



ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES

**DETERMINANT FACTORS INFLUENCING FUEL DISTRIBUTION
PERFORMANC IN THE CASE OF TOTAL ETHIOPIA S.C**

BY
SAMRAWIT KASSA

JULY, 2020
ADDIS ABABA, ETHIOPIA

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ADDIS ABABA, ETHIOPIA

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DECLARATION

I, SAMRAWIT KASSA, declare that this thesis is my original work, prepared under the guidance of Dr Temesegen Belayneh. All source of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

SAMRAWIT KASSA

St. Mary's university, Addis Ababa May, 2020

ENDORSEMENT

This thesis has been submitted to St. Mary's university, school of graduate studies for examination with my approval as a university advisor.

Temesgen Belayneh (PHD)

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ST. MARY' S UNIVERSITY, ADDIS ABABA JULY, 2020

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Acronyms and Abbreviations

CODO-Company owned-dealer operated

DODO-Dealer owned-Dealer operated

EPSE - Ethiopian Petroleum Supply Enterprise

NPRDA-National Petroleum Reservation Depot Administration

MGR-Regular Gasoline

AGO-Gasoil

HFO- Heavy Fuel Oil

LFO- Light Fuel Oil

LPG-liquefied petroleum Gas

DP-Distribution Performance

PDM-Physical Distribution Management

SCM-Supply Chain Management

ORL-Organizational Relationship Linkage

GDP- Gross Domestic Product

Sig - Level of Significance

SPSS- Statistical Package for the social science

VIF- Variance Inflation Factor

MRM- Multiple Regression Model

Table of Contents

Acknowledgments.....	i
Acronyms and Abbreviations	ii
Table of Contents.....	iii
List of Tables	vii
List of Figure.....	viii
Abstract.....	vi
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of the study	1
1.2 Background of the company	4
1.3 Statement of the Problem	4
1.4 Research Question.....	5
1.5 Research objective.....	6
1.5.1 General Objective	6
1.5.2. Specific Objectives	6
1.6 Scope of the study	6
1.7 Significance of the Study	6
1.8 Organization of the Study	7
1.9 Definition of Terms.....	7
1.9.1 Operational definition of terms.....	7
1.9.2Conceptual definition of Term	8
CHAPTER TWO	9
REVIEW OF RELATED LITRATURE	9
2.1 Introduction	9
2.2 Theoretical Review	9
2.2.1 Components, Nature and Definition of Distribution	9
2.2.2 Components of Distribution	10
2.2.3 Physical Distribution	10
2.2.4 Physical distribution management (PDM)	11

2.2.5 Function of physical distribution.....	11
2.2.5.1. Communications and order processing.....	11
2.2.5.2 Ware housing.....	12
2.2.5.3 Inventory Control.....	12
2.2.5.4 Transportation.....	13
2.2.5.5 Material Handling.....	14
2.2.6 Distribution Strategy.....	15
2.2.7 Fuel Distribution.....	16
2.2.8 Effective Distribution System.....	17
2.2.9 Channel of Distribution.....	17
2.2.10 Evaluation of Distribution Channel Performance and Effectiveness.....	18
2.2.11 Measurements of Distribution Performance.....	19
2.2.12 Problems and Factors Affecting the Performances of Distribution.....	20
2.2.13 Distribution effectiveness and firm performance.....	21
2.2.14 Outsourcing.....	22
2.2.15 Forms of Outsourcing.....	23
2.2.15.1 Tactical outsourcing.....	23
2.2.15.2 The Strategic Outsourcing Model.....	23
2.2.15.3 Transformational outsourcing.....	23
2.1.16 Transport Outsourcing.....	24
2.2.16.1 Integration.....	25
2.2.17 Types of Integration.....	25
2.2.17.1 Internal Integration.....	26
2.2.17.2 External Integration (Upstream and Downstream).....	26
2.2.18 Integration Dimensions.....	27
2.2.18.1 Process integration.....	27
2.2.18.2 Collaboration and Coordination integration.....	28
2.2.18.3 Organizational Relationship Linkage(ORL).....	28
2.2.19 Benefits of integration.....	29
2.2.20 Safety.....	29
2.2.21 Distribution performance.....	29

2.2 Empirical Review	30
2.3 Conceptual frame work	32
2.4 Hypothesis	32
CHAPTER THREE	34
RESEARCH METHODOLOGY	34
3.1. Research Approach	34
3.2 Research Design	35
3.3 Source of Data	35
3.4 Population and Sampling Technique.....	36
3.4.1 Population.....	36
3.4.2 Sampling Technique	37
3.5 Data Collection Instrument	37
3.6 Data Analysis	38
3.7 Validity and Reliability	39
3.8 Ethical Consideration	40
CHAPTER FOUR.....	41
4. DATA PRESENTATION, ANALYSIS AND INTERPRETATION	41
4.1 Data Cleaning and Coding	41
4.2. Demographic Analysis of Respondents	41
4.3 Test of Reliability and Validity.....	43
4.4 Descriptive Statistics of Variables	44
4.4.1 Descriptive Statistics of Transport Outsourcing.....	46
4.4.2 Descriptive Statistics of Integration	47
4.4.3 Descriptive Statistics of Safety Policy.....	49
4.4.4 Descriptive Statistics of Distribution Performance	50
4.5 Inferential Statistics.....	52
4.5.1 Correlation Analysis	52
4.6 Test for Linear Regression Model Assumptions.....	53
4.6.1 Normality Assumption	53
4.6.2 Checking for Linearity.....	54
4.6.3 Assumption of Homoscedasticity	54

4.6.4 Testing Multicollinearity	54
4.7 Regression Analysis	55
4.7.1 Multiple Regressions	55
4.8 Hypothesis Testing and Interpretation of Results	57
CHAPTER FIVE	60
5. SUMMARY, CONCLUSION AND RECOMMENDATION	60
5.1 Introduction	60
5.2 Summary of Finding.....	60
5.3 Conclusion.....	61
5.4 Recommendation.....	62
5.5 Limitation of the study	63
5.6 Area for Further Study	63
REFERENCE.....	64
APPENDICES	72

List of Tables

Table 4.1 Demographic Analysis of Respondents	42
Table 4.1.2. Reliability Analysis of Variables	44
Table 4.1.3 Mean and standard deviation for factors affecting distribution performance.....	45
Table 4.4.1 Descriptive Statistics of Transport Outsourcing	46
Table 4.4.2 Descriptive Statistics of Integration.....	48
Table 4.4.3 Descriptive Statistics of Safety Policy.....	49
Table 4.4.4 Descriptive Statistics of Distribution	51
Table 4.7.1 Model Summary	56
Table 4.7.2 ANOVA Analysis	56
Table 4.7.3 Coefficient Matrix.....	57

List of Figure

Figure 1 Conceptual framework of the study	32
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Abstract

The purpose of this study was to assess determinant factors that influence fuel distribution performance of Total Ethiopia S.C. The study used a convenience sampling technique on sample respondents of customers of Total Ethiopia S.C. A structured questionnaire was developed by the researcher and a quantitative and qualitative research approaches were used. The study has been adopted both descriptive and explanatory research designs. From the distributed 385questionnaire, 300 of them are responded which constitute 77.9 percent of response rate. A correlation and regression analysis was employed to explain the extent of relationship between variables of interest. Further, statistical methods such as, descriptive statistics (like mean, standard deviation), Statistical Package for Social Scientist (SPSS) version 20 was also used to analyze the data. Additional, tables and charts were used to present the study results. The finding indicates that; transport outsourcing, integration and safety policy had a significant positive impact on the distribution performance of the company. It also indicates that; safety policy and transport outsourcing followed by integration have the greatest influence on distribution performance respectively. The finding of the study implies that safety policy, transport outsourcing, and integration must be given due attention if the company wants to enhance its distribution performance.

Key Words: *Transport outsourcing, integration and safety policy, distribution performance*

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Distribution is the shipping of company products or services from the manufacturer to the market at the right place at the right time and in the right quantity to satisfy customer demand (ChwenTzeng, 1999). According to Guan, W., (2010) in different times similarly they revealed that distribution is just making a company product or service available for use or consumption by setting a separate group of individual or organization which are taking part in process of flow of products or services form producers to buyers.

In today's business era, distribution system is one of the important global aspects to distribute products to customers in different part of the world. Distribution plays a key role within the marketing mix, and the key to success is its successful integration within the mix, ensuring that customers get their products at the right place and at the right time. If the product cannot reach its chosen destination at the appropriate time, then it can erode competitive advantage and customer retention (Yeboah, 2013).

Ethiopia is a developing nation which depends entirely on the import of fuel from the oil producing countries. This import of fuel constitutes about 60% of the total imports with every single year. As in the rest of the world, the rise of oil prices is increasingly becoming a big challenge for the economy of the country. The share of fuel in import currency has been increase steadily in recent years, and it is expected to grow even sharper following higher demand due to economic growth. This takes up the lion share of the country's foreign exchange earnings. Ethiopia's oil and gas industry is nascent, but it shows signs of promise (Deloitte, 2016). A significant portion of the country is presumed to have petroleum potential and labeled into different basins (Everette S., Yavuz 2010). Few local and a number of international companies have been engaged in petroleum exploration in various parts of the country.

The bulk of Ethiopia's oil supply is imported by EPSE, EPSE is the sole importer and supplier of fuel through a competitive bid on the international market. Transport to the inland demand centers is handled largely by petroleum marketing companies, Transport Corporations and by private truckers at a standard cost regulated by ministry of trade.

More than 650 gas stations (dealers) found in different administrative regions and districts of the country. The number of gas stations does not meet the rapid growth of current cities. Besides, most of these stations have been offering services for the past 30 years and above with their initial capacity. Due to this limitation, they fail to satisfy current fuel need of the society and in average 50% of the fuel distributed every month for fuel stations is supplied by domestic fuel distributors and when we compare the company's annual volume of fuel distribution about 78.92 % was distributed by only 4 oil companies (Total Ethiopia Libiya Oil, NOC and Yetebaberuit Beherawi petroleum) the rest 21.08 % was distributed by 23 oil companies (EPSE, 2019).

Fuel supply is a high national and governmental concern; government is searching for alternative solution to fill gap on fuel transportation service has been carried out with limited number of liquid transporting tankers. Fuel has a very high contribution for country's economic and social development. However, currently fuel scarcity either due to manmade problem or certain supply limitation causes huge damage. The country fuel supply and demand has not been balanced and also there exists frequent distribution problems cause for scarcity and exposes the public community for unnecessary ups and downs and cost (EEA, 2018/19).

The Ethiopian petroleum supply history goes back towards the end of Minilik II regime, particularly in 1905 with the construction of the Addis Ababa Djibouti Railway. Foreign Petroleum Suppliers such as Agip, Shell and Caltex were engaged in supply of fuel to Vehicles. The suppliers Imports fuel via the port Djibouti of by locomotive. Although this Period considered as the landmark for the beginning of fuel Supply in Ethiopia. Prior to this, the industry characterized by monopoly market surrounded by various limiting procedures and laws which bound the company to introduce and build their brand.

Concerning the distribution and dispatching of fuel in the country (before and after establishment of the enterprise) was run by privately owned distribution companies. The fuel distribution receives fuel as per their order and distribute to the Fuel privately owned fuel station. At the beginning there were four external companies named Shell Ethiopia Limited, Total Ethiopia Share company, Mobil Oil East Africa Limited and Agip Ethiopia Share Association.

At first Agip withdrawn from Africa in 2001 and Shell took Agip place and stayed up to 2008 only and replaced by oil Libya. Similarly when Mobil from Africa in 2006, Total have took over

the business. And until September 2005 when the first domestic oil company National Oil Company (NOC) joined the sector, it was dominated by only the foreign companies. (Ethiopian petroleum supply Enterprise Special edition magazine, 2019).

As per the current regulation the fuel companies are not allowed to own stations and their work limited only receiving fuel from the enterprise and supply to the gas station. Currently in the country there are above 650 stations and until end of December 2019. There are 23 registered oil distribution companies named .

- 1 Total Ethiopia Sh.Co.
- 2 National Oil Company Ethiopia PLC
- 3 Libya Oil Ethiopia Ltd.
- 4 Yetebaberut Beharawi Petroleum Sh.Co.
- 5 Kobil Ethiopia PLC
- 6 Nile Petroleum Co.Ltd. Ethiopia Branch
- 7 Wadi Al-Sundus Petroleum Co.Ltd.
- 8 TAF Oil PLC
- 9 Dalol Oil Sh.Co.
- 10 Olway Petroleum distributor PLC
- 11 Yeshe Petroleum PLC
- 12 Gomeju Oil Ethiopia PLC
- 13 Genet Petroleum
- 14 Bilen Petroleum
- 15 JR Petroleum PLC
- 16 Habesha Petroleum PLC
- 17 Calub Ethiopia Oil PLC
- 18 Zagol Oil Ethiopia PL
- 19 Mulag Oil Importer PLC
- 20 Erta-ale Oil Ethiopia
- 21 Halefay Petroleum Trading PLC
- 22 Tabarak Oil PLC
- 23 Kernel Trading PLC

Source (Ethiopian petroleum supply Enterprise website).

Based on observational study the researcher assess how transport outsourcing, integrations, safety policy influence the distribution performance of a firm by taking Total Ethiopia S.C

1.2 Background of the company

Total Ethiopia was established in 1950 as a petroleum product distribution company, developed its Activities by acquiring the Mobil Oil East Africa assets in 2006. Today, the company operates 134 retail outlet Network Stations operational service stations 66 CODO station and 68 DODO, station from them 38 stations are located in Addis Ababa the rest 96 station where located in upcountry and about 800 general trade and specialties customers 3 aviation depots throughout the country and the new state of the art Fuels and of Liquefied Petroleum Gas (LPG) Dukam depot. Total Ethiopia is also a responsible citizen company who is actively promoting road safety, fighting against malaria, ensuring product quality and developing renewable energies such as solar energy. In addition to exploration and production and renewable energies, Total is active across the entire petroleum product distribution the main product and service that the company provide Gasoline, Kerosene, Gasoil, Light fuel oil(LFO) ,heavy fuel oil(HFO) jet-a1 Lubricants and LPG (www.totaethiopia.com).

1.3 Statement of the Problem

According to Philip kotler & Armstrong 2001, Distribution is the process of planning, implementing and controlling the physical flow of materials, final goods and related information from point of origin to points of consumption to meet customer requirements at a profit. Schewe and Smith (1980) defined distribution as the physical movement of products to the ultimate consumers. Production is not complete until goods reach the final consumers and products are worthless until they are made available to those who need them. It is this process of making goods available to those that need them that gives rise to distribution basis in a marketing strategy.

Marketing researchers are more concerned with management issues like power, conflict, satisfaction and performance (Gaski 1996). Few empirical studies were conducted to study distribution intensity and structure. Most of ideas concerning channel design issues are underlying and theoretical that predicts the choice of channel based on some factors. Although these constructs have been well accepted by marketing scholars, empirical research has to be done to confirm these assumptions and to find new factors determining the distribution performance.

Recently it has been common to see a long queue of vehicles around petrol stations in Addis Ababa searching for fuel. People, drivers and private vehicle owners run here and there filling up their tanks if they get lucky. When the shortage occurs, customers suffer since at present there is no other substitutes that serve the same purpose. It touches on people's everyday lives with services ranging from transportation, electricity, heating, etc. (Richard & Francis 2014) and construction works which involve heavy machineries such as construction of dams and road. As soon as motorists notice there is no fuel in one of the stations or there is queue of cars in stations, they will get panic, join the line and purchase more fuel than they usually purchase, thinking the shortage will continue for some time.

