

# ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES

## **COLLEGE OF BUSINESS AND ECONOMICS**

DEPARTMENT OF BUSINESS ADMINSTRATIVE

## THE ROLE OF SERVIE QUALITY ENHANCING CUSTOMER SATISFACTION: THE CASE OF ETHIOPIAN SHIPPING AND LOGISTICS SERVICE ENTERPRISE MULITMODAL TRANSPORT SYSTEM

BY:

## TADELE GUCHE

## RESERCH THESIS SUBMITTED TO SCHOOLS OF GRADUATE STUDIES OF ST. MARY'S UNIVERSITY IN PARITIAL FULFILMENTS OF THE REQUIRMENTS FOR THE DEGREE OF MASTERS ART IN BUSINESS ADMINSTRATIV

**JUNE, 2020** 

**ADDIS ABABA, ETHIOPIA** 

#### **ST. MARY'S UNIVERSITY**

### SCHOOL OF GRADUATE STUDIES

### **COLLEGE OF BUSINESS AND ECONOMICS**

#### **DEPARTMENT OF BUSINESS ADMINSTRATIVE**

## THE ROLE OF SERVIE QUALITY ENHANCING CUSTOMER SATISFACTION: THE CASE OF ETHIOPIAN SHIPPING AND LOGISTICS SERVICE ENTERPRISE MULITMODAL TRANSPORT SYSTEM

#### BY:

#### **TADELE GUCHE**

#### **ADVISOR:**

#### WORKU MEKONNEN (PHD)

RESERCH THESIS SUBMITTED TO SCHOOLS OF GRADUATE STUDIES OF ST. MARY'S UNIVERSITY IN PARITIAL FULFILMENTS OF THE REQUIRMENTS FOR THE DEGREE OF MASTERS ART IN BUSINESS ADMINSTRATIVES

#### **JUNE, 2020**

#### **ADDIS ABABA, ETHIOPA**

## **ST. MARY'S UNIVERSITY**

## **COLLEGE OF BUSINESS AND ECONOMICS**

### MASTRS OF BUSINESS ADMINSTRATIVE

## THE ROLE OF SERVIE QUALITY ENHANCING CUSTOMER SATISFACTION: THE CASE OF ETHIOPIAN SHIPPING AND LOGISTICS SERVICE ENTERPRISE MULITMODAL TRANSPORT SYSTEM

**APPROVED BY THE BOARD OF EXAMINERS:** 

**Dean, Graduate Studies** 

Signature & Date

Advisor

Signature & Date

**External Examiner** 

Mebratu L. Teklehaimanot

**Internal Examiner** 

Signature & Date

Signature & Date

### DECLARATION

I do hereby declare to the St. Mary's University School of Graduate Studies that the work which is being presented in this thesis entitled **"The Role of Service Quality Enhancing Customer's Satisfaction: The Case of Ethiopian Shipping and Logistics Service Enterprise Multimodal Transport System"** with the guidance and support of the research advisor is my own original work, that it has not been submitted partially; or in full, by any other person for an award of a degree in any other university or institution and that all sources of material used for the thesis have been duly acknowledged.

Tadele Guche Feleke

Signature

**ADDIS ABABA, ETHIOPA** 

**JUNE, 2020** 

### **ENDORSMENT**

This to certified that Tadele Guche carried out his project on the topic entailed **'the Role of Service Quality Enhancing Customer Satisfaction the case of Ethiopian Shipping and Logistics Enterprise Multimodal Transport System'** under my supervision.

Advisor

Signature

St. Mary University, Addis Ababa

### ACKNOWLEDGEMENT

First, I wish to thank the almighty God for giving me courage and perseverance to complete this project

I wish to thank my supervisor, Worku Mekonnen, (PHD) for his guidance towards completion of this project. I also thank all staff at the Ethiopian Shipping and Logistics Service Enterprise (ESLSE), friends and colleagues at work place for their support during my studies. Most important, appreciation is extended to customers of ESLSE who willingly participated in the survey and providing to me the precious information that I used in the outcome of this research.

ACKNOWLEDGEMENTi
LIST OF TABLES
LIST OF FIGURES
ABBREVIATIONS ANDACRONYMS vii
ABSTRACT viii
CHAPTER ONE
INTRODUCTION 1
1.1 Background of the study
1.2 Statement of the Problem
1.3. Research questions
1.4. Objective of the study
1.4.1. General objective
1.4.2. Specific objectives
1.5. Significance of the study
1.6. Scope of the study
1.7. Limitation of the study
1.8. Organization of the Study7
1.9 Research hypothesis7
CHAPTER TWO
LITERATURE REVIEW
INTERDUCTION 8
2.1 THEORETICAL LITERATURE RERIEW
DEFINTION
2.1.1 CUSTOMER
2.1.2 CUSTOMER SATISFACTION
2.1.3 SATISFIED AND DISATISFIED CUSTOMER
2.1.4 CUSTOMER EXPECTATIONS
2.1.5 CUSTOMER PERECPTION12

2.1.6 CUSTOMER LOAYALITY	13
2.1.7 THE IMPORTANCE OF CUSTOMER SATISFACTION	14
2.1.8 SERVICE QUALITY	16
2.1.9 CHARACTERISTICSOF SERVICE	19
2.1.10 QUALITY	20
2.1.11 CUSTOMER SATISFACTION AND SERVICE QUALITY	21
2.2 EMPIRICAL LITERATURE REVIEWS	25
2.2.1 Quality and Its Importance in Shipping Industry	25
2.2.2 Container Shipping Industry and the Role of Sea Ports Error! Bookmark no	ot defined.
2.2.3 The Shipping Industry and Measurement Scale	25
2.2.4 Conceptual Framework	28
CHAPTER THREE	30
RESEARCH METHODOLOGY	30
INTRODUCTION	30
3.1 Research Design	30
3.2 Sampling Techniques	30
3.3 Area of the study	31
3.4 Target Population and sampling size	31
3.5 Type of data and source	32
3.6 Validity and Reliability	33
3.7 Method of data collection and data analysis	34
3.8 Ethical Considerations	35
CHAPTER FOUR	37
RESEARCH ANALYSIS AND INTERPRITATION	37
INTRUDACTION	37
4.1 Response Rate of Respondents	37
4.2 Demographic Information of the Respondents	37
4.3. Descriptive Analysis of customer satisfaction using different dimension	
4.4 Pearson Correlation Analysis	50
4.5 Testing assumptions of multiple linear regression	52

4. 6 Multicollinearity Test	52
4.7 Test of Normality	53
	53
4.8 Multiple Regression Analysis	53
4.9 Test of hypothesis	56
CHAPTER - FIVE	58
SUMMARY, CONCLUSION, AND RECOMM	IENDATION 58
INTRUDACTION	58
<b>INTRUDACTION</b>	
INTRUDACTION	
INTRUDACTION 5.1. Summary 5.2 Conclusion 5.3 Recommendation	
INTRUDACTION   5.1. Summary   5.2 Conclusion   5.3 Recommendation   5.4 Suggestions for future research	
INTRUDACTION 5.1. Summary 5.2 Conclusion 5.3 Recommendation 5.4 Suggestions for future research REFERENCES	

## LIST OF TABLES

Table 4.1 Response Rate42
Table 4.2: Background of Respondents
Table 4.3: Customer satisfaction concerning service quality Regulation dimension45
Table 4.4: Customer satisfaction concerning service quality Infrastructure dimension47
Table 4.5: Customer satisfaction concerning service quality ICT Application dimension
Table 4.6 Customer satisfaction concerning service quality Competence/Skill dimension
Table 4.7: Customer satisfaction concerning service quality cost dimension
Table 4.8: Customer satisfaction
Table 4.9 Correlation between service quality and customer satisfaction
Table 4.10 multiple regression coefficients for service quality and customer satisfaction
Table 4.11 regression model summary60

Table4.12 summary of hypothesis testing result	60
Table 4.13 summary of descriptive statistics of service quality	61

## LIST OF FIGURES

FIGURE	1 .CONCEPTUA	AL FRAME WORK	
FIGURE	2 .Histogram, '	Test of Normality	

### **Abbreviations and Acronyms**



#### Abstract

This study to examine the role of service quality enhancing customer's satisfaction in the case of Ethiopian Shipping and logistics service Enterprise particularly Multimodal transport service However, Customer satisfaction measurement considered as the most reliable feedback, providing client preferences and experiences in an effective, direct, meaningful and objective way. Thus, customer satisfaction considered as a base line standard of performance and a possible standard of excellence for any business. The study involved an analysis of the current ESLSE (MULTIMODAL) service quality, whereby Service quality is using SERVICE QUALITY TESTING's five dimensions. For conducting customers' survey Likert scale based questionnaire was developed after review of literature. However, customers were selected by non-probability sampling method and a sample size of 154 customers have been selected and distributed questionnaire for the study; out of this 146 (95%) respondents were filled and returned the questionnaire. A study was conducted to collect information from customers of ESLSE mainly focusing on "corporate" customers. This study used descriptive survey research design by applying mixed research approach (qualitative and quantitative). The analysis result indicated that on all service quality dimension satisfied level and regulation dimension high satisfied level ICT application has the lowest satisfaction level. The results of collation indicated that all service quality dimensions are positive and significant effect of customer satisfaction. The regression model result indicated that the independent variable to explain 92.1% of the variance in customer satisfaction (dependent variable) in ESLSE (MULTIMODAL TRANSPORT SYSTEM). Based on the finding the researcher recommended to improve the infrastructure service quality dimension and the specific item from other service quality dimension. The ESLSE (MULTIMODAL TRANSPORT SYSTEM) should also keep update the regulation, ICT application, competence/skill and cost dimension of service quality to satisfy their loyal customer

Key Words: Customer Satisfaction, Customer Perception, and Service quality

## CHAPTER ONE INTRODUCTION

#### 1.1 Background of the study

Service quality has widely been discussed since 20th century and its idea is still relevant to help today organizations in creating differentiation and gaining competitive advantage in an era of borderless world and globalization [Ali et al. 2016, Fotaki 2015, (Karatepe 2016]. In a quality management literature, service quality is often seen as a multi-dimensional construct. Effective service quality should have two important dimensions, namely technical quality (i.e., what customers' received from services provided by an organization) and functional quality (i.e., how an organization delivers services to customers) [Brady& Cronin 2001, Gronroos 1994]. The service quality construct has been modified and simplified by US school of thought where it proposes that effective service quality should have five specific dimensions, namely tangible (physical facilities, equipment, and appearance of workers), reliability (ability to perform the promised service dependably and accurately), responsiveness (willingness to help customer and provide prompt service), assurance (knowledge and courtesy of workers and their abilities to inspire trust and confidence), and empathy (caring, individualized attention the organization provides its customers) [Ismail, Rose & Foboy, 2016, Baldwin & Sohal 2003, Parasuraman, Berry &Zeithaml 1991, 1994, Wan Edura&Jusoff 2009]. However, these quality school of thoughts have different perspectives, the source of their ideas are developed based on individual attitudes and perceptions [Sriram, Chintagunta&Machanda 2015, Yuen & Thai 2015]. This view believes that service quality is an important outcome of comparison between customer expectations before and after their experience of the service [Gronroos 2007]. If customers view that their expectations for service performance conform their perceptions of the service, this situation may lead to induce the notion of service quality [Gronroos 2007, Kitapci, Akdogan&Dortyol 2014, Zeithaml 1988].

Customer satisfaction is broadly defined as a difference between customers' expectations and experience performance after using a service and/or product at a certain period [Azman, IlyaniRanlan et al. 2016, Mosahab, Mahamad&Ramayah 2010]. While, customer loyalty is often related to as the willingness of customers to repeatedly purchase a good or service that is accompanied by psychological bond and hold favorable attitudes toward a good or toward the organization supplying the goods or services [Deng et al. 2010, Gede Mahatma YudaBakti&Sumaedi 2013, Yeo et al. 2015] Within a workplace service quality model, many researchers concur that service quality, customer satisfaction and customer loyalty are distinct, but strongly interrelated constructs. For example, the ability of service providers to appropriately implement service quality in executing daily job may lead to greater customer satisfaction [Azman, Hafizah et al. 2016, Hussain et al. 2015] and customer loyalty [Bardauskaite 2014, Lee & Lambert 2008]. Although this relationship has widely been investigated, the predicting

variable of service quality is little explained in the service quality model of service based organization. Many researchers argue that this condition may be caused by several reasons: first, previous studies have much conceptually discussed the definitions, purposes and disconfirmation paradigms of effective service quality dimensions in service organizations [Azman, Hafizah et al. 2016, WanEdura&Jusoff 2009]. Second, previous studies mostly use a simple analysis methods and gap analysis method to describe customer attitudes toward technical and functional aspect and make comparison between after and before service and/or product deliveries [Donnelly et al. 2006, Mohsin& Cyril De Run 2010, Naik&Byram 2016, Wisniewski 2001]. Consequently, these studies have produced general recommendations and this may not adequate to be used as important guidelines by practitioners to understand the complexity of service quality nature and formulate strategic action plans to enhance the effectiveness of service quality in various types of service based organization [Azman, Hafizah&Ilyani 2016, Kondasani& Panda 2015, Kitapcia, Akdogan, Dortyol 2014, Yeo, Thai & Roh 2015]. Hence, this situation motivates the researchers to fill in the gap of literature by quantifying the effect of service quality on customer outcomes. Customer satisfaction is defined as "the number of customers, or percentage of total customers, whose reported experience with a firm's products and services matches expectations (Faris et al 2010). Customer satisfaction and loyalty are crucial to sustainability, growth and profit of any business supplying a product or providing a service.

Providing the quality service to attract and retain customers has been recognized as a strategic requirement in highly competitive business environments (Parasuram et al. 1985; and Zeithaml et al., 1990). Organizations that deliver superior service quality achieve high growth in market share and increased profits (Buzzell& Gale, 1987). Since customer satisfaction has been considered to be based on the customer's experience on a particular service encounter (Cronin & Taylor, 1992) it is in line with the fact that service quality is a determinant of customer satisfaction, because service quality comes from outcome of the services from service providers in organizations. Zeithaml et al. (2006) argued that consumer satisfaction relates to a specific transaction (the difference between predicted service and perceived service) in contrast with attitudes, which are more enduring and less situational oriented.

Oliver (1993) suggested about the relationship between service quality and customer satisfaction that service quality would be antecedent to customer satisfaction regardless of whether these constructs were cumulative or transaction-specific. Some researchers have found empirical supports for the view of the point mentioned above (Anderson & Sullivan, 1993; Fornell et al., 1996; and Spreng et al., 1996) where customer satisfaction came as a result of service quality.

In relating service quality and customer satisfaction, researchers have been more precise about the meaning and measurements of service quality and satisfaction. Service quality and satisfaction have certain things in common, but satisfaction generally is a broader concept, whereas service quality focuses specifically on dimensions of service (Wilson et al., 2008). Customers are always aiming to get maximum satisfaction from the products or services that they buy. Winning in today's marketplace entails the need to build customer relationship and not just building the products; building customer relationship means delivering superior value over competitors to the target customers (Kotler et al., 2002, p. 391). Whether an organization provides quality services or not will depend on the customers' feedback on the satisfaction they get from consuming the products, since higher levels of quality lead to higher levels of customer satisfaction (Kotler& Keller. 2009, p. 169). Most companies are adopting quality management programs which aim at improving the quality of their services and marketing processes, because it has been proven that "quality has a direct impact on service performance, and thus on customer satisfaction" (Kotler et al., 2002, p. 8).

