PRACTICE AND CHALLENGES OF FREIGHT TANSPORTATION SERVICES: THE CASE OF MACCFA FREGIHT LOGISTICS PLC.

BY:

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Practice and challenges of freight transportation service in the case of MACCFA freight logistics plc.

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DECLARATION

I, the undersigned, declare that this thesis entitled “Practice and challenges of freight transportation service in the case of MACFFA FREGIHT LOGISTICS PLC” is my original work. I have carried out the present study with the guidance and support of the research advisor, **Busha Temesgen** (PhD).

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Confirmation

This is to approve that the study made by frehiwot teklay, entitled: Practices & challenges of fright transportation service, and submitted in partial fulfillment of the requirements for the Degree of Masters of Arts in Logistics and Supply Chain Management complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

Busha Temesgen (PhD)

Signature Date

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Abstract

Freight transportation has developed as one of the most crucial and dynamic areas of the transportation sector, with constant change. It is now the most important component of global commodity and supply networks in general. However, inefficiencies in general, as well as increased prices and difficulties of shipping and delivering goods, are adding to profit constraints faced by manufacturers around the world. For this reason, it's critical to research and study freight transportation. Thus the objective of this is study is to assess the practice and identify challenges influencing transportation service in the case of MACCFA freight Logistics Company. The study focused on six freight transportation practices regarding: cost of service, safety, service quality, customer satisfaction, transit time and technology and regarding challenges economic, environmental, legislative and technological issues were raised. In order to capture the issue, a mixed approach of qualitative and quantitative techniques with descriptive research design was applied. Dispatching a structured standard questionnaire and review of company profile were the main approaches to gather the data. The whole population of the company (top management, middle management and technical experts) who were directly or indirectly involved with freight transportation were involved in this study. Out of 70 total populations 50 valid responses were collected. Later, the data was analyzed using SPSS 23. The study tried to focus on practice and challenges of freight transportation service consequently, it has been revealed that the company practice all practices raised by the researcher but relatively transport service price and offering more flexible rate, accuracy of reduction of lead time, Controllability /traceability, ability to handle special products and using up to date information for forecasting customers 'needs is relatively less practiced than other related factor. The finding shows that most of the challenges of freight transportation service for the firm are found under the category of legislative and technological.

Key words- freight transportation, third -party logistics, customer service, transportation challenges

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Acronym and Abbreviation

OECD- Organization for economic corporation and development

EFTC- Ethiopian freight transport corporation

VOC- vehicle operating cost

ICT - Information Communication Technology

ESLSE- Ethiopian shipping and logistics service enterprise

OPS- outsourced service provider

EDI- enhanced electronic data interchange

Chapter one

1. Introduction

1.1. Background of the study

The evolution of international transportation may be traced back to the dawn of humanity. Animals were employed as vehicles to convey agricultural produce and people from place to place in the early days. Transportation had improved significantly over time and continues to play an important role in the development of international trade. International trade arose as a result of the varying endowment of natural resources between nations, forcing nations to become depending on one another to meet the wants of their people. As a result, international transportation service facilitates the delivery of goods in many places and strengthens international commercial contacts (Chary, 2006; Cherunilam, 2004; Hoeks, 2009; Bhat, 2010).

The principal forms of transportation employed in the transportation globe are waterways, railways, highways, airways, and pipelines. According to Vishawakarma (2010), road transport is the most cost-effective form of transportation over short distances, railway is the most cost-effective over medium and long distances, and water transport is the most cost-effective over very long distances.

The Transportation System is a fully integrated, safe transportation network that fosters social and economic development while also ensuring good access for all. It is operated to the highest standards to conserve the environment and ensure quality of life. Long-term strategy should be to plan for increased transportation demand in order to ensure efficient movement of people and products.

Any country's transportation network is critical to its development and has an impact on all sectors due to economic ties. It enables safe and on-time travel, which promotes business and lowers transportation costs while providing producers with access to markets for their products. A functioning transportation network also allows for quick access to the labor market, resulting in more job prospects. It is widely acknowledged that economies with stronger transportation and communication networks have a competitive advantage over economies with inferior networks in terms of overall competitiveness.

Increasing the efficiency of the transportation system boosts production, which has a variety of effects on the economy. Reduced transportation costs, for example, could boost business earnings, lower retail prices, enhance service quality (more frequent deliveries), allow for tax hikes, or all of the above. Even small improvements in efficiency can have a big impact. For example, if a company's annual return on investment is 8% and transportation costs are 16%, a 5% reduction in transportation costs boosts earnings. 5% Litman,(2010),

Ethiopia is a landlocked country in Eastern Africa that shares borders with Sudan, Eritrea, Djibouti, Somalia, and Kenya. Given Ethiopia's topography and settlement pattern, as well as its reliance on other countries' seaports for import and export, transportation is critical to the country's socio-economic development. The country's only railway with Djibouti is the Addis Ababa-Djibouti railway (781 km old, nonstandard gauge of 1067mm). Due to their geographic isolation, lack of direct access to the open sea, and high transportation and transit costs, landlocked developing countries like Ethiopia face numerous complicated challenges.(fikadu).

The Ethiopian transportation system is characterized by poor management and lack of coordination of goods transport, a low level of development of logistics infrastructure, and insufficient fleets of freight vehicles in terms of number and age, as well as damage and quality deterioration of goods during handling, transport, and storage. This, combined with the lack of a sea port, resulted in a weak relationship between producers (farmers) and consumers (market), as well as non-competitiveness of Ethiopian goods on the world market, jeopardizing the people's livelihood and the country's economy. In cities and at city inlets/outlets to which freight veils, there is a very high rate of traffic accidents (first in the world) and congestion (debla 2013).

There are some transportation companies in Ethiopia one of the companies that provide logistics services including air freight forwarding, ocean freight forwarding, customs clearing services, shipping agency services, air cargo agency, 3PL services, inland transportation services, packing and moving services, and warehousing, in Ethiopia and internationally is MACCFA freight logistics plc.

Generally, popular competitive advantage for firms is to promote and provide value to its customers by practicing transportation service more efficiently than competitors. Presently the competitive global market place has high stress on business activities whether they are local or worldwide. Transportation service as the key part of global business shall be considered in

particular due to the fact that it links suppliers with customers and it integrates functional entities across a company.

1.2. Statement of the problem

The efficiency of moving goods is determined by transportation operations. Moving load, delivery speed, service quality, operation costs, facility utilization, and energy savings all benefit from advancements in technology and management principles. In the manipulation of logistics, transportation plays a critical role. In light of the current situation, a robust system requires a defined logistical framework as well as appropriate transportation methods and strategies to connect the manufacturing processes.

In Ethiopia transportation system is characterized by poor management and lack of coordination of goods transport, a low level of development of logistics infrastructure, and insufficient fleets of freight vehicles in terms of number and age, as well as damage and quality deterioration of goods during handling, transport, and storage.

Logistic services capability and coordination, organization and stakeholders in Ethiopia's logistics sector including Minister of transport, customs, banks, service providers such as ship agents, carriers and forwarders locally and at Djibouti are uncoordinated (Shewangizaw, 2009). With respect to infrastructure, infrastructures are inadequate, unavailable and not developed. Inadequate port/terminal and corresponding facilities, inadequate road, rail, and other mode of transport facilities, old and inadequate type and capacity of trucks, inefficient ICT utilization and unavailability of facilities such as GPS, inefficient management of available facilities at dry ports and terminals (Shewangizaw, 2009). All these have resulted in inefficiencies in the logistics operation leading to higher logistics cost, longer lead time and unreliable service offering.

While providing freight transportation services there are numerous challenges faced by MACCFA freight logistics PLC. Constantly, there are extensive delivery delays and high transport costs, as the organization's officers complained about while the researcher informally interviewed them. Whereas, the importance of cost effective and efficient movement of freight transportation are directly related with timeliness to significantly affect the profitability and market competitiveness of the firm. But evaluating the practice along with the corresponding weight of influence requires a through thought and investigation.

The purpose of this study, thus, was to assess the practice and challenges of freight transportation in MACCFA freight Logistics Company. Though, freight transportation is one of the fundamental economic activities of the country in the international trade and affected by several challenges especially in developing country like Ethiopia, it does not attract the researcher's attention. Although, a numbers of researches have been carried out internationally on practice and challenges of freight transportation, there are limited studies in Ethiopian case and even none respecting a particularly freight forwarding company. Therefore, this inspired the researcher to conduct a study on this topic to fill the research gaps by addressing the following research questions.

1.3. Research question

This study tries to address the following research questions:

1. What is the existing practice of transportation services in MACCFA Logistics Company?
2. What are the challenges influencing transportation service in the case of MACCFA freight Logistics Company?
3. How is the performance of the freight transportation in the company?