EPSE mentions there is adequate product, but Oil Companies and fuel stations are hoarding the product or not uplifting adequately from the supply points speculating price decrease respectively. Or there was shortage of product just for few days and now we have adequate supply, but it is vague why still there is shortage of product in the cities. On the other hand, Oil Companies states there was shortage of supply at the main supply points and still the problem persist or stabilizing the supply needs more time. Whereas, fuel stations mention that they have placed orders but are not supplied by Oil Companies and there is no product that we hoard from our customer. Furthermore, as mentioned the above gaps lead the researcher to study determinant factors that Influence the fuel distribution performance of Total Ethiopia S.C.

1.4 Research Question

1. To what extent does transport outsourcing, impact the fuel distribution performance of total Ethiopia S.C?
2. To what extent does integration impact the fuel distribution performance of total Ethiopia S.C?
3. To what extent does safety policy impact the fuel distribution performance of total Ethiopia S.C?

1.5 Research objective

1.5.1 General Objective

The main objective of this research paper was to make an assessment on factors influencing the fuel distribution performance by taking total Ethiopia S.C as a case study.

1.5.2. Specific Objectives

1. To assess the extent of transport outsourcing influence on fuel distribution performance
2. To assess the extent of integration influence on fuel distribution performance.
3. To assess the extent of safety policy influence on fuel distribution performance.

1.6 Scope of the study

Geographical scope: -the company operates 134 retail outlet Network service Stations from them 38 stations are located in Addis Ababa the rest 96 station where located in upcountry the researcher delimit the scope on retail outlet Network service Stations located in Addis Ababa were used in this research work due to finance and time constraint to include upcountry network outlet service stations.

Product scope: Generally, the study is limited to two products, MGR (regular gasoline) and AGO (gasoil).

1.7 Significance of the Study

- Since the study was not done before that reviews factors influencing fuel distribution performance in Total Ethiopia S.Co. And distribution today is the back bone of many companies in any operation for delivering products to customers.
- The other significance of This research work is very crucial for the management of total Ethiopia s.c as it will make management to device by ensuring product availability to customers across the country It will serve as a knowledge base for management to employ.

- It will enable the management to provide consumers with the right products at the right time and right place which result to a substantial percentage of sales for the company.
- Therefore, Total Ethiopia S. Co will be benefited from the study to overcome the distribution challenges in petroleum marketing.
- This study can also serve as reference for further studies that will be conducted in the Oil Industry of Ethiopia with particular emphasis on factors influencing fuel distribution performance for policy makers; this study is expected to give a clue in order to improve the fuel distribution activity of the country and Total Ethiopia S. Co also.

1.8 Organization of the Study

The study has five sections; the first part contains the problem and its approaches i.e. Background of the study, problem of statement, research Question objective of the study, significance of the study, scope and limitation of the study, organization of the study, as part of it. The second part is discussed about review of related literature The third part is discussed about research methodology, the fourth part is discussed all about data presentation and analysis by using all the techniques mentioned in the methodology. The fifth part, which is, the final section was contained summary of finding, conclusion and recommendation.

1.9 Definition of Terms

1.9.1 Operational definition of terms

- **Distribution:** According to Philip kotler & Armstrong 2001, Distribution is the process of planning, implementing and controlling the physical flow of materials, final goods and related information from point of origin to points of consumption to meet customer requirements at a profit.
- **Outsourcing:** as defined by Lysons, K. and Farrington, B. (2006) ‘’is a management strategy by which major non-core functions are transferred to specialist, efficient, external providers’’. Stated differently, it refers to the process by which a company contracts another company to provide services that might otherwise be performed by in house employees.

- **Transportation:** Transportation is defined as the activities involved in shipping any goods or finished products from suppliers to a facility or to warehouses and sales locations (Kenyon & Meixell, 2011).
- **Firm Performance:** An assessment of how performance is on three specific areas of firm outcomes: financial performance, market performance, and customer value added (Richard, Devinney, Yip, & Johnson, 2009).
- **Performance Measurement:** (Tuttle & Heap, 2008) defined the performance measurement as the process of quantifying action, where measurement is the process of quantification and action leads to performance.
- **Integration:** Lambert and Cooper (2000 cited in Dannis & Kampton 2010) is it involves collaborative work between buyers and suppliers, joint product development, common systems and shared information support the idea that optimizing the product flows cannot be accomplished without implementing a process approach to the business.

1.9.2 Conceptual definition of Term

- **Oil Industry:** Oil Industry in Ethiopia is a sector engaged in petroleum product distribution.
- **Service station:** is a facility that sells fuel and engine lubricants for motor vehicles
- **Fuel:** is any material that can be made to react with other substances so that it releases energy as heat energy or to be used for work. The concept was originally applied solely to those materials capable of releasing chemical energy but has since also been applied to other sources of heat energy such as nuclear energy
- **Dealer:** They procure oil from Oil Companies and sell to bulk consumers and the general public through fuel stations
- **Depot:** premises used for the storage and sale in bulk of solid or liquid or gaseous fuel ,but does not include a service station and specifically exclude the sale by retail in to vehicle for final use of such fuel from the premises
- **Network retail outlet :**a set of sales outlets and a network head company, which maintain lasting relationships and establish common interest

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter has presented a review of relevant theoretical and empirical literature on factors that influence distribution performance such as transport outsourcing, integration and safety policy in relation to the research questions: To what extent does transport outsourcing, Integration and safety policy impact distribution performance.

2.2 Theoretical Review

2.2.1 Components, Nature and Definition of Distribution

Distribution is the process of planning, implementing and controlling the physical flow of materials, final goods and related information from point of origin to points of consumption to meet customer requirements at a profit (Kotler and Armstrong, 2001). Schewe and Smith (1980) defined distribution as the physical movement of products to the ultimate consumers. Production is not complete until goods reach the final consumers and products are worthless until they are made available to those who need them. It is this process of making goods available to those that need them that gives rise to distribution basis in a marketing strategy.

Achison (2000) denoted that unless products are distributed and delivered in the right quality, at the right time, in proper condition and at the right price; buyers may be reluctant to buy. He stressed further that distribution is regarded as a major consideration in strategic planning because it is an important marketing function that is responsible for making goods and services available to the consumers.

According to John O' Shaughnessy (1992) in his book competitive marketing: A Strategic Approach denoted that a distribution system is the network of people, institutions or agencies involved in the flow of a product to the consumers, together with the informational, financial, promotional and other services associated with making the product convenient and attractive to buy and re-buy.

Physical distribution is often regarded as “logistics”, logistics refers to the interrelation and management of all the key element or activities involved in providing both raw materials and finished products to customers. According to Kotler & Armstrong (2001) Physical distribution is the task involved in planning, implementing and controlling the physical flow of materials, final goods and related information from point of origin to points of consumption to meet customer requirements at a profit.

Traditionally, Physical Distribution typically started with products at the plant and then tried to find low-cost solutions to get them to customers. However, today’s marketers prefer market logistics thinking, which starts with the marketplace and works backward to the factory.

2.2.2 Components of Distribution

Distribution is made up of two components channels and physical distribution or logistics distribution system refer to that complex of agent’s whole seller’s through which manufacturers move products and services such add life insurance to their intended markets.

2.2.3 Physical Distribution

Physical distribution is defined as a set of activates concerned with the physical flows of materials, components and finished goods from producer to channel intermediaries and consumers (David jobber, 2001:537). Physical distribution activities have been a subject of managerial attention for some time because of the potential for cost savings and improving customer service levels.

Cost savings can be achieved by reducing inventory levels, using cheaper forms of transport and shipping in bulk rather than small quantities. Customer service levels can be improved by fast and reliable delivery including just- in time delivery, holding high inventory levels so that customers have a wide choice and the chances of stock- outs are reduced, fast order processing, and ensuring products arrive in the right quantities and quality. Physical distribution management concerns the balance between cost reduction and meeting customer service requirement. Trade- offs are often necessary.

2.2.4 Physical distribution management (PDM)

Physical distribution management (PDM) is the term used to describe the management of every part of the distribution process. PDM can be contracted out to a specialist or is best developed as a specialist function within the organization. It is the process which ensure that the correct customer within a given timescale, as cost-effectively as possible (Little and Marandi, 2003).

Part of PDM would include being aware of what your competitors are offering, as suggested above. Elements for consideration would include:

Costs involved Methods of transport – road, rail, plane, shipping, etc. Routes used, Stock, storage and stock control, Protection and delivery of stock, Timing key element evaluating the effectiveness of methods of distribution and being aware of other alternatives. Distribution is an integral part of the marketing mix. With the right distribution strategy in place that is with the right mode of delivery the right speed of delivery to the appropriate place of purchase, customer satisfaction can be significantly increased. Failure to deliver these practical points will result in the loss of orders and income to the company and long-term customer loyalty will decline (Drummond and Ensor 2001) the key objective of PDM is to find the most cost-effective way of meeting customer needs in relation to purchasing their product, whoever they are and wherever they are. Physical distribution management includes the following functions: Customer services, Order processing, Materials handling, Warehousing, Stock/inventory management, Transportation.

2.2.5 Function of physical distribution

2.2.5.1. Communications and order processing

Basically the physical distribution process starts with the company receiving an order. The starting point in a physical distribution system is order processing, which is a set of procedures for receiving, handling and filling orders promptly and accurately. Physical distribution begins with a customer orders. The order department prepares invoices and sends them to various departments. Items out of stock are back ordered shipped items are accomplice by shipping and billing documents with copies going to various' departments (Palmer, A., (2001), Reducing time between a customer placing an order and receiving the goods may be achieved through careful

analysis of the components that make up order processing time. A computer link between sales person and the order department may be effective. Electronic data interchange can also speed order processing time by checking the customer's credit rating, and whether the goods are in stock, issuing an order to the warehouse, involving the customer and updating the inventory records (David Jobber, 2001:537).

Both Palmer and Jobber have explained their thoughts with similar underlying assumptions. For a company which is producing uniform consumer products like soft drinks order processing rarely takes place.

2.2.5.2 Warehousing

Every company must store its goods while they wait to be sold a storage function is needed because production and consumption cycle rarely match. For example, Snapper, Toro, and other lawn mower manufacturers must produce all year long and store up their product for the heavy spring and summer buying seasons. The storage function overcomes differences in needed quantities and timing. A company must decide on how many and what types of warehouses it needs, where they will be located. The more warehouses the company uses, the more quickly goods can be delivered to customers. However, more locations mean higher warehousing costs. The company therefore, must balance the level of customer service against distribution costs (Kotler, P. and Armstrong, G. (2001).

2.2.5.3 Inventory Control

Inventory levels also affect customer satisfaction. The major problem is to maintain the delicate balance between carrying too much inventory and carrying too little. Carrying too much inventory results in higher- than- necessary inventory- carrying costs and stock obsolescence. Carrying too little may result in stock- outs, costly emergency shipments or production, and customer dissatisfaction. In making inventory decisions, management must balance the costs of carrying larger inventories against resulting sales and profits. Inventory decision involves knowing both when to order and how much to order.

In deciding when to order, the company balances the risks of running out of stock against the costs of carrying too much. In deciding how much to order, the company needs to balance order-

processing costs against inventory caring costs. Larger average order size results in fewer orders and lower order- processing costs, but it also means larger inventory- caring costs (Kotler, P. and Armstrong, G. (2001).

2.2.5.4 Transportation

The appropriate choice of transportation made is a key part of physical distribution management. This is especially important in markets where just in time delivery is the norm. A number of criteria should be used to select transport: costs, transit time, reliability, capability (important if goods required special handling, such as chilled temperatures), security, and traceability each major mode of transport has its own cost and service out comes that must be considered by the marketing logistics manager. These are described in turn below (Adrianpalmer, 2000:397-398).

Road: Road haulage has the key advantage of flexibility due to national road networks providing direct access to production facilities, ware houses, and customers. This allows Lorries to transport goods from supplier to end user without unloading in route.

Rail: Rail ways tend to be used for carrying large, bulky freight over long distances. Goods commonly carried by trains include coal, chemicals, and building aggregates. The longer the journey, the more economically competitive rail transport become, as can be seen in North-America. A significant problem for railways, however, is its lack of flexibility.

Air: This is both the fastest and most expensive mode of transport its great speed over long distance means that it is often used to carry perishable goods and emergency deliveries. As international trade continues to grow, air freight should likewise grow in importance, especially in global just in- time systems. Like rail, though, companies must still transport goods to and from air terminals. Air freight is eminently suited to valuable, relatively light goods such as fresh flowers, jewelry, and electronic components.

Water: This can be divided into sea and inland water ways, both of which are slow but fairly expensive. Ocean- going vessels carry a large variety of goods, for example oil from the Far East to be refined in British petroleum's Farley coastal terminal, or basic consumer goods to small islands like Guam. Inland water transportation, like rail, is associated with low-value, bulky commodities such as coal or steel.

Pipeline: Pipelines are dependable and low maintenance form of transportation for liquids and gas. They normally belong to the shipper and carry the shipper's products. The down side of this transport mode is the major investment involved in the construction of pipeline. A good example of a logistics tradeoff is given by the use of pipelines in the North Sea as opposed to oil tankers. Most of the ideas stated above usually work for companies which produce variety of products which are highly demanded by the general public such goods maybe oil, sugar and the like.

2.2.5.5 Material Handling

This essentially concerned with the movement of goods with the producers factory, ware houses, and transportation depots. Due to the complex of handling the proliferation of consumer product lines that now exists, mechanization of procedures is becoming increasingly common. An important development in materials handling is containerization. The combining of large quantities of goods in to a single large container avoids the need to handle individual items during transit. Once containers are sealed, they can relatively easily be transferred from one mode of transport to another. This allows the distributor to handle the product as few times as possible, in as large a quantity as possible, and with as much automation as can be achieved. In this way stock losses and damage are reduced.

Product packaging can also play a part in facilitating materials handling. Goods must be capable of withstanding regular loading and UN loading as well as stacking in manufacturers' and customers ware houses. You will probably have noticed how some goods are displayed on supermarket shelves: often they are either still in large cardboard boxes, designed to show off their contents, or in conveniently shaped individual containers to ensure maximum use of shelf space. At the same time, as Joelr.evans and Barry (1992) remind us, packaging must be as environmentally friendly as possible in terms of its capacity for recycling (Adrialpalmer, 2000: 398). In this case whatever the product maybe material handling is very essential and basically unavoidable. I can say it's the most common thing to all companies as far as distribution is concerned.

2.2.6 Distribution Strategy

Distribution strategy is the method a firm uses to get products and services to different channels and networks with objective to reach the end customer, either directly or indirectly. The intermediaries include the agents, wholesalers, distributors and also retailers. These elements help in ensuring that a firm has provided the customers with quality customer service that has an influence on the level of customer satisfaction (Palmer, 2001). Customers require convenience for the product offering such as the physical access. Distribution channels are important in a firm's level of competitiveness. This is because they affect the time when the product reaches the customer as well as final price of the product. Through distribution strategy, an organization gets to understand the sales channels through enhanced knowledge, better segmentation on the distribution within the sales channels, the roles played by the intermediaries on the sales process, getting to understand centers of influence on the sales channel as well as the position of a firm in relation to the sales channel (Whetton, 2011).