Before the researcher proceed to the details let how the company profile of Ethiopian Shipping & Logistics Service Enterprise seems. To maintain the commendable economic growth that has been registered in the country over the last several years, one of the strategic measures taken by the Federal Government of Ethiopia is merging the former three public enterprises that have until recently been operating separately in a rather similar and interdependent maritime sub-sectors; namely, Ethiopian Shipping Lines S.C, Maritime, Transit Services Enterprise and Dry Port Enterprise.

The Ethiopian Shipping and Logistics Services Enterprise (ESLSE for short) is the result of this merger. This newly amalgamated enterprise came into being following the issuance of Regulation by the Council of Ministers (Regulation No. 255/2011), and is vested with the huge responsibility of rendering sea-transport & logistics services to the country's importers, exporters, and investors in a more effective and efficient way, by reducing transit time, cost and handoffs. Besides, a truck operating company named Comet Transport SC has recently been transferred to ESLSE following a government decree issued in the mid of 2014.

Multimodal transport service: Essentially, this is a door-to-door cargo service with SAD (single administrative document) from the point of origin to the point of destination. In ESLSE's case, the cargoes are shipped all the way from the port of their origin via Djibouti port and finally to Modjo Dry Port as well as other inland ports. Therefore, ESLSE as official Multimodal Operator /MTO/, takes all possible care to the cargo under its custody, as of the time the shipment is confirmed and ordered.

The Enterprise is transforming itself through new organizational structure, service delivery, and increased and better facilities.

#### **1.2 Statement of the Problem**

Nowadays, market has transferred from manufacturing-market to consumer-market (Razaali khan 2018 in Trivedi2015) argued that customer has now become the king, and thus, more

valuable for the market. Market is now much focused on customer desire, and customer expectation directly affects customer satisfaction. Therefore, knowledge regarding customer satisfaction helps service providing firms to improve their service quality.

Multimodal transport can benefit many businesses that ship large amounts of freight on a regular basis. The main reason why companies prefer multimodal is that it requires less time and effort. All the shipments are under (SAD) a single administrative document. Other than saving money and time, there are many reasons your company should choose multimodal transport when planning your next shipment, including less worrying that means. When a single carrier handles your freight from door to door, it ensures easier communication and efficient tracking. It delegates a larger piece of responsibility and liability to the company coordinating your logistics. In international trade, multimodal transport has been identified as an efficient way of transporting international cargo.

Quality of products as well as services defined by the customer which assesses the image of company's brand in real terms (Razaali khan 2018 in Kenyon &. Sen, 2015). The role of customer services is becoming vital in every facet of the industry, as customer is the key to changing the future of any organization. Recent advancement in technology has redefined the relations of customer with its service provider. Due to service intangibility, in most of the services organizations, it is very hard to define the characteristics of good service quality and customer satisfaction; hence, it becomes challenging for service organizations to deliver superior quality (Razaali khan 2018 Mari , Marinkovi &Dimitrovski, 2016). Services are intangible in nature, and that is why it is extremely difficult for organizations to assess how its customer is evaluating and perceiving the end results of service quality.

As researcher understanding and 2010 annual report Ethiopia Shipping and Logistics Service Enterprise particularly Multimodal transport service has low level of development of logistics infrastructure, lack of inadequate train and train station is far from port, inadequate vehicles in number and age, damage and quality deterioration of goods while handling, transporting and in storage. With lack of sea port resulted in poor linkage of producers (farmers) to the consumers (market) and this has a great impact on customer satisfaction and high delaines of transportation.

Even though different researcher studied on the assessment of service quality performance no study found that on the role of service quality enhancing customer satisfaction in case of Ethiopia Shipping and Logistics Service Enterprise in multimodal transportation.

Therefore the purpose of the Researcher is to identify the role of service quality enhancing customer satisfaction in case of Ethiopia Shipping and Logistics Service Enterprise multimodal transport service and the study was help the organization to know its service quality and it was improve the multimodal transport problems.

#### **1.3.** Research questions

The following basic research questions were raised in this study:

1. What is the level of service quality in Ethiopian Shipping and Logistic Service Enterprise Multimodal Transport Service?

2. What is the performance of service quality in Ethiopian Shipping and logistics Service Enterprise Multimodal Transport Service?

3. What is the relationship between level of service quality and performance of service quality in Ethiopian shipping and Logistics Service Enterprise Multimodal Transport Service?

#### **1.4.** Objective of the study

#### **1.4.1.** General objective

The general objective of this study was to assess the role of service quality enhancing customer's satisfaction in the case of Ethiopian Shipping and logistics service Enterprise Multimodal transport service.

#### **1.4.2.** Specific objectives

The followings are the specific objectives of this study:

1. To evaluate the role of services quality enhancing customer satisfaction in Ethiopian Shipping and logistics Service Enterprise Multimodal transport service.

2. Identifying the dominant dimension of service quality that drives customers' perceived service quality in Ethiopian Shipping and logistics Service Enterprise Multimodal transport service.

3. To recommend suggestion in order to resolve quality related problems in Ethiopian shipping and Logistics Service enterprise Multimodal transport service.

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

This study was assessed the service provided by ESLSE (particularly multimodal transport service) and its effect on customer satisfaction. The identified strengths and weaknesses of the service delivered by the Enterprise and its effect on customer satisfaction will be used as an input for top managers of the ESLSE (particularly multimodal transport service) for their future service related decisions making to satisfy their valuable customers. The significance of the study will to give sufficient information on the service that the enterprise is currently providing and help it to know areas which need improvement and plan towards it, so that its customers enjoy quality service.

It also allows the stakeholders to have knowledge on where the enterprise stands in the eyes of its customer. Moreover, as employees are one of the stakeholders, it will help them to evaluate their service deliveries through the eyes of the customer. The study will also add new knowledge to the existing literature and it will be a stepping stone for academicians to carry out further studies on the area.

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

There are a number of services providing under Ethiopian Shipping and Logistics Enterprise. However, this study was only focused on the Multimodal transport service quality.

Thus, the study was examined the service quality dimensions only from customers' perspective at Multimodal transport service of ESLSE located in Addis Ababa. Moreover, the study was focused on the relationship between service quality dimension and its effect on customer satisfaction. The study used to measure customers satisfaction based on five service quality dimensions such as Regulation, Infrastructure, ICT application, competence/skill and cost by using this service quality testing for customer satisfaction. Therefore, geographically the research was de-limited to only customers in Addis Ababa at head office.

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

This study was limited in scope and sample size because of limited financial resources, time and accessible information regarding other service. Thus, the findings of this study may not give a general picture of the quality of the ESLSE (particularly multimodal transport service). But it can contribute to further study on quality of the Enterprise.

#### **1.8.** Organization of the Study

The study was organized in to five chapters. Accordingly the chapter commences with the introduction part which consists of Background of the study, Statement of the problem, Research objectives, Scope of the study, Significance of the study, Limitation and Organization of the study ; the Second chapter discuss both theoretical and empirical related literature of the study , the Third chapter focus on research design and methodology and the Fourth chapter discuss data analysis and discussion and finally in chapter Five presents summary of key findings, Conclusions and possible Recommendation will be forwarded by the researcher.

#### **1.9 Research hypothesis**

H1: Regulation has positive relation and significant effect on customer satisfaction.

H01: Regulation has no positive relation and significant effect on customer satisfaction.

H2: Infrastructure has positive relation and significant effect in customer satisfaction.

H02: Infrastructure has no positive relation and significant effect in customer satisfaction.

H3: Competencies/skill has positive relation and significant effect in customer satisfaction.

H03: Competencies/skill has no positive relation and significant effect in customer satisfaction.

H4: ICT Application has positive relation and significant effect in customer satisfaction.

H04: ICT Application has no positive relation and significant effect in customer satisfaction.

H5: Cost ahs positive relation and significant effect on customer satisfactions.

H05: Cost ahs no positive relation and significant effect on customer satisfactions.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### INTERDUCTION

This chapter discusses the concept of service quality and customer satisfaction. It starts by reviewing some of definitions and terms of dimensions of customer satisfaction and service quality, and tries to grasp the relationship between customer satisfaction and service quality then leads us to the conceptual frame work of the study.

#### **2.1 THEORETICAL LITERATURE RERIEW**

#### **DEFINTION**

#### 2.1.1 CUSTOMER

Customer has been defined by different individuals and groups some of the definitions that suite to this study are; Israel (2015), consumers are defined as individuals or groups that consume or use goods and services. Customers are the purchasers within the economy that buy goods and services, and they can exist as consumers or alone as customers. In other words, a customer is a stakeholder of an organization who provides payment in exchange for the offer provided to him by the company with the aim of fulfilling a need and to maximize satisfaction.

Customer is the most important impact in goal setting, activity and trying for quality improvement. Evanschitzky and Wunderlich (2006) added that customer is a real or legal person who somehow relates to company and importance from its goods and services. The concept of customer as: "Most people suppose that customer is the final consumer whereas the customer is both categories of the intra organizational and the extra organizational i.e. whoever the product and/or service are produced to meet his or her need.

According to Singh (2006), the importance of customers has been highlighted by many researchers and academicians. Zairi (2000) said "Customers are the purpose of what we do and rather than them depending on us, we very much depend on them. The customer is not the source of a problem, we shouldn't perhaps make a wish that customers 'should go away' because our future and our security will be put in jeopardy". That is the main reason why organizations today are focusing on customer satisfaction, loyalty and retention.

#### **2.1.2 CUSTOMER SATISFACTION**

Customer satisfaction measures how well a company's products or services normal or over customer expectations. These expectations often reflect many aspects of the company's market activities including the normal product, service, company, and how the company generates in the global environment. Customer satisfaction measures are an overall psychological evaluation that is based on the customer's usage time of product and service experience (Smith, 2007). According to Oliver (1997, 2010), customer satisfaction is defined as a judgment that a product or service provided a pleasurable level of consumption-related fulfillment. Also there are two levels of individual consumers' satisfaction: transaction-specific satisfaction is identified as a fulfillment response to a single transaction or encounter satisfaction is identified as a judgment based on many occurrences of the same experience and not just one-time experience. For both cases i.e. encounter satisfaction and cumulative satisfaction, satisfaction is either defined as an overall judgment of satisfaction or decomposed into satisfaction with performance or quality attributes (Cronin and Taylor 1992).

Westbrook and Reilly define- Customer satisfaction is as emotional response to the experience provided by, (or associated with) particular products or services purchased, retail outlets, or even molar patterns of behavior, as well as the overall marketplace. (1983, 3) Expected service Perceived service delivery Customer – driven service Design and standards Company perceptions of consumer expectation External communications to customers. Another author Hunt (1977) defines customer satisfaction as a process of evaluation rendered that the experience was at least as good as it was supposed to be. Tse and Wilton (1988) elaborated hunt definition where they said 'customer satisfaction is a process of consumer's response to the evaluation of the perceived discrepancy between prior expectations and the actual performance of the product as perceived after its consumption'. Satisfaction is the customer's fulfillment response. It is a judgmental that a product or service feature, or the product or service itself, provides a pleasurable level of consumption related fulfillment. (Oliver 1977). 'This definition approaches

two sides where the first approach defines satisfaction as a final situation or as end-state resulting from the consumption experience and the second approach emphasizes the perceptual, evaluative and psychological process that contributes to satisfaction'. (Evangelos and Yannis 2010, 2) 2.3.1 Importance of customer satisfaction in modern business philosophy business should be customer oriented and the implementation of the main principles of continuous improvement, justifies the importance of evaluating and analyzing customer satisfaction. In short, customer satisfaction is considered as baseline of standardize and excellence of performance for many business. It also helps to identify the potential market opportunities. (Evangelos and Yannis 2010, 1-2) Mentioning about importance of customer satisfaction in business perspective Zairi (2000) said in one magazine 'Customers are the purpose of what we do and rather than them depending on us, we very much depend on them. The customer is not the source of a problem, we shouldn't perhaps make a wish that customers 'should go away' because our future and our security will be put in jeopardy.' However, the concept of customer satisfaction is not a new one. It hit the business sectors in early 1980's where some researchers considered that customer satisfaction is the best window into loyalty. They also found that it has direct relationship with company profitability, ROI (return on investment), or share of market. Satisfied customer think twice or several times before switching to alternatives because they become attached emotionally and also afraid to believe on alternatives quality. Oliver (1997) Zairi (2000) mention more about the importance as- 'numerous studies that have looked at the impact of customer satisfaction repeat purchase, loyalty and retention. They all bring the similar message. First, satisfied customers share their experience with average five or six people and dissatisfied customers normally tell ten people about their unfortunate experience. Secondly, many customers do not complain about dissatisfaction but it is needs to realize by the company and it differs from industry to industry. Finally, people do not think dealing customer satisfaction is not as costly as to recruit a new customer. Now a day's measuring customer satisfaction become an important issue to most of business organization. In this regard there is a rumored by Lord Kelvin (19th century) 'If you cannot measure something, you cannot understand it'. In recent decades importance of customer satisfaction has increased thus many organization considered measuring customer satisfaction should be set as a parameter. 'It also considered as reliable feedback and it provides as effective, direct, meaningful and objective way the customers' preferences and expectations'. (Gerson, 1993) Wild (1980) and Hill (1996) said, customer satisfaction measurement provides a sense of achievement and accomplishment for all employees involved in any stage of the customer service process and it motivates people to perform as well as achieve higher levels of productivity. Evangelos and Yannis (2005, 5) mentioned in their book about main advantages of measuring customer satisfaction, one- measuring customer satisfaction helps to evaluate business current position against its competition and accordingly design its future plans. Second Satisfaction measurement is able to identify potential market opportunities. Third- it helps to understand customer behavior and particularly to identify and analyze customer expectations, needs and desire. Fourth- It improve the communication the total clientele. Fifth- By this measurement it is also possible to examine whether new actions, efforts and programs have any impact on the organizations' clientele. Sixth- Organizations weakness and strength against competition are determined, based on customers' perceptions and judgment. Seventh- Personnel is motivated to increase its productivity.

Levy (2009), in his studies, suggested three ways of measuring customer satisfaction:

- A survey where customer feedback can be transformed into measurable quantitative data:
- Focus group or informal where discussions orchestrated by a trained moderator reveal what customers think.
- ▶ Informal measures like reading blocs, talking directly to customers.
- Asking each and every customer is advantageous in as much as the company will know everyone's feelings, and disadvantageous because the company will have to collect this information from each customer (NBRI, 2009). The National Business Research.

#### **2.1.3 SATISFIED AND DISATISFIED CUSTOMER**

This is the condition when exact service is equal to their experience. It is not any better significantly, neither is it any worse- they are satisfied. However, this does not seem to enter the customer's memory for any long period of time. This is condition when exact service is greater than or equal to the expected service. This kind of customer will come back and tell his friends about his experience and will become an advocate for your service (Jamal and Anastasiadou, 2009), This is the case when exact service is less than experienced service. As well known, many company today struggle to win customers by telling those things they think in their services by using brochures and presentations (EMI, 2011). This over promising has poor experience and

poor customer satisfaction built into it. So always make sure that you and your company deliver more than you promise.

Customer satisfaction can be determined by deferent factors Kotler et al. (2000) have suggested as the main impacts contributing to customer satisfactions

#### **2.1.4 CUSTOMER EXPECTATIONS**

Expectations play an important role in the satisfaction formation. The extent to which a product or service fulfills a customer's need and desire may play an important role in forming feelings of satisfaction because of the impact of confirmation or disconfirmation that have on satisfaction. Consumers expect to be delivered quality products and services; therefore companies try to offer quality products and services. The term expectations really matters to companies because they want to know what customers' expectations are. The term "expectations" has different uses, in the satisfaction literature, it is viewed as a prediction made by a consumer about what is likely to happen during an exchange or transaction. According to Oliver (1981) "... expectations are consumer-defined probabilities of the occurrence of positive and negative events if the consumer engages in some behavior" (pp.25-48).

