

**St. Mary's University**  
**Challenges of Multi-Modal Transport Services, the Case of**  
**Ethiopian Shipping and Logistics Enterprise**

**Ayel**  
**e Legesse**

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# **Challenges of Multimodal Transportation services in Ethiopian Shipping and Logistics Enterprise**

**By: Ayele Legesse**

## **Approved By Board of Examiners**

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**Dean Graduate Studies**

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**Advisor**

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**Signature and date**

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**External Examiner**

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**Internal Examiner**

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## **List of Abbreviation**

ESLSE: Ethiopian Shipping Logistic Service Enterprise

SCM: Supply Chain Management

TPL: Third Party Logistics

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## **Abstract**

*In order to ensure efficient, cost effective, and reliable import and export movement of cargo to and from the Djibouti port, the government hosted multimodal transport system. This system is carriage of goods by more than one mode of transport under a single contract. Ethiopian Shipping and Logistics Services Enterprise, as a multimodal operator is responsible for the execution of multimodal transport contract, and is fully mandated to lead the multimodal transport operations. However, there are many internal and external factors that have challenged the area not to provide a quality service to its customers. The main objective of this study was to find out the major challenges affecting the day to day operational activities. This study employed both qualitative and quantitative methods. Data were collected from different customers and stakeholders that have direct partnership with a multimodal transportation. A well-structured, self-administrated questionnaire and an interview were used to collect the data. The results indicated that the major constraints were categorized in to two main groups. Poor employees' performance, poor documentation handling, unavailability of physical facility were among the internal challenges. Unprofessional involvement on the side of stakeholders, inadequate financial capacity to carry out the operation sustainably, and foreign commission agents receiving orders beyond their actual capacity, and others logistic issues have been identified as external challenges. In close collaboration with the company's customers and stakeholders, the Ethiopian shipping and Logistics Services Enterprise (ESLSE) should take an immediate corrective measure on the gaps identified.*

# CHAPTER ONE

## 1. Introduction

### 1.1. Background of the study

Multi-modal transportation is the choice of transport mode not only between the types of transportation, systems or process of transportation but also between manufacturer or seller and customer or buyer. It involves separate section between production line to go down/ware house material handling interfaces of each terminal facility and documentation process to support the product. The complete market channel has to be defined and each sector is demarcated and analyzed separately for transport requirements in coordination with customer characteristics, volume and operating environment in order for the operation to be precise (Mohanty, 2005)

The most fundamental level of multimodal transportation planning recognizes the fact that there is no single solution to the transportation problems facing a metropolitan area. Coordinating program of action is necessary to deal with the complex nature and interactions of the transportation phenomena. The concept of a coordinated includes the components such as supply chain management, demand management, and land use management. Note that a key word that describes each component is management because much of the US transportation system is in place. The decisions include questions like what additional capacity is needed, what types of operational improvement should be made, how to influence demand for the purpose of reducing the impact of traffic, how to develop compatible land use and how to provide the institutional and funding structure that support the program are all in essence management decision system ( Kadiyal, 2007).

Managing the transportation system by adding new facilities or by making operational change to improve system performance has been the most common response to transportation problems for many years. Typical action includes new highways and transit facilities improved traffic signalization schemes, traffic engineering improvements such as turn lanes one-way street reversible lanes and turn prohibitions, new or improved transit services preferential treatment for those who use multi occupant vehicles, and ramp metering. Increasingly transportation professionals have become interested storages that minimize the effects of accidents and other non-recurring incidents on traffic flow,

including incident detection programs. The application of information processing communications technologies, advanced control strategies and electronics device would reduce the rate of accident. The intelligent transportation system to improve the safety and efficient use of transport service has been considered as the part of Metro Politian transportation strategies. (Eric, 2006)

Currently the management of logistics in the modern day multi-modal transport has become a great facilitator. Containerization movement of goods has led to an integration of various modes, particularly road, rail, and water which are several combinations of modes, possibly by taking this into consideration.( ESLSE 2006 E.C).

The Ethiopian government focuses on increasing import and export expansion, one of the strategic areas. The strategic action can be achieved by direct involvement of Ethiopian Shipping and Logistics Enterprise, known as a day the enterprise gives liner services by multi-modal transportation operation.( ESLSE 2006E.C)

Ethiopian shipping and logistics enterprise was founded in 1964 G.C and started operation in 1966 with three newly built ships and two general cargos and tankers.The company was established as a share company with capital of 50,000.00 Birr, subsequently raised to 3,750,000.00 Birr. Tacprus investment inc. of Washington DC agreed to subscribe to 51% of the capital requirements designating two directors of the company. (ESLSE 2006E.C)

The Ethiopian government underwrote the remaining 40% of the capital required designating two director. Finally the company has been fully owned by the government of Ethiopia since 1967/70 G.C. Ethiopian shipping and Logistics Services Enterprise is the only company involved in sea fright activity in the country.

The companies in its long sea transportation services manage to build a reputation of reliability efficiency and good services it gives a liner service in north continent and Mediterranean routs. It also gives a cross trade services mostly from Europe, to red sea, and Gulf ports.

Currently the enterprise it believed that the introduction of multimodal transport system will benefit the country in many respects, notably by minimizing time loss at transit shipment points, reducing warehouse improve their competitive position in the international market minimizing burden of documentation and formalities, improve safety and security of goods in the country.( ESLSE 2006, E.C)

Ethiopian Shipping Transport and Logistics enterprise is the only company in Ethiopian providing such kind of multi-modal transportation operation. The limitation of the study is it only focuses on the case company because there are no companies with similar business firm in the country due to this draw conclusion for abroad country that related the same services. The data only collected from company's customers and stockholders. Assessing the practices of other multi-modal transportation providers outside the country and detail analyzing of data quantitatively is needed for further conclusion. Also detail depth interview with all relevant stakeholder and the company's logistics experts.( ESLSE, 2006)

### **1.1.1. Statement of the problem**

In order to ensure efficient, cost effective and reliable import and export movement of cargo in the given country, multi-modal transport system is the main deterrent of satisfying customers as well as keeping the country's economy sustainable for the long time. (Mohanty, 2005)

Furthermore, due to the rapid growth of Ethiopian economy and globalization of the world, it is believed that the introduction of multimodal transportation system will benefit the country in many respects. notably by minimizing time loss at trans-shipment points, reducing the warehouse cost, faster transit of cargo ,reducing the cost of export and improve their competitive position in the international market ,minimizing burden of documentation and formalities improve safety and security of goods. However, today Ethiopian market diversified and increase in a high rate despite of the entire efforts that Ethiopian shipping transport and logistics enterprise, yet challenged by the same visible problems and it has affecting investors and country's economy. However, the researcher investigates based on personal observation stated to assess the following focus area. Those are unavailability of enough containers, inadequate dry port, system performance that can be directly related to the level and operational characteristics of interests to users, extended

waiting time to get the transportation services, monopolized cargo transportation by ESLSE, in effective on line operation, length of documentation process, in effective human resource assigned in the services in proper packaging goods are some of the problems described in report and journal newspapers. However, no systematic research is undertaken to empirically validate the problem. Therefore, this paper aims at to investigate challenges of Multi modal Transportation services in Ethiopian Shipping and Logistics Enterprise.

### **1.1.2. Research Questions**

Based on the previous statement of the research problem, the following main research questions were formulated:

1. What are the challenges of multi-modal transportation operation facing in Ethiopian shipping and logistics enterprise?
2. To what extent does the Ethiopian shipping and logistics enterprise evaluate its challenges during the operation time?
3. What are the factors that affect the multimodal transport operation activities of the enterprise?
4. How does the multimodal operation practice of the company look like especially in import and export facilities?
5. What is the level of customer's satisfaction on the company's services?

## **1.2. Objective**

### **1.2.1. General objective**

The general objective of this study is to assess the multi-modal transport services challenges in the case of Ethiopian shipping and logistics services enterprise.

### **1.2.2. Specifies objectives**

The following are the specific objectives that the student's research will try to achieve:

1. To identify what the multi-modal transportation system of a company looks like.
2. To identify the causes of delays on the operation time or the movement of goods.
3. To point out whether the enterprise's facility to customer is good or not?
4. To identify the major factors affecting multi-modal transportation services.
5. To identify the causes of containers unavailability affects the company.

6. To point out how inadequate dry port affects the logistics operation.

### 1.3. Significance of the study

Ethiopian shipping transport and logistics enterprise is the only company involved in sea freight activity in the country. In addition to that one of it is implementing multi-modal transportation services. The intention of this study was to explore the common challenges of Multimodal Logistics service and provide the findings for a better improvement and policy revision to be performed by the decision makers of the enterprise. The outcomes of this study help the concerned parties in the enterprise to identify the current problems in the enterprise and take the corrective measure. Moreover, this study will be used as a reference material for students and other interested groups who seek to conduct an in depth study on multi-modal transportation services. In addition, it will help to produce new knowledge and ideas for the students and researchers who have an interest on this area.

### 1.4. Operational Definitions

Shipping transport and logistics enterprise:

- **Multi-modal transportation:** As is known, this is a transport service system which places the responsibility for transport activities under one operator(carrier) who then manages and coordinates the total task from the shipper's door to the consignee's door ,ensuring the movement of the goods along the best route by the most cost effective means to meet the shippers requirement of delivery.
- **Land lock:** port less country
- **Clearing agent:** Agents that facilitate in country documentation process to the customers
- **Freight forwarding service:** The freight and forwarding sector of the enterprise is concerned multi modal and unimodal services profession of import and Export cargo. Customers: Individual or peoples who are engaged on Import/Exporter activities.
- **Trucking:** Heavy trucks with the objectives of speeding up transportation of freight from Djibouti to Inland ports and vice versa
- **Stockholders:** an organization/agency that directly involved with the enterprise operation and being considered as a customer.



- **Customers** : in this paper direct users of the enterprise services those are importers and exporters
- **Port and Terminal sector:** of the enterprise is a point of destination to the Ethiopians in port and export trade where goods are loaded unloaded; customs formalities are completed. Goods are temporarily stored, stuffed and un-stuffed made ready for transport, and distributed to their final destination.

### **1.5. Significance of the study**

Ethiopian shipping transport and logistics enterprise is the only company involved in sea freight activity in the country. In addition to that one of implementing multi-modal transportation operation in the country, so, the intention of this study is to assess the current multi-modal transportation practice in the Ethiopian shipping transport and logistics enterprise. The study will have practical significance to assess the practice of the multi-modal transportation services as well as challenges faced in the company's. The decision makes of enterprise to identify problem area. The outcomes of this study help the concerned parties in the enterprise to identify help the concerned parties in the enterprise to identify the current problems in the enterprise and take corrective measure moreover this study can be used as a reference material for students and other interested groups who seek conduct and in depth study on multi-modal transportation services in addition to that the study should be help the students research to get more knowledge in this area and to have experience conducting researches.

### **1.6. Scope of the study**

Even if a concept of multimodal transportation service is a broad concept which is consists of the movement goods different mode transportation and facilities. The agent of Ethiopian shipping logistics enterprise distributed throughout the world. Due to the geographical limitation and time constraint the student research are concentrated more in customers and stakeholders located on the basis her in Addis head office. Moreover, the study focuses specifically on the multimodal transportation operation services .

### **1.7 Limitation of the study**

The study included only a single enterprise experience, documents, customers and stakeholders due to the fact that there is no other similar enterprise available in the country.

During the data collection process using an interview method, a very limited number of expert and managers were contacted as a multimodal service is a new approach to the country.

### **1.8 Organization of the study**

The study is presented in four chapters. The first chapter consists of background of the study, statement of the problem, objective of the study, significance of the study, definition of terms, research design and methodology, organization of the paper. The second chapters also present review of related literature which has greater importance in showing a direction of multi-modal transportation and logistics theories from different scholars prospective. The third chapter deals with the data presentation and analysis and interpretation of the study. The four chapters also include summary of interpreted data. The five chapters also incorporate conclusion and recommendation based on the real finding of the research.



## CHAPTER TWO

### Theoretical Framework

2 in order to discuss multimodal transportation services challenges and factors affecting the operation of enterprise, the scope of multimodal transportation has to be very wide. In this chapter a multimodal operation from general prospective, emerging global challenges and common factors of multimodal operation experience is described. Questions being discussed include how multimodal operation should be managed in order to be considered excellent, to ensure the most efficient and effective movement goods what type of operation support in Ethiopian shipping and logistics enterprise to followed. Due to this fact there are different country's experience her indicated.

#### 2.1. Multi-modal Transportation Operation

All over the world the choice of transport mode is not only a choice between type of transport but between a system and process of transportation, between manufacturer or seller and customer buyer. It involves separate sectors between production line to go down/warehouse material handling interfaces at each terminal facility and the documentation process to support the product. The complete market channel has to be defined and each sector demarcated and analyzed for transport requirement, in coordination with customer characteristics, volume, and the operating environment through which the operation is carried out. Each of sectors would require separate transport mode to precise. (Balaja 2002).



**Source:** ESLSE 50th year's annual newspaper (especial edition, 2014)

According to ( Balaja, 2002) Multimodal transport operations carriers' selection It is evident that transportation is one of the important facts of logistics and equally important of supply chain management because the impact of customer services and other area of cost. These decisions are parametrical within the preview of company logistics decisions due to the factor of trade off potential that exists between alternative e modes of transportation and other logistics functions within the firm. Therefore an understanding of costs and benefits of alternative transport, modes, together, with an in-depth evaluation of overall corporate implications is mandatory.

## **2.2Transportation Definition**

Transportation is the most fundamental part of strategic logistic management. Transport includes all modes of transportation/like air, railway, sea and vehicles. Transportation is the movement of product materials and services from one area to another, both in bond and out bound. It can also as movement from one node of supply chain to other.

is by providing for swift and uninterrupted flow of products back and forth through the chain, transportation provides a sort of lubrication to run the chain smoothly. It also permits deeper penetration of newer markets far from the point of production.( Deshmukh 2004)

Therefore in order to effectively manage this transportation system the first stapes would be to establish a cost effective transportation mode. In other words highest customer services in lowest price, leads to company growth.

Transportation system has a strategic bearing on a company's operation efficiency. Therefore, failure to identify the best transpiration mode can directly affect the growth of a company's. Since higher transportation costs will raise prices which will directly affect the customer satisfaction in a negative way. The three factors as mentioned by to consider the following. ( Gattom and Walters, 2003)

Customer, environment, product and company organization, which involves physical movement of grads, requires transport services. Which is more elaborate the researcher rising on multi-modal transportation services that varies from mode to mode. The best suitable mode required to be identified depend up on the nature of product that has to

move. Like it coal or carbon has to minimize losses, time and cost factor. Therefore, in order to identify the right transportation system; Impact of the transport system on the supply chain, Factors that determine the choice of transport mode, environmental issues, type of products, company's profile, customer feedbacks, and reports should be considered appropriately.

### **2.3 Multi-modal Transportation Operation Global Practices**

All over the world choice of transport mode is not only a choice between type of transport, but between a system and a process of transportation, between manufacturer or seller and customer or buyer. It involves separate sections between producing line to go down/warehouses material handling interfaces, at each terminal facility and the documentation process to support the product. The complete market channel has to be defined and each sector demarcated and analyzed separately for transport requirements, in coordination with customer characteristics, volume, and the operating environment through which the operation is carried out each of sector would require separate transport mode. To be precise more control, ownership, finance, security documentation and product, movement of product and handling, requirement of stock at each level, packaging and safety standards, market factors, labour, turnover of both goods and manpower, must be reconsidered and followed properly.

Therefore in order to maximize the usage of transport being offered, the transport companies should be able to match and synchronize the market requirements, which will then have a major influence on the choice of transport mode. Specialization is created by the impact of channel costs, which are included either before or after transportation, where the specialization reduces the mechanical handling cost, packaging costs and related expenditures mainly during terminal activity. (Boweoksok, 2003)

The very objective, by which the transport mode could be chosen, depends upon whether the company is using revenue or capital to buy the transport. In case of revenue, minimum cost throughout the transport operation should be the objective and in case of capital maximum tax return upon capital should be the objective since this gives maximum return. (Boweoksok, 2003).

## **2.4 Consideration Influencing Transportation system**

- ✓ In order to avoid delays in transportation and handling of logistics both the suppliers and distributor are relying more and more on electronic transfer system, IT and the Internet. This will help in considerable reduction in time delays and ensure better cooperation between the chains and Customer communication.
- ✓ *Market coverage:* Transportation cost influence the size of markets covered in a big way. The characteristics are cost, flexibility, reliability, and availability. The products price will influence the economics of the decision. A low volume and high value product will be able to support a higher cost which means extended delivery distances and increase in delivery frequency.
- ✓ *Sourcing decision:* The geographical dimension of the source markets can be influenced by low cost of transportation system reliable bulk freight services could extend the source market, say companies therefore have to consider a tradeoff between price and quality and the cost involved in delivery to the processing point, volume and cost of transportation. (Deshmukh and Mohanty, 2004:27)
- ✓ *Manufacturing operation:* cost of transportation has direct bearing on the location of the manufacturing market center. That is why extraction based unit are close to the source of raw materials and the products related to customers satisfaction are closer home, near to the customer hub centers,( Muthiah, 2003)
- ✓ *Pricing decision:* Transportation happens to be the important component of product cost. Therefore, selection of the appropriate transportation mode will have a direct bearing on the product cost price with more relevance to export. Increase in transportation cost increase the product pricing.( Muthiah, 2003)
- ✓ *Customer service decision:* both customer's services policy and transportation decisions go hand in hand and hence one cannot be considered in isolation of the other moreover the type of market will also dictate the decision and will vary considerably. Therefore, it is pertinent to overrule the cost factor while servicing the medical customers since speed is more important than cost in selecting the transport mode.( Muthiah, 2003)

## **2.5 INTERNATIONAL LOGISTICS**

There are several logistics activities that firms must get involved in while it is difficult to develop a comprehensive list of logistics activities, the major activities are transportation,

storage, packaging materials handling, order processing, forecasting, production scheduling and site location. The culture social, political, and economic environments of international business are important in deterring how much of different logistics functions are carried out. Logistics network can range from simple to complex. Where input are close to production facilities and production take place close to the market, logistics are likely to be relatively simple where production is distinct from both sources of supply and market the network is likely to be more complex. A system approach that recognizes the trade-offs will be useful to apply( Rotenberg 1982).



**Source:** ESLSE 50th year's annual newspaper (especial edition, 2014)

The issues associated with international transportation of finished goods from production site to market are essentially the same as those that apply to domestic production and transportation to domestic market. However there are important differences between the two international operations, the goods can be out of exporter control for longer period of time, more documentation is required packaging may be more costly shipping and insurance is more closely. The transportation alternatives include ocean shipping and containerization as well as air freight air express and parcel post. The basic activities involved in the flow of goods are transportation, warehouse and inventories, all of which, as we have emphasized should be integrated in a system's approach if the number of warehouses is increased at more places. Similarly, if an attempt is made to decrease inventory costs by reducing number of warehouses and inventory levels, transportation cost will be go up. The system's approach would recognize the trade-offs and may often lead to



the use of more expensive air freight rather than less expensive ocean shipping because of savings in warehouse and inventory costs.( Brown, 1985)

## **2.6 Logistics and Supply Chain Management**

A supply chain may be considered as a group of organizations connected with a service of trading relationships. This group covers the logistics and manufacturing activities from raw materials to the final consumer. Each organization in the chain procures and the transforms materials into intermediate/final products, and distribution.

The importance of logistics can be gained from the fact that logistics and supply chain management costs are in range of 10 to 15 of the GDP for developed countries while it is around 18 to 20 percent for developing countries. The concept of integrated logistics consists of two interrelated efforts: Logistics operation and Logistics coordination. Logistics operation can be basically clubbed into physical distribution management, materials management, and internal inventory transfer. Logistics coordination pertains to forecasting, order processing, operational planning and product procurement or material planning management this integration is effected through effective information flows. (Kaminsky, 2000)

According to ( Christopher ,1992) supply chain is network of organizations that are involved, through upstream and downstream linkages, in the different processes and activity that produced value in the form of products and services in the hands of the ultimate consumer managing these linkages and delivering the product/services to the customer in cost effective way is SCM.

Supply chain management encompasses materials and supply management from the supply of basic raw material to final product and possible recycling and re-use supply chain management focuses on how firms utilize their suppliers processes; technology and capability of enhance competitive advantage. It is a management philosophy that extends traditional intra-enterprise activities by bringing trading partners together with the common goal of optimization and efficiency.

Supply chain management is a set of approaches utilization to efficiently integrate suppliers, manufacturer, warehouse and stores so that merchandise is produced and distributed at the right quantities, to the right time, in order to minimize system under costs while satisfying service level requirement.( Gattorna, 1995)

## **2.7 Shipping and Logistics Services practices in Ethiopia Sea Port**

Addis Ababa the capital city is linked by road to new modern container port in Djibouti (Durable terminal) at the Gulf of Aden. The port of Barbara in Somali land and Port Sudan are other external trade routes that provide services for export-import trades of the country. Another potential port accessible to Ethiopia is Mombasa in Kenney. (Capital news latter 2006)

For delivering safe, reliable and cost-effective transport and logistics services, Ethiopian Shipping transport and logistics services enterprise has built and operates two dry ports which are located at *Modjo*, in the Oromiya Regional State and in *Samara*, which is Afar Regional state. The establishment of *Mojo* and *Samara* dry ports will facilitate the export and import transaction more and more helps ease the congestion at the port of Djibouti. The two dry ports include warehouse In- land roads, container depots, Customer office, insurance companies, and maritime transit.