1.4. Research objectives

1.4.1. General objective

The overall objective of this study is to assess the practice and challenges influencing transportation services in the case of MACCFA freight logistics plc.

1.4.2. Specific objectives

1. To identify the challenges influencing transportation services faced by MACCFA freight Logistics Company while providing logistics services.
2. To assess the current practice of transportation in MACCFA freight logistics company.
3. To assess the performance of the freight transportation in the company.

1.5. Significance of the study

The study is significant for all organizations, particularly those in the import and export market. It is also important for transportation service providers such as MACCFA and other investors who wish to get into the freight forwarding industry. Academicians are benefited from the study because it adds to the existing literature as a useful source of reference in the subject of logistics. It also serves as a springboard for future research to refine and extend the current study.

1.6. Scope of the study

The study focus on assessing challenges and practice of transportation service in the case of MACCFA freight Logistics Company. This means that this research will not focus on other logistics topics like warehousing, inventory, purchasing. Regarding location this study will focus on Addis Ababa headquarters and other branches in Addis Ababa but it does not include other branches that are located in dukum and kombolcha.

1.7. Organization of the study

This paper is organized in five chapters. The first chapter outlines the introductory part including with the general background, statement of the problem, significance and objectives of the study and questions that would answered by the study. The second Chapter is the literature review of the study. The third chapter is the research design and methodology, which tells us about the research design, sampling techniques, administration of questioner and interview and data analysis techniques. The fourth chapter is the core part of the research which deals with the analysis of the collected data and its findings. Finally, the fifth chapter deals with the summaries of key findings concluding remarks and recommendations suggested for solving the problem stated in the introduction part.

Chapter two

2. Related Literature review

This study's literature review includes sections on theoretical literature, empirical literature, and conceptual framework. The theoretical section is an overview of hypotheses advanced by various researchers on the subject under investigation at various eras. Although it was difficult to discover many literatures that fit the subject of the study in the review of empirical investigations, the fundamental findings from several comparable studies are included. This chapter also contains the conceptual framework.

2.1. Theoretical Review

2.1.1. Introduction to freight transportation

The efficiency of moving goods is determined by transportation operations. Moving load, delivery speed, service quality, operation costs, facility utilization, and energy savings all benefit from advancements in technology and management principles. In the manipulation of logistics, transportation plays a critical role. In light of the current situation, a robust system requires a defined logistical framework as well as appropriate transportation methods and strategies to connect the manufacturing processes.

Transportation, on the other hand, is defined by Chopra & Meindl (2001) as the movement of product from one site to another as it makes its way from the beginning of a supply chain to the client. Because items are rarely manufactured and consumed in the same region where the majority of consumers are situated, transportation has been identified as an essential supply chain Transportation's involvement in the logistics system is more complicated than simply transporting items for the proprietors. Its complexity can only be realized through top-notch management. Goods might be supplied to the correct place at the right time via a well-managed transportation system, allowing customers' requests to be met. It increases efficiency while also bridging the gap between producers and customers. As a result, transportation is the foundation of company logistics efficiency and economics, and it expands the logistics system's other duties.

Furthermore, a good transportation system that performs logistical tasks enhances not only the quality of service but also the competitiveness of the organization.

The demand for transferring a product from one site to another is contingent on the presence of demand for that commodity in the distant location. Unless there is a necessity for the commodity, freight is rarely carried to another site. As a result, derived demand for transportation, as opposed to customer demand for a product, is commonly referred to. It is also referred to as a secondary demand rather than a primary need (Coyle et al, 2011).

Goods might be supplied to the correct place at the right time via a well-managed transportation system, allowing customers' requests to be met. It increases efficacy while also bridging the gap between manufacturers and customers. As a result, transportation is the foundation of company logistics efficiency and economics, and it expands the logistics system's other duties. Furthermore, a good transportation system that performs logistical tasks enhances not only the quality of service but also the competitiveness of the organization (Tseng and Yue, 2005).

2.1.2. Modes of transportation

In the world of business, the company that can move freight at the lowest possible cost and in the shortest amount of time wins. As a result, constructing an effective supply chain from the six main modes of transportation: road, sea, air, rail, intermodal, and pipeline, is an important aspect of transportation management. Considerate the advantages and disadvantages of each mode is critical to establishing a successful supply chain.

Road Transportation

The primary and most popular route of logistics transportation is by road. From walking to horses to wagons to bicycles to cars to trucks, road transportation has been around longer than any other method in logistics and is used the most.

Road transportation is the most versatile of the four basic modes of transportation, with the least geographical limits, thanks to ongoing improvements in cars and road infrastructure. Because of this feature, road transport is the preferred mode for transporting smaller cargo over shorter distances, and it is the only mode that can do door-to-door deliveries. As a result, road

transportation completes the majority of shipments that were previously transported by another form of transportation.

Maritime Transportation

Water shipping has been used for thousands of years and is still important in today's world. Maritime transportation is responsible for 90 percent of all international trade. Cargo ships can go on practically any significant body of water and can transport the most freight for the least amount of money of any kind of transportation.

Air Transportation

Air travel is the most recent means of transportation. In both internal and international trade, airplanes are becoming increasingly significant. Air transportation is the fastest expanding and most time effective delivery form, thanks to constantly increasing technologies and virtually endless route possibilities. As a result, numerous corporations, including Amazon and UPS, have purchased their own fleets of planes in order to obtain a competitive advantage in the expanding market.

Rail Transportation

Rail transportation, which was first used in the early nineteenth century, swiftly became essential for the expansion of the western world and has played a crucial role in logistics for more than two centuries. Rail is now primarily utilized to transport the largest and heaviest payloads (bulk goods) across land in current practice. Rail is suitable for long-distance and cross-country hauls since the vast bulk of railway infrastructure connects densely populated places with big swaths of countryside between them.

Pipeline

In the usual sense, pipeline shipping is not a formal mode of transportation. However, it is critical to recognize its significance in the current fossil fuel market.

Pipelines move unprocessed fossil fuels like gas and oil from their point of origin to refineries or another means of transportation. The construction of the ship, the diameter of the pipeline, and

the viscosity of the fluid being conveyed are all factors that influence the cost of transportation. They are perfect for offshore drilling since they may be built above ground, underground, or underwater.

Intermodal Transportation (Multimodal)

Intermodal transportation is described as the conveyance of cargo from point of origin to point of destination using multiple modes of transportation, each having its own distinct contract. A different transport carrier will handle each leg of the cargo. The Shipper will have many contracts, one with each transport carrier for each leg of the consignment.

2.1.3. Transport management

Freight transport has been growing at a faster rate than passenger transit, and this trend is projected to continue. Trucks are the most common mode of urban freight transport, whereas ocean shipping is the most common mode of international freight transport.

As it was defined in Njord & Meyer (2005), transportation connects people to jobs, family, medical care, entertainment, education, and the goods needed for everyday life. Network of trade that deliver breakthroughs in technology, consumer goods that are ever less expensive, and a growing economy all are possible because of transportation. In this regard many scholars agree on that transportation management is critical Issues in determining service efficiency, for instance Taylor, Yue & Tseng, (2005) states; the operation of transportation determines the efficiency of moving products.

The progress in practices and management principles improves the moving load, delivery speed, service quality, operation costs, the usage of services and energy saving. However, Khorasani, ET. al.,(2013) agrees, Modern transportation systems are more complex and their parts are more interdependent. The effective management of modern transportation systems requires better, quicker, more comprehensive information about the current and future state of the system, and better management and control tools. Trace & Blaeser (2011) define that, the challenges of effectively managing international transportation are plentiful, complex and constantly changing.

2.1.4. Freight transport practice in different countries

2.1.4.1. US and Canada Freight Transportation System

A number of interrelated variables converged in the last quarter of the twentieth century and beyond to significantly alter the form and scope of the US freight transportation industry. In both domestic and global markets, there have been significant changes in the volume and composition of goods that are moved over longer distances; freight is moved more frequently in smaller shipments, and major freight routes (domestically and globally) are evolving quickly in response to changes in the global economy and the geography of emerging production centers (Konings et al.2008). Changes in the magnitude, character, and structure of the American and global economies are a primary factor driving this revolution of freight transportation. The overall strong performance of the US and worldwide economy during this time period has increased demand for transportation.

The American economy is increasingly becoming service-oriented, with mass manufacturing giving way to high-value-added specialized manufacturing. The character and value of commodities being transferred change as a result of the combination of rising information content and decreasing material intensity of items. Furthermore, the United States and members of the Organization for Economic Cooperation and Development (OECD) have established global and regional free trade regimes, as well as globally organized production systems and value chains, all of which necessitate the rapid and timely transportation of commodities. In order to promote the smooth operation of the global economy, these goods movements are coordinated across national and global transportation nodes and links (Konings et al.2008),

2.1.4.2. European Freight Transport System

The goods transport in Europe increased from 1.4 trillion metric tons in 1970 to 3.1 trillion metric tons in 2000, by 119 percent (Konings et al.2008). 50% of this transport is over distances between 150 and 500 km, 20 percent over 500 km. The market share of uni-modal road transport increased from 35 percent in 1970 to 44 percent in 2000 and intra-European sea transport increased its market share from 27 percent to 38 percent (Konings et al.2008). As reported by Site and Salucci, 2010, a total of 2650 billion tone kilometer (tkm) of freight were transported in the EU-27 only considering the four land transport modes (road, rail, inland waterways and pipelines). More than two thirds of the total (72.7%) was attributed to road transport, while rail,

pipelines, and inland waterways accounted for, respectively, 17.1%, 5.3%, and 4.9%. If we also consider intra-EU maritime transport and intra-EU air transport, then road transport accounts for almost half the total (45.6%), while rail and inland waterways contributions decreased respectively to 10.7% and 3.3% (the intra-EU maritime transport share is 37.3%).The average annual growth rate of freight transport between 1995 and 2007 has been 2.7%. It is also worth mentioning that the number of tone kilo meter run using road transport has increased by 49.6% during the period 1995-2007, while, in the same period, the rail freight transport trend has been fluctuating, but since 2002 it has increased by 17.7%. Freight transport is expected to grow at roughly similar rates of GDP (2.1%) for the period 2000-2020. Modal split is expected to roughly stabilize in the longer term (Nathan Associates Inc.2014).

2.1.4.3. Freight Transport System of African Countries

It is well acknowledged that Africa lacks natural ports, and that its manmade seaports are underdeveloped. Following the rise in GDP development and levels of global trade seen in most African countries in the years leading up to the global financial crisis of 2008, African ports were more congested. Indeed, the volume of cargo passing through African ports has increased in the previous decade, but containerization remains low and internal transportation links remain weak. The poor performance of African ports can be linked to a number of reasons, including location (poor connectivity), insufficient physical infrastructure (resulting in congestion), and weak institutions development.

It is significant to note that countries with higher port capacity have higher trade capacity. For example, Egypt is graded number one in Africa in terms of port capacity and South Africa is ranked number two, however, the value of trade in South Africa is higher than Egypt due to the type of exports, which are mainly costly minerals such as platinum and gold. Moreover, the value can also be driven by the number of ports that the country services. In the case of South Africa, landlocked economies such as Botswana, Lesotho, Swaziland, Malawi, Zimbabwe, and Zambia depend on its ports, and this explains South Africa's higher trade volumes (Port Development in Africa, 2010). South Africa's road infrastructure is equivalent to the best in the world. According to the Wikipedia data, some of the transport modes in South Africa in 2002 are, for road (362,099km), in 2000 for railway (20,384km) and for sea shipping (8 ports).

2.1.4.4. Freight transportation in Ethiopia

Commercial road freight transport services were among those hardest hit by the “Derg” regime's faulty economic policies. Prior to 1991, this subsector was overly regulated and centrally managed, with only the Ethiopian Freight Transport Corporation (EFTC), a state-owned commercial transport company, providing services. This parastatal operated on a "ketena" cooperative system, with five "ketenas" handling dry cargo transportation and one "ketena" handling all bulk freight transit.

The EFTC received a 5% commission on total revenue produced by individual truck owners. Tariff rates were set and enforced without taking into account the critical requirement for new vehicle investment. There was also no provision for vehicle operating costs (VOCs). The allotment of vehicles and the routes on which they ran were both subjected to restrictions. Private vehicle owners had no direct control over their vehicles and were forced to rely on whatever compensation the state provided through the "ketenas." The "Derg" administration established an adverse economic environment that inhibited investment in road freight transportation services, resulting in a steady depletion of resources.

In comparison to worldwide best practices, Ethiopia's transportation service is still in its early stages of growth. Because it does not correlate with the country's existing and future growth and requirements, well-developed transportation systems and services targeted toward satisfying approaching logistics needs are inadequate in the country. Bank processing time, which ranges from 16 to 6 months for import and 2&1/2 days for export, is significantly longer than best practices. There is a lack of synchronization and collaboration with other government entities when it comes to Customs and Dry Ports. Furthermore, the monopolistic control of Ethiopian Shipping and Logistics Service Enterprise (ESLSE) of the Shipping service, as well as the country’s excessive reliance on port Djibouti, has slowed the country's logistic performance and commercial activity (Shewangizaw, 2009).

2.1.5. Practice of third-party service providers

Rushton & Walker, (2007) third-party logistics can be defined as the management of outsourced logistics, transportation and distribution activities. A third-party logistics (3PL) provider is a company that manages outsourced tasks on behalf of the shippers or customers whose business processes it supports. Outbound transportation, warehousing, inbound transportation, freight bill

auditing/payment, customs brokerage, freight forwarding, and customs clearing are all common 3PL services Soodyall & A. M. Singh conducted a theoretical review on outsourcing the logistics function articulate that third-party logistics (3PL) are supplied by outsourced service providers (OSPs), which can be defined as organizations that provide multiple logistics services that were previously provided in-house for use by customers (as cited in Gattorna, 2010).

The service provider frequently integrates or bundles these services together. Transportation, warehousing, cross-docking, inventory management, packaging, and freight forwarding are all services provided by 3PLs (as cited in Langley, Albright, Wereldsma, 2009). Third-party logistics refers to the employment of outside organizations to handle some or all of a company's logistics needs. One of the main justifications for outsourcing is that, in the face of increased global competition, businesses are focusing their efforts on core tasks that are important to their survival, and outsourcing the rest to specialized corporations (Bhatnagar et al, 1999).

Third-party logistics (3PL) service providers are widely used by shippers, carriers, and even small intermediates to manage non-core logistics and supply activities, access capacity, and leverage technology capabilities. 3PLs add value by pushing the boundaries and assisting customers in reducing costs via tactical improvements as well as improving overall supply chain performance through strategic business process changes. Here are some factors companies use to evaluate third party logistics provider.

1. **Cost**

Cost of service: It relates to the cost of transportation, payment conditions, non-official or extra costs incurred during transactions, cost savings realized after optimization, and other handling costs. The key motivation for outsourcing logistics services has repeatedly been identified as cost. Logistic service providers (LSPs) are able to offer their services at a lower cost than corporations could if they performed the same operations in-house due to specialization and economies of scale. Furthermore, LSPs are concerned with attaining cost-effective customer satisfaction through buyer–supplier integration for both internal (manufacturers) and external (end consumers) customers. Inbound logistics, for example, aims to lower total costs by having the appropriate materials in the right place at the right time. An effective LSP allows a carrier to collaborate with a variety of service providers to manage the operation of a supply chain, resulting in a number of advantages, including enhanced market performance, competitive

advantage, advanced levels of customer service, and increased cost-effectiveness between the shipper and the carrier.

2. Safety

Shippers may have specific transportation, facility, and communication requirements based on the physical and marketing characteristics of the freight—for example, products requiring controlled temperature that necessitate the use of a refrigerated vehicle; time-sensitive shipments that require state-of-the-art communications systems to monitor their exact location and arrival times; or even the c To reduce freight costs and transit time, carriers may provide freight consolidation and break-bulk facilities based on marketing factors. These are only a handful of the numerous and diverse demands that transportation service companies face. Their capability to provide these required services are often instrumental in getting the business (Coyle et al., 2011).

3. Service quality

According to Floden et al. (2010), transportation quality is a broad term that encompasses a variety of factors such as time, reliability, frequency, danger of damage, and so on. Some studies look at each of these characteristics individually, while others look at transit quality as a single issue. All studies that consider transportation quality as a single factor rank it as the most important element. If it has been decided to transport something, it is reasonable to presume that one of the basic needs of the transportation is that the products be delivered in a timely manner. It's impossible to envisage a situation in which a transport buyer would seek a low-quality transport for its shipment. These quality factors have become so important to a company's performance and competitiveness that they have surpassed the cost of transportation as the most important component in the mode choice process in some circumstances. As a result, the modal choice process has evolved into a highly dynamic and non-linear process (Reis V, 2009).

The importance of quality and quality-related factors is likewise considerable. It indicates that the mode of transportation is chosen in two stages. The first step is to assess the transport quality. If the quality is acceptable, the transportation option is nearly entirely determined by cost (Floden et al. 2010).

The Internet, just-in-time operating methods, and constant inventory replenishment have all led to customers expecting swift processing of their requests, quick delivery, and a high degree of

product availability," according to a supply chain expert. When it comes to modal selection, service plays a significant impact. If the mode does not reach a certain degree of service that the corporation requires for a specific product, it will be eliminated from consideration. This isn't always the case, though. It's a difficult decision to make when deciding whether cost or service should be prioritized when choosing a carrier. While many businesses are concerned with pricing, many also assess a carrier's service capabilities before deciding on a price (Roberts, 2012).

According to Majerčák et al, (2015), Services - currently are largely influencing decisions about the mode of transport. Complementary services include for example the exact position of items, delivery time, delays at the transport infrastructure, loading and unloading goods, the possibility of customs clearance, providing the necessary documentation, as well as various benefits provided to transporter for regular use of certain system.

4. Customer satisfaction on transportation service

One of the most important tools for a successful business is customer happiness. Customer satisfaction is defined as an overall assessment of a product or service based on the whole purchase and consumption experience with it throughout time (Fornell, Johnson, Anderson, Cha & Bryant 1996). Customer satisfaction is associated with marketing, and it determines the customer's expectations regarding how the goods and services are provided by the companies. As a result, actionable knowledge on how to improve customer satisfaction is a critical consequence (Oliver 1999.)

In the transportation industry, providing excellent customer service will increase client satisfaction. Customer satisfaction will rise if you provide good customer service in the logistics operation, such as the ability to trace shipments and notify customers if their orders will be delayed. Customers are alerted to problems and given time to make modifications, such as finding an alternate source, by tracking delivery in real time and communicating any complications that develop. Client pleasure and service that goes above and beyond the competition ensures customer loyalty. Nowadays, six categories are used to assess customer happiness: tangibles, reliability, responsiveness, assurance, empathy, and company credibility. These are some of the aspects that influence customer satisfaction. (Javier 2008, macro)

When it comes to specific goods and services, customer service is frequently disregarded. Third-party logistics providers cannot overlook its significance in the field of logistics. The goal of 3pl provider is to eliminate the confusion from the supply chain process. When it comes to having internal staff contact with suppliers, it is critical for people running a 3pl organization to have a standard of procedure.

5. Transit time reliability

The total period between when the consignor makes the items ready for dispatch and when the carrier delivers the goods to the consignee is known as the transit time. The transit time can be described in terms of inventory carrying cost since it defines the size of in-transit inventories and affects the amount of stock kept by the consignee. Low transit times will lower the cost of in-transit inventory as well as the requirement to retain goods in distant markets (Owuor, 2014). The amount of inventory retained by the shipper and the receiver, as well as the related carrying cost of holding that inventory, can be affected by transit time. The higher the inventory levels necessary and the higher the carrying expenses, the longer the transportation time. In addition, lengthier travel times raise the cost of stock outs (Coyle et al., 2011). The complete time of the voyage is taken into account, including the time required for transshipments and waiting times in the event of "door to door" transportation. Travel speed is now frequently the most essential factor in determining which mode of transportation to use (Majercak et al, 2015).

The constancy of transit times is referred to as reliability. Shippers and receivers can improve service levels and reduce stock out expenses by sticking to pickup and delivery timetables (Coyle et al., 2011). On-time delivery is another term for it. One of the most crucial characteristics is dependability. For different commodity categories and depending on the delivery time guaranteed by the transport company Floden et al., the relevance of reliability varies (2010). Due of the unpredictability of transportation times, the freight receiver must either increase inventory levels to avoid stock out situations or incur stock out-related expenditures. The degree of modal and specific carrier demand is directly affected by reliable service; that is, a shipper may switch from an unreliable carrier to one that is more reliable and delivers more consistent service. The client may transfer from an unreliable delivery service provider to one that is, affecting transportation demand for specific carriers or traffic lanes (Coyle et al., 2011).

The importance of service reliability lies at the heart of logistics. Its success is determined on its ability to deliver freight on schedule and with the least amount of breakage or damage possible. Often, logistics companies achieve these goals by relying on the modalities that are thought to be the most trustworthy. In terms of on-time delivery, lack of breakage, and safety, the least polluting options are often viewed as the least trustworthy. Ships and railways have a bad reputation for poor customer service (Rodrigue et al, 2016).

According to Floden et al. (2010), one of the most critical aspects is transportation time. The client is unwilling to pay more for faster transit, but is prepared to tolerate longer transit times in exchange for lower prices. There are numerous factors that influence the distribution time from one site to another. Weather, products, routes, and other factors are all influenced by the passage of time.

The majority of authors concluded that effective outsourcing processes of individual or multiple logistics functions are driven, in general, by potential improvements in customer satisfaction in terms of on-time delivery, speeding up the manufacturing process, and addressing place and form utilities as a result of more effective use of financial resources in the development of core competencies. This encourages companies to contract out logistical procedures, allowing them to not only streamline the movement of goods and information in their supply chain, but also to save money on asset ownership, performance monitoring, and people hiring, management, and training.

6. Information technology

Information technology is one of the most effective tools for a corporation to change its operations quickly. Each technological advancement, from the telephone to the fax machine to the Internet, has had a significant impact on not just how businesses conduct themselves, but also on the role of the firm itself. Information technology frequently improves consumer value in ways that aren't recognized by traditional performance metrics like delivery speed and service. Given the ever-increasing abundance of data that logistics professionals must analyze when making choices, it is critical that performance metrics reflect meaningful and timely information for successful logistics process management (Iankoulova, 2012).

According to Sauvage (2003), technological effort becomes a vital variable and a substantial instrument for differentiating logistics services in a highly competitive market defined by time

compression. The electronic competent can approach the client to use company services with real-time communication and information sharing capabilities, as well as track and trace capabilities. This has led third-party logistics (3PLs) to seek reliable and real-time information on the status of the entire shipment process in order to expand planning capacity and improve customer service levels (Stough), 2001.

Specific technological skills may make it easier for enterprises in the information and communications technology supply chain to integrate more effectively. Information and communications technology capabilities can help 3PLs ensure rapid product customization and competitive lead times. 3PL must be adaptable and capable of providing a wide range of services in response to customer demand. As a result, competitive advantage in the 3PL business will increasingly be based on producing value for customers, as many value-added operations are dependent on information and communication technology applications directly or indirectly (Crowley, 1998).

Third-party logistics firms are judged on the efficiency with which they can supply services to their customers, so it should come as no surprise that a company that prioritizes innovation and technology is a great candidate. A leading third-party logistics provider will make significant investments in cutting-edge technology and will be able to provide real-time data and feedback on all elements of their customers' operations.

2.1.5. Challenges faced in freight transportation service

Transportation is the most expensive component of the supply chain logistic overall cost, accounting for a considerable portion of it. A stable and efficient transportation network is the backbone of every long-term supply chain. For millennia, transportation has been a critical component in facilitating trade. As it travels from the start of the supply chain to the hands of the end-user, its processes play an important role. However, given the rapid evolution of technology, personnel, demand, and supply, among other factors, transportation concerns have become the most addressed issues.

Road and railway transport are Ethiopia's two most important modes of transportation, with road transport accounting for about all of the country's goods transit (Kifle et al., 2000). However, as in most Sub-Saharan African (SSA) countries, Ethiopia's primary mode of transportation is road

(Thomas et al., 2008). Road transportation is the country's primary means of transportation for both domestic and international travel (Debela 2013).

Expensive transport costs due to high transit taxes imposed by the littoral country (Djibouti), complicated port and customs procedures, and poor road infrastructure are the key issues in Ethiopia's road transport sector (Kifle et al. ,2000). Because of the country's great reliance on this mode of transportation, the government has been concerned about the deterioration of transit roads, which has resulted in high vehicle operating costs (VOCs) and road transport expenses. A reliable, low-cost road transportation infrastructure is vital not only for the development of all sectors of the economy, such as agriculture, mining, manufacturing, and services, but also for the encouragement of international trade and national integration (Kifle et al.2000).

Some of the challenges faced by freight forwarding companies are discussed down below

A. **Economical**

The US dollar is the most widely used currency in international trade. The value of the US dollar fluctuates on a daily basis. It has an impact on freight rates because they can alter at any time. Not only is freight forwarding service rates affected, but customers are also affected as the cost of goods rises. Furthermore, when expensive payment methods such as bank transfers are used, they come with significant fees that are added to the entire cost.

- **Bunker Fluctuations**

Bunker fuel is a significant expense for crude tanker operators. A bunker fuel is an oil that has been distilled from crude. It is divided into several categories. These categories are defined by the chemical composition, use, and boiling point of the substance.

When compared to other types of oil, bunker fuel is highly polluting, extremely unrefined, and extremely viscous. Most engines are unable to use this type of oil since it must be heated before use. This sort of oil can only be handled by huge engines. As a result, it's primarily utilized aboard ships because they can heat it up before using it.

The freight forwarder bears the brunt of the damage when oil prices fluctuate on the international market. The increased cost of fuel has a direct impact on transportation costs. Additional gasoline surcharges have an impact as well. Surcharges are increasing as fuel prices rise, and they're all added to freight rates. With these additional costs comes the issue of financing, as well as rising inflationary pressures.

All of this places a significant burden on the freight forwarding industry, its businesses, and its employees.

- **Seasons**

The cost of the cargo and its transportation is heavily influenced by the seasons. Some commodities become extremely expensive to ship depending on the season. This is due to shifts in demand and supply. Aside from the increase in the cost of goods, the cost of freight has also increased.

Bad weather is another way the seasons have an impact on the freight forwarding industry. Many smaller ships remain docked at this time, losing out on a lot of business. The large ships can withstand the weather, but because there is a high demand for freight forwarding and a limited number of ships, prices rise. The ship might also be damaged by bad weather. As a result, it needs repairs, which enhances to the total cost.

- **Fees and Service Charges**

Varying nations have different costs that must be paid both at the point of departure and at the point of arrival. Some ships are forced to remain at sea because they are unable to pay the service or docking fees. These fees vary from port to port, and because there are no standards, it becomes a major issue.

- **Container Capacity**

Containers are made to be used to their full capacity. If the container is not full to its maximum capacity, the shipper is responsible for the expense of the remaining empty space. As a result of the added cost of the products that aren't there, the cost of the commodities being transported rises. As a result, if the container is not used to its full capacity, the cost will rise.

B. **Legal Challenges**

Aside from financial difficulties, the freight forwarding sector also faces legal issues on a regular basis.

- **Government Regulations**

The federal, state, and local governments all place regulations on the carriers on a regular basis. These rules are strict, and failure to follow them can cost carriers a lot of money. This adds to the overall expense issue.

C. **Environmental Issues**

There are other environmental difficulties to contend with, in addition to the challenges outlined above. Authorities have devised different environmental standards that a corporation must follow as a result of pollution and global warming. These laws might sometimes increase the cost to the point where the benefits outweigh the costs.

- **Transport Infrastructure Issues**

Even if all of the aforementioned difficulties are under control, transportation infrastructure remains a major issue. Not all of the transportation service's roads and networks are in good working order. Even while most forwarders communicate and share essential information on road and section conditions, there is always a need to keep the roads in good repair. This ensures that the delivery is made on schedule and that there are no complications such as vehicle breakdowns or increased maintenance costs.

- **Ocean Volatility**

Ocean shipping is used to deliver a large portion of the goods. It is highly volatile due to the rising number of elements that have a direct impact on the price. Forwarders are unable to understand their cost structure because rates and contracts are always changing. This makes it difficult for them to deliver accurate quotes to their clients.

There are also climatic shifts that they must deal with. Freight operations are nearly impossible because to the massive tides and waves. There's a danger you'll get stranded in the middle of the

ocean or sink. Furthermore, piracy is a serious problem in some locations, resulting in significant losses for enterprises.

D. Technology related challenges

The transportation industry's usage of technology is fast evolving to accommodate the aforementioned factors and more. The rapid pace of change, on the other hand, makes it more difficult to fully integrate into a standardized process. Freight forwarders use advanced communication, optimization, and tracking tools to manage and move cargo globally. Some of the difficulties that technology is currently tackling are electric vehicles, improved tracking systems, and supply chain visibility.

Information and communication technologies (ICT) are critical for transportation systems because they provide access to travel information, planning tools, opportunities to share modes of transportation, work remotely, compare transportation mode costs, make payments, improve safety and health, and communicate travel patterns.

- **Lack of communication or information sharing**

By communicating and exchanging information, ocean freight forwarders collaborate with partners to reach a common aim and mutual profit. Marine shipping companies, for example, are likely to develop new routes in order to minimize transportation costs for the alliance's forwarders. Insufficient communication or information sharing between shipping companies and forwarders, on the other hand, weakens mutual trust and decision-making efficiency. This may come at the expense of consignor-to-forwarder orders.

2.2. Empirical literature review

Due to the novelty of the research subject from an Ethiopian perspective prior to this analysis, there is only some research work that could easily be found and used by the researcher as empirical evidence. Despite this, the researcher is forced to concentrate on the study topic's continental and global experiences for this analysis.

Transportation connects the supplier sources identified during sourcing with the clients we've chosen to serve as part of our customer care philosophy (Frazelle, 2002). Similarly, Frantisek (2003) defines transportation as a fundamental component of logistics activity that extends from

vendors to you, your consumers. Transportation serves as a link between the various procedures that lead to the conversion of resources into useful items for the end consumer (Fair, M. and Williams, 1981). According to Frazelle (2002), the goal of transportation is to connect all pick-up and delivery places at the lowest possible cost while adhering to the customer service policy's reaction time criteria and the transportation infrastructure's restrictions. Tyndall and colleagues (1998), on the other hand, claim that the most significant gains in modern logistics methods have been improved processes for moving goods and material between nations in a timely and smooth manner, rather than cost reduction.

Bemnet's analysis of Ethiopia's transportation system found that transportation expenses are extremely high in Ethiopia. In the garment processing industry, for example, overall transportation costs account for 28% of total value added. This is a significant proportion when compared to the global average of 6.1 percent and Africa's average of between 15 and 20 percent.

According to a World Bank report from 1991, properly managed flows of commodities and information are only conceivable if transportation and communication facilities are well-developed. The research also stated that infrastructure in Sub-Saharan African countries is inadequately managed and maintained. Until recently, over half of the region's paved roads and 70% of its unpaved roads were in fair to bad condition and in in need of repair.

In his study, Geoff (2006) suggested that a well-established transport system in logistical operations might contribute to higher efficacy, lower operating costs, and increased service value for the organization.

According to Tilahun (2014), issues in the maritime transport sector have created a barrier in foreign trade in Ethiopia. Similarly, Fasika, Klaus, and Marcus (2014) found that long delays in customs and port handling, as well as complex tariffs for imported commodities, are becoming a concern for logistics and supply chain procedures in their research on the 12 types of businesses. They also discovered that major supply challenges include inconsistency of quality raw material during bidding and final delivery, lack of local suppliers for imported items, and long processing and delivery times due to the lengthy bureaucratic procedure involved in the purchase of imported raw material. Ethiopia's lack of access to the sea (landlocked country) and backward transportation infrastructure are also important transportation problems, according to their

research. As a result, the delivery process was both costly and difficult. This reduces the country's competitiveness among businesses.

According to a study on the competitiveness of Ethiopian shoe manufacturers by Birkinesh (2012), the high cost of inland transportation, challenges with packaging, and port facilities are confirmed as critical problems in the survey analysis for achieving competitiveness of shoe firms in Ethiopia. Similarly, Ethiopia's leather sector faces additional costs as a result of poor trade logistics (Dinh, Hinh, 2014). The most significant obstacle in this regard is the considerable lead time in imports, as timely imports of chemicals and other inputs are critical to the proper operation of the manufacturing process. Imports from Italy to Ethiopia, for example, can take one to two months, according to a major respondent in the tannery sector.

To address these issues, the Bonded Supply Warehouse Scheme was established by the recent export promotion rule, which allows foreign-based chemical and other input producers to use it. According to Girum and Florian (2013), the recently implemented 'Export Trade Duty Incentive Schemes Proclamation No 768/2012' contains several instruments to reduce inventory stocking and lead times for establishments that import inputs such as chemicals for the production of commodities for the export market. They discovered that one of these devices is the bonded input supplies warehouse scheme, which allows exporters to keep inputs without paying duty under the supervision of the customs department. This technique is also said to cut customs clearance time, raw material inventory overstocking, and lead time.

2.3. Conceptual framework

Based on the reviewed literatures the conceptual framework for the challenges influencing transportation service in the case of MACCFA freight Logistics Company is developed. The framework comprises the four independent factors required for assessing the challenges that influence transportation service which are cost, infrastructure, economic challenges, and information technology. The the dependent variable is freight transportation service and freight transportation practice. These variables are going to be used in the analysis and discussion of the research findings.

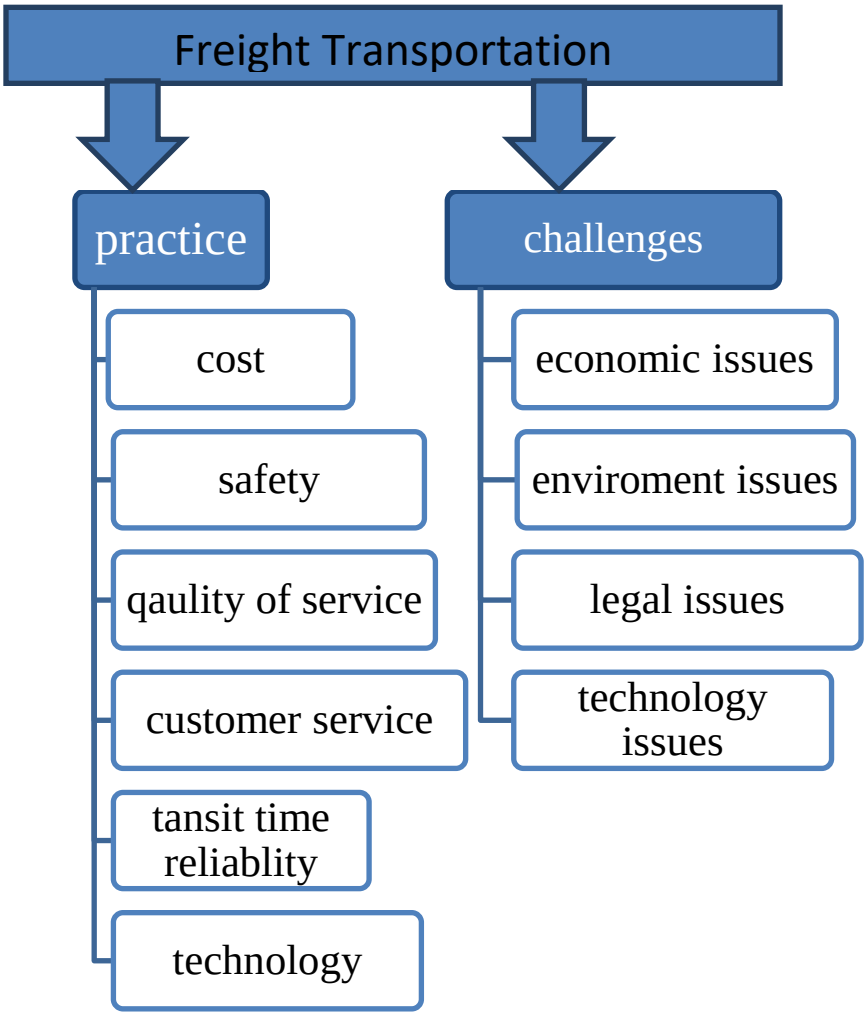

Figure 1. Conceptual framework

Source; Majercak et al, (2015) and Neil (2011).

Chapter three

3. Research design and Methodology

The research approach used to perform the study, the research design, target population, sampling strategy, data collection, and data analysis methodologies are presented in this chapter.

3.1. Description of the study area

This study paper examines the practice and problems that influence transportation service in the case of MACCFA freight logistics plc, which is located near Saris Road in Addis Ababa.

3.2. Research approach

The approach or methodology used to conduct the research is referred to as the research approach. It includes deciding on research questions, developing a conceptual framework, and selecting an acceptable research method. This study is designed as a cross-sectional study with both qualitative and quantitative data collection approaches. Structured and semi structured questioners are used to collect both primary and secondary data. During the study, documents such as reports are evaluated because it necessitates reviewing and analyzing the company's current situations and difficulties, which aids in explaining the current situation in depth.

3.3. Research design

A framework of procedures and techniques adopted by a researcher to combine diverse components of study in a relatively logical manner so that the research topic is efficiently handled is known as research design. It provides information on "how" to do research using a specific approach.

Descriptive research design is employed in this study; descriptive research design is used in investigations that are focused with describing the characteristics of a specific individual or group. Description research investigations are focused with particular predictions, narration of facts, and also directed towards the descriptive of the current status of a given occurrence and features of an individual, group, or circumstance. As a result, the research's main focus was on the practice and issues that influence transportation service in the MACCFA freight Logistics Company.

3.4. Population of the study

Target population in statistics is the specific population about which information is desired. According to Ngechu (2004), a population is a well-defined or set of people, services, elements, and events, group of things or households that are being investigated. This research sought to gain information from people involved in freight transport practice in MACCFA freight logistics PLC. This included manager, operation management staff, transportation management staff and air cargo and liaison department staff within the organization. The target population was the 70 staff in the organization who were directly or indirectly involved in on the freight transport and management operation.

3.5. Sample and Sampling Technique

A sample is a smaller group obtained from the accessible population to represent the whole population while sampling is the process of selecting the individuals for the study from the population (Mugenda and Mugenda, 2003). For this research a census of the whole population was done. The total number of people in the target population was significantly small. A census therefore enabled the researcher to collect a wide variety of views and hence promote reliability and validity of the data collected. Questionnaire was distributed for 70 employees who were familiar with the freight transportation concept and 50 questionnaires were returned.

3.6. Data sources and types

This study report examines MACCFA Logistics Company's current transportation service practice and obstacles, as well as other connected issues. This study makes use of both primary and secondary data.

3.7. Data collection procedures

3.6.1. The Primary Data

Primary data is data originated for the first time by the researcher through direct efforts and experience, specifically for the purpose of addressing her research problem. This study is utilized by self-administered questioners. The primary data is collected from employees as well from management members. Quantitative data will be generated from the sample survey. The self-

administered questioners are distributed by the researcher. The qualitative information is collected from the key informant survey and the researcher observation to reinforce the findings of the research, the researcher triangulated the finding is qualitative survey.

3.6.2. The secondary data

Secondary data refers to information that has already been acquired and recorded by someone other than the user for a reason unrelated to the current study question. The relevant secondary data is acquired from the company and published outside of the company in this study. Company reports, books, journals, brochures, and internet resources are examples of sources. This secondary data filled in the gaps left by the main data and aided in the interpretation and drafting of the formal survey findings.

3.7. Data analysis

The research is qualitative, and the data is categorized and analyzed. Following the acquisition of essential data using data collection methods, data is processed through the following stages: raw facts/data is prepared for data analysis. The information obtained from participants is examined using quantitative and qualitative methods. The quantitative data was evaluated using percentages (%), frequencies, and SPSS (statistical package program for social sciences) to process the data, while qualitative data was studied and used to provide explanations, understanding, and interpretation of the businesses. Tables, charts, and figures are commonly used to show and interpret data in a clear and comprehensible manner. Finally, based on statistical findings, the data was interpreted.

3.8. Ethical consideration

The goal of the study is explained to all participants in the study, and verbal agreement is sought from each respondent. Furthermore, the information provided by each reply was kept private. The sources are accurately stated in regard to secondary data.

3.9. Reliability and Validity

The term "reliability" relates to how consistently a method measures a variable; if the same result can be obtained consistently using the same procedures in the same settings, the measurement is deemed reliable. Validity, on the other hand, refers to how accurately a method measures what it is supposed to measure; it is concerned with the measure's accuracy (Middleton, 2019). A low

value of alpha could be due to a low number of questions, poor inter-relatedness between items, or heterogeneous constructs, according to various reports. A low value of alpha could be due to a low number of questions, poor inter-relatedness between items, or heterogeneous constructs, according to various reports (Tavakol and Dennick, 2011). As a result, the study used Cronbach Alpha in conjunction with SPSS software to assess the research instruments' reliability and validity.

Chapter Four

4. RESULTS, ANALYSIS AND INTERPRETATION

4.1. Demographic profile of Respondents

The demographic question in this study includes, age of respondents, gender of respondents, educational qualification, and work experience in MACCFA Logistics company.

Item	value	frequency	percent	validity	Cumulative percent
Gender	female	31	62.0	62.0	62.0
	male	19	38.0	38.0	100.0
age	18-25	20	40.0	40.0	40.0
	25-35	20	40.0	40.0	80.0
	36-45	7	14.0	14.0	94.0
	Above 45	3	6.0	6.0	100.0
Education level	Undergraduate degree	37	74.0	74.0	74.0
	Postgraduate Degree	13	26.0	26.0	100.0
Work experience	<1 year	3	6.0	6.0	6.0
	1-5 years	27	54.0	54.0	60.0
	6-10 years	17	34.0	34.0	94.0
	> 10 years	2	4.0	4.0	98.0

According to the above Table-1, MACCFA logistics company employees are composed of 31(62%) male and 19 (38%) female. The percentage for female is low. This implies that, there is gender equality in the sample. These results will enable the researcher to obtain results which can be generalized for both male and females. MACCFA logistics company employees are young in age. The results show that 20 (40%) employees are of age 18-25, also 20 (40%) employees are of age 25-35, while 7(14%) employees are of age 36-45, and the rest 3(6%) employees are above 45.

The table shows that more than half of the employees are young in age. Accordingly, it can be said this is the age range within which people have more social interactions in terms of work family or friendship engagements in which they have a higher tendency of moving from place to place much frequently than people in the other age categories. The analysis shows that 37(74%) MACCFA Logistics Company employees are bachelor's degree holders and the rest 13 (26%) are master's degree holder. This implies that the employees of MACCFA Logistics Company are highly educated as the organization requires highly skilled employees. As shown in the table, the organization however does not accept anything less than bachelor's degree.

The study illustrated that there are only 3 (6%) employees with a work experience of less than 1 years, 27 (54%) employees with 1-5years' work experience, 17 (34%) employees with 6-10 years' work experience, and 2 (4%) with work experience of more than 10 years. This implies that most employees are seniors, and it justifies their education level in Table-3. Most of the respondents have a 1-5 years of experience, representing 27(54%), followed by employees who have a 6-10 years of experience 17(34%) of all respondents which can be inferred that individuals under this category more or less have enough experience that allows them to give objective responses that is acceptable.

4.2. Descriptive Analysis

This section describes the overall perception of the respondents regarding the practice of MACCFA Logistics Company and the challenge the company face while giving freight transportation services

4.2.1. Analysis on practice of transportation service

The results were summarized through strongly disagree, agree, neutral, strongly agree, agree, mean scores and standard deviations. Consequently, the mean indicated to what extent the sample group on average agreed or disagreed on the different questions. Higher mean implies the agreement of more respondents with the statements, while lower mean has the implication of more respondent's disagreement with the statements.

Table 2.1- descriptive statistics for practice regarding cost

Cost	mean	Standard deviation
There is practice of managing all costs that arise in our company	3.94	.913
The service cost have been reducing in our company	2.44	1.459

Table2.1. Shows the cost related practice in freight transportation service that managing all costs that arise in company (3.94) have the highest mean which is considered to be this activity is well practiced in the company. service cost have been reducing in our company (2.44) is the list practiced in company this analysis implies there was no reduction of service cost in the company this shows that cost of service have been increasing in the organization.

Table2.2 descriptive statistics for practice regarding safety

Practice regarding Safety	mean	Standard deviation
our company has a special handling for different products	3.48	1.147
Our company we handle loss/damage claims smoothly	4.04	0.699
Our company works with safe and reliable carriers	4.22	0.815

The analysis found in table 2.2 it is works with safe and reliable carriers (4.22) and handle loss/damage claims smoothly (4.04) were considered as highly practiced factors for freight transport in the case of MACCFA Logistics Company. Special handling for different products (3.48) relatively is the list practiced service in the organization. From the given practice rank

alternatives most of the respondents rated ‘agreed’, this implies that the attributes of safety and security related are highly practices in the organization.

Table2.3. Descriptive statistics for practice regarding quality of service

Freight transportation practice regarding service quality	Mean	Standard deviation
Our transportation equipment designed to facilitate easy and fast loading and unloading	4.02	0.869
Our company have ability to handle special products	3.52	1.092
Our company have ability to perform the promised service dependably and accurately	4.06	0.890
Our service is flexibility to customer need	4.04	0.856
We have c4.02ontinuous improvement of service quality	3.60	1.195

Table2.3. presents the respondents’ views on how service quality is handled in their organization. The data analyzed showed that ‘transportation equipment designed to facilitate easy and fast loading and unloading (4.02), ability to perform the promised service dependably and accurately (4.06) and service is flexibility to customer need (4.04) of respondents were rated as ‘one of the most practiced’ in the company, while the remaining ability to handle special products (3.52) and continuous improvement of service quality (3.60) where rated the list practiced.

Table2.4.customer satisfaction

Customer satisfaction practice	Mean	Std. deviation
We respond quickly to the customer's needs	3.86	0.990
We fulfil customer orders in the promised date	3.94	1.038
We use up to date information for forecasting customers 'needs	2.82	1.173
We collect customer feedback to enhance customer satisfaction	3.68	1.133
We developed long-term relationships with our customers	4.10	0.863
We have a system where customer can track their products	3.56	1.181

Table 2.4. Illustrates the distribution of customer service practices mean scores and standard deviation.

Among all of the customer service activities, long-term relationships with our customers are found to be the leading practice, with mean score (4.10) which indicate that it is well practiced.

Other customer service practices that have been also well practiced are: to fulfill customer orders in the promised date (3.94) and responding quickly to the customer's needs (3.86).

The least practiced customer service practice is using up to date information for forecasting customers' needs (2.82). This finding revealed that most of the firms are poorly in a position to meet using up to date information for forecasting customers 'needs.

Even if the respondents rate the measurement of customer satisfaction level at a well-practiced level, there was no adequate document found that indicates the firms are measuring their customer's satisfaction level.

Among the customer service practices the four highest values of standard deviation were observed for items of a system where customer can track their products (1.181), use up to date information for forecasting customer's needs (1.173), and collect customer feedback to enhance customer satisfaction (1.133) of which showed high inconsistencies among employee's responses than other items. This signifies that for the above items, there is a higher difference in the level of practice by the Companies; specifically, some activates are practiced highly, whereas others to a small extent.

In contrast, the lowest standard deviation was developing long-term relationships with customers (0.863), We respond quickly to the customer's needs (0.990), fulfill customer orders in the promised date (1.038) which indicates that there is low variation on responses for this item.

Generally, customer service activities like; long-term relationships with our customers is found to be the leading practice, with mean score (4.10), fulfill customer orders in the promised date (3.94) and responding quickly to the customer's needs (3.86) are well practiced and the rest customer activities are poorly practiced in MACCFA logistics company.

Table2.5.transit time

Freight transportation Practice regarding Transit time	**Mean**	**Standard deviation**
The company gives shipment and deliveries services on time	4.08	0.966
There is reduction of lead time	3.54	0.973

The above analysis shows that the company gives shipment and deliveries services on time (4.08) this implies that MACCFA Logistics Company give their freight transportation service on time and deliver products to customer on time. On the other hand, reduction of lead time is (3.54) is rated the list which implies there haven't been reduction on lead time for various reason in the organization.

Table 2.6. Technology

Freight transportation Practice regarding Technology use	**mean**	**Standard deviation**
Computerized billing and tracing services	**3.62**	**1.141**
Web Enhanced Electronic Data Interchange (EDI)	**3.7**	**0.953**
Controllability /traceability	**3.44**	**1.072**
In our company we have integrated data base	**3.80**	**1.030**
There is adoption of up-to-date communication technology	**3.98**	**1.078**

The Table 2.6 above it illustrates that adoption of up-to-date communication technology (3.98), integrated data base (3.8) and Web enhanced electronic data interchange (3.7) are rated the highest this implies that majority of the respondents understood the importance of EDI and have good adoption of up to date communication technology aware about the importance of the EDI service. Computerized billing and tracing services (3.62) and Controllability /traceability (3.44) was rated relatively least important by respondents. This shows that these activities are poorly practiced in the company.

4.2.2. Analysis of challenges in freight transportation

S.N	Types of challenges of logistics	Specific Logistics Challenges	Mean	Std. deviation
1	Economical	We face Fluctuation of fuel price	2.43	1.399
		fees and service charges affects our transportation service	2.24	1.283
		The capacity of container affects our cost of transportation service	3.02	1.346
2	Environmental challenges	Low road development and maintenance	3.04	0.9858
		Change in weather affect our service	1.74	1.27711
3	Legislative challenges	We faced lengthy bureaucratic procedures	2.5918	1.25695
		We faced high taxes which settled by government	3.3	1.16058
		We faced restriction on imported items	2.6	1.11117
		We faced foreign currency shortage	3.6	1.39971
		We faced low efficiency of customs activity	2.3	1.147
4	Technological challenges	We faced poor exchange of information	2.16	1.11319
		New costly technology	2.68	1.23619
		lack of integrated system	2.82	1.20695

5	**Other challenges**	Long lead time in port	2.76	1.31801
		We faced security issue like terrorism	2.26	1.22574
		We faced low quantity of vehicles	2.64	1.18131

4.2.2.1. Economic *Challenges of transportation service*

The analysis made in economic challenges shows The capacity of container affects our cost of transportation service (3.02) shows the highest challenge faced by the company followed by Fluctuation of fuel price (2.43) and fees and service charges affects our transportation service (2.24) which is indicate poorly faced by the companies. This shows that this is not a critical challenge under this category.

4.2.2.2. Environmental Challenges of transportation service

The analysis made indicates that from the environmental challenges perception Low road development and maintenance (3.04) is found to be the critical one that well faced by the company, which indicate that there is a poor development of road. Change in weather affect our service (1.74) which is poorly faced by the companies. This shows that this is not a critical challenge under this category.

4.2.2.3. Legislative challenges

The analysis indicates that foreign currency shortage (3.6) and high taxes which settled by government (3.3) is found to be the most critical challenge which well faced by the companies. Under this category most of the challenges are well faced by MACCFA Logistics Company.

4.2.2.4. Technological challenges

The finding shows that from the technological challenges of logistics lack of integrated system (2.82) and new costly technology (2.68) are challenge which moderately faced by the companies.

However, poor exchange of information (2.21) is not critical for them under this category. In general, the challenges under this category are selected by most of the respondents next to legislative challenges. This shows that most of the challenges of logistics for the firms are found under the category of legislative and technological.

4.2.2.5. Other Challenges of transportation service

From this category long lead time in port (2.76) is the most critical challenge that well faced by the companies. Most of these challenges under this category are external challenges that are difficult to control. Even if different studies found security issues as one of the critical challenges of transportation service, only few respondents chose this challenge.

CHAPTER FIVE

5. SUMMARY OF FINDINGS AND RECOMMENDATION

5.1. Summary of findings

Based on the report provided under the chapter four, the summaries of findings are given to the readers know and reach about the key results of this study. For this study, data were collected from permanent employee of MACCFA Logistics Company based on the questionnaires distributed to 70 respondents. Out of the 70 respondents, 50 had returned the questionnaires. Consequently, descriptive statistics were used to analyze the data collected from the respondents. Frequencies, percentages, mean and cumulative scores were used to analyze the data. The study used the categorized practices that influence freight transport at MACCFA Logistics Company.

These practices in this study were evaluated by cost related factor, safety and security, quality of service, transit time, and customer satisfaction and information technology related factors. The attributes of managing all costs that arise in the company, handling loss/damage claims smoothly, working with safe and reliable carriers, ability to perform the promised service dependably and accurately, flexibility to customer need, developing long-term relationships with customers, fulfil customer orders in the promised date, giving shipment and deliveries services on time and integrated data base related factors are considered as a highly rated factors to companies of MACCFA logistics company.

Transport service price and offering more flexible rate, accuracy of reduction of lead time, Controllability /traceability, ability to handle special products and using up to date information for forecasting customers 'needs is relatively less practiced than other related factor. Freight damage experience, Loss/damage claims settlements are also well handled in MACCFA Logistics Company. On the other hand, the challenges affecting freight transportation service include foreign currency shortage, high taxes which settled by government, lack of integrated system, long lead time in port, security issue, capacity of container and low road development and maintenance are the highly rate challenges faced by MACCFA logistics company.

5.2. Recommendation

Different issues emerged as a result of the findings, and the researcher proposes the following recommendations as a remedy for each challenge.

1. Improvements in transportation and telecommunication benefit industry, agriculture, and other service sectors, as well as the general public's standard of living. It is therefore critical to invest in the development and maintenance of an efficient transportation and telecommunication network to ensure cost-effective market integration both domestically and internationally. It is well recognized that transportation plays a critical role in economic development. More precisely, it has been recognized that a high-quality transportation system is an essential precondition for remote areas to fully participate in the benefits of national development.
2. The construction of infrastructural facilities that aid in the provision of efficient and effective transportation services is required for success in the transportation sector. Governments have a primary responsibility to create transportation infrastructure. Countries that have already built their infrastructure have been able to provide contemporary transportation and communication services at a low cost and with a short response time, resulting in significant distinctions in the international economic arena.
3. For the reliability and safe arrival of products and services, safety concerns are critical. It is concerned with the items' safety while in transportation. Shipments that are damaged or lost in transit can result in higher inventory costs and/or stock outs. A damaged shipment is usually not accepted, and the buyer risks losing a deal or having the production process halted. Increasing inventory levels to avoid stock out expenses due to a damaged shipment results in higher inventory carrying costs. Security concerns should be taken seriously by businesses.
4. The government can establish a framework to ensure domestic supply of accessories and components, as well as engage closely with these industries to solve their difficulties and improve their efficiency, reducing their reliance on outside suppliers and foreign currency for import substitution.
5. For the smooth operation of freight transportation functions as well as the company's operations, a good communication mechanism between the customer and 3Pl providers should be built. Email communication or, better still, a Wide Area Network can be used to connect machines at different levels.

Generally, a third-party logistics provider's job entails providing visibility across the whole supply chain. Finding the best accessible transportation alternatives for shipments, assessing previous shipments to uncover faults within current logistics management tactics, and knowing how to modify accordingly are all critical steps in this process. In order to provide accurate shipping data to help their clients make improvements to the way they carry freight, 3PLs must use shipping analytics. For shippers to save money, they need to know which carriers are the most efficient and cost-effective, how to consolidate shipments, and how to analyze freight shipping expense. You must not only cut shipping expenses and provide analysis of your customer's shipping methods, but you must also maintain contact with your client. Companies usually outsource their logistics management to third-party logistics providers (3PLs) in order to gain access to shipping software and other logistics services, but 3PLs must be able to evolve and develop with them. Maintain contact with clients to be informed about changes in their supply chain.

5.3. Suggestions for further study

This study can be used as a starting point for future researchers who are interested to work on the practice and challenges of freight transportation service.

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7. Appendix

ADDIS ABABA UNVERSITY

SCHOOL OF COMMERCE

Department of

Logistics and Supply Chain Management

Appendix I: Introduction Letter

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

REF: Request for participation in a research study on "Practices and challenges of freight transportation services in the case of MACFA FREGIHT LOGISTICS PLC."

I am a graduate student at Addis Ababa University school of commerce from the department of logistics and supply chain management; currently working on my MA thesis. The purpose of this study is to assess the practices and challenges of freight transportation services.

You have been identified as one of the respondents for this study and you are kindly requested to fill the questionnaire. The information provided in here will be treated as strictly confidential. I thank you in advance for your time and cooperation in completing this questionnaire.

Yours truly,

Frehiwot Teklay

Appendix II: Questionnaire

SECTION ONE: Demographic and Respondents Profile (Please highlight the appropriate answer)

1. Gender

Male [ ] Female [ ]

2. Kindly indicate the age bracket you belong to.

18-25 years [ ] 25-35 years [ ] 36-45 years [ ] above 45 years [ ]

3. Which is your level of education?

10^{th} /12^{th} grade certificate [ ] Diploma [ ]

Undergraduate degree [ ] Above First Degree [ ]

4. How many years of work experience do you have?

Less than 1 year [ ] 1-5 years [ ] 6-10 years [ ] above 10 years [ ]

SECTION TWO: Practices on customer service of freight transportation service.

A. Please indicate the degree/scale of the regarding practice of freight transportation by ticking (√) in the appropriate response column.

1. Strongly disagree 2. Disagree 3. Neutral

4. Agree 5.Strogly Agree

no	**Freight transportation regarding cost**	1	2	3	4	5
1	There is practice of managing all costs that arise in our company.					
2	The service costs have been reducing in our company.					

no	**Freight transportation regarding safety**	1	2	3	4	5
1	Our company has a special handling for different products.					

2	Our company we handle Loss/damage claims smoothly.					
3	Our company works with safe and reliable carriers.					

no	**Freight transportation regarding service quality**	1	2	3	4	5
1	Our company uses transportation equipment designed to facilitate easy fast loading and unloading.					
2	Our company has a high ability to handle special products.					
3	Our company have the ability to perform the promised service dependably and accurately					
4	Our service is flexible to customer needs.					
5	Our company has continuous improvement of service quality.					

No	**Freight transportation Practice regarding Customer satisfaction**	1	2	3	4	5
1	we responds quickly to the customer's needs					
2	Our company fulfils customer orders in the promised date.					
3	we use up to date information for forecasting customers 'needs.					
4	We collect customer feedback to enhance customer satisfaction.					
5	Our company developed long-term relationships with our customers.					
6	The company has a system where customers can track their orders.					

No	**Freight transportation Practice regarding Transit time**	**1**	**2**	**3**	**4**	**5**
1	The company gives shipment and deliveries services on time					
2	There is reduction of lead time.					

No	**Freight transportation Practice regarding Technology use**	**1**	**2**	**3**	**4**	**5**
1	Our company uses computerized billing and tracing services					
2	Our company uses web Enhanced Electronic Data Interchange (EDI).					
3	We have controllability /traceability of our service					
4	There is integrated data base in our company.					
5	Our firm has an adoption of up-to-date communication technology.					

SECTION THREE: Challenges of freight transportation service.

A. Please indicate the degree/scale of the regarding challenges that affect freight transportation by ticking (√) in the appropriate response column.

1= Often 2=Sometimes 3= Uncertain 4= Rarely 5= Never

No	**Freight Transportation service challenges**	1	2	3	4	5
1	The fluctuation in fuel prices affects the transportation service in our organization.					
2	The fees and Service Charges (tolls, port charges…) affect the organization's transportation service.					
3	The capacity of the organization's container affects the cost of transportation service					
4	In our company regulation and lengthy bureaucratic procedures affect transportation service.					
5	In our company taxation has an effect on the transportation service.					
6	In our company restrictions on imported items influence transportation services.					
7	Foreign currency shortage in the country affects the transportation service in our organization.					
8	Efficiency in customs influence transportation service in our company.					
9	The long lead time in port has an effect on the organization's transportation service.					
10	Road development and maintenance affect our company's transportation service.					
11	Changes in the weather affect the price of transportation of the organization.					
12	Longer distance affects our organization's transportation service.					
13	Exchange of information has an effect on the organization's transport service.					
14	New costly technology affects the service in our company.					
15	Lack of integrated system has a major effect on the service of our company.					

16	Security issues affect the service in our company.					
17	The quantity of vehicles has a major effect on the transport service of our organization.					

B. If there are freight transportation services **Challenges** which you are facing and that are not mentioned above, please list them on the space provided. ……