In the contrast, in the service quality literature it is defined as desires and wants, what a service provider should offer rather than would offer. Customers form their expectations from their past experience, friends' advice, and marketers' and competitors' information and promises (Kotler, 2002). Therefore, perceived service quality is viewed as the difference between consumers' perceptions and expectations for the service provided. Organizations in order to keep expectations from rising, they have to perform services properly from the first time (Parasuraman et al. 1988). Thus, customer expectations for the service are likely to rise when the service is not performed as promised. Expectations serve as reference points in customer's assessment of performance (Cronin& Taylor, 1992). Thus, retailers can increase customer satisfaction by decreasing customer expectations.

#### **2.1.5 CUSTOMER PERECPTION**

Perception is an opinion about something viewed and assessed and it varies from customers to customers, as every customer has different beliefs towards certain services and products that play an important role in determining customer satisfaction. Customer satisfaction is determined by

the customers' perceptions and expectations of the quality of the products and services. In many cases, customer perception is subjective, but it provides some useful insights for organizations to develop their marketing strategies. Providing high level of quality service has become the selling point to attract customer's attention and is the most important driver that leads to satisfaction (Reichheld, 1996).

Therefore, customer perception and customer satisfaction are very closely linked together, because if the perceived service is close to customer's expectations it leads to satisfaction. Satisfied customers provide recommendations; maintain loyalty towards the company and customers in turn are more likely to pay price premiums (Ibid., 1996).

#### **2.1.6 CUSTOMER LOAYALITY**

Customer loyalty broadly refers to customer behaviors that indicate a desire to better an ongoing relationship with a company (Palmatier et al., 2006). The customer's willingness to purchase again from the company, having a preference for the company, or recommending the company to others could be indications to customers' desire to remain in a relationship with a company that demonstrate how much a customer is related to a company. Loyal customers are often worth the marketing effort, owing to their willingness to buy additional products and spread positive word of mouth as well as their reliability as a source of continuous revenues (Zeithaml, Berry, &Parasuraman 1996). The programs of customer retention could lead to a higher rate in buyer loyalty.

Although that marketing manager's primary concern is maintaining and increasing brand loyalty, there is no guarantee for loyal buyers, because today's buyer might not be so in the future since loyalty is considered so transient. "Loyalty is developed over a period of time from a consistent record of meeting, and sometimes even exceeding customer expectations "(Teich, 1997). Kotler et al.(1999) claims that the cost of attracting a new customer may be five times the cost of keeping a current customer happy. Customer loyalty is very difficult to be achieved. More and more unique ways are adopted to meet the ever changing nature of the service industry. Additionally, time constraints are most often a barrier to customer satisfaction. Every organization in the market competes to develop advanced methods to keep on track. Technology,

for example affects the service industry, since constantly meeting customer satisfaction over a period of time is the only way to achieve customer loyalty (Teich, 1997).

#### **2.1.7 THE IMPORTANCE OF CUSTOMER SATISFACTION**

"Without customers, the service company has no reason to exist. Every service business needs to proactively define and measure customer satisfaction. Waiting for customers to complain in order to identify problems in the service delivery system or gauge the firm's progress in customer satisfaction based on the number of complaints received is naïve" (Hoffman and Batteson, 2011). They also cited the figures gathered by the Technical Assistance Research Program (TARP) and presenting the following facts about customers

- > The average business does not hear from 96 percent of its unhappy customers.
- ▶ For every complaint received, 26 customers actually have the same problem.
- ➤ The average person with a problem tells nine or 10 people. 13% will tell more than 20.
- Customers who have their complaints satisfactorily resolved tell an average of five people about the treatment they received
- Complainers are more likely to do business with you again than non-complainers: 54-70 percent if resolved at all, and 95 percent if handled quickly.

The TARP figures demonstrate that customers do not actively express dissatisfaction to service firms themselves. Instead, consumers voice their dissatisfaction with their feet, by defecting to competitors, and with their mouths by telling your existing and potential customers exactly how they were mistreated by your firm. Based on the TARP figures, a firm that serves 100 customers per week and boasts a 90 percent customer satisfaction rating will be the object of thousands of negative stories by the end of a year. For example, if 10 dissatisfied customers per week tell 10 of their friends of the poor service received, by the end of the year (52 weeks), 5,200 negative word of-mouth communications will have been generated. The TARP figures are not all bad news (Palmatier et al., 2006). Firms that effectively respond to customer complaints generate positive word-of-mouth communications. Although positive news travels at half the rate of negative news, the positive stories can ultimately translate into customer loyalty and new customers. Finally, a firm should also learn from the TARP figures that complainers are the firm's friends. Complainers are a free source of market information, and the complaints

themselves should be viewed as opportunities for the firm to improve its delivery systems, not as a source of irritation.

According to Kotler, and Keller (2009) customers' satisfaction is measured on after purchase depends on the offer's performance in relationship to the buyer's expectations, and whether the buyer interprets any deviations between the expectation and actual performance. In general, satisfaction is a person's feelings of pleasure or disappointment that result from comparing a product's perceived performance (or outcome) to their expectations. If the performance falls short of expectations, the customer is dissatisfied. If the performance matches the expectations, the customer is satisfied. If the performance exceeds expectations, the customer is highly satisfied or delighted. Customer assessments of product performance depend on many factors, especially the type of loyalty relationship the customer has with the brand. Consumers often form more favorable perceptions of a product with a brand they already feel positive about.

Although the customer-centered firm seeks to create high customer satisfaction, that is not its ultimate goal. If the company increases customer satisfaction by lowering its price or increasing its services, the result may be lower profits. The company might be able to increase its profitability by means other than increased satisfaction (for example, by improving manufacturing processes or investing more in R&D), Also, the company has many stakeholders, including employees, dealers, suppliers, and stockholders, Spending more to increase customer satisfaction might divert funds from increasing the satisfaction of other "partners." Ultimately, the company must operate on the philosophy that it is trying to deliver a high level of customer satisfaction subject to delivering acceptable levels of satisfaction to the other stakeholders, given its total resources (Palmatier et al., 2006).

How do buyers form their expectations? Expectations result from past buying experience; friends' and associates' advice; and marketers' and competitors' information and promises. If marketers raise expectations too high, the buyer is likely to be disappointed. However, if the company sets expectations too low, it won't attract enough buyers (although it will satisfy those who do buy). Some of today's most successful companies are raising expectations and delivering performances to match.

#### **2.1.8 SERVICE QUALITY**

Gronroos (1984, p. 38) defined service quality as a perceived judgment, resulting from an evaluation process where customers compare their expectations with the service they perceive to have received. According to him service quality issues could be split into technical quality (what is done) and functional quality (how it is done). Parasuraman et al. (1988, p. 17) defined service quality as "the degree of discrepancy between customers' normative expectations for the service and their perceptions of the service performance". Perceived service quality is then interpreted from the differences in degree and direction between perceptions and expectations. Service quality has drawn attention of researchers and managers in recent decades (Zeithaml, 2000). It has become a significant subject because of its impact on customer satisfaction. Service quality is the measure of customer satisfaction and customer delight. By satisfying customers through high quality service, business firms not only retain their current customers, but also increase their market share (Finn and Lamb, 1991). To date, many studies on service quality relied on service quality construct and scale (Parasuraman et al., 1988). However, this application to the retail industry may not be appropriate for service quality in retailing industry seems to be different from other services (Kaul, 2005; Dabholka et al, 1996). In retail setting, especially retail stores where there is a mix of product and service, retailers are likely to have impact on service quality more than on product quality (Dabholkar et al., 1996). Service quality in retail outlets is different from other product or service oriented organizations (Finn, 2004). This is because of the unique nature of retail organizations which offer both goods and services. Service quality is considered as a vital measure to increase the customer satisfaction towards the retail store and in turn helps the store to position its service in the minds of the customers. Various service quality measurement techniques are used by the retailers to find out the exact level of satisfaction of customers towards their service offering. Research indicates that customers' satisfied with service quality are most likely to remain loyal (Wong and Sohal, 2003). Because of change in business environment, Service quality is considered a tool to increase the brand image of the store and act as a positioning tool (Mehta, Lalwani and Han, 2000). Service quality ensures customer satisfaction (Boulding et al, 1993) high revenues, increased customer retention and leads to repeat customer purchase behavior (Cronin and Taylor, 1992) which ultimately increases the market share of the retailer. Today's business environment is becoming increasingly hostile and intense competition from both domestic and foreign company's leads to greater expectation

from the customers. Service organizations strive to maintain a superior quality of service in an effort to gain customer loyalty (Zeithaml, 1988), therefore, long term success of a service organization is essentially determined by its ability to capture and retain a wide customer base. The subject of service quality has aroused considerable recent interest among business people and academics. Of course, buyers have always been concerned with quality, but the increasing competitive market for many services has led consumers to become more selective in the services they choose. Conceptualizing the quality for services is more complex than for goods. Because of the absence of tangible manifestations, measuring service quality can be difficult.

Quality in a service is a measure of the extent to which a delivered service meets the customer's expectations. It is determined by the customer's perception and not by the perceptions of the providers of the service. Service quality is considered a critical determinant of competitiveness. Service quality can help to differentiate itself from other competitors and gain a competitive advantage. Superior service quality is a key to improved profitability. Services are an important segment of all economies and they become increasingly more a part of everyday life as economies develop. Consumer service is a key factor towards generating loyal retail customers, and ultimately, successful retail businesses. Defined as an activity that supplements or facilitates store sales, consumer service includes such items as free parking, gift wrapping, environment and delivery. Additionally, sales personnel offer consumer service through their interactions and relationships with customers. Nature and extent of Service Quality is dependent upon certain identifiable factors or dimensions which can be optimized with wise managerial judgments.

Service quality is an elusive and abstract concept that is difficult to define and measure (Bateson & Hoffman, 2011:324; Kasper et al., 2006:175; Kotler& Armstrong, 2010:272; Parasuraman et al., 1985:41; Sower, 2011:8). What is also apparent, is the fact that increases in quality have numerous benefits and can have a dramatic impact on a business's survival (Bateson & Hoffman, 2011:326; Baumann et al., 2007; Ehigie, 2006; Hollensen, 2010:395; Kasper et al., 2006:176; Kassim&Souiden, 2007; Kelkar, 2010:421; Madhavaram& Hunt, 2008:67; Talib&Rahman, 2010:363; Von Freymann&Cuffe, 2010:406, Wiles, 2007:27). It is mainly for this reason that ongoing research and much debate is done in the field of service quality and in service quality measurement. The debate revolves mainly around two competing perspectives, termed the Nordic (Scandinavian or European) and the American schools. The Nordic school defines service quality using overall categorical terms that include the aspects of technical-

functional quality. The American school on the other hand, uses descriptive terms and includes inter alia the five dimensions of reliability, responsiveness, assurance, empathy, and tangibles (Brady & Cronin, 2001:44; Pollack, 2009:42). Although both schools of thought highlight important aspects of service quality, it still seems from the literature that there is no consensus that these definitions fully capture the essence of the construct. For this reason, it is important to review several different perspectives, both old and new, and from several different conceptual and empirical approaches. Definitions of service quality in the literature focus primarily on meeting customers' needs and requirements and how well the delivered service meets customers' expectations (Bateson & Hoffman, 2011:327; Berry et al., 1985:46; Grönroos, 1984:36; Kasper et al., 2006:183; Yoo& Park, 2007:912; Zeithaml, Parasuraman& Berry, 1990:2). These definitions are in line with the user-based approach discussed in section 2.4.1.3. Differences between expected and perceived performances give rise to disconfirmation, which can be either positive or negative. This is often termed the "disconfirmation 64 paradigm'. Expectations in this context are based on individual norms, values, wishes and needs and are therefore very individualistic (Kasper et al., 2006:184). Customer expectations are beliefs about the service that serve as standards or reference points against which quality is judged (Wilson et al., 2008:155). Whether or not these expectations are met by the service provider will have a crucial bearing on their perceived service quality (Bateson & Hoffman, 2011:327; Kasper et al., 2006:183). It should be noted though, that the expectations between two individuals are not necessarily identical, even if the service delivery is absolutely identical. The perceived service quality of the service is therefore also not necessarily identical (Kasper et al., 2006:184). Changing personal circumstances such as income levels, educational achievement or increasing aspiration levels may also change an individual's expectations over time. Expectations are also affected by the interaction of a person with for instance, the media, the service provider, other customers, and observation of specific situations (Kasper et al., 2006:184). In relation to the services provided by the landlord to small business tenants in shopping centers, these "personal circumstances" mentioned above, may play a minor role in the perceived service quality the small business tenants receive from their landlords. The small business tenants' circumstances, experiences and needs may be quite similar to one another. They are all leasing from the same landlord and are all "small" businesses with their own unique needs and challenges. Grönroos (1984:36; 1988:10) was amongst the first researchers that call for conceptual models of service quality in order to

understand the concept better. He believes that these models will show how the quality of services is perceived by customers. He argues that it will subsequently be possible for the service provider to manage perceived service quality evaluations by customers if they understand how the services will be evaluated by them. Conceptual service quality models can be very useful as they provide an overview of the factors which have the potential to influence the service quality of a business and to identify quality shortfalls (Ghobadian, Speller & Jones, 1993:56; Philip &Hazlett, 1997:263; Seth, Deshmukh&Vrat, 2005:914). A model will attempt to show the relationship that exists between prominent variables and can be seen as a simplified description of the reality (Ghobadian et al., 1993:56; Seth et al., 2005:914). Over the past approximately 15 years, at least 30 industry-specific scales and models of service quality 65 have been published in the literature on service quality (Ladhari, 2008:65).

#### **2.1.9 CHARACTERISTICSOF SERVICE**

According to Wilson et al. (2008), services are usually discussed in terms of its distinctive characteristics. These four unique characteristics are as follows:

**Intangibility:** Services that cannot be seen, touched, smelled or tasted. The literature highlights intangibility as one of the key characteristics of services. Regan (1963) introduced the idea of services being "activities, benefits or satisfactions which are offered for sale, or are provided in connection with the sale of goods". The degree of intangibility has been proposed as a means of distinguishing between products and services (Levitt, 1981). Darby and Karni (1973) and Zeithaml (1981) highlight the fact that the degree of tangibility has implications for the ease with which consumers can evaluate services and products. Other studies suggest that intangibility cannot be used to distinguish clearly between all products and services. Bowen (1990) and Wyckham, Fitzroy and Mandry (1975) suggest that the intangible-tangible concept is difficult for people to grasp. Bowen (1990) provides empirical evidence to support this view. Onkvisit and Shaw (1991) feel that the importance of intangibility is over-emphasized. They believe that the service provider's offer is their "productive capacity" and not the (in) tangible nature of the offer.

**Inseparability:** Services are generally produced and consumed simultaneously. Usually the provider and consumer are present when the service is being provided, so both are part of the service process. They cannot be separated from service. Inseparability is taken to reflect the

simultaneous delivery and consumption of services (Regan 1963; Wyckham et al 1975; Donnelly 1976; Grönroos 1978; Zeithaml 1981; Carman and Langeard 1980; Zeithaml et al 1985; Bowen 1990 and Onkvisit and Shaw 1991) and it is believed to enable consumers to affect or shape the performance and quality of the service (Grönroos, 1978; Zeithaml, 1981).