**Source:** ESLSE 50th year's annual newspaper (especial edition, 2014)

*Modjo* and *Semera* dry ports help to reduce transport logistic costs. The price paid per container at the dry port would about half of that at Djibouti port. This will help export and import to more efficient. The significance is not only the reduction of cost since it will also help reduce the foreign currency being paid at the port of Djibouti as payment is made in

local currency. However the company's doing such activities stole there is remarkable problem faces in the current situation

## **2.8 Physical Distribution Management**

There are many decisions that must be taken when a company organizes a channel or network of intermediaries, who take responsibility for the management of goods as the move from the producer to the customer. Each choice member must be carefully selected and the company must decide what type of relationship it seeks with each of its intermediate partner. Having established such a network, the organization must next consider how these goods can be efficiently transferred in the physical since form the place of manufacture to the place of consumption physical distribution management (PDM) is concerned with ensuring the product is in the right place at the right time.( Meindl, 2001)

It is now recognized the physical distribution management is a critical area of overall supply chain management business logistical techniques can be applied to PDM so that cost and customer satisfaction are optimized. There is little point in making large saving in the cost of distribution in the long run, sales are lost because of customer dissatisfaction. Similarly it does not make economic sense to provide a level of service that is not required by the customer but leads to an erosion of profits. This cost and service balance is a basic dilemma that physical distribution managers face. The reason for the growing importance of PDM is the increasingly demanding nature of the business environment.

In the past it was not uncommon for companies to hold large inventories of raw materials and components. Although industries and individual firms differ widely in their stockholding polices, nowadays, stock levels are kept to a minimum wherever possible. Holding stock is wasting working capital for it is not earning money for the company. The think of the logistical process merely in terms of transportation is much too narrow a view physical distribution management (PDM) is concerned with the flow of goods from the receipt of an order until the goods are delivered to the customer.

In addition to transportation, PDM involves close liaison with production planning, purchasing order processing, material control and warehousing. All these area must be managed so that they interact efficiently with each other to practice the level of service that the customer demand and a cost that the company can offered.

## **2.9 Components of Physical Distribution**

Order processing is the first of the four stages in the efficiency of order processing has a direct effect on lead times. This is directly relation to the student research because most of multi-modal transportation operation that affected with relation to order processing that is why the student research in corporate their article. So orders are received from the sales team through the sales department. Many companies establish regular supply puts than remain relatively stable over a period of time ensuring that the supplier performs satisfactorily.( Muthiah ,2003)

Very often contracts are drawn up and repeat assert (forming part of the initial control) are made at regular intervals during the contract period. Taken to its logical conclusion this effectively does away with ordering and leads to what is called partnership sourcing. This is an agreement between the buyer and seller to supply a particular producer or commodity as and when required without the necessity of negotiating a new contract every time on order is placed order-processing systems should function quickly and accurately. Other departments in the company need to know as quickly as possible that an order has been placed and the customer must have rapid confirmation of the order's receipt and the precise delivery time.( Croucher, 2000)

### **2.9.1 Inventory**

Inventory or stock management is a critical area of PDM because stock levels have a direct effect on levels of service and customer satisfaction. The optimum stock level is a function of the type of market in which the company operates. Few companies can say that they never run out of stock but if stock-outs happen regularly than market share will be lost to more efficient competitors. The key lies in as carting the re-order point might ultimately mean stock-out whereas too high stock levels are unnecessary and expensive to maintain. (Meindl, 2002)

### **2.9.2 Warehousing**

Many companies function adequately with their own on-site warehouse from where good are dispatched direct to customer. When a firm markets good that are ordered regularly but in small quantities it becomes more logical to locate warehouses strategically around the country. Transportation can be carried out in bulk from the place of manufacturer to

respective warehouses where stocks wait for future distribution to the customers. This system is used by large retail chains except that the warehouses and transportation are owned and operated for them by logistics experts. Levels of service will of course increase when number of warehouse locations increase but cost will increase accordingly. Again an optimum strategy must be established that reflect the desired level of service. (Lambert ,2000)

### **2.9.3 Transportation**

According to transportation usually represents the bulk of distribution cost it is usually easy to calculate because it can be related directly to the volume of goods transported. This idea is more supported by the student research on how to fill the gap of Ethiopian Shipping transportation and logistics enterprises because the company is highly affected by this operation so to heighten the number of units. Costs must be carefully controlled through the model of transport selected amongst alternatives and these are most constantly reviewed. ( Douglas M. Lambert 1998,)

The patterns of retailing that have developed and the pressure caused by low stock holding and short lead times have made road transport indispensable when the volume of goods being transported reaches a certain level some companies purchase their own vehicles, rather than using the services of haulage contractors. However some large retail chains have now entrusted all their warehousing and transport to specialist logistics companies.



**Source:** ESLSE 50th year's annual newspaper (special edition, 2014)

For some types of goods transport by rail still has advantages. When lead time is a less critical elements of marketing effort, or when lowering transport costs is a major objectives, this mode of transport becomes viable. Similarly when goods are hazardous or bulky in relation to value, and produced in large volumes than rail transport is advantageous. Rail transport is also suitable for light goods that require speedy delivery (e.g. letter and parcel post) except where goods are highly perishables or valuable in relation to their weight air transport is not usually on attractive transport alternative.

For long-distance overseas routes air transport is popular. Here it has the advantage of quick delivery compared to sea transport and without the cost of bulky and expensive packaging needed for sea transportation as well as higher insurance costs.

The chosen transportation mode should adequately protect goods from damage in transit (a factor just mentioned makes air freight popular over longer routes as less packaging is needed than for long sea voyages) not only do damaged erode profits, but frequent claims increase insurance premiums and inconvenience to customer endangering future business.

### **2.9.4 Third Party Logistics**

Third Party Logistics (3 PLS) is the use of an outside company to perform all or part of the company's materials and product distribution function. The competitive advantage for any company's is to focus on their core competencies and let 3PL firm handle those supply chain function in which they specialized. In order to provide truly value-added services, 3PL firms must interact with customers to understand their needs and then their offering to meet them.

This types of activity on the growing country's like Ethiopian more advantages because all necessary technology and human resource skill easily transfer specially land locked country more many spinets for port rants due to this third party logistics to avoid large amount of money. So it is obvious that companies can parcel out numerous supply chain processes to entities that specialize in the efficient performance of those processes. Outsourcing a wide any of supply chain processes can generate value across the entire supply chain because specializing firms performing the selected processes enjoy a level of

expertise and leverage that would be not available to manufactures wholesalers or retailers. Transportation warehousing order processing and fulfillment packaging, labeling and bill payment is some of the process that can be outsourced to specialist firms called third party logistics firms.

According to Rogres, D.S. and Tibben R.S third party logistics can create value for their customers in the accuracy, quality and timeliness of the information that they provide their client, different channel partner and to ultimate customer. This information can be electronically integrated into the customer's MIS for direct access.( Rogres, D.S. and Tibben R.S 1999)

Third party logistics can help customers reduce inventory and fixed assets such as buildings and equipment. This leads to better utilization and financial returns on both working and fixed capital. Although capital utilization is important to 3 p customers, reduction of supply chain costs and shoring the saving with customers is probability the most visible though not the most important value.

## **2.9. 5Vehicles Scheduling**

Vehicle scheduling is a major economic and business activity it determines the quality of delivery services to customer in terms of speed, and reliability. It determines too how many travels and drivers or unwise investment.

In extra vehicles to meet delivery commitment vehicles caught in traffic jams burn up gasoil nonetheless and are manned by drivers who must paid nonetheless. Yet no benefit is returned to company or customer. According to general motors' report that more than 2 billion vehicles hours are lost each year in traffic delay. The cost is estimated at 70 billion in lost time. Leading the way towards improved traffic flows and eventually better vehicles routing and scheduling are the University of Michigan through its intelligent vehicles through its program. The new idea it is equip large cities with automatic traffic monitoring equipment that sends signals information on congestion accident, and flows routs-to local control centers. EBERT (1989:26:30)

Vehicles too would be equipped with tracking and communication devices so dispatchers at the local control centers know the vehicles locations at all times information about the roads and vehicles would be processed by a computer, converted into recommended routes and transmitted to vehicles. A cellular phone car radio or dashboard CRT monitor might be the vehicles information receiving device. These new technologies will reshape production planning and scheduling for vehicles operations throughout the world. The result will be greater productivity, smoother highway, and conserved energy.( Candler. 1990)

Rail and trucks: fishy back, water and true train ship, water and rail and air trucks air and truck each coordinated mode offers specific advantages for example, Piggy back is cheaper than trucking alone, yet provides flexibility and convenience in deciding on transportation modes, shippers can choose from private, contract, and common carriers If a shipper become private carrier. A contract carrier is an independent organization selling transportation services to others on contract basis. A common carrier provides services between predator mind points on a scheduled basis and is available to all shippers at standard rates.( Philip Rotler 2002).

### **2.9.6 Role of Clearing and Forwarding Agents**

Distribution logistics is an important area of planning exports. Distribution logistics refer to the process of physical flow of good from the place of exporter to the location of importer at right time, with minimal cost. In this significant area clearing and forwarding agents are a link between the owners of goods and owners of means of transport. They help cargo owners in efficient movement of goods to the buyer by completing a number of procedural and documentary formalities. They are experts and knowledgeable in laws and regulations governing shipment of goods through the customs authorities.

Their basic function is to provide different range of services to exporters to ensure smooth and timely shipment of good. Clearing and Forwarding Agents play a vital role in selection of mode and route of transport. Export and import procedures booklet (2006 ;103-120 )

They are the specialized people to guide in the logistics to ensure that the goods reach the final buyers in specified time and at minimal cost, in the condition they are not sent. The



essence of distribution, logistics is the decision in respect of mode of transport to be used. Clearing agent advises exporter about the availability of alternative modes of transport and guides exporter in decision-making about the final choice of transport to achieve optional cost is transporting the goods, well within the delivery schedule.

In addition to these activities he undertakes most of the functions connected with export such as market labeling, packing, of goods advising on trade laws, arranging local transportation as well as apprising developments on transportation and cleaning duty drawback claims on behalf of the exporter. An efficient clearing and forwarding agent, indeed, goes a long way to the exporter in the Journey of exporters to make the matters easier, comfortable and may be cheaper too. Above all, the agents act trouble-shooters for the export, in case of movement problems. It is well said a real clearing agent can perform all the Functions export, in case of movement problems. It is well said a real clearing agent can perform all the functions except selling the goods.

