement industry. Therefore, the future research may also highlight logistic services in wider sample and comparative analysis on in cement industry. More so, further research in the areas of logistic practices would be useful in understanding the impact that the practices have on other performance indicators like customer satisfaction.

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APPENDIX I

QUESTIONNAIRE

Please your assistance in completing the questionnaire attached on Effects of Logistic Service on Company Performance: The Case of Habesha Cement Share Company will be highly appreciated. This questionnaire is required to assist in determining the objectives of the study. Any information provided will be used for academic purpose only and will be treated in strict confidence. Just put a tick (√) or cross mark (x) in the appropriate box as you deem fit. Thank you for agreeing to participate in this academic study.

General Instruction: - Circle your response or indicate "√" in the box beneath for closed-ended questions among the provided alternatives. You don't need to write your name.

Section A: Demographic Profile of Respondent

Instruction: Circle your response against any response that applies to you.

1.	Sex:	Male <input type="checkbox"/>	
		Female <input type="checkbox"/>	
2.	Age:	18-25 years <input type="checkbox"/>	41-55 years <input type="checkbox"/>
		26-40 years <input type="checkbox"/>	over 55 years <input type="checkbox"/>
3.	Education level	Secondary school <input type="checkbox"/>	First Degree <input type="checkbox"/>
		Diploma <input type="checkbox"/>	Master & above <input type="checkbox"/>
4.	For how long have you been employed in this company?	1 – 5 years <input type="checkbox"/>	
		6 – 10 years <input type="checkbox"/>	
		11– 15 years <input type="checkbox"/>	
		> 15 years <input type="checkbox"/>	
5.	Position in the Organization?	Clerical <input type="checkbox"/>	
		Professional <input type="checkbox"/>	
		Managerial <input type="checkbox"/>	

Section II: Logistic Services

This part of the questionnaire consists of items concerning logistic services. Evaluate to what extent each statement fits the culture of your organization. Use the following rating scale, and put “√” mark for each rating. **1: Strongly Disagree, 2: Disagree, 3: Neutral, 4: Agree and 5: Strongly Agree**

S.N.	Statements on logistic services	5	4	3	2	1
		(SA)	(A)	(N)	(D)	(SD)
I.	Internal Logistics					
1	Cooperation activities among departments in the company are smooth					
2	The company has sufficient resources on transport, human resources, warehouses, and yards to serve the production and business activities					
3	In the company there is smooth flow of information to support effective internal decision-making for logistics functions					
4	Every functional unit makes its information easily accessible for the other units.					
5	There is enough inventory level at stock, every time, to satisfy your customers order					
6	Handling complaint process is quick					
7	Internal distribution of Inputs is handled properly					
8.	There technology in use allows strong link and coordination among functional units					
II.	Inbound Logistics					
9.	Material transportation process for production is favorable.					
10	Order time and material transportation ensure the production progress.					

11	Company Storing goods according to recommended guide line.					
12	The company has good relationships with raw material suppliers					
13	Product defect (such as technical defect, packing defect, faulty quantity, missing product) occur rarely when dealing with raw material suppliers.					
14	Order requisition procedures are effective and easy to use					
15	In company the movement and storage of materials are made at the lowest possible cost through the use of proper methods and equipment					
III	Outbound Logistics					
17	Packing process and product delivery are convenient.					
18	Packing and product storage is well done.					
19	In the company there is on time delivery order for customers.					
20	Good relationship between company and its business partners.					
21	A little of mistakes (such as the number of products, product patterns) in delivery					
22	Through transportation management practice products are made available to the customers desired location					
23	The company's products are delivered using the right mode of transportation					
24	The company spends at a minimum cost to transport products to customers					

SECTION C: PERFORMANCE MEASURE

SECTION C I: - PROFITABILITY/FINANCIAL PERFORMANCE MEASURE

Please tick (✓) or cross mark (x) the level of measurements related to **financial perspective** of performance of the company for last five year.

NO.	Statements	No extent	little extent	Moderate extent	great extent	Very great extent
		1	2	3	4	5
25.	Amount of company net income has been increasing over the last five years.					
26.	The company annual revenue has been increasing over the years.					
27.	The company return on assets has improved over time.					
28.	The company market share has increased over time.					
29.	Average sales volume increase over the past year					

SECTION C II: - NON-FINANCIAL /OPERATIONAL PERFORMANCE MEASURE

Please tick (✓) or cross mark (x) on the level of success related to **operational/non-financial** perspective of performance of the company for last five year.

NO .	Statements	No extent	little extent	Moderate extent	great extent	Very great extent
		1	2	3	4	5
30.	The customers have been increasing over the years.					
21.	The reputation and brand image of the company has improved.					
32.	The company product and service quality has improved over the year.					
33.	The satisfaction of customers has improved over the years					
34.	Products are delivered to customers on time meeting the customers' requirements.					
35.	There is a decrease in customers Complaints.					