**Heterogeneity:** The quality of services cannot be consistent as they are performed by different employees and at varying time intervals. It is difficult to reproduce services of the same standards, as can be done with products, because they are produced by people. Heterogeneity reflects the potential for high variability in service delivery (Zeithaml et al 1985). This is a particular problem for services with a high labour content, as the service performance is delivered by different people and the performance of people can vary from day to day (Rathmell, 1966; Carman and Langeard, 1980; Zeithaml, 1985; Onkvisit and Shaw, 1991). Onkvisit and Shaw (1991) consider heterogeneity to offer the opportunity to provide a degree of flexibility and customisation of the service. Wyckham et al (1975) suggest that heterogeneity can be introduced as a benefit and point of differentiation.

**Perishability:** Service cannot be stored like products, at the same time; services cannot be returned or resold (Rathmell, 1966; Donnelly, 1976; and Zeithaml et al, 1985). Onkvisit and Shaw (1991) suggest that services are "time dependent" and "time important" which make them very perishable. Hartman and Lindgren claim that the "issue of perish ability is primarily the concern of the service producer" and that the consumer only becomes aware of the issue when there is insufficient supply and they have to wait for the service.

#### **2.1.10 QUALITY**

In its broadest sense, quality is a degree of excellence: the extent to which something is fit for its purpose. In the narrow sense, product or service quality is defined as conformance with requirement, freedom from defects or contamination, or simply a degree of customer satisfaction. In quality management literature, quality is defined as the totality of characteristics of a product or service that bears on its ability to satisfy stated and implied needs. Crosby (1979) defined quality of goods as "conformance to requirements"; Juran (1980) defined it as "fitness for use"; while Garvin (1983) measured quality by counting the incidence of "internal" failures (those observed before a product left the factory) and "external" failures (those incurred in the field after a unit had been installed). Gronroos (1990) has noted that product quality was traditionally

linked to the technical specifications of goods, with most definitions of quality arising from the manufacturing sector where quality control has received extensive attention and research. The product-based definitions of quality may be appropriate to the goods-producing sector; however, according to Parasuraman and others, knowledge about the quality of goods is insufficient to understand service quality (Parasuraman et al., 1985). Kotler and Armstrong (1996) have defined service quality as "the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs".

#### **2.1.11 CUSTOMER SATISFACTION AND SERVICE QUALITY**

Since customer satisfaction has been considered to be based on the customer's experience on a particular service encounter, (Cronin & Taylor, 1992) it is in line with the fact that service quality is a determinant of customer satisfaction, because service quality comes from outcome of the services from service providers in organizations. Another author stated in his theory that "definitions of consumer satisfaction relate to a specific transaction (the difference between predicted service and perceived service) in contrast with 'attitudes', which are more enduring and less situational-oriented," (Lewis, 1993, p. 4-12) This is in line with the idea of Zeithaml et al (2006, p. 106-107). Regarding the relationship between customer satisfaction and service quality, Oliver (1993) first suggested that service quality would be antecedent to customer satisfaction regardless of whether these constructs were cumulative or transaction-specific. Some researchers have found empirical supports for the view of the point mentioned above (Anderson & Sullivan, 1993; Fornell et al 1996; Spreng&Macky 1996); where customer satisfaction came as a result of service quality. In relating customer satisfaction and service quality, researchers have been more precise about the meaning and measurements of satisfaction and service quality. Satisfaction and service quality have certain things in common, but satisfaction generally is a broader concept, whereas service quality focuses specifically on dimensions of service. (Wilson et al., 2008, p. 78). Although it is stated that other factors such as price and product quality can affect customer satisfaction, perceived service quality is a component of customer satisfaction (Zeithaml et al. 2006, p. 106-107). This theory complies with the idea of Wilson et al. (2008) and has been confirmed by the definition of customer satisfaction presented by other researchers. Figure 1: Customer perceptions of quality and customer satisfaction (Wilson et al., 2008, p. 79) Service Quality Situational factor Customer Loyalty Customer satisfaction Product Quality Price

Personal factor 12 the above figure shows the relationship between customer satisfaction and service quality. The author presented a situation that service quality is a focused evaluation that reflects the customer's perception of reliability, assurance, responsiveness, empathy and tangibility while satisfaction is more inclusive and it is influenced by perceptions of service quality, product quality and price, also situational factors and personal factors. (Wilson, 2008, p. 78) It has been proven from past researches on service quality and customer satisfaction that Customer satisfaction and service quality are related from their definitions to their relationships with other aspects in business. Some authors have agreed to the fact that service quality determines customer satisfaction. Parasuraman et al., (1985) in their study, proposed that when perceived service quality is high, then it will lead to increase in customer satisfaction. Some other authors did comprehend with the idea brought up by Parasuraman (1995) and they acknowledged that "Customer satisfaction is based upon the level of service quality that is provided by the service providers" (Saravana&Rao, 2007, p. 436, Lee et al., 2000, p. 226). Looking into (figure 1), relating it to these authors' views, it is evident that definition of customer satisfaction involves predicted and perceived service; since service quality acted as one of the factors that influence satisfaction. More evidence of this relationship has been proven by past researches. As a result of the definition of customer satisfaction presented by Lewis, (1993, p. 4-12), Sivadas& Baker-Prewitt (2000, p. 73-82) used a national random telephone survey of 542 shoppers to examine the relationship between service quality, customer satisfaction, and store loyalty within the retail department store context. One of the results was that service quality influences relative attitude and satisfaction with department stores. They found out that there is a relationship between customer satisfaction and service quality. In line with the findings of Sivadas & Baker-Prewitt (2000, p. 73-82), Su et al., (2002, p. 372) in their study of customer satisfaction and service quality, found out that; these two variables are related, confirming the definitions of both variables which have always been linked. They also dictated that service quality is more abstract because it may be affected by perceptions of value or by the experiences of others that may not be so good, than customer satisfaction which reflects the customer's feelings about many encounters and experiences with service firm. (Su et al., 2002, p.372). In addition to what the other researchers have found out from customer satisfaction and service quality, some other authors Wang & Hing-Po (2002), went into details to bring in customer value in the study of the relationship between customer satisfaction and service quality. Their study

used SERVQUAL model in measuring service quality in China's mobile phone market, but with modification on the basis of focus group discussions and expert opinions to reflect the specific industry attributes and the special culture of China. Emphasis was then paid to the study of the dynamic relationships among service quality, customer value, customer satisfaction and their influences on future behaviors after the key drivers of customer value and customer satisfaction were identified. All of them were based on the development of structural equation models by using PLS-GRAPH Package. (Wang & Hing-Po, 2002 p. 50-60) This study blended the study of customer satisfaction and service quality with customer value which added more weight to the linkage between customer satisfaction and service quality because value is what customers look in an offer. 13 Past studies on the relationship between customer satisfaction and service quality which included SERVQUAL dimension have been published since from 2003 to 2010, the research on this topic dropped from 2004 to 2006 and was stable, between 2008 and 2009, there was no study on this field of study that treated the relationship between customer satisfaction and service quality with SERVQUAL dimension; research on this topic increased rapidly in 2010 (Appendix 1) With regards to the above statistics; Kuo (2003) conducted a research on service quality of virtual community websites with the purpose of constructing an instrument to evaluate service quality of virtual community websites and to have a further discussion of the relationship between service quality dimensions and overall service quality, customer satisfaction and loyalty. The researcher used Factor analysis, t-test, and Pearson correlation analysis to analyze the data collected from college students of three major universities in Taiwan. One of the results was that" on-line quality and information safety is positively related to the overall service quality, customer satisfaction, and loyalty, but the service quality level of this dimension was the poorest." (Kuo, 2003, 461-473). In contrast to the above studies; Bennett & Barkensjo (2005) studied relationship quality, relationship marketing, and client perceptions of the levels of service quality of charitable organizations. Questions were asked to 100 people on their perceptions of service quality of the organizations that had given them assistance, their satisfaction with a charity service etc. they constructed a model and estimated using the method of partial least square. Also, perceived service quality was measured via adaptations of the service quality testing instrument but without any assessments of the respondents' prior expectations concerning the services they would receive from an organization. In their results, relationship marketing was found to represent an effective weapon for improving both relationship quality and beneficiaries'
satisfaction with service provision. They stated that "relationship quality and actual service quality induced beneficiaries to want to recommend a charity to other people and to engage in positive word-of-mouth." (Bennett &Barkensjo, 2005, p. 101). Meaning the beneficiaries who stood as the customers were satisfied since recommendation is signal of satisfaction, confirming the idea that service quality is related to customer satisfaction. They were not directly conducting a research on the relationship between customer satisfaction and service quality, but because when talking about client perceptions, one must think of their satisfaction, and when talking about service quality there is a link between these two as has been proven by many researchers ( Baker-Prewitt, 2000, p. 73-82; Kuo-YF, 2003, 461-473; Gera, 2011, p. 2-20) This means it could be useful to test these three variables (Customer satisfaction, service quality and Service quality dimensions). The study of Bennett &Barkensjo (2005) stated that "the hypothesis elements of service quality dimension (Tangible, assurance etc.) were scientifically associated with the service quality construct" (Bennett &Barkensjo, 2005, p. 101). It could be interesting to test SERVQUAL model with the five dimensions and service quality assuming that expectations is included to see if it will be significantly associated. In support of the use of SERVQUAL in the relationship between customer satisfaction and service quality, Ahmed et al., (2010) conducted a mediation of customer satisfaction relationship between service quality and repurchase intentions for the telecom sector among university students, with SERVQUAL model's 5 dimensions 14 (tangibles, responsiveness, empathy, assurance and reliability) by Parasuraman et al. to measure service quality. To crown the fact that customer satisfaction and service quality are important variables in business research on customers, Gera (2011) investigated the link between service quality, value, satisfaction and behavioral intentions in a public sector bank in India and one of their results states that "Service quality was found to significantly impact on customer satisfaction and value perceptions" (Gera, 2011, p. 2-20) The literature review shows latest researches up to 2011 on the relationship between customer satisfaction and service quality. The researches in this area have been covered so far as below; • It has been researched that there is a relationship between customer satisfaction and service quality. • It has been researched that service quality could be evaluated with the use of SERVQUAL model. • It has been researched that service quality could be evaluated d by other dimensions of service quality that is, functional and technical and not necessarily SERVQUAL model • some researchers even tested service quality and service quality dimensions. What is lacking is the relationship between customer satisfaction and service quality dimensions. Among all the recent articles that I could reach, none of the studies had tested the five dimensions of SERVQUAL and customer satisfaction and service quality at the same time to confirm this relationship between customer satisfaction and service quality.

#### **2.2 EMPIRICAL LITERATURE REVIEWS**

#### **2.2.1 Quality and Its Importance in Shipping Industry**

Since the 1980s, quality has been a growing concept, which became a reference in the attraction of customers, measurement of performance as well as improvement of the company's offerings. In the latter years, together with the impressive growth of the tertiary sector, the concept of quality had to be adapted to different industries, products or services but also to different customer segments (Lewis, 1989). The interest in the study of quality has been growing in the researchers' sphere, for two main reasons, on the one hand, mainly due to the large interest for companies to use this concept to grow a long-term and profitable business, and on the other hand, due to the complexity in the definition of the concept. The concept of quality can be characterized as complex, because of various elements, starting with the number of definitions suggested to the reader. An extensive number of definition available to the reader or researcher, shows the large number of research done on the topic, as well as the various levels the studies touched upon, and the details discovered by researchers (Crosby, 2006; Kara, Lonial, Tarim, &Zaim, 2005; Wicks &Roethlein, 2009). "A satisfaction-based definition of quality", defining the concept as being "the summation of the affective evaluations by each customer of each attitude object that creates customer satisfaction, where the term customer is defined as any internal or external stakeholder of the organization and an attitude object is any entity of interest" (Wicks & Roethlein, 2009, p. 92). However, the concept of quality for services will be defined as "the measure of how well the service level delivered matches the customer expectations. Delivering quality service means conforming to customer expectations on a consistent basis" (Lewis &

## 2.2.2 The Shipping Industry and Measurement Scale

As seen in the overview of the shipping industry and the role of ports, such industry provides services mainly to businesses rather than final customers. By studying the business-to-business

industry, it is foreseeable that some of the factors, determinants or scales used to measure the service quality was changed and adapted to this specific environment. In fact, and as mentioned by several researchers, business customers tend to require higher quality, relationship with a longer length of time, and most importantly, some specific requirements such as the importance of deadlines or financially related issues that can greatly impact the service quality if they are not properly handled (Lee, 2011; Ullrich, 2002). In order to understand what the main aspects of service quality in the shipping industry are, academic articles and previous studies in the area have been used. To understand how the perception of service quality is built, various features considered by business customers, and have been relayed by several researchers. From many articles, the technical features of the service are the main points of evaluation to assess the quality. The importance of the technical qualities can be explained by some researchers (Lopez & Poole, 1998; Nelson, 1974), due to the fact that, in the shipping industry, the service offered tends to be evaluated at the outcome only. On the other hand, other researchers such as Lee (2011), Grönroos (1988) or Lewis (1989), believe that the quality of the service is assessed all along the process. In both perspectives, the technical qualities are fully part of the quality evaluation process. The technical qualities of the service can differ from a customer to another due to the operations they experience or the requirements they have. However, most customers and researchers can agree on the importance of pilotage, towage and mooring, these operations are the first contact between the customers (containerships) and the service provider (the port). If these operations are executed impeccably, the first contact will have a positive impact on the customer's experience, and one's perception of the company's professionalism (Grönroos, 1984). In addition, the previously cited operations are crucial for the following procedures due to the high impact of these technical movements on the efficiency of the overall supply chain. Indeed, as it tends to be time consuming, the better the operations are performed, the better it is to avoid the accumulation of lead times, congestion and delays along the supply chain (Lopez & Poole, 1998; Pantouvakis et al., 2008). The first consequences of the increase of lead time is most of the time, the increase of costs for both the customer and the service provider, and directly deducted from this, the customer satisfaction is impacted. In order to optimize the lead times, technologies have been applied to the shipping industry to enhance the operations in seaport sites. It means, better equipment for faster and safer on and off loading operations, software to optimize the storage of containers, bigger areas to carry out bigger vessels, with large container capacities, and lastly more efficient equipment to maneuver and organize the port site (Lopez & Poole, 1998; Pantouvakis et al., 2008). The technology, as previously explained, enable a better handling process of the cargo, which includes the off and on-loadings of containers, the cargo consolidations but also the specific requirements for storage and warehousing of the containers. The efficiency gained with the technical operations, can be transferred onto the intermodal operations, consisting in the well-functioning exercise of relocating the containers to another transportation mode, from the seaborne transportation to the hinterland transportation. The technological improvements emerged, mainly to reduce uncertainties along the transportation process as well as deliver on time services and gain value over this. This process requires punctuality and expertise to produce an efficient and reliable work (T. E. Notteboom, 2004; Pantouvakis et al., 2008; J. L. Tongzon, 2009). To increase the reliability of the company and give the proof of the service quality to actual or potential customers, business customers can rely on various type of certifications. The most notable ones in the shipping industry are the ISO ones, 9000 series. As explained by Lopez & Poole (1998), having this type of certification is a proof of excellence and ability to do the service offered. This kind of certifications are considered as a good plus in the relationship between the company and its customers, since it increases the willingness of both parties to work in a constructive and effective way. Partnering with a company which has recognized ability is a way for customers to reduce uncertainty as well as encourage loyalty and trust (Lopez & Poole, 1998; T. E. Notteboom, 2004; Wicks & Roethlein, 2009). In order to assess the service quality, several other aspects of the seaport might be evaluated, such as the number of sailings, the equipment and infrastructure available at the terminal. Such indicators can be influenced by the technologies available at the port, as well as the overall efficiency and organization management of the port area. Concrete examples to illustrate this, could be, the efficiency and number of cranes, the number of berths or the size of the terminal. To complete the evaluation of the service quality, business customers tend to take into the administrative issues and so the contact they have with the personnel. This encounter usually set the tone for the relationship between service provider and customer, and enables sharing ideas, requirements or concerns (Kołowrocki&Soszy ska, 2006; Wu &Goh, 2010). Thus, during the service encounter, the customer can evaluate the type of services offered, and may ask for specific adaptation for its business, which means that if the service provider is able to identify specific needs, the more likely the customer will feel