### **2.9.7 Benchmarking in Supply Chain Management**

Benchmarking is the continuous process of measuring product, services, and practices against the toughest competitors, or those companies recognized as industry leaders “Benchmarking is an external focus on internal activities, functions or operations in order to achieves continuous improvement. Starting from an analysis of existing processes or activities and then to identify an external point of reference or standard, by which each activity can be measured or judged. A benchmark can be established at any level of the organization in any functional area. The ultimate goal is to be better than the best to attain a competitive advantage.

Organization that introduces benchmarking correctly can use it to make a quantum leap in their performance, and develop a culture in which managers and staff constantly searches for improvement within logistics and supply management benchmarking can be used for a number of different purposes, from assessing the performance of the entire operation, through prioritizing improvements to searching for the off-the shelf improvement strategies in a specific area of logistics or supply chain activity in some senses benchmarking is imitation and stealing-creative swiping. At its best it is skillful appropriation and adaption requiring imagination and innovation at its worst it can be an expensive and time-

consuming piece of corporate tourism. It is a long term process requiring senior management's commitment which the emphasis upon continuous improvement and organization learning. (Kaplan and Norton, 1996 71:79)

### **2.9.8 Information and Technology in the Integrated Supply Chain**

According to( Rosen, L.T. 2000) they explain that information is the key to the decision making in business. Prior to the 1980s a significant portion of the information used to flow between functional area within an organization, and between supply chain member organizations were paper based transactions and communications were slow, unreliable, and error pron. Conducting business in this manner was costly because it decreased firms effectiveness in being able to design develop procure, manufacture, and distribute their products during this period information was often over looked as a critical competitive resources because its value to supply chain members was not clearly understood. However firms that are embarking open supply chain management initiatives now recognize the vital importance of information and the technologies that make this information available in a sense information systems and the technology. Utilized in the supply chain represent one of the fundamental elements that link the organization in to a unified and coordinated system, and perhaps even the survival, of any supply chain management initiative cycle time reduction, implementing redesigned cross-functional processes, utilizing cross-selling opportunities and capturing the channel to the customer underpin the competitive positioning of business.

Timely and accurate information is more critical now than at any time. Three factors have strongly impacted of information .Satisfying in fact pleasing; customers have become something of a corporate obsession. Serving the customer in the best, most efficient and effective manner has become critical, and information about issues such as order status, product availability, delivery schedules and invoices has become a necessary part of the total customer service experience. Information is crucial factor in the manger abilities to reduce inventory and human resources to competitive level. Information flows play an essential role in the strategic planning for and deployment of resources.

The need for virtually seamless bonds within and between organizations is a key notion in the essential nature of information systems in development and maintenance of successful supply chain. That is creating inter-organizational processes and link to facilitate, delivery of seamless information between marketing, sales, purchasing, finance, manufacturing, distribution and transportation internally as well as inter organizationally, to customers, suppliers carriers and retailers across the supply chain will be improve fill rates of the customers service increase forecast accuracy, reduction in the total inventory and savings in the company's transportation costs-goals which need to be achieved.

### **2.9.9 Characteristics of Services**

According to (Zethaml and Bitner 2000) explained that services have four different or unique characteristics they are.

*Intangibility:* Services are processes and performance due to these factors they cannot be seen, tested or inventories like we do in tangible good for instance multi-modal transportation services is a process moving good from one place to another and since it's a process we cannot feel it rather we can encounter the final out put which is gathering our consignment in the needed place and process is intangible and sometimes difficult to demonstrate. The way how it is performed can create a gap in the customer's satisfaction.

*Heterogeneity:* services are performances by human no two services will be precisely a like and can be explained as the core services rendered by a public transportation company might be the same which is transporting goods but sine it is performed by human, the way they perform can be absolutely deferent and can imply the services heterogeneity. Customer can build their expectations on their post experienced service at other public transport provider and if the services is not provided just like their previous experience, it will affect their satisfaction this is due to the services is heterogeneity. ( Zethaml and Bitner 2003)

(Balaji 2002) add two more characteristics those are:

- *Inseparability:* Some services are inseparable with the service provider due to this reason that the customer must be presented to get the required services for instance

the Ethiopian shipping and logistics transport services must be presented to get the transportation because the mode of services and the customer are inseparable.

- Variability: The quality of service may very depend on who provides it as well as when and how it's provided. For instance supporting shipping logistics service activities cannot be performed at the same way by service employees and their psychological condition: can also determine their performance and variability of service can be observed.

While every service standards set by the company to meet customer satisfaction: there should be an instruction which is specific targeted to the customer measurable, and achievable, goal relevant to customer timely and supported by the company (Karr and Blohowrak , 1998:36)

To meet quality dimensions, every company must improve its quality recommended some point regarding to how improve service quality which are listening what the customer want, putting reliability as a service priority, better service design encouraging customers to complain to how the company weaker side and develop problem solution system, surprising customers to exceed their expectations, showing fairness to customers as well as to employees, promoting team work in the company, making research on employees to know why service problems occur and finally develop on inspiring leadership throughout the company because quality services will be derived from it.( Kotler and Keller: 2006)

### **2.9.10 Classification of Clearing Agent Services**

The following are some of the services provided by all clearing and forwarding agents.

- Warehousing before transportation.  
Seen after the goods are manufactured and are ready for shipping, warehousing facility for goods in made available before they are transported to the docks/port.
- Container Arrangement  
Movement through containers has been gaining popularity to facilitate export goods reach in the original condition, they are sent. In case of need, this service is provided.
- Reservation of shipping space

Unless shipping space is finalized there is no guarantee about the shipment of goods agents books the shipping space contacting the agents of the shipping company, alternatively, making arrangement for air fighting.

- Selection of mode of transport

Mode of transport is a matter of negotiation between the exporter and importer, invariably incorporated in the contract. Either exporter or importer arranges transportation, depends on price terms the agent provides information about different shipping lines, air lines, and guides on the selection of route, optimal from the standpoint of delivery date and distribution costs. Delivery of goods as agreed upon is one of the conditions on which success in exports depends. As transportation cost occupies a significant place in total cost, structure, services of clearing agents are highly valuable in managing timely, delivery, containing cost to achieve sales and profit goals for exporter. (Export import procedures, 2006)

### **2.9.10.1 Causes for Customer Dissatisfaction**

Dissatisfaction customer will not only take the business away but they will probably tell several others about their experience. For this reason a factor that causes dissatisfaction needed to be identified.( Alexander, 2003)

Pointed out some of the reason why customers and stakeholder get dissatisfied. These are misinformation from an employee, feeling of being victimized by the business operation, delay and long waits, promise not delivered, conflicting message from employee lack of communication between parties, treatment as being wrong or unimportant moreover, defective or inferior quality product, feeling of being dismissed or discounted by the personal and business. ( Meaneil, 1995)

For further explanation stated that the other main cause for customer dissatisfaction is the marketing promises. If the marketers raise expectation too high by making exaggerated promises. The buyer is likely to be dissatisfied when promises were not delivered. However, if the company expectation too low it couldn't attract enough buyers.( Kotler 2002)

### **2.9.10.2 Customer Complaint**

Customers might complain if the actual service performance is below their expectation because it will make them dissatisfied. If a company over promise about its service in its promotion, it will lead to over expect the service performance. Angry customers often tell many other people about their problems and again unhappy customers might tend to reach thousands of people by posting complaints on bulletin boards and its final result will darken the good will of the company.

A customer can complain for many reasons like to vent their anger, obtain compensation from the company and help to improve the service.

When a customer seek fairness for his/her complains there are three dimensions which are stated (lovelock and writz, 2004)

1. Procedural Justice: has to do with the policies and rules that any customer will have to go through in order to seek fairness. It includes flexibility of the system and consideration of customer input into the recovery process.
2. Interaction Justice: It involves the firm's employee who provide the service recovery and their behavior towards that customer like giving an explanation for the failure and making an effort to resolve the problem.
3. Outcome Justice: It pertains to the compensation that a customer receives as a result of the losses and inconveniences incased because of services failure.

When complaints are satisfactory solved, the customer involved are much more likely to remain loyal and lovelock and (writz,2004) describes some dose not for handling complaints.



## **CHAPTER THREE**

### **Research Design and Methodology**

#### **3.1. Research Design**

The research design employed of the study is descriptive survey method, and both quantitative and qualitative research approach was used. Based on the descriptive methods, it describes the multi-modal transport operation challenges of Ethiopian shipping transport and logistics enterprise.

Quantitative methods were used to assess direct involvement of the operational activities in the case of the company's working together. By integrating supplies chain management, it activates the satisfaction of the customers and other relevant body. The challenges of multimodal transportation in the shipping are activity measured by using 5-point likers scale method and variables under the challenges and causes of those challenges are discussed.

#### **3.2. Sample and Sampling Technique**

To study about the Ethiopian shipping transport and logistics enterprise and its many challenges on multi-modal transportation operation services, Stakeholders and customers of the company have been directly involved; both are to fulfill the necessary developing questioner to get the relevant information.

To discuss on different issues of multi-modal transport operation practices, the company's multi-modal expert and operation mangers were interviewed to get data about the Ethiopian shipping and logistic enterprise services.

Ethiopian shipping transport and logistics services were mainly involved in import and exports actives and other government tasks. The study area is in Addis Ababa since most of the customers are in Addis Ababa; the total population is 950, out of this 350 are customers and 600 are stakeholders. These are selected using stratified sampling technique because of the enterprise customer have different characteristics and heterogeneity due to this reason and to reduce simple basins categorized in to four stratum. These are 200 importers, 150 exporters, 100 transporters, and 500 clearing agents were included to get a reliable data,



Using the sample formula developed by Nasiurma (2000).The researcher calculated a total sample of 110, assuming that a 95 % confidence interval, and 0.05 Coefficient of variation.

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

Where, n=sample size, N=population, C=Coefficient of variation (0.05), and e= level of precision (0.05)

n=110 with a 5% of error

The one hundred ten customers and stakeholder were selected by stratum random sampling techniques by using their company name. Of the total sample, 50 of it were collected from customers and the remaining 60 from stakeholders. Questioners were filled by both: stakeholder and customers each of questioner different since the case company multi-modal operation expert and operation manager was interviewed to get about the concrete information regarding to the overall operation and customer perception.

### **3.3. Type of data and Tool**

In an effort to address the research objectives and to provide possible recommendations, the study used both primary and secondary data sources. With regards to primary data, questionnaires have been distributed to the company, customers and stakeholders. An interview was conducted with the company's logistic experts and operation mangers. The interview was aimed to obtain the detail information concerning the major challenges and their causes, customers' attitude towards the overall multi modal transport performance and to obtain their practical way forward. Operation Manager responsible for day to day activities of the multimodal operation was also interviewed. Interview questions presented to the interviewee so as to collect relevant information to meet with the study objectives.

### **3.4 Procedures of Data Collection**

The procedure for the data that was collected using questionnaires was first to identify the respondents after that communicated to get their consent. Once the respondents gave consent, the prepared questionnaires were distributed to each participant by appreciating their participation and devoting their precious time for the research. The questionnaires were collected by rechecking the completeness of the data. Regarding to interview, the researcher have interviewed Ethiopian shipping transport logistics enterprise operation manager and logistics experts by creating comfortable atmosphere during the interview.

The interview questions composed of different issues as it has been stated in the objectives. A brief introduction was provided and the aim of the study was clearly described to the interviewee. The face to face Interview was carried out following the respondent's willingness to participate in study and understood the procedures. Lastly, the Company's report and literature was reviewed and collected as a means of secondary data.

### **3.5 Method of data Analysis**

#### **Quantitative**

The collected data were entered and analyzed with the help of statistical software SPSS version 20. Data were cleaned for outliers and corrected and frequency, percentages, tables, and graphs were used for the description of data as deemed required. Mean and standard deviations were also used a descriptive analysis. .

#### **Qualitative**

The qualitative data were transcribed based on Amharic and then translated into English. Data cleaning was made on both Amharic transcription and English translation. Then; the data were classified in main thematic areas and summarized to identify the major challenges of multimodal transportation service.

### **3.6 Ethical consideration**

There is much more than the ethics behind the chosen subject to consider during the research process. Considerable focus must be put at ensuring that more specific research ethics, especially while dealing with the construction of the thesis frameworks during the stage of data collection. There should be respect for the participants of both the survey and the interviews. Research ethics include the privacy of possible and actual participants. There should be confidential handling of the data provided by participants, additionally there must be an acknowledgement of the effects the research might have on the participants and their provided information. The research paper believed to fulfill all the research ethics started above in collection and interpretation of primary data.

## CHAPTER FOUR

### Results and Discussions

**Table 4 .1Background Information of Respondents**

<b>Item</b>	<b>Measurement</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Gender</b>	Male	37	72.5
	Female	13	27.5
<b>Level of Education</b>	Primary school	3	5.9
	High school/secondary	19	39.2
	Diploma	7	13.7
	BSC/BA	20	39.2
	MSC/MA	1	2.0
<b>Job Title</b>	Import/Export	22	43.1
	Government Employee	4	7.8
	Transporter	16	3.9
	Cleaning agent	5	9.8
	Others	1	2.0
<b>Working with Ethiopian shipping and logistics Enterprise</b>	<1 years	11	21.6
	1-5years	19	37.3
	5-10years	10	21.6
	>10years	10	19.6

Table 4.1 shows gender distribution and 37(72.5%) of respondents are male, whereas 14(27.5%) are female. This implies that the Ethiopian shipping transport and logistics enterprise has slightly higher percentage of than male at a time of undertaking the research.

Regarding the level of educational background, the customers of Ethiopian shipping transport and logistics enterprise are 20(39.2%). 20(39.2%) percent of the respondents are degree holders and high school leavers, whereas 7(13.7%), and 3(5.9%) of respondents have diploma, and the rest of them completed joiner secondary school.

Regarding the third item in the table, one customer of Ethiopian shipping transport and logistics occupation of the respondent 22(43.1%) and 17(33.3%) of the respondents work import and export while (17.33%) and 5(9.8%) of respondents work as transporter and document processors, but the remaining 4(7.8%) and 1(2.0%) of respondents are civil servants and other constitutions. As the finding indicated the majority of respondents are more familiar with multimodal transportation so, they have provided the researcher to get reliable information.

As shown in item 4, on table 1 we can understand that 19(37.3%) of the respondents have long time working with enterprise for 1-5 years the other 11(21%.6) for working 5-10 years while the remaining 10(19.6%) for 5-10 years. since majority of two categories working long time with Ethiopian shipping transport and logistics enterprise it is believed that they have much experience with multimodal transportation services.

**Table 4.2 Operational service of Shipping and Logistics Enterprise by customers**

Item	Measurement	Frequency	Percentage (%)
<b>The most commonly used Transportation system</b>	Shipping	32	62.
	Air	1	2.0
	Vehicle	17	35.3
	Train	0	0
	<b>Total</b>	<b>50</b>	<b>100</b>
<b>Physical facilities during Operation</b>	Poor	16	31.4
	Medium	16	33.3
	Good	18	35.3
	<b>Total</b>	<b>50</b>	<b>100</b>
<b>Operational Responsibilities of Ethiopian Shipping and Logistics Enterprise</b>	Very Low	17	33.3
	Medium	28	56.9
	High	5	9.8
	<b>Total</b>	<b>50</b>	<b>100</b>
<b>Overall Satisfaction with operational service</b>	Low	10	19.6
	Medium	25	51.0
	High	16	29.4

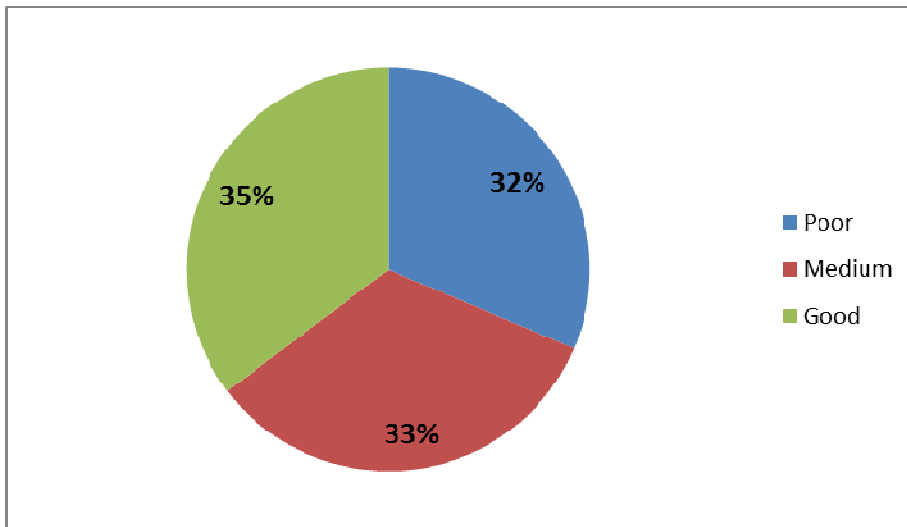
	<b>Total</b>	<b>50</b>	<b>100</b>
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According to item one on table two, 32(62.7%) of the respondent customers mostly used shipping transportation while 18 (35.3%) used vehicles. The rest 1(2.0%) used air transportation, having the two majority percentages of respondents from shipping and transportation services. This implies that it can be a reference for the researcher output since currently most imports and exports of goods movements by the above specific transportation.

As demonstrated in item 2, on table 2 about 17(33.3%) of respondents medium perception of the physical facilities of Ethiopian shipping transport and logistics' enterprise on the same percentage of them is said very low while 13(25.5%) of them are rated low. The rest 3(5.9%) and 1(2.0%) of respondents are ranked high and very high respectively. Having sufficient machines and other physical facilities for multimodal transportation system is fundamental but in case of shipping enterprise poorly available, this implies that the enterprise has got a difficulty in carrying out its duties and responsibility.

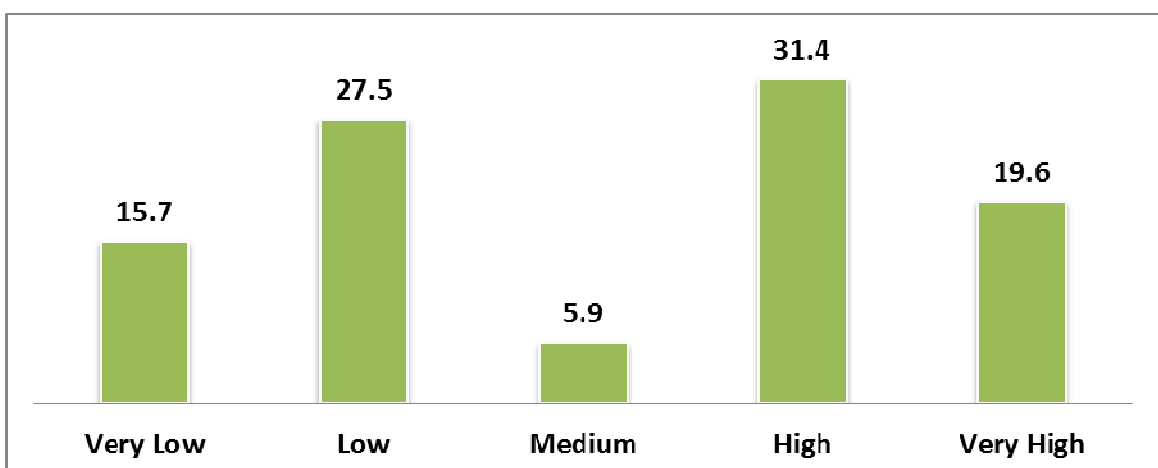
According to item 3 in table 2 concerning the responsibility of shipping line to the customers, 29(56.9%) of respondents have medium perception, 11(21. %) of them have low responsibility and the remaining 6(11.8%) and 5(9.8%) rated the level of meeting its responsibility as very high and high. This reveals the majority of the respondents believe the company's commitment in fulfilling its responsibility is not satisfactory. Consequently, this has a negative impact in damaging the image of the company.

According to item 4, on table 2, concerning the overall satisfaction of the operational services of Ethiopian shipping transport and logistics enterprise, 10(19.6%) of respondents replied low, 26(51.0%) of them ranked medium attitude, and the remaining 16(29.4%) of respondent rated high. From the above percentage more than 50% of customers' were dissatisfied.



**Fig-1 Physical facility of multi modal operation in percentage**

As shown in figure 1 on table 2 about 32% of respondents have poor perception of the physical facilities of Ethiopian and shipping transport and logistics' enterprise, 33% of respondents indicated medium and the remaining 35% of them responded as having good perception. Although sufficient machines and other physical facilities for multimodal transportation system are fundamental, the shipping enterprise is poorly availed with physical facilities. This implies the enterprise has got a difficulty in carrying out its duties and responsibility.



**Fig-2 Use of modern technology for document processing in percent**

We can clearly observe from figure 2 that the responses of most of respondent customers tend to be for documentation purposes in the Ethiopian shipping transport and enterprise; the use of modern technology for 34.4 % of respondents ranked high while 27.5 % of respondents rated low modern technology practice. 15.7 % respondents also is said to be very low, the remaining 19.6% and 5.9 % of respondents ranked very high and medium respectively. This is implies that multimodal transportation system cannot meet their objective without fast technology documentation process due to this the company try to maximizing their technology capacity

**Table4.3 Major challenges of Shipping and logistics Enterprise by customers**

Item		Response Categories					Mean	SD
		SA	A	N	D	SD		
<b>Prior notification for any transportation schedule changes</b>	Freq	0	3	18	11	18	2.13	0.980
	%	0	5.9	37.3	21.6	35.3		
<b>Containers availability</b>	Freq	0	1	25	17	7	2.4	0.753
	%	0	2.0	51.0	33.3	13.7		
<b>Short time documentation process</b>	Freq	1	4	8	21	17	2.03	1.010
	%	1.96	7.8	15.6	41.1	33.3		
<b>Availability of transportation Service</b>	Freq	2	9	12	14	14	2.43	0.090
	%	3.9	17.6	23.5	27.4	27.4		
<b>dry port availability</b>	Freq	5	15	14	8	9	2.5	1.007
	%	9.8	29.4	27.5	15.9	17.6		
<b>Availability of modern technology for Information processing</b>	Freq	10	16	3	14	8	3.1	1.423
	%	19.6	31.4	5.9	27.5	15.7		
<b>Inconsistency shipping schedule</b>	Freq	2	4	2	17	24	1.76	1.052
	%	3.9	7.8	3.9	33.3	47.0		

The table above summarizes the challenges of the multimodal transportation services in Ethiopian shipping transport and logistics enterprise on behalf of the customer side on prior notification for any transportation schedule changes. The majority of the respondents is neutral and strongly disagrees. Responses's the value of mean is 2.13 located between neutral and strongly disagree and tends more towards neutral and the value of mode also confirmed (mode=3). The value of standard deviation is 0.980 the percentage of neutral and strongly disagree is 37.3 and 35.3 respectively. Which is indicated that prior notification less attention given by enterprise and customer perception also changing for long run existence with the enterprise.

Regarding the second item, 26(51.0%) and 17(33.3%) of the respondents are said to be neutral and strongly disagree. This indicates that majority of company's customers believe that there is lack of containers availability while 7(13.7%) and 1(2.0%) of respondents ranked disagree and agree respectively. The value of mean also indicated 2.4 while mode conformed that (3). The value of standard deviation is indicated 0.753 the finding shows that how much containers availability the most challenges in multimodal transport operation activities in Ethiopian shipping enterprise.

When considering the third item in the table, lack of long term documentation process faces the Ethiopian shipping transport and logistics customers regarding to this the table shows the value of mean is 2.03 which indicated between strongly disagree and disagree also the mode confirmed that 1, The value of standard deviation is 1.010 from the respondents responses the enterprises have to take long time documentation process this is indicates that most the enterprise customer affected by documentation proses and to exposed for additional warehouse costs .

Regarding the fourth item in the table, the value of mean is 2.43 which is located between strongly disagree and disagree. The value of mode is also 2 and indicated to be neutral and agree. The value of standard deviation is 0.090 from the respondent response we can conclude that unavailability of transport services is the current challenges of in multimodal transportation services in Ethiopian shipping transport and logistics enterprise.

In the item fifth on the table the value of mean is 2.5 which means the value of answers is located between agree and neutral and the value of mode is 1, confirming the response



direction towards neutral. The percentage of natural answer indicated 14(29.4%) and the percentage of agree answer were 15(29.4%) from the total answers. The value of standard deviation is 1.007 the finding implies that in Ethiopian shipping transport and logistics enterprise dry ports are the most desirable especially in the growing counters like Ethiopian in the last six year Ethiopian shipping transport and logistics enterprise by introducing multimodal transportation saving large amount of dollar in Djibouti ports in spite of this if there is adequate dry port you can imagine the country economy by fair increase. So the companies try to maximizing dry port availability to satisfy multimodal transport operation

In the item sixth on the table the value of mean is 3.1 which mean that the value of answers is located between agree and disagree and the value of mode is 4, confirming the response direction towards agree. The percentage of agree answer was 10(31.4 %) and percentage of disagree was 14 (27.5%) from the total of answers. The value of standard deviation is 1.4233. The statistics implies that availability of modern technology for information process is not availing for smooth operation in multimodal transportation services.

On table 4 item seven summarized to what extant respondent' agree' on availability of shipping scheduling during the operation time. The value of mean stated 1.76 and indicates a concentration reward between strong disagree and disagree. The value of mode is indicates 1 the ability of respondent strong disagree. The value of standard division is 1.052 and indicates the answer implies that most of the customers of Ethiopian shipping transport and logistics have not dissatisfaction by multimodal transport services because in the global market time scheduling the most fundamental issue for competitive advantage due to this the company try to fulfill this gap.

**Table 4.4 Status of shipping and logistics Enterprise employee performance and customer satisfaction**

Item		Response Categories					Mean	SD
		SA	A	N	D	SD		
							<b>2.47</b>	<b>1.046</b>
<b>Assigned Qualified employee</b>	Freq	1	6	17	18	9		
	%	2.0	11.8	33.3	35.3	17.6		
<b>Customer satisfaction with employee performance</b>	Freq	0	1	29	17	4	<b>1.69</b>	0.510
	%	0	1.96	56.8	33.3	7.8		

<b>Willingness to be a future customer</b>	Freq	2	2	10	30	7	2.88	0.431
	%	3.9	3.9	19.6	58.8	13.7		

In item 4 on table 4, the value of mean is 2.47 which means that the value of answer is located between neutral and disagree the value mode is 2 confirming response directions towards neutral. the percentage of disagree answer was 18(35.3%) and the percentage of neutral 17(33.3%) from the total answers the value of standard division is 1.046 the finding of analysis assigned qualified employer in the right place one of the measure challenges in Ethiopian shipping transport and logistics enterprise this is reduced the company effectiveness and reliability by large portion.

Concerning the Ethiopian shipping transport and logistics, employees' performance on how to measure on the customer side regarding the statistical data interpreted 30(58.8%) and 10(19.6%) respondents ranked disagree and neutral the remaining 2(3.9%) and 2(3.9%) were rated strongly agree and agree the value of mean located 2.88 which is between neutral and disagree perception the value mode also stated (3) the value of standard division 0.431 the finding implies that majority of shipping customers have dissatisfied by the employees

**Table 4.5 Background information of Respondents/Stakeholders**

<b>Item</b>	<b>Measurement</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Gender</b>	Male	40	67.2
	Female	20	32.8
<b>Level of Education</b>	Primary school	12	19.7
	Secondary school	24	39.3
	Diploma	12	19.7
	BSC/BA	12	19.7
	MSC/MA	1	1.96
<b>Job Title</b>	Transporter	34	55.7
	Clearing Agent	14	23.0
	Fleet forward	6	9.8
	Customs	5	8.2
	Wholesale	2	3.3

<b>Years of partnership with Ethiopian shipping and logistics Enterprise</b>	<1 years	6	9.8
	1-5years	28	45.9
	5-10years	21	34.4
	>10years	6	9.8

Regarding the level of education background, the stockholders of Ethiopian shipping transport and logistics enterprise 12(19.7%) and 13(21.3%) of respondent are degree and diploma holders, whereas 24(39.3%) and 12(19.7%) of respondents are high school and second degree. The data shows that stakeholders of Ethiopian shipping transport and logistics enterprise may not have a problem to communicate with English an international language.

Regarding the third item in the table, one stockholder of Ethiopian shipping transport and logistics enterprise job was assessed in the above table 34(55.7%) and 14(23.0%) of respondents were transporters and clearing agent; the remaining 6(9.8%) and 5(8.2%) of respondents were working customs authority and broker respectively. As the finding indicated majority respondents are direct related to multimodal transport operation services. This is implies that the researcher have get valuable information.

As it is described in item 4, table one, 28 (45.9%) of the respondents are working with Ethiopian shipping transport and logistics; 1-5 years were 21(34.4%) of respondents working with 5 to 10 years and 6(9.8%) of respondents working less than six years; the rest 5(8.2%) working more than ten years as the finding indicated the majority of respondent working long years respectively. this shows that the researcher questionnaire achieving the targeted.

**Table 4.6 Major Challenges of Shipping and logistics Enterprise for stakeholders**

Item		Response Categories					Mean	SD
		SA	A	N	D	SD		
<b>Facility Availability</b>	Freq	4	7	5	45	18	2.56	0.786
	%	6.5	11.4	8.2	73.8			
<b>Sufficient containers availability</b>	Freq	5	8	1	40	7	2.1	1.16
	%	8.2	13.1	1.6	65.6	11.5		
<b>Short time documentation process</b>	Freq	2	5	3	43	13.1	2.1	0.768
	%	3.27	8.19	4.91	70.4	13.1		
<b>Schedule based goods transportation</b>	Freq	1	3	40	3	14	2.7	0.957
	%	1.6	4.9	65.6	4.9	23.0		
<b>dry port availability</b>	Freq	3	8	9	34	7	2.4	1.025
	%	4.9	13.1	14.8	55.7	11.5		
<b>Availability of modern technology for Information communication</b>	Freq	1	3	41	13	3	2.7	0.673
	%	1.6	4.9	67.2	21.3	4.9		
<b>Inconsistency shipping schedule</b>	Freq	1	13	5	33	7	1.76	1.052
	%	1.6	21.3	8.2	57.4	11.5		
<b>Prior notification for any transportation schedule changes</b>	Freq		3	19	11	18	2.04	0.65
	%	0	5.9	37.3	21.6	35.3		
<b>Supply chain integration</b>	Freq	2	4	13	17	25	2.5	0.870
	%	3.2	6.5	21.3	27.8	40.9		
<b>Good Compliant Management system</b>	Freq	1	2	0	48	10	1.9	0.730
	%	1.6	3.3	0	78.7	16.4		

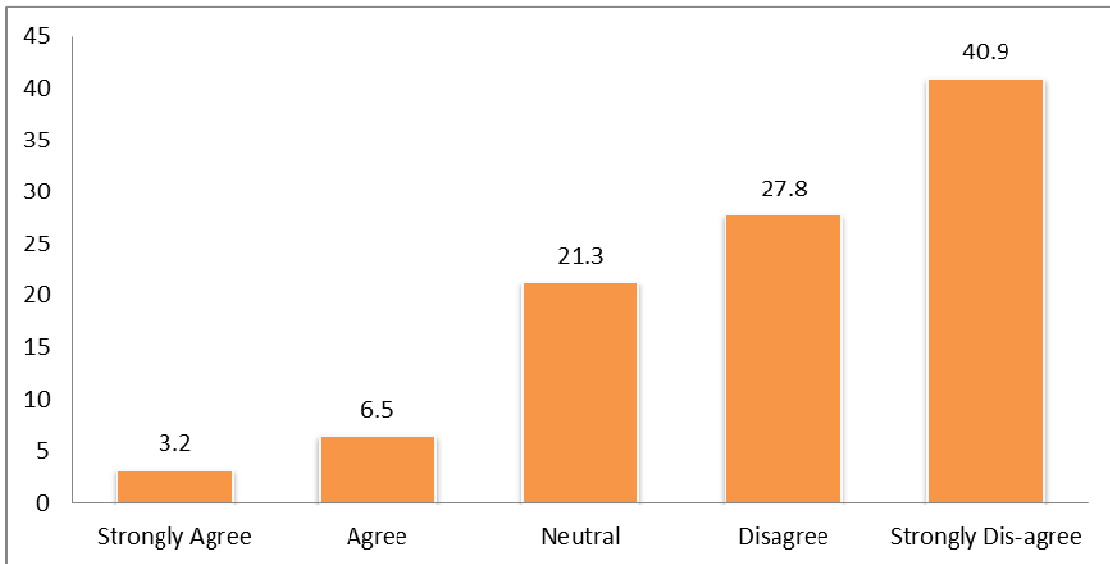
Apart from specific challenges in each multimodal transportation services, Stakeholders were asked about the availability of physical facilities. as shown in table 4.6 the respondents stated the value of mean is 2.56 which means that, the value of mode (mode 3) confirming the answer is said to be disagree from the percent of 45(73.8%) from the total answer and 18(1.0%) for strongly disagree answers.

The value of standard deviation was 0.786. From the respondents, we can conclude that Ethiopian shipping transport and logistics enterprise have provided multimodal operation physical facilities. It is the key instrument giving different type of services when the absence of physical facilities resulted ultimately in decline of the company's customers.

Having sufficient container availability the most fundamental issue for multimodal transport operation but in case of Ethiopian shipping transport and logistics services is poorly available were the data indicated from table 4 on item 2 the value of mean 2.56 which means that the value of answer between strongly disagree and disagree also the value of mode is 2 the percent of strongly disagree the answer is 40(65.5%) and disagree 7(11.5%) from the total answer this implies that the company try to manage the existing gap.

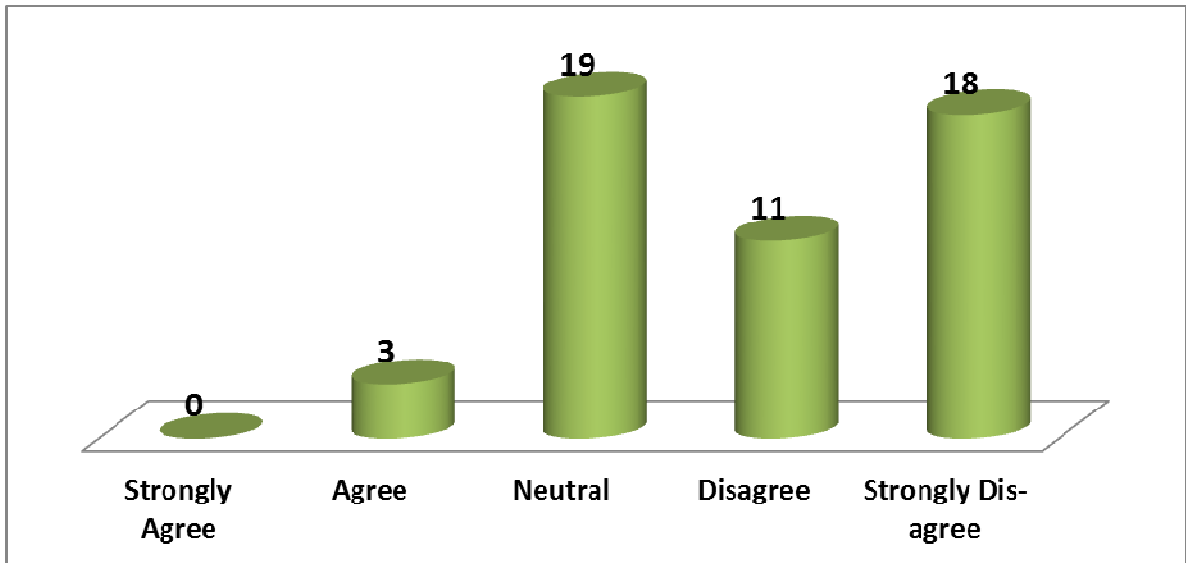
Item 4 on table 4 indicated the extent of responses regarding long time documentation process. From statistical data, it shows that the value of mean is 2.15 ranked the value of answer is located between disagree and strong disagree the value mode(3) from the mode value and percentage we can see the general direction of answer towards the value of disagree which 43(70.4%) from the total answer and strongly disagree 13(13.3%) of answer The value of standard Deviation is 0.0959 that indicates that to create implication for import and export activities and the customer also to exposed unnecessary expense. due to this reason the company changes in electronics documentation process.

Apart from specific challenges multimodal transport services stockholders were are common challenges in supply chain management as a table on item six indicated the value of mean is 2.5 which means that the value of answer is located between strongly disagree and disagree the value of mode is 2 confirming the answer tends to be strong disagree from the percentage we can see the general direction of answer towards the value of disagree 17(27.8%) of answer .the value of standard deviation is 0.870 from stockholder responses which implies that shipping transport and logistics enterprise there is limited supply management network this is also affected stockholders activities.



**Fig 4.3 Supply Chain Integration in percentage**

Apart from specific challenges, multimodal transport services are common challenges in supply chain management as the table on item six indicates. The graph indicated that the value of mean is 2.5 which means that the value of answer is located between strongly disagree which has 40.9% and disagree; the value of mode is 2 confirming the answer tends to be strong disagree from the percentage. We can see the general direction of answer towards the value of disagree 27.8% of answer the value of standard deviation is 0.870 from stockholder responses implies that shipping transport and logistics enterprise there is limited supply management network this is also affected stockholders activities.



**Fig-4.4 Prior notification for any transportation schedule change in percentage**

Apart from specific challenges multimodal transport services stockholders were are common challenges in supply chain management as a table on item six indicated the value of mean is 2.5 which means that the value of answer is located between strongly disagree and disagree the value of mode is 2 confirming the answer tends to be strong disagree from the percentage we can see the general direction of answer towards the value of disagree 17(27.8%) of answer the value of standard deviation is 0.870 from stockholder responses implies that shipping transport and logistics enterprise there is limited supply management network this is also affected stockholders activities

### **Qualitative Data Analysis**

#### ***Interview with logistics expert and operation manager***

Eight questions were presented to expert of Ethiopian Shipping and Logistics Services Enterprise. The responses for an interview are summarized and analyzed as follows:

Q 1. What are the major activity being performed in your company?

According to the logistics experts, the current mandate of the company was from the house Peoples Representatives on code number 196/ 1994. They provided sea transport services in the country surrounding area and international sea routes, protecting the country socio-economical interest in international sea transportation sector, and providing shipping transportation services for cargoes bought on FOB bases from the ports that the company's services covers which is to make efficient use of foreign currency that might be paid if foreign shipping company's service used. In addition to that responsible to licensing deferent stockholder,

Q2.What kinds of procedures are taken by your department?

The major activity of this section is leading, controlling, evaluating and monitoring all Ethiopian shipping and logistics enterprise operation including multimodal transport services inside country and abroad. There are different supplies chain in corporate working with our company for example, freight forwarder, multimodal transport services, transporter and clearing agent all this stakeholder from the operation started to complete the process were applying the latest software developed to control and evaluating the performance of each stakeholders activities to improve their competitive position in the international market and reducing warehouse cost, faster transit of cargo facilitate for the country as well as the customers of Ethiopian shipping and logistics enterprise.

Q3. What are the controlling mechanisms in your department?

As the interviewee responds concerning the controlling mechanisms, it enable to judged whether shipping service is quality or not and listed some of them as freight rete competitiveness, on time delivery cargo, cargo safety, all documentation process, availability of service from the needed ports and customer friendly by manual system. IT based communication exchange area among those criteria currently new soft were developed to the overall movements of goods and services mentored by this system

Q 4, what kind of system is currently used in your office to reduce transport logistics costs?



According to operation managers, currently the country's import and export demands to increase by a large number due to this Ethiopian shipping transport and logistics enterprise conducting multimodal transportation system. This system is to ensure efficiency, reducing waiting time, minimizing warehouse cost, and to improve the lead time movement of goods from previous time.

Q5. What are the challenges associated with the system?

Ethiopian shipping and logistics enterprise have a responsible body for to reduce transport logistic and other relevant expenses for this reason should be conduct multimodal operation responsible to lead this operation in order to ensure efficient cost effective and reliable in port and export movement of cargo from shipping point to destination. Know the challenges are the company employees, stockholders and customers it cannot easily understand the multimodal operation.

Yes the major challenges are the company's employees, customers, stakeholder unable multimodal transportation system due to this stele remarkable problems those are delays goods at the port financial constant lack of information system all this are happened on the customer side, on the company side also lack of Human Resource effective operation facilities and resistance of adapting new technology the main challenges.

Q6. In what way those challenges affect the customer and stakeholders?

Multimodal transportation system is the known phenomena in the country due to this remarkable problem; those are delays goods at the port, financial constant, lack of information system inadequate dry port, lack of efficient counters' availability, lack of human resource all this are happened on the company's side. On behalf of the customer for the lack awareness it lead us to insure extra storage cost, the goods to spoiled in the port Djibouti, it leads to bankruptcy, to exposed for unnecessary lion, and disqualifies the market competition the stockholder like transporter drivers and assistance driver for dealing loading unloading schedules to exposed for unnecessary expenses all this are affects the customer and to reduce the company's efficiency.

Q7. How do you evaluate your operational officer's knowledge and skill regarding the multi-modal transportation system?

According to the logistics expert, employee's knowledge and skill is limited because the multimodal transportation operation system is newly conducting in the past seven years that is one problem; furthermore there is lack of professional workers in this area. There for in the near future to fulfill this gap we have planned to give training to employee's customers and professional workers.

Q8. What do you recommend for the above problem to be solved?

Multimodal transportation service by itself is very complex and challenged operation. To ensure effective and reliable activity, all stakeholders, customers, the government body are working hand in hand. The procedures and multimodal activities should be supported by online technology because the demand of growing country import and export transaction to increase time to time.

The major challenges that multimodal transport services face in day to day operation are fragmented unscheduled transport availability, inadequate dry port un-consistency shipping scheduled lack of adequate containers delays goods at the port resistance of adapting new technology lack of human resource, effective and efficient operation facilities the main company's challenges.

According to the officer interview all those challenge can be solved there is different strategies states by the company the first one all customers stakeholders and employees come to the modern technology and working together with Ethiopian shipping and logistic enterprise the second one also the government more emphasis for this section to facility different operation materials like Forklifts, Long Hall truck, computers and other machines the third one is the Ethiopian shipping and logistics enterprise try to upgrade the carrier of employees and continues training with regarding to new technology transformation in addition to that try to create awareness about stakeholders and customers what do you main multimodal transportation and what is the advantage of this operation to give benefit the country economic and investors all this are working together while the company simply achieving for the five years strategic plan.

## **CHAPTER FIVE**

### **Summary of Findings, Conclusion and Recommendations**

#### **5.1. Summary of Findings**

Since multimodal transportation system is new to Ethiopian shipping and logistics enterprise, the enterprise is facing various challenges in undergoing its operation. According to the finding the challenges are categorized into four main groups. The first challenges are related to factors within the company. The second challenges concentrate on external factors from stakeholders and customers. The third challenges come from the government side. Finally, the last challenge is lack of awareness about supply chain management.

##### **5.1.1 Quantitative Data summary**

- ✓ Among the respondents population, (72%) of the company's customers were male and the rest were female.
- ✓ More than 39% of the respondents were BA/BSC holders.
- ✓ About 55% of the respondents were importers and exporters in their job assignment while 13% and 10% were transporters and clearing agents respectively. The remaining 7.8% were government employees.
- ✓ More than 80% of the respondent customers and stakeholders were working with the company for more than 5 years and the remaining 20% were working for less than five years.
- ✓ More than 85% the respondents were used either road or railways as a mode of transportation, and the remaining 15% were used air.
- ✓ 87% of respondents were dissatisfied about the enterprise physical facility
- ✓ For more than 78% of respondents were answered very low for the company's operational responsibility.
- ✓ Regarding to modern technology uses of for documentation process, 31.4% of respondents were answered high level of satisfaction while 27.5% and 19.6% of responded very low.
- ✓ 55% of the customers are dis-satisfied about prior notification for any transportation schedule changes, but 32% were answered neutral.

- ✓ 85% of the company's customers were dissatisfied with container availability
- ✓ 73% of the respondents claim that they were not happy about the time required for the documentation process.
- ✓ 65% of the respondents were dissatisfied about the service rendered at the country dry ports
- ✓ 81% of the customer respondents were dissatisfied by the company's inconsistent shipping schedule.
- ✓ 65% of the customers were responded low satisfaction about qualified workers is not assigned for the job.
- ✓ More than 55% of customers had less satisfaction about the company's complaint management system.
- ✓ 79% of the respondents were showed their level of disaffection for supply chain integration with other partners

### **5.1.2 Internal Challenges**

- ✓ Enterprise's employees lack inadequate knowledge on modern technologies and understanding that helps to execute the operation successfully, and to entirely implement multi modal activities as planned, in the country. In addition, there was no continuous and adequate on site/off site. And training was provided to the staff as part of human resource capacity building.
- ✓ Employees' reluctance for accepting and applying new technologies has greatly affected the smooth implementations multimodal operation service.
- ✓ The concept and aim of multi modal transportation system is not understood equally among the enterprise workers.
- ✓ Poor documentation process and its handling were observed and the time for document processing took extended time against the standard.
- ✓ The enterprise over all controlled the entire operational activities and there was a limited involvement on partners side
- ✓ Inconsistent shipping schedule and lack of coordination / integration to use a very inadequate resource wisely.
- ✓ Delays of goods at the port, waiting for documentation process, and transport unavailability, that affected the operation.

- ✓ The non-functionality of the new dry ports other than *Mojo* and *semera dry ports* were seriously affected the sector not facilitating the logistics associated with export/import shipment.

### 5.1.3 External Challenges

- ✓ Customers were forced to pay extra storage. The multi modal operation service is yet not fulfilled the demand requested by its customers
- ✓ Adequate containers and other port machineries (forklift, terminal tracker, and terminal chassis) remained as the major area challenge for loading /unloading related activities.
- ✓ The rationale, concept/ideas and overall mission of multi modal operation service was not equally understood by its customers and stakeholders. The effort to curb this problem is not yet acceptable. Customers were disqualified from market competition.
- ✓ Stakeholders and customers were not finically capable enough to facilitate the operations and it has enormously affected to achieve a standard lead time for moving goods from the origin pint to final destination/customer ware house
- ✓ Inadequate operation coordination due to the shortages of professional/qualified workers
- ✓ Inadequate Supply Chain Integration between the company's and Stakeholders
- ✓ Poor performance in the practices of S.C.M in different commercial and governmental sector of Ethiopia. For example
  - Lack of qualified workers in the operation place
  - Poor documentation process and handling
  - Unclear and inconsistent legal agreements between customers and Multi modal operators
- ✓ The enterprise foreign agents focused on their benefits revive un necessary orders to maintain their benefits only
- ✓ customers and stakeholders have a limited awareness about multi modal operation
- ✓ Delayed shuttling by Importers/exporters affected the overall operation performance.
- ✓ The enterprise agents found in the abroad received unnecessary/extreme order from their customers to expand their business and used to hold customer. Thus, artificial containers shortage and goods movement would be interrupted sharply.

#### **5.1.4 Secondary Data summary**

- ✓ It is believed that the introduction of multi modal transport system has benefited the country in many respects, especially by minimizing time loss at transit shipment points, reducing warehousing cost, faster transit of cargos, reducing the cost of exports and improved their competitive position in the international market , minimizing burden of documentations and formalities, improve safety and security of goods. However, the pervious lead time from port Djibouti to the country dry port on average was 1-30 days, because of the introduction of Multimodal transportation services, the lead time was planned to be reduced by half and it was calculated below 15 days. Due to physical availability, assignment of qualified workers in the sector, and lack of awareness of multi modal operation by importers and exporters, the calculated lead time was not meet as of yet by the enterprise.

As shown in the secondary data, the enterprise has established seven dry ports across the country, but currently only two ports (*Mojo&Semera*) are working at their full capacity. As a result of this and the growing demands import/export the existing containers are not fulfilling customer's inquiry. In addition, poor supply chain integration became the fueling factors for enterprise to achieve below the standard.

## 5.2. Conclusion

The study was conducted to find out the major challenges of multimodal transportation services in relation to the Ethiopian Shipping and Logistics Service Enterprise. Also, it intended to discover the major activities of multimodal transportation and the factors that influence in shipping and logistics activities.

The Ethiopian shipping and logistics enterprise is not operating as it is expected to because of lack of physical facilities, unskilled manpower and poor coordination among customers and stakeholders, Therefore in order to manage different activities under multimodal transport operations, i.e., freight forwarding, clearing and transporting, incorporating clearing agents, transporters and customs officials is a big challenge. To mention some, inadequate dry port, waiting for documentation process, lack of information technology, unskilled human resource, uncommitted employees are determinant factors that challenge multimodal transport operation in Ethiopian shipping and logistics enterprise.

Based on the gathered data in line with the basic research questions raised, the following conclusions are drawn after assessing the challenges of multimodal transportation operation posed in Ethiopian shipping transport and logistics enterprise. The researcher concluded that some major failures were identified and also highlighted under the summary of major findings. With regard to physical facilities, the following are the drawbacks of the company: inadequate dry port, unavailability of enough containers, inconsistency in shipping schedule, waiting time of transportation delivery, and slow documentation process. These have affected import and export transactions in the country as well as individual investors.

According to the findings, multi modal enterprise is found to be not issuing payment for the transporters in timely manner, because of this reason, vehicles stuck with different technical problems while on the road to the port Djibouti and the owner of the truck could not take an immediate action as they are not get paid timely and faced a huge financial shortages to carry the operation. Therefore, additional time has required to fix the truck problems and to reach in to the port Djibouti. Subsequently, a substantial amount of containers would appear at the port.

The lack of contractual agreements between Enterprise and stakeholders has caused a regular operational service interruption and added an extra burden to the enterprise not to fulfill the current growing demand. Furthermore, Lack of proper coordination, inadequate multi modal operation awareness and limited financial capacity by the customers has strained the facilitations of smooth goods movement port to destination point.

With regards to human resource, the date indicated that the performance of the employees is not up to the expectation. There is no prior notification when there is delay in shipping or changing schedules at the ports. There is poor performance in supply chain integration. This, in turn, leads to losing trust in customers and stockholders. Sometimes it incurs the company additional costs. Ethiopia is a land lock country and it has a negative impact on the national import and export activities if a multi modal transportation system is not strengthen and implemented systematically that to ensure effective and efficient transportation service.

### **5.3 Recommendation**

The recommendations are made based on the failures observed and in a way that answers the major research questions and with intention to meet the objective of the study. The recommendations highlighted as follows.

- The study was conducted to find out the major challenge of multimodal transportation services in Ethiopian shipping transport and logistics enterprise .The company should fulfill the physical facilities like dry port availability, in consistency shipping schedule, dealing of documentation process and transport availability; this is to create strong relationship with the customer and stockholder in addition to that more investor came from abroad this is to maximizing country economy and to gat valuable foreign currency.
  
- The company should expand the availability of its services through latest technology and provide a real time solution by integrating customer relationship and management system. It can also automate its customer service features like cargo tracking, processing fright and quotation,



inquires, online customer support, and to creation awareness stations periodically. All this facilities available by the company's .and large amount of dollar will be saved in the land locked country.

- Evaluating employee's performance survey can also help the company to identify the potential multimodal transportation services delivery problems that also have a direct relationship with the customer satisfaction. Besides that the company should providing extensive training can help to make employees capable of rendering the expected service from them while motivating them at the same time to give visible contribution for shipping transport industry.
- The company should prompt have to deploy to fasten the process implemented to refund the amount of deposit for the containerized package till the consignees' warehouse.
- It is better to provide customers with a chance to present their appeal on the spot and compensating them if their complaint is logical and to decrease their disappointments by creating impression. This can help the company to get more accurate feedback from customers rather than taking time to conduct satisfaction surveys
- The company should improve its delivery time as fast as possible in order to increase the movement of goods by adding value to satisfy import and exporter. Because delays is the vital concern of customers which affect their business and it pool out them from the existing computation.
- Even if it is the only company in Ethiopian that renders shipping industry services, the company's should handle the multimodal transportation services properly otherwise the domestic investors and foreign investors to shifted the capital for other well facilitated counters.

- Ethiopian shipping transport and logistics enterprise should establish a strong Monitoring and evaluation system for the movement of goods in the operation time.
- To ensure effective multimodal transportation services, the company should conduct information sharing experience with stockholder and customers. Since information is vital through the shipping industry and to making decision timely when introducing system to collect analyses and disseminates desirable. The information system should be acceptable and use friendly by its customers
- To ensure effective multi modal transportation operation service, the enterprise should place a standard contractual agreement with customers and stakeholders.
- Customers and stakeholders should improve documentation process and work by setting a plan of action for each activities.



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Appendix A: Questionnaires for Multimodal operation

Appendix B: Interview for the company experts

Appendix C: Questionnaires for stockholder

**Interview questions for Ethiopian shipping and logistics enterprise for higher official**

1. What are the major activities being perform in your company?
2. What kind of procedures taken by your department?
3. What are the controlling mechanisms in your department?
4. What kind of system currently used in your office to reduced transportation logistic costs?
5. What are the challenges associated with multimodal transport system?
6. In what way those challenge affect customers and stakeholders?
7. How do you evaluate your operational officers' knowledge and skill regarding to multimodal transporting system?
8. What is your recommendation of solution to avoid the above problem?