Achison (2000) stated that before a decision about the distribution to be adopted for efficient channels network, company should identify the target consumer it intends to reach with its products. This is because distribution network can vary among companies, however for more narratives the following scope of the strategic alternatives companies could pursue include:

- A. Exclusive distribution
- B. Intensive distribution and
- C. Selective distribution

A. EXCLUSIVE DISTRIBUTION

Suggest that one particular dealer serving a given area is granted sole right to sell a product and it is usually associated with products that the targeted customer would not mind to seek out for. Again by contrast, some producers purposely limit the number of intermediaries handling their products; availability and accessibility are deliberately restricted. Exclusive distribution often is found in the distribution of new automobile and prestige products which need to protect their image up market exclusivity and allows for higher- mark up.

B. INTENSIVE DISTRIBUTION

The aim of intensive distribution strategy is to secure as many outlets as possible in order to maximize availability and accessibility to potential buyers. This type of distribution is most suited to products where convenience of purchase and impulse buying are important factors influencing sales. Examples of product requiring intensive distribution are: cigarette, candies, cookies, soft drink, ice cream, tooth paste, petrol and other similar items are sold in many of outlets to provide maximum brand exposure and consumer convenience.

C. SELECTIVE DISTRIBUTION

This involves where a few selected distribution outlets are given the opportunity/right to distribute the company's goods. The manufacturer may want the distribution of the product to be as intensive as possible but may also want to protect the image of the company and its brands by exercising some control over the type of retailers selling it. Most televisions, furniture and small appliance brands are distributed in this manner. By using selective distribution they do not have to spread their efforts over many outlets, including many marginal ones. They can develop good working relationships with selected channel members and expect a better- than average with more control and less cost than does intensive distribution.

2.2.7 Fuel Distribution

Commodities such as oil, gas, and petrochemicals are transported using different mode of transportation such as pipe-lines, vessels or tankers, roads, and railroads. These commodities are produced in limited places of the world, yet they are demanded all over the globe since they are an essential source of energy and raw material for many other industries (Raed, Tiravat, & Basheer, 2006). The boom in global demand of oil along with the ease of international trade and the inflexibility involved in the petroleum industry's fuel distribution has made its management more complex and more challenging (Coia 1999, as cited in Barua, 2010).

A fuel distribution consists of all stages involved, either directly or indirectly, in fulfilling a customer's request (Chopra & Meindl, 2001). As John et al. (2013) described fuel distribution as an extended enterprise that crosses the boundaries of individual firms to span the related activities of all the companies involved in the distribution of fuel. There is a tremendous need to get everyone to pull together in the same direction (Handfield, 2016).

2.2.8 Effective Distribution System

Strategy in sales and marketing is a collection of processes that firms utilize before selling their goods and/or services. The aim of a good strategy in selling is that one can meet a proper person at the proper time and location using the best technique in order to influence that person. The real meaning of strategy is doing all things needed to do in the best situation and achieving goals (Ghazaleh Moghareh Abed, Mohammad Haghghi, 2009).

In today's environment, strong distribution strategy is crucially important for the success of many manufacturing firms in the world. According to Christopher & Towill, (2002), the ability to plan and execute the movement of the right product to the right place at the right time can also make the supply chain more efficient by significantly reducing expedited freight and the production and repositioning of unneeded inventory. Moreover, George & Iravo, (2014), stated that the effective distribution strategy is paramount to be able to deliver quality products to its customers. Meeting specific customer service requirements around products and services can help grow market share by maintaining strong existing relationships and growing new ones. The efficiency and effectiveness of the logistics operation has a considerable influence not only on the business performance of manufacturers but also on the customer's perception of the quality of the products and services provided by the plant.

Many manufacturing firms have best distribution structure and logistic strategy while many others still fall to deliver the right quantity of products in time, in the right condition at the minimum cost. Therefore; to meet the customer expectation, designing the best distribution network system by controlling and properly managing various factors that affect the efficiency of delivering products from the point of production to the point of final consumption is crucially important.

2.2.9 Channel of Distribution

Every finished product can only get to the consumers through an effective and efficient channel of distribution. The term channel of distribution refers to the systems of marketing institution through which goods and services are transferred from original producers to the ultimate consumers.

Linus & Emola, (1998) define Channel of distribution as a series of marketing institutions through which title to or control of a product, service or idea is transferred from producer to customer, clients or business users. The key element in this definition is the passage of title or control over goods, services or idea and not necessarily their physical movement. Kotler & Armstrong (2001) view it as a set of interdependent organization involved in the process of making a product or service available for use or consumption by the consumer.

2.2.10 Evaluation of Distribution Channel Performance and Effectiveness

The modernization of business activities, increasing level of competition and globalization in the world economy has a great impact on distribution channels management and performance and on the success of any business. Manufacturers' success cannot be reached from their own effort alone; their success or failure is determined and increasingly reliant upon their marketing channel members or distributors' (e.g., agents, wholesalers and retailers etc.) performance and how effectively and efficiently their products are reaching to the intended consumers or sold (Singh & Imran, 2014). That means performance of distribution channel and effectiveness determines competitiveness and successes of the company. The level of performance attained by distribution channel members is pivotal for a firm's achieving a competitive advantage. Hence in order to survive and thrive in a highly competitive manufacturer companies have to have a distribution channels which have good performance and have no problem at any point of the distribution channel (Hanaa, 2013).

In the distribution channel or distribution network context the main task of distribution channels is placing the goods in hand of potential customers at the right time and place. Therefore, in products distribution delivery time has major significance. Delivering products in shortest feasible time is one of the criteria for measuring performance of distributors (Kiumars Sharifi, Nazanin Zandi, and Roshanak Rezvani (2013). scheme, storing and depot facilities, transportation and orders management are of top priorities (Koshy, 2014). Whenever, such services are offered by distribution channels properly and in harmony with quality products for the consumers or users, positive performance and effects on profitability of the company are expected, otherwise profit crises are expected (Kiumars, Nazanin & Roshanak, 2013).

By evaluating and measuring distribution performance manufacturers and businesses can see what they achieve, quantify and qualify their effectiveness, identify opportunities for improvement and compare their performance against competitors (Ibid). Therefore, intermediaries/distribution channels that want to be successful and survive in competitive marketing environment should have to strive to properly perform the large number of distribution activities to achieve the set goal of the marketing and should evaluate and measure their distribution performance regularly (Salih and Emel, 2013).

The manufacturer who also sells all of its output through intermediaries/distribution channels is likely to evaluate its channel members' performance more comprehensively, because the firm's success is so directly dependent upon the channel members' performance.

To evaluate and identify the performance of distribution channels in delivering quality services in the process of distribution of products, we need to measure different indicators and analyze them (Hanaa,2013). Traditionally, distribution channels performance is measured by financial aspects or minimum logistic costs. But with the increase of competitiveness in the global market performance of distribution networks along with SCM start to be measured by non-financial aspects as well, such as customer service level and satisfaction or how to improve customer value and to decrease expenditures at the same time (Wihdat, Yousef & Sang-Heon, 2013).

Most of the current distribution network studies (Koshy, 2014, Kiumars, Nazanin, &Roshanak 2013, Wihdat, Yousef and Sang- Heon, 2013, Salih and Emel, 2013 etc.) have emphasized on the importance to use some non-financial parameters (such as customer service level and satisfaction, service coverage area, inventory level, delivery or lead time and costs) as well for evaluation of effectiveness of performance of distribution channels that companies used for distributing their products to the end users.

2.2.11 Measurements of Distribution Performance

Distribution refers to the steps taken to move and store a product from the supplier stage to a customer stage in the supply chain. Distribution occurs between every pair of stages in the supply chain. Performance measurement is defined as the process of quantifying the effectiveness and efficiency of action Lancaster & Reynolds, (2004) Furthermore, performance measurement provides an approach to identifying the success and potential management

strategies, and facilitating the understanding of the situation. Henceforth, accurate performance measurement is helpful in the improvement of SCM. Many firms look to continuous improvement as a tool to enhance their core competitiveness using SCM. Many companies have not succeeded in maximizing their supply chains potential, because they have often failed to develop the performance measures and metrics needed to fully integrate their supply chain to maximize effectiveness and efficiency.

Lee and Billington (1993), observed that the discrete sites in a supply chain do not maximize efficiency, if each pursues goals independently. Distribution performance can be measured through delivery schedule of the Distribution Company,

2.2.12 Problems and Factors Affecting the Performances of Distribution

Marketing channels develop and operate in complex environment that is continually changing. The changes have major effects on the marketing channels. According to Salih,y and Emely (2013). every channel is influenced by macro environmental forces or variables such as consumer buying behavior, economic, political and legal factors, technological changes, international macro influences and channel member preferences. Due to the dynamics nature of these factors, companies must frequently evaluate and monitor the performance of their distribution channels. The evaluation and monitoring has to be done regularly for better results.

The fundamental challenge confronting channel managers in the face of these economic developments is to help channel managers weather difficult economic conditions. The competitive environment must include not only domestic but also global competition as well. The socio cultural environment has a significant impact on marketing channels because the structure of marketing channels reflects the socio cultural environment within which they exist. The technological environment must be monitored carefully to evaluate the effects of technological changes on marketing channels. Such developments as the internet, computerized inventory management, computer shopping etc. have had, and will continue to have, profound effects on marketing channel strategy. Also channel managers cannot ignore the political-legal environment, with its complex laws and continually changing precedents. Distribution strategy and its performance can also be shaped by how decisions are made in other marketing areas such as the product, price and promotion elements. The idea behind the channel in the distribution

area is that a channel concept highlights the efficiency and effectiveness aspects of distributing goods and services (Wihdat D, Yousef A, & Sang-Heon L. (2013).

Traditionally, distribution network performance is measured by financial aspects or minimum logistic costs, yet with the increase of competitiveness in the global market; distribution networks along with SCM performance are measured by nonfinancial aspects as well, such as customer service level (Gunasekaran and B. Kobu, 2004) or how to improve customer value and to decrease expenditures at the same time (M. Kärkkäinen, T. A. Risku, and J. Holmström, 2003). Most of the current distribution network studies use parameters based on the customer service level, which is service coverage area such as the number of distribution centers and the inventory Level with minimum total costs (A. Amiri, 2006), (F. Altiparmak, M. Gen, L. Lin, and T. Paksoy, 2006), and (H. Selim and I. Ozkarahan, 2008). However, only a limited number of researchers consider delivery time with minimum total costs or consider all parameters such as inventory level, lead time, service coverage areas, and costs simultaneously (F. Altiparmak, M. Gen, L. Lin, and T. Paksoy, 2006).

The need to evaluate performance level of distribution channels is just as important as the evaluation of other marketing functions. Clearly, the marketing mix is quite interdependent and the failure of one component can cause failure of the whole (Michael, 2012). Therefore in evaluating the performance and efficiency of distribution of products; it is very essential to identify what factors affect or challenge the performance and effectiveness of the distributors.

2.2.13 Distribution effectiveness and firm performance

Effectiveness as non-economic performance or non-financial measure has been concerned by Kaplan, and Norton (1992) long term firm orientation. Meanwhile, measured non-financial performance based on complement financial statements, such as “effective operational measures on customer satisfaction, internal business processes, and the organization’s innovation and improvement activities” .Effectiveness had been known as indicators for customer satisfaction, conventionally considered to be an essential determinant factor for long term customer behaviors (Oliver,1980) and a significant predictor of positive performance in inter-organizational relationship Furthermore, according to(Inkpen, & Cural, 2004). non-financial indicators are likely to be used for identifying the best practices within cooperative relationships. This has also

been emphasized clearly by Johnson, L.K. (2006), that non-economic instrument could be significantly used as an expansion indication of a firm's long term goals. According to Kaplan, and Norton (1992), profitability and other financial measures actually occur due to non-financial activities and accomplishments. On economic measures- improvement of effectiveness activities are considered to be the trigger of future financial utility and non-financial performance is crucial to foresee the company's future performance as it could offer extra and increased data, separately from economic one, in which could be used for users „decision making. In distribution channel, according to Sherlekar (2004), suppliers are effective if they deliver what was asked for, no matter if they are bound to filthier warehouses to manage-if they managed the task inefficiently. Meanwhile, Rhea et al.,(1987) gave some examples of distribution effectiveness referring to customers' satisfaction in that if customer expected delivery order in two weeks and the firm can fulfill less or punctual than in two weeks, meaning the customers' satisfaction is fulfilled. On the contrary, it is ineffective if customers expect delivery order in two weeks, but the firm could not fulfill the demand in less than in two weeks or punctually.

2.2.14 Outsourcing

Outsourcing as defined by Lysons, K. and Farrington, B. (2006) ‘‘is a management strategy by which major non-core functions are transferred to specialist, efficient, external providers’’. Stated differently, it refers to the process by which a company contracts another company to provide services that might otherwise be performed by in house employees. Outsourcing is being employed to achieve performance improvements across the entire business. Accordingly, usually firms have outsourced their non-core activities. However, outsourcing does not necessary mean that the outsourced function is less important to company's performance. In recent years, many other functions in all industries has been actively outsourced, though, outsourcing of entire processes however has not been prevalent.

In recent years the traditional paradigm of owning factors of operations to achieve competitive advantage is challenged by cost saving motive. There is also other factors to go for outsourcing including achieving competitiveness as supported by Greaver, (1999). In addition, the sourcing concept of moving activities out of the organization to where the experts and their resources exist has challenged owning all of the resources as most traditional firms by the strategy for outsourcing. Outsourcing is simply the transferring of an internal service function to an external

organization that otherwise would be difficult to acquire, or costly to have in-house Outsourcing is one of these business practices that can lead to greater competitiveness Embleton and Wright (1998)

2.2.15 Forms of Outsourcing

2.2.15.1 Tactical outsourcing

it is that a company will get a better service for less investment and management time from an outsource provider. It focuses on constructing the right contract and making the vendors stick to that contract. Reasons for tactical outsourcing are for example immediate cost savings. Quite often, the company is already in trouble and uses tactical outsourcing as a direct way to address problems.

2.2.15.2 The Strategic Outsourcing Model

as a strategy, holding stock or inventory in warehouses just in case it is needed is a highly costly activity. The stock itself is expensive and might not sell or could become obsolete. Warehouses and distribution centers generally are expensive to build, operate and maintain, acquiring transportation is also becoming very expensive, therefore strategies to curve up this situation is imperative. According to Visagie (2003), there are a number of critical issues to be taken into account when outsourcing becomes an improvement initiative. Strategic decision making in terms of what is to be outsourced and what not to outsource is essential. Strategic outsourcing is about outsourcing a certain function of a company to be able to focus on core businesses. It requires a strong secure relationship between the vendor and the company. This means a strategic long-term partnership with the emphasis of mutual benefit, instead of a pure vendor – buyer relation, which is quite often adversarial.

2.2.15.3 Transformational outsourcing

in transformational outsourcing the decision might be doing all or none. It refers to outsourcing everything the company does not do well, including core businesses. Therefore, the purpose of outsourcing is redefining the business. This might be quite questionable since core business is usually the most important part of a company.

2.1.16 Transport Outsourcing

For many companies cost of transport is the highest logistical cost. Transport cost is usually defined only as freight charges. Apart from freight charges, costs arise from carrying inventory in-transit, from numerous operations connected with frequent and small deliveries resulted from just in time deliveries. During a production plan preparation, it is vital to know exactly when material will be delivered. Focus on customer needs" satisfaction, order fulfillment, short transit time, on-time delivery; gives transport costs a new dimension. Unless considerable buffer stocks are kept, the production plan relies on accurate estimated delivery dates. Delays, lacking or inaccurate delivery information can be extremely costly as the consequence could be production down-time (Greaver, M. F. (1999).Risk is connected with a basic assumption in the resource-based perspective that a company is highly dependent on resources controlled by others (Embleton, P.R., and Wright, C.P. (1998).Transit times affect the cash-to-cash cycle for most companies. Long transit times means later payment and negatively affects the cash flow. Cash is tied up in inventory in transit that could otherwise have been employed elsewhere, contributing to further revenue generation

Transport is needed throughout the whole supply chain being the link between supply chain members. Because demand and supplies have become international processes short lead time is especially important for companies that operate in international or global environment. Consequently quality of transport service affects the competitiveness of the entire supply chain. The challenge is to achieve competitive advantage in the context of rapid and unpredictable changes of markets. Over the past years it had place a growing focus on service quality improvement and reduction of inventory. The highly competitive environment along with customers" demands for tailored products and services has forced companies to continuously evaluate, improve and reengineer their logistics operations. These operations have a noticeable contribution in companies" efforts to meet customers'" expectations (Jiang, B. and Qureshi, A. (2006).

Managing companies in this increasingly demanding environment has made many firms to look for logistics service provider. They are used for many logistics functions, such as transport or warehousing. Logistics activity (purchasing, warehousing, transport and distribution, inventory management) can be realized more efficient than by manufacturing companies. The source of

competitive advantage is the capability to adapt, integrate, and reconfigure internal and external organizational skills, resources, and functional competences to match the requirements of a changing environment (Teece et al. 1997). Manufacturing is the industry with the highest demands regarding logistics services and consequently it is judged as the most appropriate industry for comparisons within the logistics context

2.2.16.1 Integration

Integration in different functions within companies allows companies to increase productivity, customer satisfaction, and financial performance. Characteristics that show an integration successfully carried out can be seen from the increasing performance of Griffin (1992), while Ellinger et al (2000), argues that Performance cannot be improved without integration in the organization. Paiva et al (2010), examined the integration of two departments namely manufacturing and marketing and found that companies achieved better performance when manufacturing and marketing worked together.

Integration is very useful for the company, especially in improving the performance of the company. Research on integration has been widely carried out, in each of these studies found various limitations. This paper is a literature study to explore the limitations of research that has been carried out by several integration studies. This limitation is a research opportunity that can be done by researchers who are interested in conducting research to fill the limitations of previous research.

2.2.17 Types of Integration

According to (Flynn, Huo and Zhao 2010) integration is the extent in which the manufacturer (Internal integration) and the extended forms in both directions external integration (Upstream and downstream) strategically collaborate for achieving mutual beneficial goals (Barbara et al., 2010). On this definition they highlighted importance of strategic collaboration as an ongoing partnership to achieve mutually beneficial strategic goals. It provokes mutual trust, increases contract duration and encourages efficient conflict resolution and sharing of information, rewards and risks.

2.2.17.1 Internal Integration

Internal integration is the creating coordination among functional departments within an organization. The internal integration, the function to function integration within the business organization can be considered as the first step of operational integration as the bases of effective integration as the benefits of external integration (Harrison & Hoek, 2008).

Identify fundamental information requirement of each functional department and creating an access of information among these department is the process of creating internal integration.

Harrison et al, (2008) demonstrated the impact of internal integration on external integration as; “high internal integration can reach a level of collaborative internal operation, with which the whole firm works like an integrated system that results in better performance and better interdepartmental effectiveness, such as cycle time reduction, better in-stock performance, increased product availability levels, and improvement in order-to delivery lead times (Harrison & Hoek, 2008).”

2.2.17.2 External Integration (Upstream and Downstream)

“The supplier base is really an extension of the enterprise. As such, supplier relationships (face-to-face, telecommunications, or the Internet) need to be developed as aggressively and strategically as customer relationships (Frazelle, 2002)”. This implies that the upstream integration which give high emphasize to the supplier should be equal to downstream integration.

External integration also refers to the systems that coordinates and crates collaboration among all stakeholders with on the value chain (the supplier, manufacturer and the customer). External integration allows all partners to share critical information such as forecast demand, actual orders, and inventory levels

Award,H.A.H and Nasar,Mo.,(2010) demonstrate external integration as “Downstream integration involves core competencies derived from coordination with critical customers, whereas supplier integration involves core competencies related to coordination with critical suppliers” (Donal & Edward, 1989).

High level of collaboration and information sharing activities with key customers in the downstream integration, providing the business entity with strategic insights into market expectations and business opportunities, and enabling a more efficient and effective response to the end customer. Argue that downstream integration reduces unpredictable demand and leads to better financial performance Grahm, C.S. & Mark, J. (2016.)

Effective external integration with customers may enable organizations to reduce demand side risks, and to minimize potential occurrences of anything that may affect the business firm ability to meet the requirements of customers and end-users. Through integration with customers, companies can better understand customer needs and respond more quickly to them. Integration with consumers contributes to demand planning, greater visibility in sharing information, and a consequent increase in the level of service (Thomas & Alcantra, 2013).

2.2.18 Integration Dimensions

2.2.18.1 Process integration

It involves collaborative work between buyers and suppliers, joint product development, common systems and shared information. Lambert and Cooper (2000 cited in Dannis & Kampton 2010) support the idea that optimizing the product flows cannot be accomplished without implementing a process approach to the business. Viewing as a set of integrated process capabilities can be used to improve performance; complex activities can be coordinated to great advantage between functions and redundant or non-value-added activities.

The oil industry is one of the largest and most complex industries in the world that encompasses many stakeholders, involves huge investment and touches on peoples' everyday lives with services ranging from transportation, electricity, heating, etc. (Richard & Francis 2014), using integrated process across the network will enhance the overall process.

Shared information between partners can only be fully leveraged through process integration. By connecting the business process both within the enterprise and between enterprises, the network moves the information and intelligence by extending the reach and richness of the information Raed, AL-H., Tiravat, A. & Basheer, K., 2006, He continued and emphasizes that information

can be available through a collaborative process and the logistics of making, distributing and delivering good become more efficient.

Regardless of the petroleum sector existed for decades and the essential role it plays in fulfilling most transportation needs, literature related to supply chain of oil, in particular on challenges of integration of oil supply are very few.

2.2.18.2 Collaboration and Coordination integration

A common feature of these approaches was recognition that ‘the whole is greater than the sum of the parts’. Amarpreet, S. & John, B., 2010) states that collaboration allows companies to “leverage each other on an operational basis so that together they perform better than they did separately”. Collaborative relationships internally and externally are necessary ingredient for success (John, C. John, Rober, Brain 2013).identified a dynamic collaboration capability should help a company access, shift and leverage resources to rapidly respond to a changing competitive environment. For cooperation to exist, channel members must agree that they have concerns of mutual interest, must work together toward the achievement of those goals, and must collectively have the ability to create logistical and transactional channels that will enable the channel as a whole to be competitive in the market places Coia, A., 1999,

2.2.18.3 Organizational Relationship Linkage(ORL)

Inter organization relations defined as formal arrangements that bring together tangible and intangible assets different legally independent organizations with the aim to produce joint value added to the ultimate customers (Benchmann & Witteloostuijn, 2006). Organizational Relation Linkage ORL involves well established relations and transparent interactions members, which demands common visions and objectives, ideas and organizational culture and integrated performance measures, incentive schemes and sharing of skills (Rafaela et al., 2012).

Organizational relationships are networks of resource interdependencies. The organizational relation linkage includes all participants in the supply chain including manufactures, buyers, suppliers, customers, government agencies, and other external organizations like third party logistics service providers that are critical to the success of the supply chain (Tillquist, 2002). Organizations relation linkage is the key instrument to share critical resources like inputs, skill

and knowledge, idea, information, technology and logistical equipment. Information and Information Technology is a key component for the successful implementation and management of organizational linkage in the supply chain (Pfeffer, 1992; Tillquist, 2002)

2.2.19 Benefits of integration

According to National Research Council (2000) & Katunzi (2010), potential benefits of integration are:

- Reduction in transaction costs through information sharing
- Increased competitiveness and profitability
- Improved delivery performance
- Increased forecast accuracy

2.2.20 Safety

Safety refers to the common beliefs, attitudes, and values surrounding safety that exist within an organization. While there are no OSHA standards or regulations that pertain specifically to safety culture, a strong culture of safety can offer myriad organizational benefits companies with a strong culture of safety have integrated safety throughout their operations and view a safe operation as a core organizational value. In order for a strong safety culture to take hold, safety efforts must be valued and supported throughout an organization Source: (www//safety.BLR.COM).

2.2.21 Distribution performance

Due to global competition, organizations have been forced to improve their distribution. Instead of competing as individual entities they prefer competing as demand chains as it gives them an upper hand against their rivals through provision of high customer service levels by forging relationships with customers and suppliers while ensuring that ordering costs are minimized. Another strategic measure taken by distributors and manufacturers is the establishment of holistic cooperation between themselves and transportation organizations to facilitate effective communication, alignment of incentives and synchronization of decisions in order to enhance distribution service performance and gain competitive advantage in the global market. (Venus, et

al. 2009). According to Rabinovich and Bailey, (2004), Distribution Service Quality comprises of an array of logistics that ranges from customer needs and marketing to delivery of finished products to customers. They claim that an effective physical distribution system is that which is reliable and ensures that products reach customers in a timely manner. Sherlekar, S.A. (2004).resolved that the poor road network in Uganda has created more challenges in the transport and warehousing segment. They show that ineffectiveness of Distribution Service performance can be minimized or eliminated through vertical collaboration. This is where manufacturers and the distributors downstream collaborate for common good. Service performance helps in evaluating the ability of the provider to unfailingly deliver products within the stipulated time frame at a cost that is acceptable. Factors such as product quality, product availability, reliable delivery and other elements like timely responsiveness and effective communication have a positive relationship with customer satisfaction. Recurring purchases of products that represent augmented expenditure between business partners come as a result of customer's burning desire to maintain a healthy and constructive relationship with the supplier (Bowersox, et.al, 2002).

There is a relationship between service performance and customer satisfaction and the intention to buy again. Customer satisfaction may be evaluated depending on the consumption experience and total purchase of a given commodity or service over a period of time. The assessment may be performed based on confirmation or disconfirmation of purchase of commodity or service. Increased customer satisfaction has been associated with improvement in economic returns of a company, including profitability and market share. Customer satisfaction can be increased by improving the quality of service (Zeithaml, 2000).

2.2 Empirical Review

This section reviews literature from studies carried out related to fuel distribution and determinate factors influencing of fuel distribution performance in petroleum marketing that support the study.

The existing body of knowledge on distribution strategies is vast and suggests several techniques and management skills. Only some aspects relating to performance, something of fundamental importance, will be highlighted here. A good starting point is the research done by Doney and

Cannon (1997), which stressed several contributions in the field. Kozak and Cohen (1997) created a list of statements for companies to use to achieve the level of trust and commitment with suppliers, which can be adapted in this case Distribution builds stable competitive advantages,

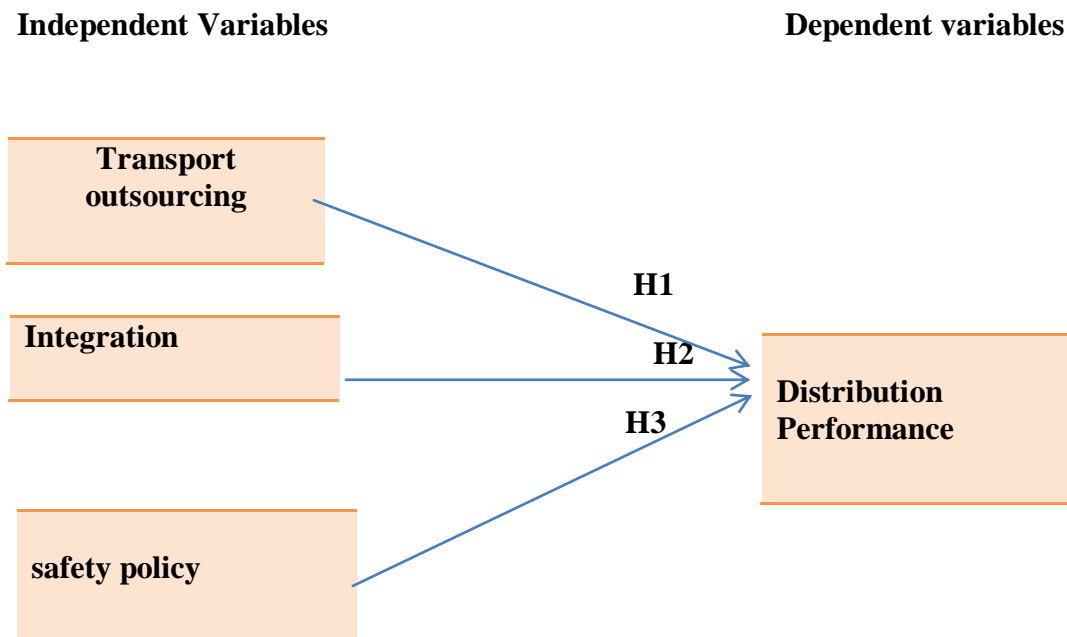
A variety of approaches has been taken to distribution channels, but distribution performance and intensity has received little attention in academic research (Frazier and Lassar, 1996).Marketing researchers are more concerned with management issues like power, conflict, satisfaction and performance (Gaski 1996). Few empirical studies were conducted to study distribution performance and intensity. Most of ideas concerning channel design issues are underlying and theoretical that predicts the choice of channel based on some factors. Although these constructs have been well accepted by marketing scholars, empirical research has to be done to confirm these assumptions and to find new factors determining the channel choice.

Wick (2000) The impact of transport outsourcing in the distribution performance in business outside suppliers. Results of this study indicate that success or failure in distribution depends on care and caution in continuous management of outsourcing function to ensure the job being done by distribution partners as expected. if the third-party distributor's procedures and performance are not carefully monitored, there is the risk of permanently alienating the existing customers, who have been attracted through much hard effort. wick, observes that the key to a successful outsourcing relationship includes understanding the process specifying objectives, establishing internal procedures for evaluating performance against objectives, and deploying systems that help to manage the function effectively.

2.3 Conceptual frame work

Determinants of distribution performance are congregated into three constructs of transport outsourcing, integration and safety policy, Angelmar, Reinhard and Louis, (1998)

The relationship between these constructs with distribution performance is conceptualized as follows.



Source: Figure 1.1 Conceptual Framework adapted from (Angelmar, Reinhard and Louis, 1998) and modified by the researcher.

2.4 Hypothesis

The conceptual framework model shows the level of influence of three different factors on the factors influencing fuel distribution performance of the company. Those factors are transport outsourcing, integration and safety policy the level of influences between the factors and the effect of distribution performance was tested by hypothesis. There are three hypotheses in order to test to what extent the independent variables (factors) that affect the distribution performance. Such as:

Hypothesis 1: transport outsourcing has a positive and significant effect on the distribution performance of Total Ethiopia S.C.

Hypothesis 2: integration has a positive and significant effect on the distribution performance of Total Ethiopia S.C.

Hypothesis 3: safety policy has a positive and significant effect on the distribution performance of Total Ethiopia S.C.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Research Approach

According to Creswell, John W. (2005) there are three basic types of research approaches including quantitative, qualitative, and mixed approach.