understood, and confident with the ability of the company to complete the service. The service encounter is a strategic key for service providers: in fact, by answering the interrogations and issues of customers, the company shows its professionalism, and so enhance the value of its service, potentially inducing a higher perceived service quality. In addition to the service encounter, the administrative support of a seaport is an important aspect of the service quality, since it enables the smoothness in operations. The administrative support can include the quality of customer handling, the value-added services as well as organization for warehousing processes, and most importantly the security and safety of the seaport area. When all the administrative tasks are properly completed, the lead times are reduced, which positively impact the efficiency of operations, which is one of the most important criteria for quality evaluation (Lopez & Poole, 1998; T. E. Notteboom, 2004; Pantouvakis et al., 2008). By testing several scales to measure the service quality, the previously cited authors, mentioned the importance of the cost of the service. A too low price would give a low value to the service, which tend to be perceived as lower quality, whereas a too high price would not attract potential customers. The service quality is directly impacted by the perceived value of the service, and whether it is fairly calculated (Lee, 2011; Lopez & Poole, 1998; T. E. Notteboom, 2004; Pantouvakis et al., 2008). All arguments cited above, are part of the company's reputation, which at a later stage can be seen either as strength or as a weakness to attract future customers or attract new ones. As the reputation of the company is built over time, and on its ability to offer a service in a similar way over time, the more the customers are satisfied the more beneficial it is for further agreements (Bennett & Gabriel, 2001; Lopez & Poole, 1998; Pantouvakis et al., 2008).

#### **2.2.4 Conceptual Framework**

The conceptual frame work indicates the crucial process, which issue to show the direction of the Study. The study shows the relationship between the five service quality dimensions and customer satisfaction. Also the study focuses on the five service quality test which represents customer perceptions toward the service offered which is referred to as the perceived service quality.

#### **Independent variables**

#### **Dependent variables**



#### The five service quality test dimensions in these studies are:

- **REGULATION**: An official rule or act of controlling something
- **INFRASTRUTURE**: Is the general term for the basic physical system of a business, region, or nation for instance, transportation system.
- **ICT APPLICATION**: Are currently popular in schools due to its capabilities in facilitating administration activities from data storage to knowledge decision making.
- COMPETENCY/SKILL: Competencies refers to skills or knowledge that leads to superior performance measurable skills, abilities and personality traits that identify successful employees against defined roles within an organization.
- **COST**: In business and accounting cost is the monetary value that has been spent by a company in order to produce something in a business.

## **CHAPTER THREE**

## **RESEARCH METHODOLOGY**

## **INTRODUCTION**

This chapter discussed detail of the research methodology. The chapter is organized in research design, area of the study, target population and sample size, type of data and sources, method of data collection and data analysis and sampling techniques.

## **3.1 Research Design**

In designing any research study, the researcher should be familiar with the basic steps of the research process that guide all types of research designs in order to choose the most appropriate design to answer the research questions and hypotheses.

This study used descriptive survey research design by applying mixed research approach (qualitative and quantitative). The researcher choose this research design because of its advantages in obtaining data; it is also the simplest and least cost and least cost alternative compared to longitudinal (Neumann, 2003). In this research qualitative approach is used for data analysis. According to Creswell et al. (2003), qualitative research helps in getting an in-depth analysis of the problem under investigate relationships, including effects relationships; it helped in conditions or investigates relationships. In addition, it helped in answering questions concerning the current state of the subject under the study. Finally this study is used explanatory type of research design in order to explain the relationship between the service quality variables and customer satisfaction and how this dimension affects customer satisfaction. Data is collected on service quality dimensions and customer satisfaction using model explanatory. The research is cross sectional that data is collected at one point in time.

#### **3.2 Sampling Techniques**

Sampling Technique provide a range of methods that enable one to reduce the amount of data needed for a study by considering only data from a sub-group rather than all possible elements (Saunders et al., 2009, p. 210). According to Saunders et al., (2009, p. 213) there exist two types

of sampling: probability sampling, where the chances of each case being selected from the population is known and is usually equal for all cases, and non-probability sampling where the chances of each case selected from the total population is not known, making it impossible to answer research questions (Saunders et al., 2009, p. 213). The researcher used a non-probability sampling strategy called purposive sampling. Purposive sampling is a non-probability sampling method and it occurs when "elements selected for the sample are chosen by the judgment of the researcher. Researchers often believe that they can obtain a representative sample by using a sound judgment, which will result in saving time and money. Purposive sampling also known as judgment, selective or subjective sampling, is a sampling technique in which researcher relies on their own judgment when choosing members of population to participate in the study. The researcher used this type of sampling technique is that the unique characteristics of ESLSE customers. The ESLSE customers are categorized into two, major and minor customers. The researcher applied formulas to calculate a sample size. The population consisted of import and export customers. The researcher is used techniques of non-probability sampling method. A sample of 146 respondents is drawn from the population according to their tonnage performance. To ensure fair representation of the research subjects from each corporate and minor customer of importers and exporters are incorporated. Therefore, the research is conducted non- probability sampling method technique those who are intentionally selecting corporate and minor customers based on their tonnage performance.

#### **3.3** Area of the study

The study carried at ETHIOPIAN SHIPPING AND LOGISITICS SERVICE ENTERPRISE particularly MULITIMODAL TRANSPORT SERVICE in Addis Ababa at head office. Head office was selected to be the main study area based on the facts that it is the more customers here. Also, the researcher collected data from corporate and minor customer through questionnaires which distributed to the customer during providing service and collected after being given enough time to fill them.

#### **3.4 Target Population and sampling size**

The main focus of this study was to identify the service quality provided by ESLSE particularly multimodal transport service and its effect on customer satisfaction using SERVICE QUALITY TESTING (regulation, infrastructure, ICT application, competence, and cost).

The target population constituted mainly the ESLSE particularly multimodal transport service in the head office customer those who are engaged in import and export sector. This population is chosen because it is assumed to have adequate information of the subject under investigation and the research variables.

According to the information based from marketing department 800 total customers of multimodal transport system registered at head office. But out of 800 customer 250 customers identify loyal customer. Based on this the researcher used 250 customers as target population of this study and samples were drawn out of these customers based on the following Yamane (1967) formula.

The sample size of this study to developed Yamane (1967) formula.

n =<u>N</u> 1+N (e)<sup>2</sup> Where, n= is the sample size N =is the population size, e= is the level of precision or sampling error= (0.05) Confidence Level =95% n= 2501+250(0.05)<sup>2</sup> 250/1+250\*0.0025

250/1.625 n=154

Thus, sample size of 154 customers was selected from the population of 250. These 154 Customers were selected by using a type of non-probability convenience sampling technique.

#### 3.5 Type of data and source

The researcher collected and worked on both primary and secondary data using questionnaires and company written document instrument of data collection. The questionnaires were distributed to the corporate and minor customers of Ethiopian Shipping & Logistics Service enterprise particularly Multimodal transport service customers and also the researcher was gathered company written document. According to Ghauri&Gronhaug (2005, 40) research methodology refers to the collection of data and their analysis. The researcher chooses the

method of a primary and secondary data. Primary data are often based on current analysis and are specific, whereas secondary data are taken from the sources such as books, journals, media, the internet, research papers and so on. Often primary data are more reliable and can be taken as a source of getting feedback and the steps for the improvement. But at the same time, primary data are often challenging, time consuming and costly. The primary data is collected through questionnaire. The questionnaire consists of structured and open-ended questions which give the opportunity to the customer to have their own opinion and feedback for the improvement in the future. On the other hand, the interview was conducted with the company division managers to get detail information about company as well as future strategy and plans in regard to the service quality and customer satisfaction. Moreover, qualitative method is used to know the steps that the organization took to increase the customer satisfaction and loyalty.

#### 3.6 Validity and Reliability

**Validity** is concerned with whether the findings are really about what they appear to be about. It is possible to study the opinions that customers have about the quality of a particular product or service given by a particular organization. Validity is an evolving complex concept because it relates to the inferences regarding assessment results. Focusing on the consequences of the inferences made implies that they should be appropriate and adequate. Messick (1989, p. 6) points out that inferences are hypotheses, and when these inferences are validated it amounts to hypothesis-testing. As a result, validity is seen as evaluative judgments that are made on the inferences of assessment results or test scores, that is whether correct interpretations are made and actions are taken based on the inferences.

The use of the validity and reliability in quantitative research is prevalent. These two terms, validity and reliability refer to the psychological variables or concept, being measured. In other words, to fragment comprehensive evaluation in measurement validity and reliability are used. Comprehensive evaluation helps to gather evidence, including theoretical information, by seeking answers to the silent questions (Berzonsky& Adams 2004.) Validity is fundamental in evaluating measures in the thesis. In this thesis, the research is valid because the collected data and the research questions are in a systematic way and pre –questionnaire was distributed to check the validity of questions to further data collection process.

All the things that needed to be measured have been measured. The answers given by the participants are truth full and beneficial for those who are not parts of the research. Additionally, the purpose of the research was assessing the service quality to know how satisfied the customers are with services of the case company. In order to ensure the validity of thesis the author has conducted the questionnaire. However, the validity will determine whether the research truly measures the exact thing which is intended to measure or how truthful the research results are. **Reliability** is a concept to evaluate quality in quantitative study with a purpose of explaining and quality concept in qualitative study with the purpose of generating understanding this relates to the company, customer opinions about the company and the services. The conductor of this research has gathered the information to understand how the customer feels about the services of the company and to create improvements where needed. This research work is reliable because the data were a true reflection of what the customer felt.

The questionnaire was distributed in the written paper to the customers for 3 weeks. The number of the respondents within these 3 weeks was very high therefore the time period in collecting and analyzing the data was perfect for reliable results.

#### 3.7 Method of data collection and data analysis

The research was conduct on the ESLSE particularly multimodal transport service corporate and minor customers, for the primary data collection. It includes questionnaire filled by multimodal transport service customers. The questionnaires has distribute physically for the respondents who are targeted for the research.

During data analysis the data was organized, reviewed, and coded categorically and chronologically. For this research both descriptive and inferential statistics method was use. The researcher was identify and discussing the differences of qualitative and quantitative approaches. In the same way gathering, analyzing and interpreting of data take place and was presented using statistical tools like Percentage analysis; mean, standard deviation, Correlation and multiple regressions are applied for analyzing the data collected.

Method of data collection is relatively dependence on standard questionnaires. Therefore this questionnaire has been developing based on statement of the problem, research hypothesis, reviewed literatures. The data for this research was collected via several methods; these included

qualitative and quantitative research method. The type of quantitative research method applied in the study includes questionnaire whereas qualitative research includes a written document. The data collected on this subject is done by the distribution of questionnaires to the different corporate customers of ESLSE that have been using the service of the company. The questionnaires are distributed physically for the respondents who are targeted for the research. Secondary data also was collected relevant sources for the subject study area.

The questions were made in to four parts. The first part of the questions was back ground of the respondents. The second part was operational characteristics of the respondents. The third part includes service quality questions. The fourth one was customer satisfaction question. For all questionnaire in section respondents were requested to indicate their feeling on a five point Likert scale type to measure weighted as follows: 1 = strongly disagree 2 = disagree 3 = undecided 4 = agree and 5 = strongly agree. While making interpretation of the results of frequency, mean and standard deviation, 1 - 1.8 = strongly disagree, 1.81 - 2.6 disagree, 2.61 - 3.4 neutral (undecided) 3.41 - 4.20 agree and 4.21 - 5 strongly agree. (Best, 1977)

The data and information collected from the respondents are presented, interpreted and analyzed according to respondents. During data analysis the data is organized, reviewed, and coded categorically and chronologically. For this research both descriptive and inferential statistics method is used. The researcher is identify and discussed in qualitative and quantitative approaches. In the same way gathering, analyzing and interpreting of data take place and presented using statistical tools like Percentage analysis, mean, standard deviation, Correlation and Multiple Regression analysis are applied for analyzing the data collected. The collected data is analyzed with SPSS package. I tested the relationship and cause and effect between service quality dimensions with customer satisfaction. The two main aspects satisfaction and service on ESLSE service quality from the customer's perspectives. Evaluation of customers was able to be conducted through their views of the meaning of service quality.

#### **3.8 Ethical Considerations**

All information gotten from the respondents were treated with confidentiality without disclosure of the respondent's identity. Moreover, no information was modified or changed, hence information gotten was presented as collected and all the literatures collected for the purpose of this study were appreciated in the reference list.

# **CHAPTER FOUR**

# **RESEARCH ANALYSIS AND INTERPRITATION**

# **INTRUDACTION**

This part of the research deals with the analysis and discussion of the data gathered from the questionnaire survey and written document. It includes the measure the service quality against customer's satisfaction of ESLSE (MULTIMODAL TRANSPORT) in Addis Ababa.

## 4.1 Response Rate of Respondents

## Table 4.1 Response Rate

Questionnaires	Questionnaires Returned	Response Rate
Distributed		
154	146	95%

Source: primary data

To make the analysis a total of 154 questionnaires were distributed to customers of Ethiopian Shipping and Logistic Enterprise, (Multimodal transport system) out of these 146 questionnaires were properly filled and returned back to the researcher, some of the respondents left without completing the questionnaires which means the overall response rate of the study was 95%. This means enough to analyze the finding.

## **4.2 Demographic Information of the Respondents**

Table 4.2. Dackground of Respondents	<b>Table 4.2:</b>	<b>Background</b>	of Res	pondents
--------------------------------------	-------------------	-------------------	--------	----------

Sex of respondents	Frequency	Percent
Male	80	54.8 45.2
Female	146	100
Education level of respondents	Frequency	Percent

Grade 12 completed	2	1.4
Certificate	1	0.7
	5	3.4
College Diploma	84	57.5
First Degree	54 146	37.0
Second Degree and above	140	100
Total		
Job Title level of respondents	Frequency	Percent
CEO/Manager	0	0
Deputy G/manager	0	0
Deputy Grinanager	4	2.7
Dep't Manager	21	14.4
Division Head	21	14.4
Serier Officer	52	35.6
Senior Officer	40	52.9 100
Officer	140	100
Junior Officer		
Total		
Years stayed at the organization respondents	Frequency	Percent
Under 2 years	3	2.1
2-5 years	19	13.0
	72	49.3
6-10 years	52	35.6
over 10 years	146	100
	1	

Total	

## Source: Owen survey result June 2020 n =146

Table 4.2 above shows that out of the total respondents 80 (54.8%) of respondents were male and 66(45.2%) respondents were females. The result shows that the numbers of male respondents were greater than female respondents; related to respondent's job position out of the total 4(2.7%) of respondents were Dep't manager, division head and senior officer respondents are the same 21(14.4%) officer and junior respondents were 52(35.6%) and 48(32.9%) respectively. The result shows that the majority (68.5\%) respondent's job positions were junior and officer. This implies that majority of respondent's job position were under operational.

Related to educational qualification of the respondents, out of the total 2(1.4%) of respondents educational background were grade 12 completed, 1(0.7%) of the respondents educational background were certificate, 5(3.4%) respondents education background were college diploma, 84(57.5%) of respondents educational background were first degree and the remaining 54(37.0%) respondent's educational background were master's degree and above. The result showed that above half of respondents educational level are first degree and next respondents educational qualification are second degree and above holders. This implies the majority of respondents are first Degree holders.

Related to stayed the organization of the respondents, out of the total 3(2.1%) of respondents working in the company were under 2 years, 19(13.0%) of respondents working in the company were 2-5 years, 72(49.3%) and 52(35.6%) or respondents are 6-10 and over 10 years respectively. This implies that majority of respondents are above 6 years.

## 4.3. Descriptive Analysis of customer satisfaction using different dimension

To measure the customers' perception of the service quality provided by Ethiopian Shipping and Logistics Enterprise (ESLSE) particularly Multimodal transport system, the five service quality testing dimensions is used in this study. The five service quality test directly measures the customer' perception of service performance and assumes that respondents automatically compare their perceptions of the service quality levels with their expectations of those services.

The model contains 28 questions and a five point likert scale is used to measure the performance. For all the service quality dimensions (Regulation, Infrastructure, ICT Application, Competence/Skill and Cost), the mean score have been computed. The table below 4.3 up to 4.8 represents the results.

In this part, the data related with the study is presented and analyzed in detailed manner. This section is further categorized into five broad proportions (Regulation, Infrastructure, ICT Application, Competence/Skill and Cost). Based on this, customers were asked to rate the level of provision of service with specific quality service. In order to request their opinion on the importance of effective service delivery processes different questions were included in each indictors and service quality for customer satisfaction.

The following table below gives a breakdown of the descriptive measures of the five dimensions of service quality performance that were answered by respondents.

Item 1	Ν	Mean	Std. Deviation
Multimodal transport systems are too restricted by gov't regulation.	146	4.27	0.790
The present multimodal transport service regulation is barrier to the efficiency of the multimodal transport service quality.	146	3.97	0.770
A sate-owned multimodal transport system has increased customer satisfaction.	146	1.92	0.725

Table 4.3: Customer satisfaction concerning service quality Regulationdimension

Electronically			
customer			
procedures for			
multimodal			
transport service	146	4.55	0.797
can be increased			
customer			
satisfaction.			
Customs laws and			
formalities are			
greater barrier to a			
multimodal	146	4.03	0.737
transport service.			
The port system			
can be the obstacle			
for the	146	4.14	0.650
effectiveness of			
multimodal			
transport service.			
Average score	146	3.81	0.74
<b>C</b>	14 T 2020	- 110	

Source: Owen survey result June 2020 n = 146

Table 4.3 above shows the mean score and the six items of regulation dimension of service quality. According the table result above, Multimodal transport systems are too restricted by government regulation scored a mean value of 4.27 and standard deviation value equal to .790, for the statement the present multimodal transport service regulation is barrier to the efficiency of the multimodal transport service quality scored a mean value 3.97 with standard deviation value .770, for the statement a state-owned multimodal transport system has increased customer satisfaction scored a mean value equal to 1.92 with standard deviation value .725, for the statement electronically customs procedures for multimodal transport service can be increased customer satisfaction scored a mean value 4.55 with standard deviation value .797, for the statement Customs laws and formalities are greater barrier to a multimodal transport service a mean score scored mean value 4.03 with standard deviation value .737and finally for the statement The port system can be the obstacle for the effectiveness of multimodal transport service a mean score value equal to 4.14 with standard deviation value .650. The average mean score of the regulation service quality test dimension score vales have 3.81 and standard deviation value have .74, this

result indicated that Ethiopian Shipping and logistic Service Enterprise (ESLSE) has the average regulation dimension service quality agreed and satisfied condition. Except the statement that a state-owned multimodal transport system has all regulation dimension has agreed. This implies related to the regulation dimension relatively customers are nearer to agree level or satisfied by the service provided by ESLSE. However, customers are disagreed or dissatisfied with the state-owned multimodal transport.

Item 1	Ν	Mean	Std. Deviation
In Ethiopia there			
are sufficient			
inland clearance			
exercise their right			
and responsibilities	146	1.87	0.667
towards			
multimodal			
transport service			
quality.			
In the country			
sufficient			
infrastructure to			
improved			
multimodal			
transport service			
quality and	146	1.83	0.625
customer			
satisfaction.			
Sufficient			
highway, railways			
and rail port can be	146	4.45	0.734
increased import			
goods and			
customer			
satisfaction.			
Privatizing			
multimodal system			

 Table 4.4: Customer satisfaction concerning service quality Infrastructure

 dimension

is better than state-	146	4.08	0.686
owned multimodal			
transport system in			
service quality.			
Average score	146	3.05	0.678

Source: Owen survey result June 2020 n =146

According to the table 4.4 above result, for the statement when you have a problem, In Ethiopia there are sufficient inland clearance exercise their right and responsibilities towards multimodal transport service quality scored a mean value 1.87 and standard deviation value .667, In the country sufficient infrastructure to improved multimodal transport service quality and customer satisfaction scored a mean value equal to 1.83, and standard deviation value .625, Sufficient highway, railways and rail port can be increased import goods and customer satisfaction scored a mean value 4.45 and standard deviation value .734 and Privatizing multimodal system is better than state-owned multimodal transport system in service quality scored mean value equal to 4.08 and standard deviation value .686.

The infrastructure dimension of service quality's mean value indicated that two items or variables show below the neutral level. This shows almost half customers are disagree with the infrastructure dimension of service quality of the ESLSE. The average score value of infrastructure service quality dimension average mean value has 3.05 and standard deviation has .678, this indicates that most of ESLSE customer have agreed and satisfied in infrastructure service quality dimension. The company and the government are not sufficient attention for inland clearance exercise and infrastructure.

<b>Table 4.5:</b>	Customer	satisfaction	concerning	service	quality	ICT	Applicatio	n
dimension								

Item 1	Ν	Mean	Std. Deviation
Customers are able			
to get sufficient			
information for			
modern technology			
about their cargos	146	1.91	0.684
in ESLSE.			
Ethiopian shipping			

and logistics			
service enterprise			
offer sufficient			
online information	146	1.51	0.754
service for			
multimodal			
transport system			
customer.			
To simplify			
multimodal			
transport service,			
there is integrated			
information system			
between SELSE,	146	3.96	0.838
CUSTMOS, and			
FREIGHT			
FORWARDERS.			
Use modern ICT			
application in			
multimodal			
transport service	146	4.03	0.756
has significant			
effect on customer			
satisfaction.			
Average score	146	2.85	0.758

Source: Owen survey result June 2020 n =146

Table 4.5 above result shows that the ICT application dimension of service quality, the statement customers are able to get sufficient information for modern technology about their cargos in ESLSE scored a mean value 1.91 and standard deviation value .684, Ethiopian shipping and logistics service enterprise offer sufficient online information service for multimodal transport system customer score mean value 1.51 and standard deviation value .754, to simplify multimodal transport service, there is integrated information system between SELSE, CUSTMOS, and FREIGHT FORWARDERS scored a mean value 3.96 and standard deviation equal to .838 for the statement, use modern ICT application in multimodal transport service have significant effect on customer satisfaction scored a mean value 4.03 and standard deviation .756

and average mean value score 2.85 and average standard deviation .758 this implies ICT application service quality dimension moderately agree satisfied.

The result indicated that on ICT application service quality dimension use modern ICT application in multimodal transport service have significant like responsive dimension service quality customers are relatively agreed or satisfaction, and simplify multimodal transport service, there is integrated information system between SELSE, CUSTMOS, and FREIGHT FORWARDERS has mostly agree and satisfied. The other ICT application dimensions are the customers are disagree or dissatisfied. We can conclude that customers are disagreed or dissatisfied on the ICT application dimension of service quality of ESLSE.

 Table 4.6: Customer satisfaction concerning service quality Competence/Skill

 dimension

Item 1	Ν	Mean	Std. Deviation
The structure of			
gov't transport			
minister or			
department is			
suitable for	146	2.01	0.843
multimodal			
transport service			
dev't.			
There are			
professional and			
competent	146	4.09	0.704
employees in			
ESLSE.			
The high level			
performance of			
service quality in		4 - 40	
ESLSE is to great	146	1.69	0.914
impact customer			
satisfaction.			
Good competency			
in multimodal			
transport operation		4.00	
has significant	146	4.08	0.696

effect on customer satisfaction.			
A good competency in multimodal transport system has the efficiency of the import business in the country.	146	4.37	0.715
Average score	146	3.25	0.774

Source: Owen survey result June 2020 n =146

According to the table 4.6 above result, for the statement when you have a problem, The structure of government transport minister or department is suitable for multimodal transport service development scored a mean value 2.01 and standard deviation value .843, There are professional and competent employees in ESLSE scored a mean value equal to 4.09, and standard deviation value .704, The high level performance of service quality in ESLSE is to great impact customer satisfaction scored a mean value 1.69 and standard deviation value .914,Good competency in multimodal transport operation has significant effect on customer satisfaction scored mean value equal to 4.08 and standard deviation value .696, and a good competency in multimodal transport system has the efficiency of the import business in the country score a mean value 4.37 and standard deviation value .715 and average mean score 3.25 and standard deviation has the respondents are agreed and satisfied.

The competence/skill dimension of service quality's mean value indicated that two items or variables show below the neutral level and professional and competent employees a mean value indicated almost neutral level. The good competency in multimodal transport operation and a good competency in multimodal transport system has the efficiency of the import business in the country statement of competence dimension have agree or satisfied with customer. This shows almost half customers are disagree with the competence dimension of service quality of the ESLSE. This further indicates the company and the government are not sufficient attention for multimodal operation system good service quality. Half of related to competence dimension

customers are dissatisfied or neutral with the service provided by ESLSE at head office in Addis Ababa.

Item 1	Ν	Mean	Std. Deviation
Providing high			
level service			
quality and			
reasonable cost in	146	1.86	0.749
multimodal			
transport system.			
A high restriction			
of multimodal			
transport			
regulation is	146	4.12	0.875
additional cost for			
customer.			
Sufficient dry port			
with facilitation			
customs is could	146	4.02	0.920
reduce customer	140	4.23	0.839
Appropriate ICT			
application in			
application in multimodal	1/16	1 15	0.825
transport service	140	4.15	0.025
can minimize			
customer cost			
Average score	146	3.59	0.822

Table 4.7: Customer satisfaction concerning service quality cost dimension

Source: Owen survey result June 2020 n =146

According to the table 4.7 above result, for the statement when you have a problem, providing high level service quality and reasonable cost in multimodal transport system scored a mean value 1.86 and standard deviation value .749, a high restriction of multimodal transport regulation is additional cost for customer scored a mean value equal to 4.12, and standard deviation value .875, sufficient dry port with facilitation customs is could reduce customer cost scored a mean value 4.23 and standard deviation value .839, appropriate ICT application in

multimodal transport service can minimize customer cost scored mean value equal to 4.15 and standard deviation value .825, and average cost dimension service quality has score a mean value 3.59 and standard deviation value .822 this indicates that cost service quality dimension has more of the respondents are agreed and satisfied.

The cost dimension of service quality's only providing high level service quality and reasonable cost in multimodal transport system has the mean value indicated below satisfied and neutral. The company to upgraded service level and cost considerations for the customers at head office in Addis Ababa.

Item 1	Ν	Mean	Std. Deviation
High level of			
service			
performance is to	146	1.00	0.707
upgrade customer	146	4.09	0.787
satisfaction in			
multimodal			
transport system.			
Sufficient			
highway, railway,			
rail station and dry			
ports are creating			
customers	146	4.20	0.852
satisfaction.			
Improving			
multimodal			
transport service is			
creating loyal	146	4.21	0.840

## Table 4.8: Customer satisfaction

customer.			
Multimodal			
transport operator			
has high service			
performance	146	4.48	0.888
improving			
customer			
satisfaction.			
A good			
employee's			
encouragement has			
a positive impact	146	4.06	0.717
for customer			
satisfaction.			
Average score	146	4.21	0.817

Source: Owen survey result June 2020 n =146

Customer satisfaction is the degree to which products or services provided by a company meet a customer expectation. It is how satisfied a customer is after doing business with a company. Customer satisfaction not only measures how happy a customer is with their transactions with the business but also their overall experience with the company.

As shown from table 4.8 the high level of service performance is to upgrade customer satisfaction in multimodal transport systems, mean value score 4.09 and standard deviation value score 0.787, the statement for sufficient highway, railway, rail station and dry ports are creating customers satisfaction mean value score 4.20 and standard deviation value score 0.852, the statement for improving multimodal transport service is creating loyal customer mean value score 4.21 and standard deviation score value 0.840, the statement for multimodal transport operator has high service performance improving customer satisfaction mean score value 4.48

and standard deviation score value 0.888, the statement for a good employee's encouragement has a positive impact for customer satisfaction mean value score 4.06 and standard deviation value score 0.717 and average mean score and standard deviation of customer satisfaction have 4.21 and 0.817 respectively. Result indicates most of the respondents choose agree for customer satisfaction. From the above result we can conclude that majority of ESLSE customers are relatively satisfied with ESLSE service delivery.

#### **4.4 Pearson Correlation Analysis**

Like the descriptive statistical model, simple correlation and multiple regression methods testing the hypothesis of the research. Pearson correlation test was conducted to know the degree of relationship between the independent variables of service quality and the dependent variables of customer satisfaction.

Correlation measures the strength of the linear relationship between two variables. Thus Pearson correlation used to identify whether there are relationships between the variables and to describe the strength and the direction of the relationship between two variables. According to Berndt et.al (2005) the level of association as measured by Pearson coefficient falls between -1.0 and +1.0 which indicates the strength and direction of association between the two variables. The interpretation of the result is as follows, a correlation result between 0 to 1 implies positive relationship 0 (zero) for non-relationship 1 for perfect relationship -1 for perfect negative relationship and between -1 to 0 indicate the existence of negative relationship. Since all variables are interval, the relationship between the dependent variable (customer satisfaction) was investigated using Pearson product correlation coefficient.

<b>Table 4.9</b>	Person	Correlations	matrix	correlation
	I CI SUII	Contrations	maun	contration

				ICT			
		Regulation	Infrastructure	application	Competence	Cost	Satisfaction
Regulation	Pearson Correlation	1	.441**	.410** <sup>*</sup>	868**	.442**	.773** <sup>*</sup>
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	Ν	146	146	146	146	146	146
Infrastructure	Pearson Correlation	.441**	1	.444**	.508**	.529** <sup>*</sup>	.512**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	Ν	146	146	146	146	146	146
ICT	Pearson Correlation	.410***	.444***	1	.326**	.445**	.732***
application	Sig. (2-tailed)	.000	.000		.000	.000	.000

	Ν	146	146	146	146	146	146
Competence	Pearson Correlation	.868***	.508**	.326**	1	.426**	.822** <sup>*</sup>
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	Ν	146	146	146	146	146	146
Cost	Pearson Correlation	.442***	.529***	.445**	.426***	1	.497**
	Sig. (2-tailed)	.000	.000	.000	.006		.000
	Ν	146	146	146	146	146	146
Satisfaction	Pearson Correlation	.773** <sup>*</sup>	.512***	.732**	.822**	.497**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	Ν	146	146	146	146	146	146

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

#### Source: Owen survey result June 2020 n =146

The above table 4.9 shows that all the independent variables (i.e. regulation, infrastructure, ICT application, Competence/skill Cost) are positively correlated to customer satisfaction in ESLSE (MULTIMODAL TRANSPORT SYSTEM) in Addis Ababa. According to Cohen (1988) suggestions the following relationships are considered as strong (r = 0.5-1.0) correlation such as between customer satisfaction and infrastructure with  $r = .512^{**}$ , the relationships between regulation and satisfaction with  $r = .773^{**}$  with sig. value .000, the relationships between ICT application and customer satisfaction with  $r = .731^{**}$  and sig. value equal to .000 and the relationships between competence/skill and customer satisfaction with  $r=.822^{**}$  with sig. value .000; and the relation between competence/skill and infrastructure with  $r = .508^{**}$  with sig value .000 and the relation between regulation and competence/skill with  $r = .868^{**}$  with sig value .000 an the relation between infrastructure and cost with  $r = .529^{**}$  with sig value .000 the following relations are considered as moderate (r=0.3-0.49) relationship such as the relationships between ICT application and competence/skill with  $r=.326^{**}$  and sig. value equal to .000, the relationships between cost and regulation with  $r = .442^{**}$  and sig. value .000, the relationships between ICT application and infrastructure with  $r = .441^{**}$  sig. value equal to .000, the relationships between cost and ICT application with  $r = .445^{**}$  and sig. value equal to .000, the relationships between cost and competence/skill with  $r=.426^{**}$  and sig value equal to .000, ;relationships between ICT application and regulation with  $r = .410^{**}$  and sig. value =.000, the

relationship between ICT application and infrastructure with r=.444 and sig. value =.000 and the relation between customer satisfaction and cost with r=.497 with sig value.

From this we can conclude that there is statistically significant (at P < 0.05) positive relationship between regulation, infrastructure, ICT application, competence/skill, cost and customer satisfaction at Ethiopian Shipping and Logistic Service Enterprise particularly multimodal transport system in Addis Ababa. The next step is to test the assumption to carryout multiple linear regression analysis in ESLSE.

#### 4.5 Testing assumptions of multiple linear regression

According to Julie (2005) before proceeding to multiple regressions analysis, first the researcher has to check the following assumptions such as sample size, outliers, normality, linearity, multicollinearity and singularity, and found they were not a problem for the researcher. Then the researcher proceeds to the regression analysis.

## 4.6 Multicollinearity Test

Multicollinearity is refers to the relationship among the independent variables. Multicollinearity

v			
	Collinearity dtasditcs		
	Tolerance	VIF	
Regulation	.115	8.700	
Infrastructure	.373	2.684	
ICT application	.464	2.155	
Competence/skill	.153	6.521	
	.569	1.757	
Cost			

 Table 4.10 Multicollinearity Test Stasitcs

Source: Owen survey result June 2020 n =146

According to Julie (2005) to check multicollinearity effect two things should be checked Tolerance and VIF from the coefficient table. If the value of Tolerance is very small (less than .10), it indicates that the multiple correlation with other variables is high, suggesting the possibility of multicollinearity. The second value given is the VIF (Variance inflation factor), which is just the inverse of the Tolerance value (1 divided by Tolerance). If VIF values shows

above 10 would indicating multicollinearity. The value of VIF does not exceed 10 and the value of tolerance is not below 0.1. Therefore, it indicates that there is no multicollinearity among the predictor variables and the study does not violate the assumption.

#### 4.7 Test of Normality

The distribution of scores on the dependent variable should be 'normal' describing a symmetrical, bell-shaped curve, having the greatest frequency of scores around the mean, with smaller frequencies towards the extremes. For this research, the visualized histogram indicates that data used in the study is normally distributed and therefore it has fulfilled the assumption.



#### 4.8 Multiple Regression Analysis

Multiple regression analysis examines the effect of service quality. Coefficient of determination

R is the measure of proportion of the variance of dependent variables about its mean that is explained by the independent or predictor variables. It is conducted to investigate the effect of independent variable on the dependent variable and identify the relative significant influence i.e. independent variable (regulation, infrastructure, ICT application, competence/skill and cost) to the dependent variable on customer satisfaction. Higher value of R represents greater explanatory power of the regression equation. Regarding the collinear and multi collinear has tested on the data.

4.11 Multiple regression analysis of model summary

			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	.960 <sup>a</sup>	.921	.918	.11180

a. Predictors: (Constant), Cost, ICT application,

Competence/skill, Infrastructure, Regulation

b. dependant variable: customer satisfaction

## Source: Owen survey result June 2020 n =146

Table 4.11 above indicates R, R Square, Adjusted R Square and standard error of the estimate. Further, it lists the independent variables that are entered in to the regression model. R (.960) is the correlation of independent variables with the dependent variable. The model summary, above shows the R Square is 0.921. This tells us how much of the variance in the dependent variable (customer satisfaction in the Ethiopian Shipping and Logistic Service Enterprise particularly multimodal transport system) are explained by the independent variables (as regulation, infrastructure, ICT application, competence/skill and cost). This means that our model (independent variables) explains 92.1% of the variance in customer satisfaction (dependent variable).

## Table 4.12 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.429	5	4.086	326.898	.000 <sup>b</sup>
	Residual	1.750	140	.012		
	Total	22.179	145			

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), Cost, ICT application, Competence/skill, Infrastructure Regulation

#### Source: Owen survey result June 2020 n =146

From the above ANOVA 4.12 table, it has been determined that service quality dimensions have significant effect on customer satisfaction at F = 326.898 and Sig. is .000. Hence, the result depicted that the alternative hypothesis "service quality dimensions have significant effect on customer satisfaction in ESLSE" is accepted which leads to rejection of the null hypothesis. Overall the model is significant to carry out regression analysis.

# Table 4.13 multiple regression coefficients for service quality and customer satisfaction

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	8.367	.690		12.118	.000
	Regulation	.121	.064	.062	1.98	.020
	Infrastructure	.111	.085	.051	1.99	.002
	ICT application	.757	.049	.536	15.379	.000
	Competence/ skill	.563	.141	.672	11.083	.000
	Cost	.336	.129	.082	2.596	.010

a. Dependent Variable: Customer satisfaction

#### Source: Owen survey result June 2020 n =146

(Y = 0 + 1X1 + 2X2 + 3X3 + 4X4 + 5X5 + ei...)

Where

Y= Customer satisfaction

 $\alpha$  = the constant

 $\beta$  = Coefficient of the factor

X1, X2, X3, X4, X5 = Factor which affected customer satisfaction (independent variable)

X1 =Regulation

X2 = Infrastructure

X3 = ICT application

*X*4 = Competence/skill

X5 = Cost

(Y = 8.367+0.121(Regulation) +0.111(Infrastructure) +0.757(ICT application) +0.563(Competence/skill) +0.336(Cost).

The result of this study revealed that all service quality dimensions (regulation, infrastructure, ICT application, competence/skill and cost) have positive and significant effect on customer satisfaction in Ethiopian Shipping and Logistic Service Enterprise at head office in Addis Ababa. The highest correlation is between ICT application and customer satisfaction followed by

The model result shows us an increase in regulation, infrastructure, ICT application, and competence/skill and cost service quality dimension by one unit and multiplying by their coefficient cause to increase customer satisfaction by the same proportion in Ethiopian Shipping and Logistic Service Enterprise particularly multimodal transport system in Addis Ababa.

## 4.9 Test of hypothesis

The following hypotheses were tested to answer the hypothesis proposed by the researcher and consequently address the objective of the study.

## **Hypothesis** 1

H1:1 regulations has a significant effect on customer satisfaction

H01:2 regulations has no significant effect on customer satisfaction

The result shows on table 4.9 correlation matrix found that the variable regulation is equal to r= .773\*\* and sig value equal to .000. These finding indicate that the researcher has strong evidence to reject the null hypothesis and accept the alternative hypothesis. These indicate that there is a significant and strong positive relationship between regulation service quality dimension and customer satisfaction in ESLSE particularly multimodal transport system at head office Addis Ababa.

## Hypothesis 2

H1:2 infrastructures has a significant effect on customer satisfaction

H0:2 infrastructures has no significant effect on customer satisfaction

As shown from table 4.9 correlation matrix found that the variable infrastructure is equal to r= .512\*\* and sig value equal to .000. These finding indicate that the researcher has strong evidence

to reject the null hypothesis and accept the alternative hypothesis. These indicate that there is a significant and strong positive relationship between infrastructures service quality dimension and customer satisfaction in ESLSE particularly multimodal transport system at head office Addis Ababa.

#### **Hypothesis 3**

H1: 3 ICT applications has significant effect on customer satisfaction

H0:3 ICT applications has no significant effect on customer satisfaction

The result shows on table 4.9 correlation matrix found that the variable ICT application is equal to  $r=.732^{**}$  and sig value equal to .000. These finding indicate that the researcher has strong evidence to reject the null hypothesis and accept the alternative hypothesis. These indicate that there is a significant and strong positive relationship between ICT applications service quality dimension and customer satisfaction in ESLSE particularly multimodal transport system at head office Addis Ababa.

#### **Hypothesis 4**

H1:4 competence/skill has a significant effect on customer satisfaction

H0:4 competence/skill has no significant effect on customer satisfaction

The result shows on table 4.9 correlation matrix found that the variable competence/skill is equal to  $r=.822^{**}$  and sig value equal to .000. These finding indicate that the researcher has strong evidence to reject the null hypothesis and accept the alternative hypothesis. These indicate that there is a significant and strong positive relationship between competence/skill service quality dimension and customer satisfaction in ESLSE particularly multimodal transport system at head office Addis Ababa.

## Hypothesis 5

H1:5 costs has significant effect on customer satisfaction

Ho: 5 costs has no significant effect on customer satisfaction

Cost service quality dimension and customer satiation had  $r=.497^{**}$  and Sig. (p-value.000. The data analysis also found that cost service quality dimension was moderately correlated to customer satisfaction. With these data we can accept the alternative hypothesis (H5) and we reject the null hypothesis. So the finding concludes that there is a significant and positive moderate relationship between cost service quality dimension and customers satisfaction in ESLSE particularly multimodal transport system.

## **CHAPTER - FIVE**

## SUMMARY, CONCLUSION, AND RECOMMENDATION

## **INTRUDACTION**

The aim of this section is to check if the research questions were answered; the objective was met and if the study has contributions. Thus the chapter begins with summary, conclusion, then and followed by recommendation. A suggestion for future research ends the chapter.

## 5.1. Summary and key findings

The objective of this study assess the role of service quality enhancing customer's satisfaction in the case of Ethiopian Shipping and logistics service Enterprise particularly Multimodal transport service with respect to service quality dimensions. Therefore I aimed at placing theoretical foundations for further research on customer satisfaction, service quality. Using service quality dimension (regulation, infrastructure, ICT application, competence/skill and cost) to examine the effect of service quality and customer satisfaction will help the management to better understand what these dimensions mean to the customers and to the organization. Based on the analysis the following findings were put it:

- The findings of the descriptive study describes customers were most satisfied with the regulation dimension of service quality. On the contrary customers were less satisfied with ICT application and infrastructure. Regarding to the correlation and regression analysis results of the study shows that except cost the four service quality dimension (regulation, infrastructure, ICT application, and cost) have strongly positive and significant relationship as well as significant effects on customer satisfaction.
- The study also revealed that the descriptive statistical analysis customers were strongly agreed with the regulation which scored a mean of 3.81 and standard deviation of .740 followed by cost a mean scored of 3.59 and standard deviation of 0.822, competence/skill were strongly agreed with a mean score of 3.25 and standard deviation of .774, infrastructure was strongly agreed with a mean and standard deviation of 3.05

and .678 respectively ICT application were scored a mean and standard deviation of 2.85 and .758.

- Regarding correlation result there is a positive and significant relationship between regulation and customer satisfaction infrastructure and customer satisfaction ICT application and customer satisfaction competence/skill and customer satisfaction and moderately positive and significant relationship cost and customer satisfaction. The highest significant relationship is found between competence/skill and customer satisfaction. While the lowest significant relationship is found between cost and customer satisfaction.
- The multiple regression results show that all the service quality dimensions (regulation, infrastructure, ICT application competence/skill and cost) have positive and significant effect on customer satisfaction.
- The R square value of 0.921 indicates that 92.1% of variation in customer satisfaction can be accounted by the service quality dimension.
- This study tested the relationship among service quality and customer satisfaction found out that they had significant relationships somehow. Some of the service quality dimensions were significantly related to customer satisfaction and/or service quality; also some of the dimensions were not valid variables for a test in trying to relate customer satisfaction and service quality with service quality dimensions. The findings show that relationship between service quality dimension and customer satisfaction doesn't matter in the relationship between customer satisfaction and service quality in a company because whether or not some dimensions were related with customer satisfaction and/or service quality, the relationship between customer satisfaction and service quality were still significant in certain cases. The implications could show that the service quality dimension has an impact in the relationship between customer satisfaction and service quality because all of the dimensions were significantly related to service quality and customer satisfaction. It also implies that; service quality is not the only factor affecting customer satisfaction in a company because other factors were given by customers for reasons that lead to their satisfaction. Thus the outcome in this case, suggests that to provide quality service in order to satisfy customers with this aspect, the organization in this kind of service sectors need to improve on the dimensions of service quality. Also, to
provide total satisfaction to customers, the service sectors need to improve on the other factors that were given as reasons for satisfaction.

- Hence the result of this research can be useful to ESLSE with respect to how to deal with customers, in order to maintain the organization's main objective of profit maximization and cost minimization. It provides results that could be useful to managers for strategic planning. Management of ESLSE could examine those other factors apart of service quality that the customers selected as reasons for satisfaction or dissatisfaction. In this case, the management could always adjust on those other factors to provide its customers with the best values and also dictate the important dimensions to lay more emphasis on in order to improve service quality and/or customer satisfy action.
- The findings from this research are relevant to gaining more customers by keeping the old customers and attracting new customers. This could be done by providing the values that the customers' desire, and when this is done, the customers will be satisfied. Satisfying the customers by making sure they obtain good quality services is the latest strategy for organizations in today's business environment. That is why companies are going in for total quality management to improve the quality because quality has a great impact on customer satisfaction. My study contributes to this area by confirming or adding value to the relationships that are involved among customer satisfaction, service quality and some of the service quality dimensions. Service quality is not the only factor determining customer satisfaction in ESLSE and also that service quality dimension is an important tool of evaluating service quality by the customers.

#### **5.2 Conclusion**

In conclusion, companies can benefit from the fact of knowing how customers perceive the service quality and knowing the way of how to measure service quality. Therefore, the management can use the specific data obtained from the measurement of service quality in their strategies and plans. This will help organizations to better understand various service quality dimensions that affect overall customer satisfaction. In this way, ESLSE can better assess the service provided to customers on each service quality dimension to provide better service to their valuable and loyal customers. Thus, understanding customer satisfaction with service quality is very important in this competitive business environment.

Based on the findings we can conclude that regulation, infrastructure, ICT application, competence/skill and cost dimension service quality has positive and significant effect on customer satisfaction and customers are agree on some dimension like regulation, cost, competence/skill and dissatisfied on ICT application dimension service quality and neutral on the infrastructure dimension service quality provided by Ethiopian Shipping and Logistic and Service Enterprise multimodal transport system at the head office in Addis Ababa.

#### **5.3 Recommendation**

Based on the findings of the study, the researcher put forward the following recommendations:

The lowest scores recorded for infrastructure requires targeting these elements in order to increase customer satisfaction. Therefore, ESLSE should improve these dimensions through

- Improve Road infrastructure
- Improve port infrastructure
- New port also build
- Upgrade inland facilitation

Revisiting the costs of services particularly shipping freight cost vis-a-vis the services delivered especially on services attributed to delays.

Increasing availability of sufficient and modern transportation facilities and other equipment's including dry ports

Improving efficiency and information dissemination through

- Improved overall quality of website such as appearance and user-friendliness.
- Improved and increased information content.
- Informing customers of the availability of website.
- Informing customers the benefits of using the website through ads and notices.

Undertaking follow up surveys to measure whether the actions taken have improved customer satisfaction or not.

The major improvement service of ESLSE identified by customers that dealing with

• Capacity related problems. This includes reducing ships and trucks shortage, scheduling enough ships to each port, and reducing employee turnover.

• Delay and bureaucratic service related challenges. This includes standardizing time spent for processing payments, documents and receipts, reducing bulk and repetitive paper work, and improving coordination.

#### **5.4 Suggestions for future research**

The topic was a good one but because of its limitations and/or outcome, there is a need for further research. Because the study did not consider ESLSE employees who provide the services to customers; further research could be to study relationship among service quality, customer satisfaction and job satisfaction with the use of all the five service quality dimensions at once, to see if satisfaction level of employees is related to their services and/or customer satisfaction. Another further study could be to test among the dimensions with the use of another statistical method to see which of them will be more important to service quality and/or customer satisfaction. Also future study could be to test these same variables in ESLSE.

#### REFERENCES

- A. Zeithaml, and M.J. Bitner. Service Marketing: Integrating Customer Focus across the Firm. NY: McGrawHill. 2003.
- Ali et al. Fotaki ,Karatepe. A Dynamic Model of Service Quality: From Expectations to Behavioral Intentions, *Journal of Marketing Research*. 1993. 30 (2): 7–27.
- Ananth, A., Ramesh, R., &Prabaharan, B. Service Quality GAP Analysis in Private Sector Banks A Customer Perspective. Internationally Indexed Journal(2011).245-252. .
- Azman, IlyaniRanlan et al. Service Quality in the Financial Services Industry in Malaysia: The Case of Islamic Banks and Insurance. International Review of Business Research Papers. 2005. 1(2): 10-21.
- Barker, M., Baker, D., Bormann, N., Roberts, M.&Zahay, D. Social media marketing, A strategic approach, 2nd edition.USA. Beaumont & Leland, R. "Metrics: A practical example" in The PDMA handbook of new product development. New York, 1996.pp 463 – 488
- Bateson & Hoffman, Customer satisfaction, market share, and profitability: findings from Sweden, Journal of Marketing, 1994 58, July.53-66.
- Bateson & Hoffman, Delivering quality service: Balancing customer perceptions and expectations. 1990.
- Belás J. &Gab ová, L. The relationship among customer satisfaction, Loyalty and financial performance of commercial banks.E & M Economic and Management, 2016.Volume 2, Issue 1, pp 132-144
- Bitner and Huber. Assessing service quality in school of business, International Journal of Quality and Reliability Management, 1997, 14(3):204-218
- Brady & Cronin, Service Quality: A Concept Not Fully Explored Library Trends. 2001. 49(4): 687-708 28.
- Brunner, T. A., Stöcklin, M. &Opwis, K. Satisfaction, image and loyalty: New versus experienced customers. *European Journal of Marketing*, *Volume 42*, pp 1095-1105. Business dictionary.2017.

- C. Cook, B.Thompson. Reliability and validity of SERVQUAL scores used to evaluate perceptions of library service quality. *Journal of Academic Librarianship*. 2000. 26(4), 248-258.
- Chen, M. F. & Wang, L. H..The moderating role of switching barriers on customer loyalty in the life insurance industry. The Service Industries Journal, 2009. Volume 29, pp 1105–1123.
- Chidambaram, V., & Ramachandran, A.).A Review of Customer Satisfaction towards Service Quality of Banking Sector. Social and Management Sciences, (2012) 71-79.
- Coelho, P. S. &Henseler, J..Creating customer loyalty through service customization. *European Journal of Marketing*, 2012Volume 46, pp 331-356.
- Coyne, K. Beyond service fads: meaningful strategies for the real world. Sloan Management Review, 1986.Vol. 30, pp 69 76.
- Darby and Karni. Service quality: a study of quality dimensions, Service Management Institute, Helsinki 1982.
- Dick, S.A. &Basu, K.. Customer Loyalty: Toward an integrated conceptual framework. Journal of the Academic Marketing Science, 1994.Volume 22, Issue 2, pp 99-113.

European Journal of Business and Management, 2005.7, 45-53.

- Evangelos and Yannis. A Multistage Model of Customer's Assessment of Service Quality and Value. Journal of Consumer Research. (1991) 375-384.
- Faris et al. Cross-national Assessment of Service Quality in Telecommunication. Journal of Marketing. 2001. 11(5):.307-317.
- Fornell, C. A national customer satisfaction barometer: The Swedish experience. Journal of Marketing, 1992.Vol.55, pp.6-21.Gajjar, B. N. Factors Affecting Consumer Behavior. International Journal of Research in Humanities and Social Sciences, 2013.Volume 1, Issue 2.
- Golafshani, N..Understanding reliability and validity in qualitative research.University of Toronto.2003

- Gremler, D. & Brown, S. The Loyalty Ripple Effect: Appreciating the full value of customers. International Journal of Service Industry Management, 1999Volume 10, Issue 3, pp 271-28.
- Grönroos, C..Service management and marketing.Third edition.John Wiley.& Sons, Ltd. England.2007
- Gronroos, C. The service quality: The six criteria of good perceived service quality, Review of Business, 1988. 9: 10-13
- Gupta, S., Lehmann, R. D. & Stuart, A. J. Valuing Customers. Journal of Marketing Research, 2004Vol 41, Issue 1, pp 7-18.
- Hague, P & Hague, N. Customer Satisfaction Survey: The customer experience through the customer's eyes. London: Cogent Publication Hayes, E. B. 2008.
- Hill, N., Brierley, J. & MacDougall, R. How to measure customer satisfaction? USA: Gower Publishing Ltd. 2003.
- Huarng, K. H. Configural Theory for ICT development. *Journal of business research*, 2015.Volume 68, Issue 4, pp 748-756.
- Hunt A. Service Loyalty, the Effects of Service Quality and the Mediating Role of Customer Satisfaction. (2002).
- Ismail, Rose &Foboy, Service Quality Gap and Customers' Satisfactions of Commercial Banks in Malaysia.International Review of Business Research Papers. 2007. 3(4) October: 327-336
- Jobber, D. & Chadwick, F. Principles and practice of marketing .7th edition.2012
- Juran.A Service Quality Model and Marketing Implications. *European Journal of Marketing*, (1980).36-44.
- Kasper et al., A cognitive model of the antecedents and consequences of satisfaction decisions. Journal of Marketing Research, 1980 17, 460-469.
- Kothari, R. C. Research Methodology: Methods and Techniques. New Delhi: New Age International (P) Limited Publishers. 2004.
- Kotler, P. & Armstrong, G. Wrong Veronica. Principles of marketing. 4th edition. England: Pearson Education Ltd. 2001.
- Kotler, P. & Keller, K.L..*Marketing management 12th edition*. Upper Saddle River: Pearson Education Inc. 2006.

Kotler, P. Marketing Management; Analysis, planning, implementation, and control, *6th edition*, New Jersey; Prentice – Hall.1996.

Kramer, J., & Chen, J. Title of the Article. Journal Name, 110-313. (2010).

- Kumar, R..Research Methodology: A step by step guide for beginners.*Third Edition*. Cornwall: Great Britain by TJ International Ltd. 2011.
- Kumar, V. & Petersen A. J..Customer relationship management. United Kingdom: John Wiley & Sons, Ltd. 2012.
- Ladhari, the Impact of Service Quality Dimension on Customer Satisfaction: A Field Study of Arab Bank in Irbid City, Jordan, 2008.
- Lam, S. Y., Shankar, V., Erramilli, M. K., & Murthy, B.. Customer value, satisfaction, loyalty, and switching costs: An illustration from a business-to-business service context. Journal of the Academy of Marketing Science, 2004.Volome32, Issue 3, pp 293-311.
- Lovelock, C. & Wright, L. Principles of Service Marketing and Management.5<sup>th</sup> edition. New Jersey: Prentice Hall. 2007
- Malhotra, K. N. Review of Marketing Research: Special issue marketing legends. UK: Emerald Group Publishing Limited. 2005.
- Mehta, Lalwani and Han, Service Quality Management with SERVQUAL Model: An Empirical Study of Govt. /Ngo's Eye Hospitals In Haryana. Indian Journal of Commerce & Management Studies.2011, 2(2)
- Molaee, M., Ansari, R., &Teimuori, H. Analyzing the Impact of Service Quality Dimension on Customer Satisfaction and Loyalty in the Banking Industry of Iran. International Journal of Academic Research in Accounting, Finance and Management Sciences, (2013, July). 3, 1-9.
- Molaee, Maysam; Ansari, Reza; Teimuori, Hadi.Analyzing the Impact of Service Quality Dimension on Custommer Satisfaction and Loyalty in the Banking Industry of Iran. International *Journal of Academic Research in Accounting , Finance and Management Sciences, (2013). (3), 1-*9.

- Munari, L., Lelasi, F. &Bajetta, L. Customer Satisfaction Management in Italian Banks. Qualitative research in financial markets,2013.Volume 5, Issue 2, pp 139-160.
- Oliva, T.A., Oliver, R.L. & MacMillan, I.C.A catastrophe model for developing service satisfaction *strategies.Journal of Marketing*, 1992. Volume 56, pp 83 95.

Oliver, R.L. Whence consumer loyalty. Journal of Marketing. 2003. Volume 63, pp 33-44.

- D. & Rogers, M..Managing Customer Relationships: A Strategic Framework. New Jersey: John Wiley & Sons Inc. 1999.
- Onkvisit and Shaw.).Determining the Relative Importance of Critical Factors in Delivering Service Quality of Banks: An Application of Dominance Analysis in SERVQUAL Model.Managing Service Quality. 2009. 19(2), 211 – 228.

P. Kotler, G. Amstrong. Principles of Marketing, 11th Ed., New Jersey, Pearson Prentice Hall 2006.

- Parasuraman, A., &Zeithaml, V. A. SERVQUAL: A Multiple Item Scale for Measuring Consumer Perception of Service Quality. Journal of Retailing, 12-40. International Academic Journal of Economics, (1988).Vol. 3, No. 7, pp. 69-79.
- Quddus, F. S., &Hudrasyah, H.The influence of Service Quality Dimension on Customer Satisfaction and Customer Loyalty in PT. JNE North Bandung Area.Journal of Business and Management,(2014).pp 446-556.
- Reichheld, F.F. & Schefter, P. ELoyalty: Your secret weapon on the web. Harvard Business Review, 2000. Volume 78, Issue 4, pp 105-113.
- Rosenberg, J.L.&Czepiel, A.J. Journal of Consumer Marketing: A marketing approach customer retention. United Kingdom: MCB UP Limited. 2017.
- Saghier, N., & Nathan, DService Quality Dimension and Customer's Satisfaction of Bank in Egypt.Tahun International Business Reseach Conference, 4-5. (2013, April).
- Sivadas& Baker-Prewitt. Customer Satisfaction: The customer experience through the customer's eyes. London: Cogent Publishing Ltd. (2000)

- Tao, F. 2014. Customer Relationship management based on Increasing Customer Satisfaction.International Journal of Business and Social Science, 2014.Volume. 5, Issue. 5, pp. 256-263.
- Taylor, B., Sinha, G. &Ghoshal, T..Research Methodology: A guide for researchers in management & social sciences. New Delhi: Prentice-Hall. 2006
- Thomas, B. & Tobe, J. Anticipate: Knowing What Customers Need Before They Do. Avaliable: http://site.ebrary.com/lib/samk/home.action. 2013.
- Tse and Wilton. The Marketing Aspects of Service Quality. Emerging Perspective on Services Marketing. 1983. 99 107.
- Tsoukatos, E., & Rand, G. Path Analysis of Perceived Service Quality, Satisfaction and Loyalty in Greek Insurance. Managing Service Quality, (2006).16-19.
- V. A. Zeithaml, L.L. Berry and A. Parasuraman. The Behavioral Consequences of Service Quality, Journal of Marketing, 1996, 60, April: 31-46.
- V.A. Parasuraman, A. Zeithaml, L. Berry. A Conceptual Model of Service Quality and Its Implications for the Future Research.Journal of Marketing. 1985. Vol. 49, pp.41-50.

Wilson et al., The complex relationship between consumer satisfaction and brand loyalty, *Journal of Economic Psychology*, 1995, 16: 311-29.

# Appendix

## Appendix

## Questionnaire

Dear respondents, I would like to thank you in advance for your willingness to read and respond to this questionnaire. I am studying my master's program in the field business administration at Saint Mary's University. Currently I am conducting a research entitled "The role of service quality enhancing customer satisfaction in case of Ethiopian Shipping and Logistics Service Enterprise particularly Multimodal Transport Service. The information you provide will be highly valuable for the success of this research project i.e the validity of this research depends on your genuine responses. Therefore, the researcher kindly requests you to be extremely objective and genuine while you give your response. The information will be used for academic purpose only and the researcher strongly assures you of the confidentiality of your answer. Thank you once again for being cooperative and volunteer to devote your precious time and effort in filling this form.

#### **General instruction**

- 1. You are not requested to write your name on this questionnaire
- 2. The questionnaire has two parts please answer all items under each part
- In case you have any doubt or ambiguities while you are filling this questionnaire please don't hesitate to contact me via: phone number: 0912769144 and email guchemike@gmail.com

*Thank you once again for your cooperation* Researcher's name: Tadele Guche

#### **PART I: Demographic Information**

#### 2. Education Background:

 $\Box$  Grade 12 completed  $\Box$  Certificate  $\Box$  College Diploma  $\Box$  First Degree  $\Box$  Second Degree and above

#### 3. Job Title

□ CEO/Manager □ Deputy G/manager □ Dep't Manager □ Division Head □ Senior Officer □ Officer □ Junior Officer

#### 4. Years stayed at the organization

 $\Box$  Under 2 years  $\Box$  2-5 years  $\Box$  6-10 years  $\Box$  over 10 years

**5.** Your department/work unit.....

## Part II: Instrument for multimodal transport system

With regard to the statement provided below, please 'thick' the appropriate box to indicate the extent to which you agree or disagree with each statement. The items scales are five point likert type scales with 1= strongly disagree 2= disagree 3= neutral 4= agree 5= strongly agree.

No	1. Regulation	Strongly	Disagree	Neutral	Agree	Strongly
		disagree				agree
		1	2	3	4	5
1.1.	Multimodal transport systems are too restricted by government regulation.					
1.2.	The present multimodal transport service regulation is barrier to the efficiency of the multimodal transport service quality.					
1.3.	A state-owned multimodal transport system has increased customer satisfaction.					
1.4.	Electronically customs procedures for multimodal transport service can be increased customer satisfaction.					
1.5.	Customs laws and formalities are greater barrier to a multimodal transport service than a long inland transit time.					
1.6.	The port system can be the obstacle for the effectiveness of multimodal transport service.					
	2. