

**ST.MARY' S UNVERSITY COLLEGE
DEPARTMENT OF MARKETING MANGEMENT
FACULTY OF BUSINESS**

**THE PRACTICE AND CHALLENGE OF LOGISTIC ACTIVITIES IN THE CASE OF
POPULATION SERVICE INTERNATIONAL**

**BY
NAPOLEON YOSEPH**

**JUNE 2013
SMUC
ADDIS ABABA**

THE PRACTISE AND CHALANGE OF LOGISTIC ACTIVITIES IN THE CASE OF
POPULATION SERVICE INTERNATIONAL

A SENIOR ESSAY SUBMITTED TO THE DEPARTMENT OF MARKETING
MANGMENT

IN PARTIAL FULFILMENT OF THE REQUIRMENT FOR THE DEGREE OF
BACHELER ARTS IN MARKETING MANGMENT

BY
NAPOLEON YOSEPH

JUNE 2013

ST.MARY 'S UNIVERSITY COLLEGE
FACULTY OF BUSINESS
DEPARTMENT OF MARKETING MANGEMENT

THE PRACTICE AND CHALANGE OF LOGISTIC ACTIVITIES IN THE CASE OF
POPULATION INTERNATIONAL SERVICES

BY
NAPOLEON YOSEPH

APPROVED BY THE COMMITTEE OF EXAMINERS

DEPARTMENT HEAD

SIGNATOR

ADVISOR

SIGNATOR

INTERNAL EXAMINER

SIGNATOR

EXTERNAL EXAMINER

SIGNATOR

ACKNOWLEDGMENT

Above all, I would like to praise God for helping me to finish this study.

I would also like to forward a special gratitude to my advisor Abera Yilma for his continuous follow-up, advice, comment, and encouragement through the process of completing this research paper.

I would like to extend my thanks to my wife Tigist Alemu for her support, and encouragement from the very beginning of my education until now.

And, last but not least, I forward my thanks to my little sister Nane Yoseph for her special encouragements, and sisterly love.

Table of contents

Title	Page
Acknowledgment	I
Table of contents	II
List of table	V
Chapter 1: Introduction	
1.1 Back Ground of the Study.....	1
1.2 Statement of the Problem.....	2
1.3 Basic Research Question.....	4
1.4 Objective of the Study.....	4
1.4.1 General Objective	4
1.4.2 Specific Objective.....	4
1.5 Significance of the Study	5
1.6 Scope of the Study/ Delimitation of the Study.....	5
1.7 Research Design and Methodology.....	5
1.7.1 Research design	5
1.7.2 Population, Sample size, & Sampling Technique	6
1.7.3 Type of Data Collected	6
1.7.4 Methods of Data Collection	6
1.7.5 Methods of Data Analysis	7
1.8 Limitation of the study	7
1.9 Organization of the study	7
Chapter 2: Review of Related Literature	
2.1 Logistic	8
2.2 Element of logistic	8

2.2.1 Network design	8
2.2.2 Inventory	9
2.2.3 Warehousing	10
2.2.4 Order processing	11
2.2.5 Demand forecasting	11
2.3 Basic inventory concept.....	12
2.3.1 The objective of inventory	14
2.3.2 Function of inventory	15
2.3.3 Category of inventory	16
2.3.4 Reason for carrying inventory	17
2.3.5 Wrong reason for carrying inventory	18
2.3.6 Inventory performance measure	19
2.4 Inventory Mangement	19
2.4.1 The objective of inventory management	20
2.4.2 Symptoms of poor inventory management	20
2.4.3 Measure of effectiveness of inventory management	21
2.4.4 Measure to decrease inventory-related cost	21
2.4.5 Inventory turn over	21
2.4.6 Impact of demand pattern on inventory management	21
2.4.7 Important of inventory management	22
2.4.8 To be effective inventory management must have the Following	23
2.5 Integrated Logistics management	23
2.5.1 Cross functional team work	23
2.7 Knowledge sharing process	26

Chapter 3: Data Presentation, Analysis and Interpretation

3.1 General characteristic of the respondents 27
3.2 Analysis of the finding of the study 30
3.3 Analysis of open ended question 35

Chapter 4 : Summary, Conclusions and Recommendations 44

4.1 Summary 44
4.2 Conclusion 46
4.3 Recommendation 46

Bibliography

Appendix A: Questionnaires

Appendix B: Interview guide

List of Tables

Title	Page
Table 1: General characteristic of customer profile.....	28
Table 2: The frequency of giving order per month, and customer responses who changes order.....	30
Table 3: Customer response about the company how it work in related to customer need.....	31
Table 4: Customer responses about a chance to see the warehouse of PSI & also is it good enough to keep inventory.....	32
Table 5: Customer responses about who get a defect items when they take A good & is there a right to replace a defect items.. ..	33
Table 6: Customer response on to which they communicate the responsible body when they gate a defect items, & also did they gate a quick response from those concerned body.....	34
Table 7: Customer reflection to wards the goods that take from the company is on related to there preference.....	35

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

According to Bowersox and Closs (2000:4) Logistics involves the integration of information, transportation, inventory, warehousing, material handling and packaging. All of these areas of work provide a variety of stimulating jobs. These jobs combine to make overall logistics management challenging and rewarding career .because of the strategic importance of logistical performance an increasing number of successful logistics executives are promote to senior management.

According to Kotler P., Armstrong (2006:401) Inventory management also affects customer satisfaction, Here mangers must maintain the delicate balance between carrying too little inventory and carrying too much. With too little stock, the firm risks not having products when customers want to buy to remedy this firm may need costly emergency shipment or production. Carrying to much inventory carrying costs, and stock obsolescence in managing inventory, firms must balance the cost of carrying larger inventories against resulting sales, and profits. Many companies how greatly reduced their inventories and related cost through just in time logistics systems with such system producer and materials carry only small inventories of parts or merchandise often only enough for few days of operations.

According to P.Havaldor (2007:15.7), Inventory Management is a business manages their routine operation of manufacturing, & marketing with the help of inventory. This could take the form of raw materials, packing materials, (to support production) work in process on the production shop floor, & finished goods (to support marketing).

Therefore Population Services International (PSI Ethiopia) is an organization that selected by student researcher. It is establish 2003. Now a day, the organization is located around on Meskel flower area, just in front of Nazarewe building. In addition, it

is a good position on global health organization with programs targeting malaria, child survival, HIV and reproductive health. PSI provide lifesaving product, clinical Services & behavior change communication that empower one world most Vulnerable population to lead heather lives

PSI has 88 employees two expatriate staff based in Addis Ababa. The product that delivered by PSI are medical related on HIV, medicine related on transmitted infection treatment ,condoms, Weha agar, Iodized salt etc. Then ,the company logistic department is on the position in order to planning, implement & controlling process of physical flow of material & final product from the point of origin to the point of use-to meet the customer need . Moreover, inventory management is especially making a decision regarding the level of inventory & estimating the demand of the product based on the information of marketing areas. Therefore, the student researcher is within a passion in order to investigate how the practices and challenge of logistic activities on inventory management in the case of PSI organization.

1.2 Statement of the Problem

According to the M. Lambert, R. Stock, & M. Ellram (1998:120) Inventory is a major use of working capital. Accordingly, the objective of inventory management are to increase cooperate profitability through improved inventory management to predict the impact of corporate policies on inventory levels, & to minimize the total cost of logistic activities while meeting customer service requirement. Measuring inventory management effectiveness is the impact that inventory has corporate profitability by lowering cost or supporting increased sales.

Measure to decrease inventory related cost include reducing the number of back order or expedited shipments, removal absolute or dead stock from the system, or improving the accuracy of forecasts. Transshipment of inventory between field warehouse & Small-lot transfers can be reduced or eliminate by better inventory planning. Better inventory management can increase the ability to control & predict how inventory

Investment will change in response to management police. (M. Lambert, R. Stock, and M. Ellram1998:120).

With this regard, the student researcher will investigate the practices & challenge of logistic activities on inventory management in the case of PSI organization. Based on the student researcher preliminary study the symptoms or gaps of the organization as follows.

The student researcher observes a problem or gaps that occur between different departments within the organization. As per the information, the student researcher find from the head of inventory management the gap that occurs between different departments, it results- the company forced to avoid a large quantity of absolute & damaged pharmaceutical products. Therefore, the student researcher will focus & investigates in how it occurs a large quantity of absolutes & damaged goods in the company? & also demand forecasting & order processing will be the marketing parts that the student researcher gives strong attention for it.

In addition to this, the warehouse that the company uses only one which available on Addis Ababa area, but the customer of the company which are found both urban & rural areas .There for ,the student researcher will investigate it on the availability & the numbers of warehouse in perspective of customers which founds on different locations.

1.3 Basic Research Questions

In order to investigate the stated problem the student researcher was try to answer the following basic research questions.

1. What are inventory management practices look like in PSI?
2. What are the challenges of inventory management practices in PSI?
3. What methods the company uses for the integration between departments within inventory management area?

1.4 Objective of the Study

The objective of this study was both general and specific.

1.4.1 General objective

The main objective of this study was to investigate the practices and challenge of logistic activities on inventory management in the case of Population Services International (PSI Ethiopia).

1.4.2 Specific objectives

The specific objectives deal with the following.

- To identify the inventory management practices in Population Services International.
- To find out the challenge of inventory management practices in Population Services International.
- To figure out the methods the company use for the integration between departments with in inventory management.

1.5 Significance of the Study

The study was a great contribution or value for the following parties.

- ❖ It helps a great significance for the student researcher to implement and analyses theoretical application in a real world.
- ❖ It also helps the other researchers to use as a base in conducting a further research in this area.
- ❖ Finally, it also helps the company in order to know symptoms of the Organization.

1.6 Scope of the Study/ Delimitation of the Study

This study was not examining the detail parts of the logistic activities, which are transportation, packaging, warehousing, procurement, and forecasting. The student researchers were paying attention on inventory management activities in Population Services International. However, logistic activities are interlinked by nature. Because of these, the student researcher raises some points, which are element of logistic activities in related on inventory management, & this study were conducted on more of a marketing perspective. In addition to this, the study were delimited only to Addis Ababa area, and included the period with in 2010 - 2012.

1.7 Research Design and Methodology

1.7.1 Research Design

The student researcher was applying descriptive research design to describe the practices and challenge of logistic in general, but inventory management in Population Services International, particular.

1.7.2 Population, Sample size, and Sampling Technique

- **Population**

The target populations of this study were supply-chain management, inventory management, and customer of the company.

- **Sample Size**

It is difficult to determine the sample size of the customers; as a result, the student researcher was employing the recommendation of Malhorta (2006:339). I.e. minimum of 200 respondents were take as a representative sample. In addition to this, two respondents were taking from the head Supply-Chan management, & Inventory management.

- **Sampling Technique**

The student researcher was used non-probability sampling technique, since it is appropriate technique while determining sample frame will be difficult. Regarding a

non-probability sampling technique the student researcher was used accidental sampling technique which base on the availability, and capturing the audience. In addition to this interview was the other sampling technique for the head of inventory management, and Supply- chain management.

1.7.3 Types of Data Collected

To conduct this study both primary and secondary data were use.

Primary data were collects from the head of supply- chain management, inventory manger and customer of the company.

Secondary data was included from published and unpublished sources like internet, reference books related with the subject matter.

1.7.4 Method of Data Collection

The questionnaires were use for customers of the company. The questionnaire includes both open & close-ended questions to make the respondents were free, & in order to get fair answer. The interview parts were conducts with the Supply-chain management, because inventory management found within this department. Therefore, the interview was conducts by using unstructured interview. The observation was going on to the logistic activities. In addition to this secondary data were obtain from reference books and internet, and company profile.

1.7.5 Method of Data Analysis

The responses to questionnaire from the selected sample were analyze by descriptive type of data analysis technique, for summarizing the finding data that was tabulating in logical manner, and with in quantitative analysis technique it use different systematic methods like percentage & tabulation type that help the student researcher to draw conclusions. Qualitative analysis was also making for interpretation of interview, & an open-ended question were narrate.

1.8 Limitation of the Study

During the presentation of this research study , the student researcher was constrained by various limitation, among the major limitation, some of the customer were not willing to fill the questionnaire, not only the customers, those managers who selected for the interview were busy , however, it create the difficulty the student researcher try to conducting the study as much as possible.

1.9 Organization of the Study

The study organized into four chapters. The introduction part is presents in the first chapter that includes the background of the study, statement of the problem, research questions, objective of the study, delimitation /scope of the study, significance of the study, definition of terms, research design, and methodology, limitation of the study, and organization of the paper.

The second chapter deals about the review of related literature of the study; it is more of conceptual work of the study. The third chapter discusses data presentation, analysis and interpretation. Finally, the last chapter deals with summary, conclusion and recommendations.

CHAPTER TWO

2 REVIEW OF RELEATED LITERATURE

2.1 Logistic

According to Agrawal (2003:7) Logistic is the process of planning, implementing, and controlling of efficient effective flow and storage of goods, services and releated information from the point of origin to the point of consumption for the purpose of conforming to customer expectation.

P. Agrawal (2003:30) also mentions that the primary component of logistic activities includes net work design, transportation, inventory management, & order processing. The supportive components of logistic activities include storage & warehousing, materials handling, proactive packing, procurement, information, & forecasting.

Bhat P.(2005:7) definie that logistic as the process of anticipating customer need and wants, aquring the capital, material, people, technolgy, and infromation necessary to meet those needs and wants, optimising the goods or service producing the net work to fulfil customer request and utilizing the net work to fulfil customer request in a timely manner.

2.2 Elements of Logistic

Logistical competency is achieved by coordinating of those elements.

- Network design
- Information
- Transportation
- Inventory
- Warehousing, Material handeling, Packing.
- Order processing
- Demand forecasting

2.2.1 Network design

According to Bowersox & Closs(2003:25) The number, size,& geographical relationship of facilities used to perform logistical operations directly affect customer service capabilities & cost. Network design is primary responsibility of logistical management since a firm facility structure is used to provide product & materials to customers. Typical logistic facilities are manufacturing plants , warehouses, cross-dock operations & retail stores. Determining how many of each type of facilities are needed, their geographic location ,& the work to be performed at each is a significant part of network design. In specific, situations ,facility operation may be outsourced to service specialists. Regardless of who does the actual work ,all facilities must be managed as an integral part of firms logistical network. The network design requirement is to determine the number & location of all type of facilities required to perform logistic work. It is also necessary to determine what inventory & how much to stock at each facilities & where to assign customer order for shipment. The network of facilities form a structure from which logistical operations are performed. Thus the network incorporate information & transportation capabilities. Specific work tasks related to processing customer orders, maintaining inventory ,& material handling are all performed within the network design framework. Choose among five main transportation modes: truck, rail, water, pipeline, and air along with an alternative mode for digital products the internet.

Bowersox and Closs (2003:29) also explain that transportation is the operational area of logistics that geographically positions inventory. Because of its fundamental importance and visible cost, transportation has received considerable managerial attention over the years. Almost all enterprises have managers responsible for transportation.

2.2.2 Inventory

According to Bowersox and Closs (2003:30) the inventory requirement of a firm depends on the network structure and the desired level of customer service. Theoretically, a firm could stock every item sold in a facility dedicated to service each customer. Few

business operations could afford such a luxurious inventory commitment because the risk and total cost would be prohibitive. The objective is to achieve the desired customer service with the minimum inventory commitment, consistent with lowest total cost. Excessive inventories may compensate for deficiencies in basic design of a logistic network and to some degree inferior management. However, excessive inventory used as a crutch will ultimately result in higher than necessary total logistics cost.

According to text compiled by Derege A (page 7) inventory may be defined as usable but idle resource or it is any idle material resource of an enterprise waiting for future sales use or transformation. In other words, it refers to stocking raw materials, in process, finished tools and equipments, spares and others in order to meet an expected demand.

2.2.3 Ware housing

According to Kotler, and Armstrong (2006:401). Production and consumption cycles rarely much. So most companies must store tangible goods while they wait to be sold. A company must decide on how many and what types of warehouse it needs and where they will be located. The company might use either storage warehouses or distribution centers. Storage warehouses store goods for moderate to long periods. Distribution centers are designed to move goods rather than just store them. They are large and highly automated warehouses designed to receive goods from various plants and suppliers, take orders, fill them efficiently, and deliver goods to customers as quickly as possible. These days, warehousing has seen dramatic change in technology in recent years. Older, multi-storied warehouses with outdated materials-handling methods are steadily being replaced by newer, single-storied automated warehouses with advanced, computer-controlled material handling systems requiring few employees. Computers and scanners read orders and direct lift trucks, electric hoists, or robots to gather goods, move them to loading docks, and issue invoices.

Agrawal (2003:195), states that warehouse is the go down for keeping and storing goods and providing other related services in order to keep traders and manufactures to preserve the goods in a scientific and systematic manner to maintain their original value, quality and usefulness.

2.2.4 Order Processing

According to Havalador (2007:15.6) Order processing is getting orders in time from customers, checking on the status of execution and delivery. The sales people get the orders and usually pass it on the logistics function for processing and dispatch.

Agrawal (2003:263) also explain about the order processing that the eye of customers, product quality and feature and price factor are less important than elements like meeting committed delivery data, intact delivery, correct documentation, accuracy in filling orders, information regarding order status, advance notice of shipping delays can cost a customer more than the actual product cost. Thus, the significance of order processing is with in the perspective of logistic and supply- chain management as follow.

- Achievement of required customer service level
- Legal significances
- Point to point information

2.2.5 Demand Forecasting

According to Havalador (2007:15.5) Demand forecasting is a decision on haw much to order from Suppliers and when and how much to produce for customers. This activity normally starts with the sales forecasts given by marketing and sales function. This is normally the function of sales to develop the forecast at agreed frequencies for agreed geographies. The forecast then becomes the starting point of the planning functions, which is the responsibility of logistics.

Altekar (2005:13) also describes that any business can benefit from accurate forecast to

- optimize the business for reducing the cost of operation

- Increase sales opportunities for maximize profit
- Provide accurate information for making better decision.

Agrawal (2003:135) explains the importance of demand forecasting is not only to determine production and stocking levels but also to make broad decisions such as those involving network configuration, supply and marketing.

M. Lambert and R. Stock (1998:17) also describes that there are many types of demand forecasting. **Marketing forecast** customer demand based on promotion, pricing competition, and so on. **Manufacturing forecast** production requirements based on marketing sales demand forecast and current inventory levels. **Logistic usually becomes involved in forecasting interims of** how much should be ordered from its suppliers (through purchasing) and how much of finished product should be transported or held in each market that the organization serves. In some organization, logistic may even plan production. Thus logistic need to be linked to marketing, manufacturing, forecasting, and planning.

Forecasting is a complex issue with many interactions among functions and forecast variables.

2.3 Basic Inventory concepts

According to Bhat (2005:160), the basic inventory concepts include 1) reason for holding inventory & 2) various types of inventory. Why hold inventory? Inventory serves five purposes:

- 1) It enables the firm to achieve economic of scale
- 2) It balances supply & demand
- 3) It enables specialization in manufacturing
- 4) It provides protection from uncertainties in demand and order cycle.
- 5) It acts as a buffer between critical interfaces within the channel of distribution.

There is a briefly shown in the following:

1. **Economic of scale:** A firm can realize economic of scale in manufacturing, purchasing, & transportation by holding inventory. By purchasing large quantities, a firm gets quantity discounts. In turn, transportation can move larger volumes and achieve reduced transportation cost per unit of item moved and better utilization of transportation equipments. Manufacturing can have longer production runs (bigger batch quantities), allowing reduced per unit fixed cost. (I.e. set up cost).

Balancing supply and demand: - seasonal supply or demand may make it necessary for a firm to hold inventory; - for example, demand for some products such as chocolate, toys etc. ..., may increase in festival seasons. The cost of establishing production capacity to hold the peak demand would be substantial. If a company were to produce exactly to meet the demand when it occurs. There will be substantial idle capacity and wide fluctuations in work force requirements would result. The decision, to manufacture to stock by maintaining a relatively stable work force (i.e. level production throughout the year) would build up substantial inventory at various times during the year. On the other hand, demand for a product may be relatively stable through out the year. However, raw materials may be available only at certain times during the year (i.e. seasonal availability of raw materials.) In such situations, it may become necessary to manufacture finished products in excess of current demand and hold them in inventory.

2. **Specialization:** - inventory makes it possible for each of firms' subsidiaries to specialize in the products that it manufactures. The finished products can be ship to field warehouses where they are aggregate to fill customer order. By specializing each manufacturing plant a gain economies of scale through long production runs (reducing fixed cost per unit produced), saving in transportation cost which will more than offset the additional inventory carrying costs. Such manufacturing plants recognized as focused factories.

3. **Protection from uncertainties:** it is held as protection from uncertainties, i.e. to prevent stock outs in the case of variability in demand or variability in replenishment cycle (lead-time). Also excess raw material inventories may be alive to hedge against price increase or supply shortage. The costs of holding the inventory should be comparing to the savings realized or costs avoided by holding it.

Work-in-process inventory is often maintained between manufacturing operations within a plant to avoid production hold ups in case a critical machine or equipment were to breakdown and also to equalize production flow. Since not all manufacturing facilities produce at the same rate, alternatively organizations are focusing on rebalancing the production processes to minimize or eliminate the need for work-in-process inventory. Inventory planning is critical to successful manufacturing operations because shortage of raw materials can cause production stoppage or change in production schedule, which in turn may result in a shortage of finished products. While scarcity of raw materials can disrupt normal manufacturing operations. Excessive inventories can increase inventory-carrying costs and reduce profitability.

Finished goods inventory can be used as a means of improving customer service level by reducing the likelihood of a stock-out due to unanticipated demand or variability in lead-time.

4. **Inventory as a buffer:-** inventory is held throughout the chain to act as a buffer for the following interfaces:
 - a) Supplier - procurement (purchasing)
 - b) Purchasing -Production
 - c) Production - Marketing
 - d) Marketing - distribution
 - e) Distribution - intermediary and
 - f) Intermediary - consumer / user.

Because channel participants are supported geographically, it is necessary to hold inventory throughout the supply chain to successfully achieve time and place utility.

2.3.1 The objective of inventory

According to Halvalder (2007:15.17), Businesses manage their routine operation of manufacture and marketing with the help of inventory. This could take the form of raw material, packing materials,(to support production), work-in process on the production shop floor and finished goods (to sporting marketing) .The objective of inventory include-

- To maximize customer services – Inventory holding ensure availability of stocks when and where required inventory is protection against any kind of uncertainty for example, if a competitor is not able to serves the market with his product for any reason, the company should have enough inventory to fill the gap in the market.
- Help minimize the cost of plant operation-production can happen in economic batches. If production has to get these economies, it has to pack lot sizes of different SKUs per a schedule and build up stocks.
- Minimum investment to deliver the agreed costumer service.