Qualitative research is an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem. The process of research involves emerging questions and procedures, data typically collected in the participant's setting, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data (Creswell, John W. (2005).

Quantitative research is an approach for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures (Creswell, John W. (2005).

Mixed methods research is an approach to inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks. The core assumption of this form of inquiry is that the combination of qualitative and quantitative approaches provides a more complete understanding of a research problem than either approach alone (Creswell, John W. (2005). Thus, in order to achieve the objective of this study and answer the research questions mixed approach were used.

3.2 Research Design

A research design is a set of advance decisions that makes up the master plan specifying the methods and procedures for collecting and analyzing the needed information (Burns & Bush, 2003). Saunders et al., 2009 also indicate that research design is the general planning about how the researcher will go about answering his or her research questions.

According to Burns & Bush (2003) research designs are classified into three categories: exploratory, descriptive, and explanatory. The choice of the most appropriate design depends largely on the objectives of the research. Exploratory research is most commonly unstructured, informal research that is undertaken to gain background information about the general nature of the research problem. Accordingly, exploratory research does not have a formalized set of objectives, sample plan, or questionnaire. In contrast to explanatory designs, descriptive research is undertaken to describe answers to questions of who, what, where, when, and how. The third one is explanatory, studying a problem with the purpose to explain the relationships or dependencies between variables. However, sometimes a research can be both descriptive and explanatory (Saunders et al., 2009).

The study has been adopted both descriptive and explanatory research designs. On one hand, descriptive research design was used to describe and summarize the characteristics of respondents. On the other hand, explanatory research design is used to establish the magnitude, direction and significance of various factors affecting the distribution performance of a firm in this case Total Ethiopia S.C .

3.3 Source of Data

Basically, there are two types of sources of data: Primary and secondary sources of data. According to Malhotra (2005), primary data are originated by the researcher for the specific purpose of addressing the problem at hand. Secondary data are data that are collected for some purpose other than the problem at hand.

In order to answer raised research questions, both primary and secondary data sources was used in this study. The primary data collection method was performed using the use of structured questionnaire, it will be distributed to customers of fuel service station. Questionnaire is one of

the most important research instruments and for collecting primary data, a structured close ended questionnaire used as a primary source of data in this study. It is recommended to keep the questionnaire as short as possible and give it a logical and sequential structure so that the respondent can easily see what the questionnaire is about and can follow its themes as they go through them (Fisher, 2007). Secondary data were collected from books, journals, articles, websites, Prior research works and Companies written documents.

3.4 Population and Sampling Technique

3.4.1 Population

Target population is defined as the entire aggregation of respondents that meet the designated set of criteria (Kothari, 2004). The populations of this study is customers of network retail out let service station In different base towns of Ethiopia market And geographic location As per the data obtained from the company profile there is 134 retail outlet Network service Stations among them 38 service stations are located in Addis Ababa the rest 96 station where located in upcountry Therefore, customers of 38 network service station are the total population of the study.

According to Davis (2000) as cited by Israel (2009), a large population's sample size can be calculated by using the formula

$$n = \frac{Z^2 p(1-p)}{e^2}$$

$$n = \frac{1.96^2 \times 0.5 \times (1 - 0.5)}{0.05^2} = 385$$

n =stands for the sample size which is drawn

e = level of precision or sometimes called sampling error (is ranges in which the true value of the population would be estimated).

p = population proportion

Z = level of confidence

The sample have been drawn from maximum variability of the population ($P=0.5$) with 95% level of confidence with 5% precision level.

3.4.2 Sampling Technique

Sampling is the selection of a fraction of the total number of units of interest for the ultimate purpose of being able to draw general conclusions about the entire body of unit (Parasurman, 2004). There are two types of sampling techniques divided as probability and non-probability.

Probability sample is a sampling procedure in which each element of the population has a fixed probabilistic chance of being selected for the sampling. This requires not only a precise definition of the target population, but, also a general specification of the sampling frame (Malhotra 2005). It includes samples based on simple random sampling, systematic sampling, stratified sampling, cluster/area sampling (Kothari, 2004).

In contrast, non-probability does not use chance selection procedure, but rather rely on the personal judgment of the researcher. As to Kothari (2004, p.15), “non-probability samples are those based on convenience sampling, judgmental sampling and quota sampling techniques. Convenience sampling is technique in which a sample is drawn from that part of the population that is close to hand, readily available, or convenient (Anol 2012) Thus, the study used non probability sampling technique which is convenience sampling technique because the population is too large and it is impossible to include every individual and the respondents are included based on their convenient accessibility and proximity to the researcher.

3.5 Data Collection Instrument

Questionnaire is one of the most important research instruments and for collecting primary data, a structured close ended questionnaire will be used as a primary source of data in this study.

The questionnaire is made up of five parts. the first part comprises the demographic information of respondents, the second part questions related to transport outsourcing, the third part is questions related to integration, the fourth part question related to safety policy, finally the fifth part question related to distribution performance constructed into a five point Likert scale ranging from 1 for “Strongly Disagreed” to 5 for “Strongly Agreed”.

The questionnaires drafted in English language was translated into Amharic language by one of legally operating translation offices since they have the experience and proficiency in translation. The Amharic version of the questionnaire was intended for those respondents who have low proficiency in the English language. Voluntary respondents were asked with which version of the questionnaire they would be at ease to fill; the English or the Amharic version and then given the questionnaire accordingly.

3.6 Data Analysis

Data analysis essentially consists of applying statistical techniques to a data base to make inferences about variables or study objects; data analysis consists of a series of activities that can involve the application of several different statistical techniques in a variety of different ways. These activities must be closely coordinated so that all the information necessary for decision making is extracted from a data base.

There are several steps which are required to prepare the data ready for analysis and the steps generally involve data editing, coding, data entry and data cleaning (Shukla, 2008). To test and analyzing the role of independent variable – transport outsourcing, integration and safety policy on dependent variable- distribution performance , the researcher used Multiple Regression Analysis (MRA) and multivariate linear regression analysis to be conducted. Pearson correlation coefficient would also be used to show the interdependence between the independent and dependent variables.

The regression equation is stated below:

$$y_i = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \epsilon$$

Where,

y_i =Distribution performance

β_0 = y intercept/constant

β_1 = the beta weight or regression coefficient of transport outsource

β_2 = the beta weight or regression coefficient of integration

β_3 = the beta weight or regression coefficient of safety policy

x_1 = transport outsource

x_2 = integration

x_3 = company safety policy

3.7 Validity and Reliability

Validity is the extent to which differences found with a measuring instrument reflect true differences among those being tested or it refers to the extent to which a test measures what we wish to measure (Kothari, 2004). Shukla (2008) defined as validity is the extent to which differences in observed scale scores reflect the true difference among objects on the characteristics being measured.

As per Kothari (2004), content validity is the extent to which a measuring instrument provides adequate coverage of the topic under study. If the instrument contains a representative sample of the universe, the content validity is good. Its determination is primarily judgmental and intuitive. It can also be determined by using a panel of persons who shall judge how well the measuring instrument meets the standards, but there is no numerical way to express it. Therefore, the researcher will apply a consistent and valid sampling procedure to achieve the validity of the research work.

Reliability has to do with the accuracy and precision of a measurement procedure and reliable measuring instrument does contribute to validity, but a reliable instrument need not be a valid instrument. Two aspects of reliability exist and namely stability and equivalence deserve special mention. The stability aspect is concerned with securing consistent results with repeated measurements of the same person and with the same instrument and the degree of stability determined by comparing the results of repeated measurements. The equivalence aspect considers how much error may get introduced by different investigators or different samples of the items being studied. A good way to test for the equivalence of measurements by two investigators is to compare their observations of the same events. (Kothari, 2004).

For this study Cronbach's alpha will be used to assess the internal consistency of variables in the research instrument. Cronbach's alpha is a coefficient of reliability used to measure the internal consistency of the scale; it represents number between 0 and 1.

3.8 Ethical Consideration

Research, however novel its discoveries, is only of any value if it is carried out honestly. There are two aspects of ethical issues in research:

The individual values of the researcher relating to honesty and frankness and personal integrity.

The researcher's treatments of other people involved in the research, relating to informed consent, confidentiality, anonymity and courtesy.

Hence, the researcher was conduct the research in ethical manner that the thoughts, ideas and works of others acknowledged accordingly and the sources of the data are credited with a proper citation. Accordingly, the researcher will treat participants with due ethical consideration and follow proper way to inform respondents with full consent and inform to respond for questionnaires with confidence and understanding the purpose of the thesis, follow ethical way to record, analyze and present the findings of the research work.

CHAPTER FOUR

4. DATA PRESENTATION, ANALYSIS AND INTERPRETATION

In this chapter the data collected from respondents were analyzed and interpreted using quantitative analysis which involves analysis of the demographical information of respondents and the descriptive and inferential statistics employed to test the hypothesis and to investigate the influence of the independent variables on the dependent variable. To analyze the collected data in line with the overall objective of the research undertaking, statistical procedures were carried out using SPSS version 20.

4.1 Data Cleaning and Coding

To address the research objective, data were collected from customers of the Total Ethiopia S.C. The data was cleaned and coded in order to make the collected data's suitable for the analysis; all questionnaires were screened to be complete. All returned incomplete questionnaires were therefore considered as errors and removed from the survey data. Out of the 385 distributed questionnaires, 85 were incomplete. Hence, a total of 300 complete questionnaires were being used for the study with 77.9 % response rate. Coding of data is necessary for transferring and editing data in SPSS. The questions and possible answers were corresponded in the order of the actual questionnaire and coded for further analysis using SPSS.

4.2. Demographic Analysis of Respondents

This part elaborate the characteristics of the respondents (customers) in terms of gender, age, educational status, occupation and usage. Accordingly, the respondents were summarized and described in the subsequent part.

Table 4.1 Demographic Analysis of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Female	91	30.3	30.3	30.3
	Male	209	69.7	69.7	100.0
Age	18- 30	58	19.3	19.3	19.3
	31- 43	118	39.3	39.3	58.7
	44-56	94	31.3	31.3	90.0
	57 and above	30	10.0	10.0	100.0
Education background	Primary education	8	2.7	2.7	2.7
	Secondary education	34	11.3	11.3	11.3
	Diploma	96	32.0	32.0	14.0
	First Degree	132	44.0	44.0	46.0
	Master's and above	30	10.0	10.0	100.0
Occupation	Government Employee	92	30.7	92	30.7
	Private Employee	136	45.3	136	76.0
	NGO	57	19.0	57	85.0
	Self-Employed	15	5.0	5.0	100.0
Usage	Daily	32	10.7	10.7	10.7
	Weekly	66	22.0	22.0	32.7
	Monthly	177	59.0	59.0	91.7
	Occasional	25	8.3	8.3	100.0

Source: Survey Result, (2020)

Table 4.1 shows the information of 300 usable respondents of this research by dividing from gender. Accordingly, from the total respondents, male respondents constituted 69.7 % (209) whereas female respondents constituted the remaining 30.3 % (91). That means in this investigation the number of male customers who used the company service has highest percentage than that of female customers.

And the second table shows the age of the respondents (19.3 %) of them were between 18 and 30 years; (39.3%) of them were between 31 & 43 years, (31.3%) of them were between 44 & 56 years and (10.0%) of them were greater or equal to 57.

In terms of educational classification, the above table 4.1 indicated that, almost all of the respondents' educational level is above high school complete. Out of the 346 respondents, 44.0% (132) of them were first degree holders, 32.0 % (96) of the respondents were diploma holders, 11.3% (34) of them were secondary education holders and 10.0 % (30) of the respondents were

master's holders, 2.7 % (8) of the respondents were primary education holders. This implies that, the majority of customers have first degree.

In terms of occupation, 30.7% of respondents were government employees, 45.3 % were private employee, 19.0% were NGO, and 5.0% were self-employed.

Furthermore, the last item in the above table presents frequency of usage. 10.7%, 22.0%, 59.0% and 8.3% of respondents use the company service daily, weekly, monthly and occasionally respectively. This implies that occasional customers have high percentage value.

4.3 Test of Reliability and Validity

The reliability test is an important instrument to measure the degree of consistency of an attribute which it is supposed to measure. As stated by (Anol, B., 2012). *Social Science Research: Principles, Methods, and Practices*. 2nd ed. Florida: University of South Florida Tampa the less variation of the instrument produces in repeated measurements of an attribute, the higher its reliability. Reliability can be equated with the stability, consistency, or dependability of a measuring tool. Cronbach's alpha is one of the most commonly accepted measures of reliability. It measures the internal consistency of the items in a scale. It indicates that the extent to which the items in a questionnaire are related to each other. It also indicates that whether a scale is one-dimensional or multidimensional. The normal range of Cronbach's coefficient alpha value ranges between 0-1 and the higher values reflects a higher degree of internal consistency. Different authors accept different values of this test in order to achieve internal reliability, but the most commonly accepted value is 0.70 as it should be equal to or higher than to reach internal reliability (Hair et al., 1998).

The table below shows the value of alpha for each dimension as a whole. which shows the measure has internal consistency.

Table 4.1.2. Reliability Analysis of Variables

Measurement	Number of items	Cronbach's alpha
Transport outsourcing	7	.833
Integration	7	.749
Safety policy	7	.830
Distribution Performance	5	.803
Reliability of all items	26	.907

Source: Survey Result, SPSS (2020)

As shown in the table 4.1.2 above, all the constructs were fulfilled the recommended cut-off point of the alpha, which Cronbach's Alpha .833 for Transport outsourcing, .749 for Integration, .830 for Safety policy and .803 for Distribution Performance. The overall Cronbach Alpha Coefficient for all items is also .907. To sum up, all the constructs have confirmed as reliable variables that can be taken as an indication of acceptability of the scale for further analysis.

4.4 Descriptive Statistics of Variables

In this part descriptive statistics in the form of mean and standard deviation were presented to illustrate the level of agreement of the respondents. The main objective of the study is to identify factors influencing fuel distribution performance in Total Ethiopia S.C. To do so, customers of the Total Ethiopia were asked to rate the level of agreement to each question under the four attributes namely: Transport outsourcing, Integration related, Safety policy and Distribution Performance on a five point Likert scale with: 1= strongly disagree, 2= disagree, 3 = neutral, 4= agree and 5= strongly agree.

Table 4.1.3 Mean and standard deviation for factors affecting distribution performance

Descriptive Statistics

	N	Mean	Std. Deviation
TRO	300	3.5181	.82568
LI	300	3.5867	.80493
SP	300	3.6876	.77119
DP	300	3.6820	.74318
Valid N (listwise)	300		

Source: Survey Result, SPSS (2020)

As it can be seen from table 4.1.3 above, the mean score values ranges between 3.51 (mean score value of Transport outsourcing) with standard deviation of .825 and 3.687 (mean score value of Safety policy) with standard deviation of .771.

In order to assess factors influencing fuel distribution performance of Total Ethiopia S.C, a total of 26 questions were grouped into four which were: Transport outsourcing, integration, Safety policy and Distribution performance which is the dependent variable. In order to compare the respondents, descriptive statistics of mean and standard deviation were used. The mean indicates to what extent the sample group averagely agrees or disagrees with the different statements. The higher the mean the more the respondents agree with the statement while the lower the mean the more the respondents disagree with the statement. In addition, standard deviation shows the variability of an observed response. Descriptive statistics of each variables has been discussed one by one in the following section. According to Zaidatol and Bagheri(2009)

Mean Score	Description
<3.39	Low
3.40-3.79	Moderate
>3.80	High

4.4.1 Descriptive Statistics of Transport Outsourcing

According to (Teece et al.1997) Transport Outsourcing is Managing companies in this increasingly demanding environment has made many firms to look for logistics service provider. They are used for many logistics functions, such as transport or warehousing. Logistics activity (purchasing, warehousing, transport and distribution, inventory management) can be realized more efficient than by manufacturing companies. The source of competitive advantage is the capability to adapt, integrate, and reconfigure internal and external organizational skills, resources, and functional competences to match the requirements of a changing environment Accordingly, the respondents were asked 7 questions related to transport outsourcing. The Table 4.4.1 below presents respondents result of transport outsourcing with mean and standard deviation values for each item.

Table 4.4.1 Descriptive Statistics of Transport Outsourcing

	N	Mean	Std. Deviation
The company has good and sufficient Transport out sourcing	300	3.32	.899
Total Ethiopia current arrangement of transport ensure its fuel distribution	300	3.37	1.191
The current condition of the company truck availability can ensure its fuel distribution	300	3.39	1.066
The company has sufficient truck to distribute fuel to the service station and client efficiently	300	3.36	1.141
Out sourced transport perform better in the company's and enhance the fuel distribution	300	3.70	.808
Outsourced transportation provides on-time delivery	300	3.77	1.313
Outsourced transport enhance delivery schedule to the company	300	3.71	1.584
Valid N (listwise)	300		

Source: Survey Result, SPSS (2020)

The average mean for transport outsourcing question that says “The company has good and sufficient Transport out sourcing” is 3.32 which is below 3.39 this shows that the most respondents do not believe that there is sufficient outsourcing. Transport outsourcing questions number two that says “Total Ethiopia current arrangement of transport ensure its fuel distribution.” is also categorized in this class which shows low transport outsourcing that means the arrangement did not ensure the distribution.

Transport outsourcing questions number three that says “The current condition of the company truck availability can ensure its fuel distribution.” is also categorized in this class which shows low transport outsourcing that means the truck did not ensure the distribution. The average mean for transport outsourcing question four that says “The company has sufficient truck to distribute fuel to the service station and client efficiently” is 3.36 which is below 3.39 this shows that the most respondents believe that the company has no sufficient truck.

Among the seven means “Out sourced transport perform better in the company’s and enhance the fuel distribution,”, “Outsourced transportation provides on-time delivery, ” and “Outsourced transport enhance delivery schedule to the company” questions are in moderate class those means value is greater than 3.39 that most respondents agree that there is on time delivery .

4.4.2 Descriptive Statistics of Integration

According to Lambert and Cooper (2000 cited in Dannis & Kampton 2010) Integration is it involves collaborative work between buyers and suppliers, joint product development, common systems and shared information, support the idea that optimizing the product flows cannot be accomplished without implementing a process approach to the business. Accordingly, the respondents were asked 7 questions related to integration. The Table 4.4.2 below presents respondents result of Integration with mean and standard deviation values for each item.

Table 4.4.2 Descriptive Statistics of Integration

	N	Mean	Std. Deviation
The company has good and effective integration	300	3.62	1.507
Integration on Information on product shortage and shipment delay shared to you Promptly	300	3.56	1.224
There is good coordination between Total Ethiopia, EPSE & Horizon Terminal Limited	300	3.36	1.212
Good coordination between EPSE and NPRAD depot enhance the company On fuel distribution	300	3.81	1.232
Process and activity integration of Total Ethiopia on placing fuel order is easy and not time taking.	300	3.98	1.294
Process and activity integration with NPRDA depots location has an influence on company fuel distribution to supply to customers	300	3.39	1.190
NPRDA depots have adequate resource to supply the company requirements	300	3.38	1.233
Valid N (listwise)	300		

Source: Survey Result, SPSS (2020)

The average mean for integration question that says “There is good coordination between Total Ethiopia, EPSE & Horizon Terminal Limited” is 3.36 which is below 3.39 that shows most respondents do not believe that there is no good coordination. integration related questions number six that says “Process and activity integration with NPRDA depots location has an influence on company fuel distribution to supply to customers.” is also categorized in this class. And also “NPRDA depots have adequate resource to supply the company requirements” has low mean value which indicates that there is gap in resource.

Among the seven means “The company has good and effective integration” and “integration on Information on product shortage and shipment delay shared to you Promptly,” questions are in moderate class those means value of 3.62 and 3.56 respectively. On the other hand, “Good coordination between EPSE and NPRAD depot enhance the company on fuel distribution ” and “Process and activity integration of Total Ethiopia on placing fuel order is easy and not time taking. ” questions are in high mean value of 3.81 and 3.98 respectively.

4.4.3 Descriptive Statistics of Safety Policy

Safety refers to the common beliefs, attitudes, and values surrounding safety that exist within an organization. While there are no OSHA standards or regulations that pertain specifically to safety culture, a strong culture of safety can offer myriad organizational benefits companies with a strong culture of safety have integrated safety throughout their operations and view a safe operation as a core organizational value. In order for a strong safety culture to take hold, safety efforts must be valued and supported throughout an organization Source: (www//safety.BLR.COM), Accordingly, the respondents were asked 7 questions related to Safety policy. The Table 4.4.3 below presents respondents result of security policy with mean and standard deviation values for each item.

Table 4.4.3 Descriptive Statistics of Safety Policy

	N	Mean	Std. Deviation
The company has good and sufficient level of safety procedures	300	4.04	.769
The company stringent safety procedures have influence on fuel distribution system	300	3.54	1.222
As an international company the safety procedures should be applied for all the stakeholders	300	4.09	.995
Safety cannot be compromised to get financial and market share benefit	300	4.04	1.052
The company safety procedures of fuel truck has an influence on decreasing of no of truck	300	3.37	1.051
Stations are dry out stock due to shortage of truck	300	3.38	1.302
The safety culture of Total Ethiopia has good and efficient on fuel distribution compared to other petroleum company	300	3.35	1.200
Valid N (listwise)	300		

Source: Survey Result, SPSS (2020)

The average mean for Safety policy question that says “The company safety procedures of fuel truck has an influence on decreasing of no of truck” is 3.37 which is below 3.39 that shows most respondents do not believe that there is good and efficient truck safety procedure. Safety policy questions number six that says “stations are dry out stock due to shortage of truck.” is also categorized in this class. And also “The safety culture of Total Ethiopia has good and efficient on fuel distribution compared to other petroleum company” has low mean value which indicates that there is gap in the safety culture of the company.

Among the seven means “The company stringent safety procedures have influence on fuel distribution system” question is in moderate class with means value of 3.54 .

On the other hand , “As an international company the safety procedures should be applied for all the stakeholders” , “The company has good and sufficient level of safety procedures” and “Safety cannot be compromised to get financial and market share benefit” questions are in high mean value of 4.09, 4.04 and 4.04 respectively.

4.4.4 Descriptive Statistics of Distribution Performance

According to (Cooper ,2006) Shifting business environments are causing a growing number of IT managers to rethink how they handle distribution management. Growing dependence on extended and diffuse partner networks, for instance, is creating new operational complexities that have put a strain on traditional management practices IT managers are wrestling with how to integrate distribution management operations in new geographical areas with a wide range of systems; from ERP (enterprise resource planning) applications to inventory management and supply chain management packages. Pulling together information from a variety of sources also carries with it security concerns, including access control Accordingly, the respondents were asked 5 questions related to distribution performance. The Table 4.4.4 below presents respondents result of distribution performance with mean and standard deviation values for each item.

Table 4.4.4 Descriptive Statistics of Distribution Performance

	N	Mean	Std. Deviation
The distribution of fuel is flexible enough to alter delivery schedules depending on customer demand	300	4.02	.918
Total Ethiopia s.c deliver the required amount of fuel timely to customer	300	3.37	.895
The distribution of fuel is dependent on availability of trucks	300	3.81	1.011
The distribution of fuel in the company is fair to ensure product availability at all service stations	300	3.37	1.100
The distribution network of the company helps to ensure fair distribution of fuel to the service stations	300	3.84	1.029
Valid N (listwise)	300		

Source: Survey Result, SPSS (2020)

The average mean for distribution performance question that says “Total Ethiopia S.C deliver the required amount of fuel timely to customer” is 3.37 which is below 3.39 that shows most respondents do not believe that there is a gap in on time delivery to customers. And also “The distribution of fuel in the company is fair to ensure product availability at all service stations” has low mean value which indicates that there is low distribution of fuel regarding to the availability.

On the other hand, “The distribution of fuel is flexible enough to alter delivery schedules depending on customer demand”, “The distribution of fuel is dependent on availability of trucks”

and “The distribution network of the company helps to ensure fair distribution of fuel to the service stations” questions are in high mean value of 4.02, 3.81 and 3.84 respectively

4.5 Inferential Statistics

4.5.1 Correlation Analysis

A correlation is a measure of how strongly two variables relate to each other. Correlation coefficients are frequently used to describe data because they are relatively easy to use and provide a great deal of information in just a single value (Akroush, N. (2003).

Karl Pearson’s coefficient of correlation or simple correlation is the most widely used Method of measuring the degree of relationship between two variables (Kothari, 2004). The calculated value of the correlation coefficient ranges from -1 to 1, where -1 indicates a perfect negative relation (the relationship is perfectly linear) and 1 indicates a perfectly positive relationship. A correlation coefficient of 0 indicates that there is no correlation Akroush, N. (2003).

Correlations

		TRO	LI	SP	DP
TRO	Pearson Correlation	1	.312**	.588**	.623**
	Sig. (2-tailed)		.000	.000	.000
	N	300	300	300	300
LI	Pearson Correlation	.312**	1	.432**	.549**
	Sig. (2-tailed)	.000		.000	.000
	N	300	300	300	300
SP	Pearson Correlation	.588**	.432**	1	.689**
	Sig. (2-tailed)	.000	.000		.000
	N	300	300	300	300
DP	Pearson Correlation	.623**	.549**	.689**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	300	300	300	300

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

Source: Survey Result, SPSS (2020)

The table shows the Pearson correlation result with its significant level. When we see the correlation of Transport Outsourcing with Distribution Performance it has a significant positive Pearson correlation of 0.623 at 0.01 level of confidence interval. With regard to Integration it has a significant positive Pearson correlation of 0.549 at 0.01 level of confidence interval. The third variable which is Safety Policy has a significant Pearson correlation of 0.689 at 0.01 level of confidence interval. This implies that transport outsourcing, Integration and Safety policy are the factors that are directly and positively impacting the distribution performance and the extent of impact is also great as the indicates a significant person correlation coefficients of 0.623, 0.549 and 0.689 for transport outsourcing, integration and Safety policy respectively implying that the factors under consideration are significant in affecting the firms distribution performance.

4.6 Test for Linear Regression Model Assumptions

4.6.1 Normality Assumption

Normality of distribution can be tested by using histogram with a normal curve. As shown in the Figures from the Appendixes 3 and 4 residuals were normally distributed around its mean of zero which indicates that the data were normally distributed and it was consistent with a normal distribution assumption. As the figures confirmed the normality assumption of the data, this implies that the inferences made about the population parameters from the sample statistics tend to be valid.

Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
TRO	300	.041	.141	-1.103	.281
LI	300	-.337	.141	-.908	.281
SP	300	.256	.141	-1.111	.281
DP	300	-.492	.141	.105	.281
Valid N (listwise)	300				

Source: Survey Result, SPSS (2020)

According to Yi (1988) one of the first things that should be taken care of before proceeding in to the main part of the analysis, is to check whether the data are normally distributed or not. For this checking, Yi (1988) suggests that, the standardized skewness distribution result and Kurtosis result must be between the ranges of ± 2.58 . According to the above table, both the standardized skewness and kurtosis results fall in the given range. So this was a good signal to start with the subsequent analyses since the data are normally distributed (see the detail graphical presentation in Appendix).

4.6.2 Checking for Linearity

The linearity of the relationship between the dependent and independent variable represented the degree to which the change in the dependent variable is associated with the independent variable (Hair et al., 1998). In a simple sense, linear models predict values falling in a straight line by having a constant unit change (slope) of the dependent variable for a constant unit change of the independent variable (Hair et al., 1998). The regression model can be expressed in a linear way. Checking the linearity between y and x variables can be done by plotting the independent variables against the dependent variable Akroush, N. (2003) (see Appendix 4).

4.6.3 Assumption of Homoscedasticity

The variability in scores for independent variables should be similar at all values of the dependent variable. The scatter plot should show a fairly even rectangular shape along its length. There should be homoscedasticity before running multiple regression analysis. This means that the residuals (the differences between the values of the observed and predicted dependent variable) are normally distributed, and that the residuals have constant variance. Which indicates the assumption of Homoscedasticity was met (see Appendix 5).

4.6.4 Testing Multicollinearity

Multicollinearity refers to the situation in which the independent variables are highly correlated. When the independent variables are multi-co linearity, there is overlap or sharing of predictive power. When the predictor variables are correlated among themselves, the unique contribution of each predictor variable is difficult to assess. One should check for the problem of multicollinearity which is present if there are high correlations between some of the independent

variables. The study checks this with the Variance Inflation Factor (VIF) which calculates the influence of correlations among independent variables on the precision of regression estimates. The VIF factor should not exceed 10, and should ideally be close to one. Tolerance is an indicator of how much of the variability of the specified independent variable is not explained by the other independent variables in the model and is calculated using the formula $1-R^2$ for each variable. If this value is very small (less than 0.10), it indicates that the multiple correlation with other variables is high, suggesting the possibility of multicollinearity.

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	TRO	.650	1.538
	LI	.808	1.238
	SP	.586	1.707

a. Dependent Variable: DP
Source: Survey Result, SPSS (2020)

As can be seen from table 4.2.2.2 above, regarding this study the tolerance level of all independent variables are greater than 0.1 and the VIF value of all the independent variables are also less than 10. This confirms the absence of multicollinearity.

4.7 Regression Analysis

4.7.1 Multiple Regressions

In its simplest form, regression analysis allows market researchers to analyse relationships between one independent and one dependent variable. In marketing applications, the dependent variable is usually the outcome we care about, while the independent variables are the instruments we have to achieve those outcomes with. Distribution Performance was used as the dependent variable while (transport outsourcing, integration and Safety policy) were used as the independent variables.

Table 4.7.1 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.783 ^a	.614	.610	.46422

a. Predictors: (Constant), SP, LI, TRO

Source: Survey Result, SPSS (2020)

The model summary table shows an Adjusted R-Square value is 0.610 which means that 61.0% of the distribution performance was explained by the variation of the three variables. Namely (Transport outsourcing, integration and Safety policy) In other words, this means that 39.0% of the dependent variable i.e. distribution performance cannot be explained by these the three variables and that there must be other variables that have an influence on the outcome.

Table 4.7.2 ANOVA Analysis

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	101.356	3	33.785	156.779	.000 ^b
	Residual	63.787	296	.215		
	Total	165.143	299			

a. Dependent Variable: DP

b. Predictors: (Constant), SP, LI, TRO

Source: Survey Result, SPSS (2020)

From the ANOVA table, it is possible to see the overall significant of the model. The mean squares can be calculated by dividing the sums of squares by the associated degrees of freedom. F-ratio is a test of the null hypothesis that the regression coefficients are all equal to zero. The table shows that the F-value (156.779) is significant at 0.01 level of significant (P value that corresponds to F statistics is significant). The result of the study indicated that regression model significantly predicts distribution performance of the Total Ethiopia S.C.

Table 4.7.3 Coefficient Matrix

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	.393	.155		2.535	.012
TRO	.277	.040	.308	6.868	.000
LI	.264	.037	.286	7.128	.000
SP	.370	.045	.384	8.142	.000

a. Dependent Variable: DP
 Source: Survey Result, SPSS (2020)

The table below shows the constant, beta, and significance level of each variable. It indicates that the three variable which are Transportation Outsourcing, integration and Safety policy influence Distribution Performance significantly at 95% confidence interval with a sig. level of 0.000, 0.000, and 0.000 respectively.

The regression model of this study can now be properly written in an equation as follows:

$$Y1 = 0.393 + 0.277X1 + 0.264X2 + 0.370X3 + 0.05.$$

The regression model from table 4.3.3 above result shows that keeping other variables constant, a one unit increase in Transportation Outsourcing will bring a 0.277 unit increase in Distribution Performance, a one unit increase in Integration will bring a 0.264 unit increase in Distribution Performance and a one unit increase in Safety Policy will bring a 0.370 unit increase Distribution Performance.

4.8 Hypothesis Testing and Interpretation of Results

Hypothesis	Result	Reason
H1: Transport Outsourcing has a positive and significant effect on the distribution performance of Total Ethiopia S.C.	Accepted	$\beta=0.277$, $p<0.05$
H2: Integration has a positive and significant effect on the distribution performance of Total Ethiopia S.C.	Accepted	$\beta = 0.264$, $p<0.05$
H3: Safety Policy has a positive and significant effect on the distribution performance of Total Ethiopia S.C.	Accepted	$\beta =0.370$, $p<0.05$

Hypotheses (H1)

Transport Outsourcing has a positive and significant effect on the distribution performance of Total Ethiopia S.C. Transport Outsourcing has a positive and significant effect on the distribution performance of the company. As observed from correlation matrix table 4.2.1 transport outsourcing and distribution performance of the company were positively correlated with correlation coefficient of 0.623 significant at p-value equal to zero. Provided that accept alternative hypothesis H1. According to (Teece et al. 1997). Transport outsourcing Managing companies in this increasingly demanding environment has made many firms to look for logistics service provider. They are used for many logistics functions, such as transport or warehousing. Logistics activity (purchasing, warehousing, transport and distribution, inventory management) can be realized more efficient than by manufacturing companies. The source of competitive advantage is the capability to adapt, integrate, and reconfigure internal and external organizational skills, resources, and functional competences to match the requirements of a changing environment In addition to this transport outsourcing has positive and significant effect on distribution performance. The result of correlation of the above researcher are related with my research hypothesis. Accordingly, increasing transport outsourcing of the company will increase distribution performance.

Hypotheses (H2)

Integration has a positive and significant effect on the distribution performance of Total Ethiopia S.C. Integration has a positive and significant effect on the distribution performance of the company. As observed from correlation matrix table 4.2.1 Integration and distribution performance of the company were positively correlated with correlation coefficient of 0.549 significant at p-value equal to zero. Provided that accept alternative hypothesis H2. According to Lambert and Cooper (2000 cited in Dannis & Kampton 2010) Integration is it involves collaborative work between buyers and suppliers, joint product development, common systems and shared information .support the idea that optimizing the product flows cannot be accomplished without implementing a process approach to the business The result of correlation of the above researches are related with my research hypothesis. Accordingly, increasing integration of the company will increase distribution performance.

Hypotheses (H3)

Safety policy has a positive and significant effect on the distribution performance of Total Ethiopia S.C. Safety policy has a positive and significant effect on the distribution performance of the company. As observed from correlation matrix table 4.2.1 Safety policy and distribution performance of the company were positively correlated with correlation coefficient of 0.689 significant at p-value equal to zero. Provided that accept alternative hypothesis H3. Safety refers to the common beliefs, attitudes, and values surrounding safety that exist within an organization. While there are no OSHA standards or regulations that pertain specifically to safety culture, a strong culture of safety can offer myriad organizational benefits companies with a strong culture of safety have integrated safety throughout their operations and view a safe operation as a core organizational value. In order for a strong safety culture to take hold, safety efforts must be valued and supported throughout an organization Source: (www//safety.BLR.COM), The result of correlation of the above researches are related with my research hypothesis. Accordingly, increasing creating awareness on Safety policy of the company will increase distribution performance.

CHAPTER FIVE

5. SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter is based on the analysis and interpretation given in chapter four. Sequel to presentation of data, summary, conclusions, recommendations and highlighting future research areas.

5.2 Summary of Finding

Based on the analysis and interpretation of data in chapter four of this research work, the following summary of findings was made:

- The correlation results indicate that, there is positive and substantial relationship between transport outsourcing and distribution performance ($r = 0.623, < 0.01$), safety policy and distribution performance ($r = 0.689, P < 0.01$) and Integration and distribution performance ($r = 0.549, p < 0.01$).
- The effect of each independent variable on distribution performance service are, 0.277, 0.264, 0.370 respectively. In general distribution performance is primarily predicted by higher level of safety policy and transport outsourcing, and to a lesser extent by Integration in Total Ethiopia S.C.
- Independent variables (Transport outsourcing, Integration and Safety Policy) have a positive and significant impact in the company distribution performance. As a result, the hypothesis drawn at the beginning stating that transport outsourcing, Integration and Safety policy had a positive influence on distribution performance has been accepted.
- Finally, from the regression model drawn we have seen that the independent variables explain the dependent variable with a percentage of 61.0% of the variance in distribution performance and the remaining 39.0 % is explained by extraneous variables.

5.3 Conclusion

The main purpose of the study was to assess factors influencing fuel distribution performance in the case of Total Ethiopia S.C. Questionnaire were distributed to customers of Total Ethiopia S.C.

The result of correlation between dependent and independent variables shows, there is positive correlation. Transport outsourcing, Integration and safety policy are positively and significantly correlated with distribution performance. From the result, the highest positive correlation exists in safety policy followed by transport outsourcing and integration. The other issue is test of significance which indicates the level of significance effect of one independent variable to the dependent variable. As a result, all independent variables are significant effect on the dependent variable.

Based on the data analysis the entire hypotheses were tested all stated variables have a significant effect and an impact on distribution performance so the hypotheses are accepted. The output of multiple linear regression indicates that the variation in the distribution performance Total Ethiopia S.C is explained by the independent variables such as transport outsourcing, integration and safety policy.

5.4 Recommendation

Based on the results of the analysis and conclusion made the following recommendations are forwarded by the researcher.

From items of **transport outsourcing** total Ethiopia has good and sufficient Transport out sourcing which is below 3.39 this shows that the most respondents do not believe that there is sufficient outsourcing. So The company should provide sufficient Transport out sourcing in order to solve the problem. Total Ethiopia current arrangement of transport ensure its fuel distribution is also categorized in this class which shows the arrangement did not ensure the distribution. so the company should improve the current arrangement of transport. And also current condition of the company truck availability can ensure its fuel distribution score low mean. In order to improve this problem, the company should improve truck availability to distribute fuel to the service station and client efficiently in order to ensure the fuel distribution.

From items of **integration related** There is good coordination between Total Ethiopia, EPSE & Horizon Terminal Limited, Process and activity integration with NPRDA depots location has an influence on company fuel distribution to supply to customers, NPRDA depots have adequate resource to supply the company requirements scored low mean value so the company should create good coordination between Total Ethiopia, EPSE & Horizon Terminal Limited in order to ensure the distribution. Process and activity integration with NPRDA depots location has an influence on company fuel distribution to supply to customers. NPRDA should have adequate resource to supply the company requirements.

From items of **safety policy**, the company safety procedures of fuel truck have an influence on decreasing of no of truck, stations are dry out stock due to shortage of truck, The safety culture of Total Ethiopia has good and efficient on fuel distribution compared to other petroleum company has low mean value which indicates that there is gap in the safety culture of the company. In order to solve this problem, the company should improve the fleet size of truck, increase the number of the truck to decrease dry out of stocks on the service station, hardly work in creating awareness on the safety culture of Total Ethiopia in order to competitive to other petroleum companies.

From items of **distribution performance** Total Ethiopia S.C deliver the required amount of fuel timely to customer, The distribution of fuel in the company is fair to ensure product availability at all service stations scored low mean value which indicates that there is low distribution of fuel regarding to the availability so the company should deliver the required amount of fuel timely to customer in order to increase performance and The distribution of fuel in the company is needed to be fair to ensure product availability at all service stations.

5.5 Limitation of the study

This study has some limitation:

First, the study was focused mainly on the network retail service station and partially on Addis Ababa service station“ point of views due to some constraints. The opinion of up country service station was not incorporated. It is very important to consider opinion up country service station for further research.

Secondly, the research was limited to Total Ethiopia S.C not included other domestic fuel company’s in Ethiopia. Hence, the research findings may not be generalized to the entire Fuel industry in Ethiopia. There by it is recommended for further research to incorporate the private and other organization to expand the scope and acceptance of determinants factors influencing distribution performance of different industries in fuel sectors in Ethiopia as well.

5.6 Area for Further Study

It would also be interesting to expand this study to other petroleum companies. In addition, there is a need to study additional factors other than considered in this study in an organization`s context that influence distribution performance. Again it would be very interesting to expand this study by considering sample respondents other than indicated in this study and applying the respective analysis technique for that matter weather for the same business indicated in this study or some other business.

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Internet Documents

(www.totaletioopia.com)

(www//safety.BLR.COM)

APPENDICES

St. Mary's University College

School of Business

Department of Marketing Management

Dear respondent,

My name is samrawit Kassa. I am currently conducting a research as part of a partial fulfillment of the requirements for the degree of Masters in Marketing Management. The purpose of the research is Assessing on factors influencing fuel distribution performance in the case of Total Ethiopia S.C. All information obtained will be used for academic purpose only. Hence be assured that your responses will not be revealed to anyone. Please answer all the questions as they are vital for the success of this research

Your co-operation and assistance will be highly appreciated. If you need any clarification or information: Mob.0911-23-68-69 [E-mail.samrawitkassaej@gmail.com](mailto:samrawitkassaej@gmail.com)

Part I General information

Instruction: Please put Mark “√” before your Choice for Each Question.

1. Age:

18- 30 31- 43 44-56 57 and above

2. Gender:

Female Male

3. Highest educational level obtained:

Primary education Secondary education

Diploma First Degree Master's and above

4. What is your occupation?

Government Employee Private Employ NGO

Self-Employed

5. How often do you use Total Ethiopia product?

Daily Weekly Monthly Occasional

Part Two: Statement of Survey

❖ Transport outsourcing related question

Direction: Please indicate your degree of agreement/disagreement with the following statements by circling the appropriate number. (1-Strongly disagree; 2-Disagree; 3- Neutral; 4-Agree and 5-Strongly agree) Key: TO=Transport outsourcing, LI=Lack of integration, SP= Safety policy DP=Distribution performance

Code	Questions	Strongly Disagree	Dis Agree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
TO1	The company has good and sufficient Transport out sourcing					
TO2	Total Ethiopia current arrangement of transport ensure its fuel distribution					
TO3	The current condition of the company truck availability can ensure its fuel distribution					
TO4	The company has sufficient truck to distribute fuel to the service station and client efficiently					
TO5	Out sourced transport perform better in the company's and enhance the fuel distribution					
TO6	Outsourced transportation provides on-time delivery					
TO7	Outsourced transport enhance delivery schedule to the company					

Part Three: Statement of Survey

❖ Integration Related question

Code	Questions	Strongly Disagree	Dis Agree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
LI1	The company has good and effective integration					
LI2	integration on Information on product shortage and shipment delay shared to you Promptly					
LI3	There is good coordination between Total Ethiopia, EPSE & Horizon Terminal Limited					
LI4	Good coordination between EPSE and NPRAD depot enhance the company On fuel distribution					
LI5	Process and activity integration of Total Ethiopia on placing fuel order is easy and not time taking.					
LI6	Process and activity integration with NPRDA depots location has an influence on company fuel distribution to supply to customers					
LI7	NPRDA depots have adequate resource to supply the company requirement					

Part Four: Statement of Survey

❖ Safety policy Related question

Code	Questions	Strongly Disagree	Dis Agree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
SP1	The company has good and sufficient level of safety procedures					
SP2	The company stringent safety procedures have influence on fuel distribution system					
SP3	As an international company the safety procedures should be applied for all the stakeholders					
SP4	Safety cannot be compromised to get financial and market share benefit					
SP5	The company safety procedures of fuel truck has an influence on decreasing of no of truck					
SP6	stations are dry out stock due to shortage of truck					
SP7	The safety culture of Total Ethiopia has good and efficient on fuel distribution compared to other petroleum company					

Part Five: Statement of Survey

❖ Distribution Performance related questions

Code	Questions	Strongly Disagree	Dis Agree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
DP1	The distribution of fuel is flexible enough to alter delivery schedules depending on customer demand					
DP2	Total Ethiopia s.c deliver the required amount of fuel timely to customer					
DP3	The distribution of fuel is dependent on availability of trucks					
DP4	The distribution of fuel in the company is fair to ensure product availability at all service stations					
DP5	The distribution network of the company helps to ensure fair distribution of fuel to the service stations					

ቅድስተ ማርያም ዩኒቨርሲቲ ኮሌጅ

ስኩል ኦፍ ቢዝነስ

የማርኬቲንግ ማኔጅመንት ትምህርት ክፍል

ለተከበሩ መልስ ሰጪ

ሳምራዊት ካሳ እባላለሁ። በቅድስተ ማርያም ኮሌጅ የድህረ ምረቃ ተማሪ ስሆን በአሁኑ ጊዜ በማርኬቲንግ ማኔጅመንት ለሁለተኛ ዲግሪ የመመረቂያ ጽሑፍ ማሟያ ጥናት በማድረግ ላይ እገኛለሁ። የዚህ ጥናት አላማ ቶታል ኢትዮጵያ አ.ማ የሚሰጠው የነዳጅ ስርጭት አገልግሎት ላይ ተጽእኖ የሚፈጥሩ ተግዳሮቶችን ለይቶ መተንተን ነው። ለዚህ ጥናት አላማ የሚሰበሰቡ መረጃዎች በሙሉ ለትምህርታዊ አላማ ብቻ የሚውሉ ስለሆነ የሚሰጡት ምላሽ ምስጢራዊነት የተጠበቀ ነው፤ ለሌላ ወገን አይገለጽም። ስለሆነም የእርስዎ መልስ ለጥናቱ አላማ መሳካት ከፍተኛ ሚና አለው።

ለሚደረግልኝ ቀና ትብብር ከወዲሁ የላቀ ምስጋናዬን እያቀረብኩ ተጨማሪ መረጃ ወይም ማብራሪያ ከፈለጉ በስልክ ቁጥር 0911-23-68-69 ወይም E-mail.samrawitkassaej@gmail.com ሊያገኙኝ ይችላሉ።

ክፍል I ጠቅላላ መረጃ

መመሪያ: እባክዎን ለእያንዳንዱ የመረጡት መልስ ላይ የ“√” ምልክት ያድርጉ

2. እድሜ:

18- 30 31- 43 44-56 57 እና ከዚያ በላይ

2. ጾታ:

ሴት ወንድ

3. የትምህርት ደረጃ:

የመጀመሪያ ደረጃ ሁለተኛ ደረጃ
ዲፕሎማ የመጀመሪያ ዲግሪ ሁለተኛ ዲግሪ እና ከዚያ በላይ

4. ስራ/ሙያ?

የመንግስት ሰራተኛ የግል ሰራተኛ መ.ያ.ድ (NGO)

የግል ሙያ

5. የቶታል ኢትዮጵያ ምርቶችን በምን ያህል ጊዜ ይጠቀማሉ?

በየአለቱ በየሳምንቱ በየወሩ አልፎ አልፎ

ክፍል ሁለት : የጥናቱ ሐሳብ መግለጫ

❖ ከትራንስፖርት አገልግሎት አቅርቦት ጋር ተያያዥነት ያላቸው ጥያቄዎች

መመሪያ: እባክዎን ከታች በተመለከቱት ዓረፍተነገሮች ውስጥ በትክክል አመለካከትዎን ወይም ሐሳብዎን የሚገልጽ አማራጭ ላይ ያክብቡ::(1-በጣም አልስማማም; 2-አልስማማም; 3-ገለልተኛ; 4-እስማማለሁ እና 5-በጣም እስማማለሁ) ቁልፍ ሐሳቦች: TO= ትራንስፖርት አውትሶርሲንግ/የመጓጓዣ አገልግሎት አቅራቢዎች; LI= የቅንጅት እጥረት; SP= የደህንነት ፖሊሲ ; DP= የስርጭት አፈጻጸም

ኮድ	ጥያቄዎች	-በጣም አልስማማም	አልስማማም	ገለልተኛ	እስማማለሁ	በጣም እስማማለሁ
		1	2	3	4	5
TO1	ኩባንያው ጥሩ እና በቂ የትራንስፖርት አገልግሎት አቅራቢዎች/ሰጪዎች አሉት					
TO2	የቶታል ኢትዮጵያ ወቅታዊ የትራንስፖርት ስምሪት የነዳጅ ስርጭትን አስተማማኝነት የሚያረጋግጥ ነው					
TO3	ኩባንያው በአሁኑ ጊዜ ያለው የነዳጅ ጫኝ ቦታዎች አቅርቦት አስተማማኝ የነዳጅ ስርጭትን የሚያረጋግጥ ነው					
TO4	ኩባንያው ለነዳጅ ማዲያዎች እና ለደንበኞቹ የነዳጅ ስርጭት አገልግሎትን በተቀላጠፈ ሁኔታ ለመስጠት በቂ ነዳጅ ጫኝ ተሽከርካሪዎች አሉት					
TO5	የትራንስፖርት አገልግሎት ሰጪዎች ኩባንያው የነዳጅ ስርጭት አገልግሎቱን በተሻለ ሁኔታ እንዲሰጥ እያስቻሉት ነው					
TO6	የትራንስፖርት አገልግሎት ሰጪዎች የነዳጅ አቅርቦትን በተፈለገበት ትክክለኛ ጊዜ ማድረስ ይችላሉ					
TO7	የትራንስፖርት አገልግሎት ሰጪዎች ኩባንያው ነዳጅ በሰዓቱ ለተጠቃሚዎች እንዲያደርስ ያስችሉታል					

ክፍል ሶስት: የጥናቱ ሐሳብ መግለጫ

❖ ከቅንጅት አሰራር ጋር ተያያዥነት ያላቸው ጥያቄዎች

ኮድ	ጥያቄዎች	-በጣም አልሰማም	አልሰማምም	ገለልተኛ	እስማማለሁ	በጣም እስማማለሁ
		1	2	3	4	5
LI1	የኩባንያው የአሰራር ቅንጅት ጥሩ እና ውጤታማ ነው					
LI2	የምርት እጥረት እና የነዳጅ ጭነት መዘግየት/በጊዜው አለመድረስ መረጃዎች በፍጥነት ለኩባንያው ይደርሳሉ					
LI3	በቶታል ኢትዮጵያ አክሲዮን ማህበር ፣ የኢትዮጵያ የነዳጅ አቅራቢ ድርጅት እና ሆራይዘን ተርሚናል ሊሚትድ መካከል ጥሩ እና ውጤታማ የአሰራር ቅንጅት አለ					
LI4	የኢትዮጵያ ነዳጅ አቅራቢ ድርጅት እና ብሔራዊ የመጠባበቂያ ነዳጅ ክምችት ዲፖ ድርጅት መካከል ጥሩ የአሰራር ቅንጅት መኖሩ ለኩባንያው የነዳጅ ስርጭቱን ውጤታማ ያደርገዋል					
LI5	የቶታል ኢትዮጵያ የነዳጅ ትእዛዞችን የሚያስተናግድበት የቅንጅት አሰራር ፋጣን እና ቀልጣፋ ነው					
LI6	የብሔራዊ የመጠባበቂያ ነዳጅ ክምችት ዲፖ ያለበት ቦታ ኩባንያው ለደንበኞቹ የሚያቀርበው የነዳጅ አቅርቦት እና ስርጭት አገልግሎት ላይ ተጽእኖ አለው					
LI7	የብሔራዊ የመጠባበቂያ ነዳጅ ክምችት ዲፖዎች ለኩባንያው የነዳጅ ፍላጎትን ለማሟላት የሚያስችሉ በቂ ግብአቶች አሉት					

ክፍል አራት፡ የጥናቱ ሐሳብ መግለጫ

❖ የደህንነት/ሴፍቲ ፖሊሲ ጋር ተያያዥነት ያላቸው ጥያቄዎች

ኮድ	ጥያቄዎች	-በጣም አልሰማማም	አልሰማማም	ገለልተኛ	እስማማለሁ	በጣም እስማማለሁ
		1	2	3	4	5
SP1	ኩባንያው የሚተገበራቸው የደህንነት/ሴፍቲ ፖሊሲ ጥሩ እና አስተማማኝ ነው					
SP2	ኩባንያው የሚከተለው ጥብቅ የሆነ የደህንነት/ሴፍቲ ፖሊሲዎች የነዳጅ ስርጭቱ ላይ ተፅእኖ አለው					
SP3	ቶታል አለምአቀፍ ኩባንያ እንደመሆኑ መጠን ኩባንያው የሚከተላቸው የደህንነት/ሴፍቲ ፖሊሲዎች በሁሉም ባለድርሻዎች ላይ ተፈጻሚነት ሊኖረው ይገባል					
SP4	ከደህንነት/ሴፍቲ ጋር ተያያዥነት ያላቸው ጉዳዮች ከገንዘብ ጥቅም ወይም ከገበያ ድርሻ ጉዳዮች ጋር ለድርድር ሊቀርብ አይገባም					
SP5	ኩባንያው የሚከተላቸው/የሚተገበራቸው የደህንነት/ሴፍቲ ፖሊሲ መስፈርቶች የትራንስፖርት አገልግሎት ሊሰጡ የሚችሉ ነዳጅ ጫኝ ቦቴዎች ቁጥር እንዲቀነስ አስተዋጽኦ አድርጓል					
SP6	በነዳጅ ጫኝ ቦቴዎች እጥረት ምክንያት የነዳጅ ማድያዎች ባዶ እንዲሆኑ እና ምንምአይነት የነዳጅ ክምችት እንዳይኖራቸው አስተዋጽኦ አድርጓል					
SP7	ከሌሎች ኩባንያዎች በተለየ ሁኔታ የቶታል ኢትዮጵያ የሚከተላቸው እና የሚተገበራቸው ለተጠቃሚዎች የተሻለ አገልግሎት እና የነዳጅ የደህንነት/ሴፍቲ ፖሊሲዎች ስርጭት እንዲያቀርብ አስችሎታል					

ክፍል አምስት፡ የጥናቱ ሐሳብ መግለጫ

❖ ከነዳጅ ስርጭት ሒደት ጋር ተያያዥነት ያላቸው ጥያቄዎች

ኮድ	ጥያቄዎች	-በጣም አልሰማማም	አልሰማማም	ገለልተኛ	እሰማማለሁ	በጣም እሰማማለሁ
		1	2	3	4	5
DP1	በደንበኞች ፋላጎት ላይ በመመርኮዝ የነዳጅ አቅርቦት ስርጭት ተለዋዋጭ ነው					
DP2	ቶታል ኢትዮጵያ አክሲዮን ማህበር ተጠቃሚዎች የሚፈልጉትን የነዳጅ መጠን በተፈለገው ሰዓት ማቅረብ ይችላል					
DP3	የነዳጅ ስርጭት የነዳጅ ጫኝ ቦቴዎች አቅርቦት ላይ የተመሰረተ ነው					
DP4	ኩባንያው የሚከተለው የነዳጅ ስርጭት አሰራር በሁሉም የነዳጅ ማድያዎች በቂ የምርት አቅርቦት እንዲኖር የሚያስችል ነው					
DP5	የኩባንያው የነዳጅ ስርጭት ኔትወርክ/ትስስር ሁሉም የነዳጅ ማድያዎች በቂ ምርት እንዲኖራቸው የሚያስችል ነው					

APPENDIX 2: Reliability Statistics and Tests

Scale: Transport Outsourcing Reliability Statistics

Case Processing Summary

		N	%
Cases	Valid	300	100.0
	Excluded ^a	0	.0
	Total	300	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.833	7

Scale: Integration Reliability Statistics

Case Processing Summary

		N	%
Cases	Valid	300	100.0
	Excluded ^a	0	.0
	Total	300	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.749	7

Scale: Safety Policy Reliability Statistics

Case Processing Summary

		N	%
Cases	Valid	300	100.0
	Excluded ^a	0	.0
	Total	300	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.830	7

Scale: Distribution Performance Reliability Statistics

Case Processing Summary

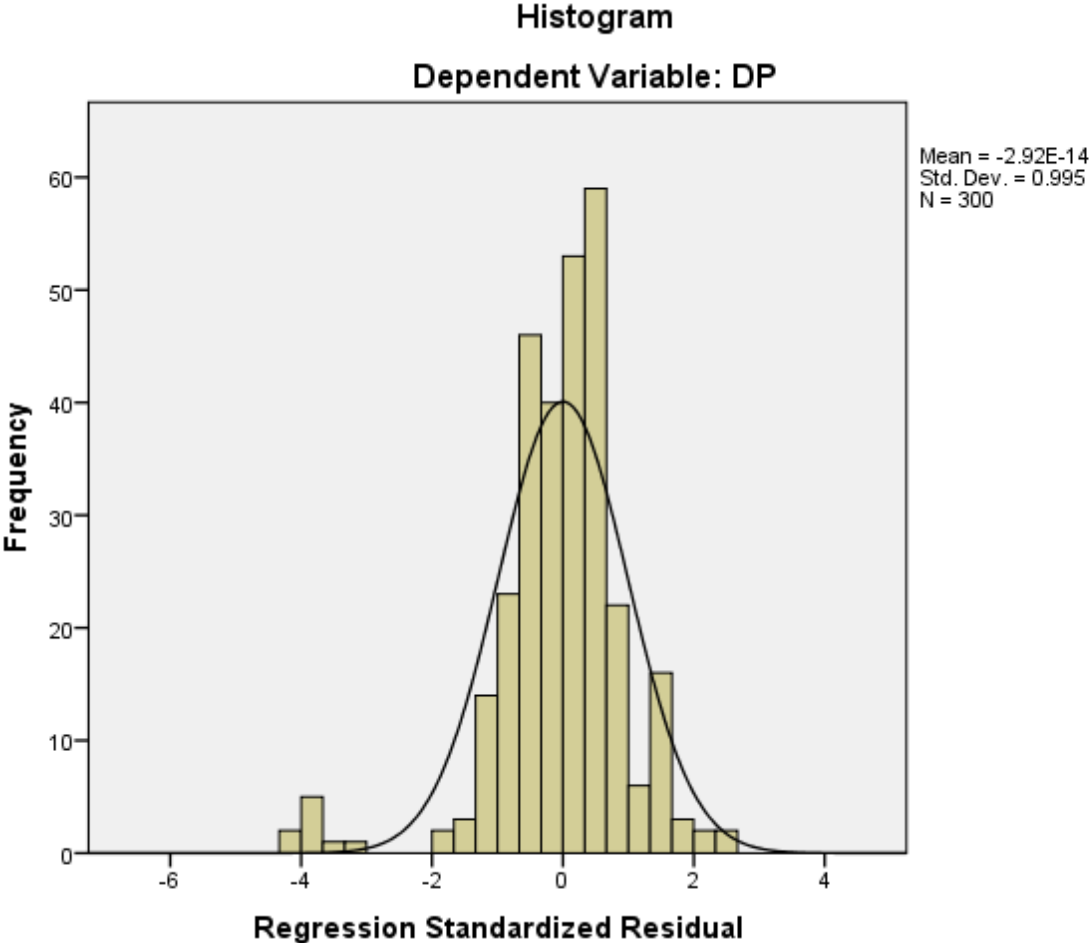
		N	%
Cases	Valid	300	100.0
	Excluded ^a	0	.0
	Total	300	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.803	5

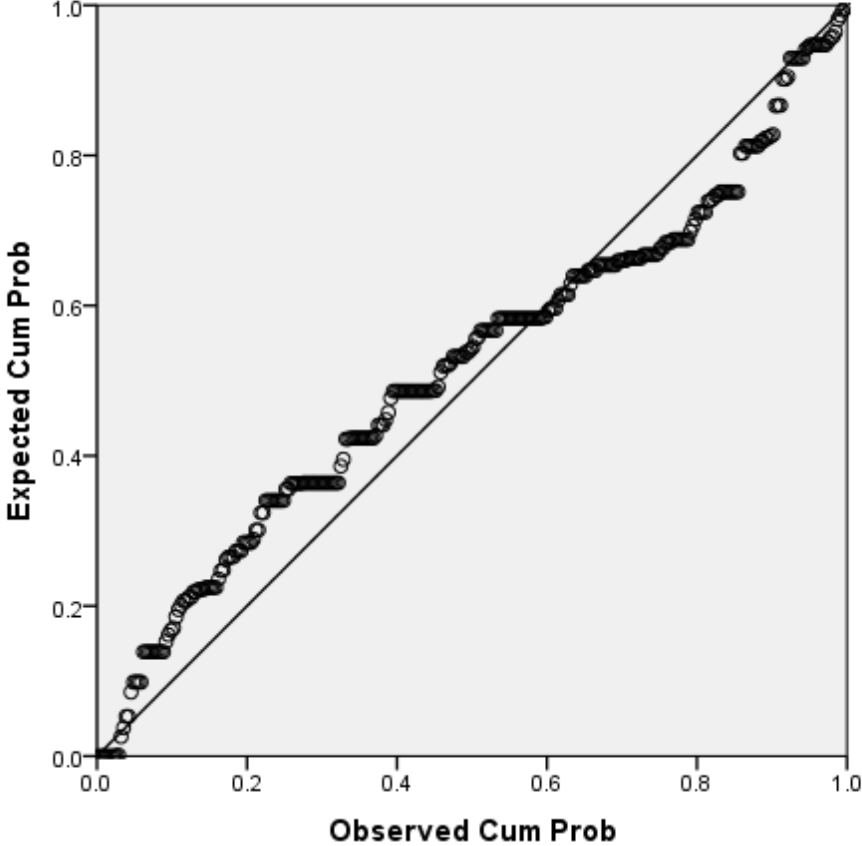
APPENDIX 3: Histogram for Normality Test of the Data



APPENDIX 4: Normal P- P Plot to Test Normality of the Data

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: DP



APPENDIX 5: Homoscedasticity Test