2.3.2 Functions of Inventory

According to Halvalder (2007:15.17) Inventory acts as buffer between:

- Supply and demand – both in terms of quantities and the timing.
- Customer demand and finished goods – again in terms quantities and the timing of the demand
- Requirements for an operation and the output from the previous – on the shop floor
- Parts and materials to begin an operation and the suppliers of the materials.

It is rightly said that inventory is the shock- absorber of a business. However, maintaining inventory means high carrying casts, reducing profit and even loss in market share. In today’s competitive world, wasteful inventory management practice are permitted or tolerated.

Inventory driven by the following factors:

- Target service level parameters- if 100 per cent service level is required, it may mean a large inventory as not single stock out situation is acceptable
- Lot sizing practices- vendor at times dictate the minimum lot size to be purchased of a given price -this may increase the stock level.
- Safety stocks and safety time conventions- arrive at with experience to handle uncertainty and disruptions'.
- Volume discounts and purchase arrangement
- Seasonal build up needs -as all raw materials may not be available all through the year example of tea .edible oils.

2.3.3 Categories of Inventory

According to Halvalder (2007:15:19), inventory could be of the following categories

- **Anticipation;** this has been built in anticipation of future requirement. Example could be of inventory meant for peak season demand, build up expecting a strike or inventory meant for a sales promotion
- **Safety or fluctuation;** this part of the inventory is meant to cover random, occasional unpredictable fluctuation in supply and demand and lead- time. Examples could be of inventory meant to prevent disruption in operation delivery problem and so on.
- **Lot size:** the need for this inventory is normally driven by the vendors who insist on certain price or discount only on fixed quantities , which may not be immediately required for production. The inventory could to get discount, reduce shipping ,set up and ordering costs. This also called cycle- stock
- **Transportation ;** This is mostly inventory which needs to be in transits as it normally takes a certain time to move inventory from one point to another this is also known as pipeline of movement inventories. An example could be factor to a distribute center or C&FA

- **Hedge;** There are a number of material which are commodity based where the price fluctuate every day – like edible oils, precious metal like gold. Companies that do business in a rainy day – where prices are not so favorable .this hedge in vinery
- **Maintenance repair and operating supplies;** the term consumable is also used to describe these kind of material in stock .As the name indicated these material are meant to support operation or maintenance .They are not input into the production system but facilitate production .Example could be cutting tools, spare parts ,consumable and lubricants .

All the above categories of inventories are kept raw materials, work-in-process finished goods, MRO and in transit / pipeline stocks.

2.3.4 Reasons for carrying inventory

Halvalder also explain that (2007:15.18), reasons for carrying some of these categories of inventories could vary between different operating situation .The quantities held might also vary. Some of these reasons could be highlighted as follows;

- WIP or pipeline (in plant) stock; production rates which depend on men and machines are finite and well defined. Production also requires number of steps to be completed and each stage may take varying amounts of time hence the need for this inventory.
- **Cycle stock** is again on production line to minimize set – up and time which are fixed. For example a tooth paste manufacturing line would like to complete 2 days of continuous production of the 200 gm pack before shifting to a 100 gm pack for the next 3 days and 50 gm on the last day of working week.
- **Seasonal stock;** the reason is obvious. Production like machines manpower is fixed but the demand can be seasonal. There is a need to build up finished goods stocks a company selling room heaters in winter has to produce the units other months also to meet the peak demand in the season.

- **Safety stock:** as demanded is a random variable and uncertainties of supply can not always be seen, some level of safety stock is always maintained. Safety stock takes care of the fluctuations in demand.
- **Stocks** could also be held for other reasons like price fluctuation, & market shortages.

Whatever may be the reasons for carrying inventory, the argument always arises whether the sheet of a company and more of assets should be good moreover in the inventory is an asset & its cost is not reflected in the P&L account, is having too much of it such a bad thing?

However, it has now been well recognized in business the world over that inventory is working capital / supply chain cost driver.

2.3.5 Wrong reasons for carrying inventory

According to Halvalder (2007:15.8) while there are several good reasons for carrying inventory, which is the interest of the organization, some companies tend to carry inventory for all the wrong reasons slowly creep in and get noticed when it might be too late. Let us examine what some of these wrong reasons could be;

- Poor quality of materials, and the yield. This could happen due to supplier quality, which in the keep varying or the accepted level of defects as counteracted is not tight enough. Even when the quality is accepted as per spent, when running the materials on the machines', the yield varies. To avoid these problem companies keep additional safety stocks
- Unreliable supplier deliveries;
 - The supplier does not conform to schedule. The company increases safety stock levels.
 - Poor supplier production systems
 - Discrepancies in deliveries and logistical problems
 - Short notice orders, or frequently, and logistical problems.

- Extended order cycle time-between the recognition of requirement and the physical receipt of the goods irregular.
- Inaccurate/uncertain demand forecast. Companies which produce product to stock expecting demand suffer from this problem moreover many of them also have the problem of month end sales skewed as result of not so correct and last minute orders, they tend to keep high inventories to protect against market stock-outs.
- Custom items used for standard application. There is always a clash between purchase and production. Purchase would like to buy industry standard part, as customized requirements are more expensive as the supplier has to create special tooling. Smaller batches also increase price per unit. However, production in order to suit its process would still like to have customized part there by increasing the stock levels.

2.3.6 Inventory Performance Measures

According to Halvader (2007:15.20) In order to measure performance of inventory held by companies at whatever stage simple measures have been used and became very popular. Two such measures are given below

1) Inventory turns are the measure of the value of business, which the inventory holding has helped the company to generate.

Inventory Turns=Annual cost of goods sold/average inventory in value This could also be calculated based on volume of business like kilos, tons, liter, obviously the higher the number, the better managed is the inventory

2) Number of days of supply is another simple measure. This denotes the number of days of production (in case of raw or packing materials) or day sales (in the case of finished goods, which the inventory holding can service.)

Day of supply= inventory on hand / daily usage .All figures are kilos, tons, liters

2.4 Inventory Management

According to Kotler and Armstrong (2006:401) Managers must maintain the delicate balance between carrying too little inventory and carrying too much. While too little stock, the firm risk not having products when customers want to buy. To remedy this firm may need costly emergency shipments or production. Carrying too much inventory results in higher than necessary inventory carrying cost and stock obsolescence. Thus in managing inventory, firms must balance the cost of carrying larger inventories against resulting sales and profits.

Many companies have greatly reduced their inventories and related costs through just in time logistic systems. With such system, producer and retailers carry only small inventories of parts or merchandise often only enough for few days of operations.

SL Gupta (2000:217) also explains that management knows the need, importance and practicability of scientific inventory management. The conflicting objectives of inventory control are reflected in the seemingly conflicting demands, which are made on an inventory manager from time to time. For example stocks are to be kept at low level but not too low, turn over is to be increased but only at a satisfactory profit rate, bulk purchases are to be attempted to obtain better prices but over buying is to be controlled, special attention is to be given to the disposal of obsolesces or near absolute items but not before the point of obsolescence is identified.

2.4.1 The objective of inventory management

According to Bhat (2005:162), the objective of inventory management are (1) to increase corporate profitability through improved inventory management, (2) to predict the impact of corporate Policies on inventory levels & (3) to minimize the total cost of logistic activities while meeting customer service requirements.

2.4.2 Symptoms of Poor Inventory Management

The symptoms of Poor Inventory Management include:

1. An increase in the number of back order, indicating too many stock outs
2. Rising inventory investment
3. Higher than normal customer, turn over.
4. Increased number of canceled orders from customers or intermediaries
5. Insufficient storage space due to excessive inventory
6. An increase in the number, & rupee value of obsolete products.

2.4.3 Measuring of Effectiveness of Inventory Management

The key measuring of effectiveness of inventory management is the impact that inventory has on corporate profitability. Profitability can be increased by lowering cost of supporting increased sales.

2.4.4 Measuring to decrease inventory -related cost include:

1. Reducing the number of back orders
2. Purging obsolete or dead stock from the system &
3. Improving the accuracy of casts.

Better inventory planning help to reduce or eliminate transshipment of inventory between field warehouses & small lot transfers. Better inventory management the ability to control & predict how inventory investment will change in response to management policy.

2.4.5 Inventory Turn over is another measure of inventory performance. It is measured as the ratio of annual rupee sales volume at a cost to average rupee inventory investment,

$$\text{Inventory turn over} = \frac{\text{Annual rupee sales volume at cost}}{\text{Average rupee inventory investment}}$$

Turnover should be used along with other measures that reflect customer service issue to indicate the measure of inventory effectiveness.

2.4.6 Impact of demand pattern on inventory management

According to Bhat (2005:165), the inventory management methods are influenced by:

- 1) Pull versus push production system &
- 2) Dependent or independent demand inventory.

Pull versus push systems are distinguished by the way the company production is driven. If a company waits to produce product until customer demand it, the production system referred to as a pull system, which means customer pulls the inventory through the system. On the other hand, if a firm produces to forecast or anticipated sales to customers, the production system referred to as a push system. This means, the firm is pushing its inventory in to the market in anticipation of sales.

Independent versus dependent demand inventory focuses on whether the demand for an item depends on something else. An independent demand item is finished goods, while the raw materials & component that go in to production of finished good are referred to as dependent demand items. The demand of raw materials & component is derived demand because it is based on the demand for the finished goods. The need for finished good is forecast item can be calculated based on the production schedule for the finished goods.

Inventory manager must take two decisions-1) how much inventory to order 2) when to place the order.

2.4.7 Importance of inventory management

According to Behat (2005:171), In adequate control of inventories can results in both under stocking & overstocking of items. Under stocking result in production holdup, lost sales, dissatisfied customer, delayed delivery of finished goods to customers & so on. Overstocking unnecessarily ties up working capital funds, obsolescence, and wastage due to lose of shelf life, damage in storage, pilferage & so on.

Two main concern of inventory management are:

- 1) **Level of customer service** i.e., to have the right goods, in sufficient quantities, in the right place at the right time.
- 2) **Costs of ordering & carrying inventories & the shortage cost or stock out costs.**
The overall objective of inventory management is to achieve satisfactory levels of customer service while keeping inventory cost within reasonable limits.
 - **Two basic decisions to be made** are the **timing & size** of orders.(i.e. , when to order & how mach to order).

The inventory performance is measured by customer satisfaction (measured by the number & quantities of back orders & for customer complaints.) & by inventory turn over ratio, which is the ratio of annual cost of good sold to average inventory investment. The higher this ratio the batter will be the inventory performance, which implies more efficient use of inventories.

2.4.8 To be effective inventory management must have the following:

- 1) A system to keep track of the inventory on hand & on order.
- 2) A reliable forecast of demand that include an indication of possible forecast error.
- 3) Knowledge of lead time & variation in lead time (probability of variation & extent of variation i.e. ., extension of lead time).
- 4) Reasonable estimates of inventory carrying cost, ordering costs & shortage costs
- 5) A classification system for inventory items (e.g., ABC or XYZ classification).

2.5 Integrated Logistic Management

According to Kotler and Armstrong (2006:404) the concept, recognize providing better customer service and trimming distribution cost require teamwork, both inside the company and among all marketing channel organizations. In side, the company's various departments must work closely together to maximize the company's own logistics performance. Outside, the company must integrate its logistics system with

those of its supplier and customers to maximize the performance of the entire distribution system.

2.5.1 Cross - Functional Teamwork

Inside the Company

The above authors also explain that in most companies, responsibilities for various logistic activities assigned too many different functional units. Marketing, sales finance, operations, purchasing. Too often, each function tries to optimize its own logistics performance with out regard for the activities of the other functions. However, transportation, inventory, warehousing and order processing activities interact, often in an inverse way. Lower inventory level reduces inventory-carrying costs. However, they may reduce customer service and increase cost from stocks outs, back orders, special production runs, and costly fast freight shipment. Because distribution activities involves strong trade-offs, decisions by different functions must be coordination to achieve better overall logistics performance. The goal of integrated supply chain management is to harmonize all of the company's logistics decisions. Close working relationships among functions can be achieved in several ways. Some companies have created permanent logistics committees, made up of manger responsible for different physical distribution activities. Companies can also create management positions. That link the logistic activates of function areas

Bhat (2011:17) also states that integrated logistic is integrates the activities such as physical distribution, materials management, logistics engineering, business logistics, logistic management, distribution management and supply chain management. Even though all these activities vary from one another, they share one key ingredient, the concept of continuous uninterrupted flow of the product. All logistic activities must work together to move the product smoothly through the channel of distribution to the final customer. Integrated logistic is a service-oriented process. It involves actions,

which help movement of the product from the source of raw material to final customer. So with out integrated logistic, marketing cannot fill customer order.

2.7 Knowledge transfer capability

According to Bowersox and Closes (2003, 46) It is a limitation in the ability of to share experience. Failure to transfer information or knowledge containment tends to foster the functional orientation by developing a work force composed of specialists. The failure to transfer knowledge can also create a barrier to continued integration when an experienced employee retires or for some reason leaves the farm.

CHAPTER THREE

3 DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

This part of the research paper focused on data presentation, analysis & interpretation. The primary source of data for this research has collected via questionnaire. Accordingly, 200 questionnaires have distributed, out of which 178 were completed, and returned. Besides, due to improper response, 10 questionnaires have disregarded implying that 168 questionnaires have actually used.

The chapter has two parts, the first part deals with the general characteristic of the respondents & the second parts deals with analysis of the research findings, interview questions & answers. The interviews conducted to the inventory manger and supply-chain manger of PSI organization.

3.1 GENERAL CHARACTERISTIC OF THE RESPONDANTS

The Respondents were asking to mention about their sex, age, educational background, work experience, and the duration of customers how much to stay in years within the company. Accordingly, their responses have presented in the following tables.

Table 1 Demographic Characteristic Of the Respondents

S.N	Item	Respondents	
		Frequency	Percentage %
1	Sex		
	Male	124	73.8
	Female	44	26.2
	Total	168	100
2	Age		
	18-27 years	61	36.3
	28-37 years	103	61.3
	38-47 years	4	2.4
	Total	168	100
3	Educational qualification		
	12 Completed	1	0.6
	Diploma	129	76.8
	Degree	35	20.8
	Above degree	3	1.8
	Total	168	100
4	Work Experience		
	1-3 years	73	43.5
	4-6 years	85	50.6
	Above 7 years	10	6.0
	Total	168	100
5	Customer for PSI		
	1-3 years	164	97.6
	4-6 years	4	2.4
	Above 7 years	-	-
	Total	168	100
Total		168	100

As depicted in Table 1, item No.1, 124 (73.8%) of the respondents males, while 44 (26.2%) was females. This shows that the number of male is greater than that of female customers. And it doesn't have any implication on the finding of the study.

The Age classification of the respondents shown in previous table, item 2, that 103 (61.3%) of the respondents were between the age of 28-37 years, 61 (36.3%) of them were between the age of 18-27 years, and 4 (2.4%) of the respondents were between 38-47 years respectively. This implies that the majorities of the respondents were finding to be youngsters, and they could share necessary information from experience.

The Educational qualification is concerned as shown in the above table, item 3, 129 (76.8%) of the respondents are college diploma holders, 35 (20.8%) of the respondents are first-degree holders, 3 (1.8%) of the respondents are above degree level, and 1 (0.6%) of the respondent has 12 completed. This figure tells us that the majority of the customers are college diploma. As a result, those respondents could be forward attainable and detail information whatever they asked in this questionnaire, and it helps the student researcher in order to get the responses to that of many questionnaires.

The Work experience is concerned as shown in the above table, item 4, 85 (50.6%) of the respondents have 4-6 years of work experiences, 73 (43.5%) of the respondents have 1-3 years, and 10 (6%) of them have 7 and above years of experiences. This implies that, the respondents in general enable them to respond to questioner presented to them adequately.

The respondents which stay as a company customers shown in the above table, item 5, 164 (97.6%) of the respondents were done 1-3 years as a customers, 4 (2.4%) of them have 4-6 years of customer for PSI. This indicate that the majority of the respondents were had longer relationship with PSI organization. This can imply that they could be able to forwarded attainable information regarding to the company logistic activities in inventory management areas.

3.2 ANALYSIS OF THE FINDING OF THE STUDY

This research study tries to investigate the practice and challenge of logistic activities on inventory management in the case of Population Service International. In light with, student researcher likes to investigate the challenge of logistic activities on inventory management in recent years. Therefore the study has been incorporated the company by preparing questionnaire as well as the company management personal which conducted through interview ,and also observation which has been taken on a warehouse area. According, various questions were posing to sample respondent manly related to PSI company warehouse, knowledge sharing process, integration between different departments, and ways of inventory management.

Table 2: Frequency of giving order, and changing orders on the customer side.

S.N	Item	Responses	Respondents	
			Frequency	Percentage %
1	How often did you usually give order per month?	Once per month	140	83.3
		Twice per month	22	13.1
		More than 3 times	6	3.6
		Total	168	100
2	Have you ever changed your order?	Yes	68	40.5
		No	100	59.5
		Total	168	100

According to the data presented in table 2, item 1, 140 (83.3%) of the respondents give order once per month in order to take the goods from the company, 22(13.1%) of the respondents give order twice per month, and 6 (3.6%) of the respondents give order more than three times per month.

In item 2 presented in the above table 100 (59.5%) of the respondents were changed order that gave to the company, and 68 (40.5%) of the respondents did not change there order which gave to the company. From this data, we can show that the majority of the respondents be changed their order because of many reasons like gating batter price, a batter quality and others. So in order to forecast the demand of the customers in the future the company is giving more attention on it. This implies that, if the customer changes their order, it leads the company on the wrong decision about the process of demand forecasting.

Table 3 Did you think that PSI Ethiopia is working in related to customer need on inventory management area?

Question	Responses'	Frequency	Percentage %
Did you think that PSI Ethiopia is working in related to customer need on inventory management area?	Yes	38	22.6
	No	130	77.4
	Total	168	100

Table 3, show that 130 (77.4%) of the respondents were argue that PSI Ethiopia is working not in related to customer need, 38 (22.6%) of the respondents, agree that the company is working in related to customer need. This implies that large number of customer was dissatisfied as compared with those satisfied.

Table 4 Do you have a chance to see the warehouse of PSI organization?

S.N	Item	Responses	Respondents	
			Frequency	Percentage %
1	Do you have a chance to see the warehouse of PSI organization?	Yes	22	13.1
		No	146	86.9
		Total	168	100
2	Do you think that the company have enough store place to keep inventory?	Strongly agree	5	3.0
		Agree	3	1.8
		Neutral	4	2.4
		Disagree	12	7.1
		Strongly disagree	-	-
		Total	168	100

As we shown in table 4, item 1, 146 (86.9%) of the respondents did not get a chance to see the warehouse of PSI, and 22 (13.1%) of the respondents has chance to see were house of PSI. This implies that, most of the customers have not close relationship for having information about the company; this is why they did not have the chance to see a warehouse of PSI Company.

In item 2 , presented in table 4 , 12 (7.1%) of the respondents disagree that the company doesn't have enough store place to keep inventory, 5 (3.0%) of the respondents strongly agree that the company have enough store place , 4 (2.4%) of the respondents were neutral , and 3 (1.8%) of the respondents are agree that the company have enough store place. This indicates that the company has not enough store places to deliver the goods to the entire customer, this lead to the company to losing the customer.

Table 5 Have you got a defect item when you take goods from PSI?

S.N	Item	Response	Respondents	
			Frequency	Percentage %
1	Do you ever have a defect item when you take goods from PSI?	Yes	11	6.5
		No	156	92.9
		Total	168	100
2	The customers have a right to replace the defect items.	Yes	5	3.0
		No	6	3.6
		Total	168	100

According to the data presented in table 5, item 1, 156 (92.9%) of the respondents did not get a defect item that delivered by PSI organization, 11 (6.5%) of them got a defect item. This indicates that larger number of customer were did not get a defect items as compared with those of customers who got a defect items.

As shown in the table 5, item 2, 6 (3.6%) of the respondents did not have the right to replace the goods when the goods is not workable, 5 (3.0%) of the respondents have the right to replace the goods. This indicates that it does not shown a picture within a customer who have not replace the item when they got a defect items and the customers who have a right to replace the goods, because the figure in both sides are more of proportional.

Table 6 who is the responsible body to communicate when you get a defect items?

S.N	Item	Responses	Respondents	
			Frequency	Percentage %
1	Who is the responsible body to communicate when you get a defect items?	For marketing manger	1	0.6
		For sales personal's	10	6
		For production personal	-	-
		General manger	-	-
		Total	168	100
2	Do you get quick responses from the concerned body for a defect item?	Yes	6	3.6
		No	5	3.0
		Total	168	100

According to table 6 , item 1, 10 (6%) of the respondents are communicate to the sales personal, 1 (0.6%) of them is going to communicate marketing manger. This indicates that whenever the customer can get a defect items they are going to communicate a sales personnel.

As shown in the table 6, item 2 , 6 (3.6%) of the respondents are get a quick response from the concerned body if problem happen on goods, 5 (3%) of the respondents didn't agree that in order to get a quick responses .This implies that, the customer can get a quick responses from concerned body whenever they gat defect items.

Table 7 How often do you take the goods according to your preference in PSI?

Question	Responses	Frequency	Percentage %
How often do you take the goods according to your preference in PSI?	Very often	4	2.4
	Quiet often	5	3.0
	Some times	126	75.0
	Seldom	31	18.5
	Never	-	-
	Total	168	100

From the data gathered, & presented in table 7, 126 (75%) of the respondents indicate that the customer of PSI are some time taken the goods according to there preferences, 31 (18.5%) of the respondents are a little times to take a goods , 5 (3%) of them are quiet often to take a goods, 4 (2.4%) of the respondents very often to take the goods according to their preference.

Finding of Qualitative Research (Interview) within Inventory manger

Communicate the participant in the detail interview, which have between the inventory manger of the company and the student researcher. The student researcher was chose the inventory manger of the company to participate in this interview based on his duties and responsibilities of the company.

❖ The interviewer had asked question that related to the practices of logistic activities of the organization, while he was be asked he replied as the logistic activity of the company has implemented in two ways.

1. **In bound logistic:-** when we are taken the goods from supplier, there are a lot of works to accomplished, such as selecting a right supplier, demand forecasting, transportation, checking the goods, insurance, banking, LC are points which are going to give more attentions.

2. **Out bond logistic:-** when we get the goods from supplier there are also a logistic activities like contacting with distributor, agent, customers, a marketing activities, promotion, warehousing, network design, information system, transportation, inventory management ,material handling, packaging are other points that are also give attentions.

According to Bhat P.(2005:7) define that logistic as the process of anticipating customer need and wants, acquiring the capital, material, people, technology, and information necessary to meet those needs and wants, optimising the goods or service producing the net work to fulfil customer request and utilizing the net work to fulfil customer request in a timely manner.

- ❖ Regarding the question on how the practical activities of inventory management of the company going on? The inventory manger replied that Inventory management in PSI Company involves making a decision concerning the level of how much inventory to order, and when, this is a vital point that we are giving more attention of it. For doing so the basic criteria is going on to make decision by minimize the total inventory cost.

According to Kotler and Armstrong (2006:401) **Inventory Management** is Managers must maintain the delicate balance between carrying too little inventory and carrying too much. While too little stock, the firm risk not having products when customers want to buy. To remedy this farm may need costly emergency shipments or production. Carrying too much inventory results in higher than necessary inventory carrying cost and stock obsolescence. Thus in managing inventory, firms must balance the cost of carrying larger inventories against resulting sales and profits. Many companies haw greatly reduced their inventories and related costs through just in time logistic systems. With such system, producer and retailers carry only small inventories of parts or merchandise often only enough for few days of operations

- ❖ The interviewer had also asked what was the challenges faces that the company in related to inventory management? -he forwarded his idea as- currently the challenges is on increasing number of canceled order from customer or intermediaries
- Increasing the number of obsolete or damaged products & for those obsolete or damage goods which need the place to remove it.
- Estimating the demand of customers is the other point.

According to the finding with open-ended question why the reason customers can change there order?

- When they gat a better price.
- When they gat a batter qualities.
- Financial factor is the other point that the customer can change their orders...

In addition to this the open-ended question show that how PSI Company is working in related to the need of customer on inventory management.

The company is not working in related to customer need, and they put some reason for how the company works.

- Keeping there promises
- They must come, and know the need & interest of the customers.
- They must think a long lasting customer relationship.
- They have to create a time schedule to visit the customers.
- It should be batter to follow up the customers after delivering the goods.

According to Behat (2005:171), **Importance or the challenge of inventory management in adequate** control of inventories can results in both under stocking & overstocking of items. Under stocking result in production holdup, lost sales, dissatisfied customer, delayed delivery of finished goods to customers & so on. Overstocking unnecessarily ties up working capital funds, obsolescence, and wastage due to lose of shelf life, damage in storage, pilferage & so on.

- ❖ Concerning the question that asked to the inventory manger, how you think giving a warehouse service in order to cover the entire customers? He forwarded his idea as currently PSI Company has only one warehouse, the goods that we have just in related to health area. Therefore, the good that we import from outside need especial warehouse area like temperature, facilities, and some of the goods does not put with other good because of the nature of pharmaceutical products, these & other are the major challenges for PSI company. Of course, the company has only one warehouse, & our target customer is especially around the regional area. So in order to cover it, we are using distributor, agents for the countryside, but we have to give attention for adding the warehouse.

According to Kotler, and Armstrong (2006:401) about the **Warehousing** production and consumption cycles rarely much, so most companies must store tangible goods while they wait to be sold. A company must decide on how many and what types of warehouse it needs and where they will be located. The company might use either storage ware houses or distribution centers. Storage warehouse store goods for moderate to long periods. Distribution centers are designed to move goods rather than just store them. They are large and highly automated ware houses designed to receive goods from various plants and supplies, take orders, fill them efficiently, and deliver goods to customers as quickly as possible.

These days, warehousing has seen dramatic change in technology in recent years. Older, multi stored ware houses with outdated materials-handling methods are steadily being replaced by newer, single- storied automated ware houses with advanced, computer-controlled material handling systems requiring few employees. Computers and scanners read orders and direct lift trucks, electric hoists, or robots to gather goods, move them to loading docks, and issue invoices.

- ❖ Finally, the interviewer asked question about which departments is the source of information for deciding the level of how much quantity in order to import the goods from out side the country? As he justified that, in order to decide the quantities of the goods, there are a responsible body, which are marketing department, logistic department, finance department are some of them.

According to Havaldor (2007:15.5) Demand forecasting is a decision on haw much to order from Suppliers and when and how much to produce for customers. This activity normally starts with the sales forecasts given by marketing and sales function. This is normally the function of sales to develop the forecast at agreed frequencies for agreed geographies. The forecast then becomes the starting point of the planning functions, which is the responsibility of logistics.

Finding of Qualitative Research (Interview) within supply-chain manager

Communicate the participant in the detail interview, which have between the Supply-chain manger of the company and the student researcher.

- ❖ The interviewer had asked question which are related to how the practices of integration between departments like logistic, marketing & others, he replied as Those departments are more of interlinked, we know that integration between departments that emphasized teamwork, inside the company, & among all the marketing channel organization to maximize the performance of entire distribution systems, & for supplier & customers. However, the point is we are doing our job within specific areas. All departments are responsible only for that specific area. This is a way that how we are doing our job.

Bhat (2011:17) also states that integrated logistic is integrates the activities such as physical distribution, materials management, logistics engineering, business logistics, logistic management, distribution management and supply chain management. Even though all these activities vary from one another, they share one key ingredient, the concept of continuous uninterrupted flow of the product. All logistic activities must

work together to move the product smoothly through the channel of distribution to the final customer. Integrated logistic is a service-oriented process. It involves actions, which help movement of the product from the source of raw material to final customer. So with out integrated logistic, marketing cannot fill customer order.

- ❖ Regarding the question on which departments are directly links between logistic departments. The Supply-chain manger reply that there are many department like-
 - ✓ Supply-chain management
 - ✓ Marketing department
 - ✓ Finance department
 - ✓ Public relation

Concerning the question that the problem rise with in department in related to inventory management area , which was asked to the Supply-chain manger of the company, he forwarded his idea as , the problem happen more of the flow of information, knowledge sharing to decide the level of how much quantities to import from supplier side, & there is a little conflict in between marketing, finance ,& logistic departments.

According to Bhat (2005:164) the symptoms of Poor Inventory Management include-

1. An increase in the number of back order, indicating too many stock outs
 2. Rising inventory investment
 3. Higher than normal customer, turn over.
 4. Increased number of canceled orders from customers or intermediaries
 5. Insufficient storage space due to excessive inventory
 6. An increase in the number, & rupee value of obsolete products.
- ❖ In related to the above question, if there is a problem, how the companies make a solution for it, while he replied as we try to balance the conflict between departments by discussion.

According to Bhat (2005:174) explain that in most companies, responsibilities for various logistic activities assigned too many different functional units. Marketing, sales finance, operations, purchasing. Too often, each function tries to optimize its own logistics performance with out regard for the activities of the other functions. However, transportation, inventory, warehousing and order processing activities interact, often in an inverse way. Lower inventory level reduces inventory-carrying costs. However, they may reduce customer service and increase cost from stocks outs, back orders, special production runs, and costly fast freight shipment. Because distribution activities involves strong trade-offs, decisions by different functions must be coordination to achieve better overall logistics performance. The goal of integrated supply chain management is to harmonize all of the company's logistics decisions. Close working relationships among functions can be achieved in several ways. Some companies have created permanent logistics committees, made up of manger responsible for different physical distribution activities. Companies can also create management positions. That link the logistic activates of function areas

- ❖ The interviewer asked question about the knowledge sharing process of the company in related to inventory areas. As he clarified that there are always a meeting within departments, if some problem happen ,we are going to discusses it, & try to minimized that problem as much as possible ,& also there are a weekly ,monthly report's, every person are responsible to do that, because of this we can able to share the knowledge .

According to Bowersox and Closes (2003, 46) Knowledge transfer capability is a limitation in the ability of to share experience. Failure to transfer information or knowledge containment tends to foster the functional orientation by developing a work force composed of specialists. The failure to transfer knowledge can also create a barrier to continued integration when an experienced employee retires or for some reason leaves the farm.

CHAPTER FOUR

4 SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This section deals with the summary of findings obtained from analysis and interpretation of data, conclusion, and recommendation of the study.

As indicated in the first chapter, PSI is working on more of medical area by importing pharmaceutical product, water treatment and others in order to satisfy the society by delivering the goods in the line with customer orders.

This research, focused to investigate the practice, and challenge of some of logistic activities on inventory management. Moreover, the research has intended to forwarded possible solution for identified challenged based on findings. Therefore, the research employed a methodology known as questionnaire and interview to gather detail data and information in order to achieve its objective.

4.1 SUMMARY OF FINDINGS

On the bases of the analysis, the study has come up with the following findings.

- The research consisted 124 (73.8 %) males and 44 (26.2%) female.
- The age of the customers showed that the majority of them 103 (61.3%) were 28-37 years.
- With regard to qualification of the respondents, the study showed that the majority of them 129 (76.8%) were diploma holder.
- The study showed that the respondents have long years experience ranging from 4-6 (50.6%) in the market.
- The study indicated that the majority of the respondents have long year duration staying as a customer ranging from 1-3 years (97.6%) in the company.
- The finding of the study also showed that majority 140 (83.3%) of the respondents have giving order once per month.
- The study indicated that the majority 130 (77.4%) of the respondent described the company did not work on related to customer need.
- The investigation confirmed that as indicated by the majority 12 (7.1%) of the respondents, the company did not have enough store places to keep inventory.
- The study indicate that the majority 156 (92.9%) of the respondents describes that they did not get a defect item when they take goods from the company.

- The study showed that, as indicated by the majority, 6 (3.6%) respondents describes that they didn't have the right to replace the goods.
- The study indicated that the majority 10 (6%) of the respondents communicate the sales personal's when they gat a defect items.
- The study also indicated that the majority 6 (3.6%) of the respondents have gate a quick response when they gat a defect items.
- The investigation confirmed that as indicated by the majority 126 (75%) of the respondents, they did not gat a goods according to there preference.
- As can be seen from the finding most of the respondents indicate that customers change their order.
- The study reveals that the company did not work in related to customer needs.
- The finding showed that a way used by the interview about the major challenge of inventory management are increasing the number of canceled order, increasing the number of obsolete or damaged products, & the place to remove that obsolete products, estimating the demand of customers.
- The study seems to show that the integration between departments is not good enough.
- The finding showed that a process used by the interview about knowledge sharing process of the company in related to the researcher topic is not good enough.

4.2 CONCLUSIONS AND RECOMMENDATION

Conclusions

Based on the findings stated above, the following conclusion can be drown .

- Regarding to the interview with inventory manger the major challenge of the inventory management area are increasing the number of canceled orders, increasing the number of obsolete products or damaged goods, in addition to this the place to remove those obsolete goods, and also estimating the demand of the customers were the other points.
- Concerning to knowledge sharing process within the same interview is not good enough on the area of the total logistic activities.
- The study seems to show that the integration between departments is not good enough.
- Regarding to the research activities on related to the topics he believe that how the important of the research activities.

4.3 Recommendation

Based on the analysis and conclusions the student researcher provides recommendation as follows.

1. The company should give attention for increasing the number of warehouses in related to the demand of many customers, and also it must comes one steps or build a clear relationship by showing the internal activities like a warehouse area.
2. For the challenges of inventory, the company should works on building a good relationship with customers, try to estimate the demand of customers especially on the marketing area, create the integration between departments by sating a common objective that is works for all departments.
3. The company should take a necessary action on knowledge process activities by using the functional orientation and developing a work force composed of specialists.
4. The company logistic department should analyze and understand the importance of integration between departments, and all logistic activities must work together to move the product smoothly through the channel of distribution to the final customer. Integrated logistic is a service-oriented process. It involves actions, which help movement of the product from the source of raw material to final customer. So with out integrated logistic, marketing cannot fill customer order.

Bibliography

Bhat. (2005), **Logistics Management**: 6th Edition. New Delhi: Himalaya publishing house.

Bower sox and Closs. (2002), **Logistical Management /The Integrated Supply, and Chain Process**: 6th Edition. New Delhi: Tata Mc Graw Hill. Kotler.P and Armstrong. (2006, **Principles of Marketing**: 11thEdition. Dorling Kindersley: India Private limited.

D.K Agrawal. (2003), **Logistic and Supply Chain Management**:1st Edition. New Delhi: Macmillan India Ltd.

Havaldor (2007), **Sales and Distribution Management**: 1st Edition. New Delhi: Tata MC Grow-Hill Publishing Company limited.

Kotler P. and Keller (2006), **Marketing Management**: 12^t Edition. New Delhi: Dorling Kindersley PVT. Ltd.

Malhorta, and Naresh.K .(2006), **Marketing Research and applied Orientation**: 5th Edition. New Delhi: prentice hall of India private Limited.

M.Lambert ,R.Stock & M.Ellram .(1998), **Fundamental of Logistics Management**: New Delhi: Mc Graw- Hill Companies.

SL Gupta. (2000), **Sales and Distribution Management**: 1stEdition. New Delhi: Published by excel books.

APPENDICES

5. For how long your company working with PSI as a customer?

1-3 years 4-6 years More than 7 years

2. Questions Directly Related to the Study.

6. How often did you usually give order per month?

One per month Twice per month

More than three times per month

7. Have you ever changed your order?

Yes No

8. If your answer is 'yes' for question number 7, Can you mention a reason why
You change the order? _____

9. Do you think that PSI is working in related to the customers need in related to
inventory management?

Yes No I do not know

10. To what extent you are satisfied with the service of PSI in related to inventory
management area?

Strongly agree Neutral Strongly disagree

Agree Disagree

11. Do you have a chance to see the warehouse of PSI organization?

Yes No

12. If you say 'yes' for question number 12 do you think that the company has enough
store place to keep the inventory?

Strongly agree Neutral Strongly disagree

Agree Disagree

13. Have you got defect item when you take goods from PSI Ethiopia?

Yes No Neutral

14. If your answer is 'yes' for question number 13 did you have a right to replace the
defect items?

Yes No

15. If you got a defect items to whom did you communicate?

A for general Manger B for marketing manger C for production manger

D for sales Personal's E if others, please specify_____

16. Based on question number 15 do you get quick response from concerned body?

A Yes B No C I don't know

17 How often, do you take the goods according to your preference in PSI Ethiopia?

Very often Sometimes Seldom

Quiet often Never

Appendix B
St. Mary's University College
Faculty of Business
Department of Marketing Management

Interview Checklist

This interview is prepared to ask the coordinator of supply & chain Manger & inventory manger of PSI Ethiopia in order to find valuable information to the study about the company in general, & to investigate the logistic activities especially on inventory Management.

Interview questions for the head of inventory management

1. What are the practices of logistic activities in your organization?
2. Can you mention about the practical activities of inventory management?
3. What challenges face the organization in related to inventory management area?
4. How do you think to give warehouses services for cover all of your customers?
5. Which departments is the source of information for deciding the level of how much quantity in order to import the goods from out side the cantiry?

Interview questions for the coordinator of Supply-chain management

6. How the practices of integration between departments like logistic, marketing and others?
7. Which departments are directly links between logistic departments?
8. Is there any problem rises with in departments in related to inventory areas?
9. If-there is a problem how your company make a solution for it?
10. Can you elaborate some thing about the knowledge sharing process in your company in related to inventory areas?

DECLARATION

I, the undersigned, declare that this senior essay paper is my original work, prepared under the guidance of Ato Abera Yilma. All source of material used for the manuscript have been dully acknowledged.

Name: Napoleon Yoseph

Signature: _____

Place of Submission: St. Mary 's University

Date of Submission: June, 2013

ADVISOR APPROVAL

This paper has been submitted for examination with my approval us the University College s advisor.

Name: _____

Signature: _____

Date of submission _____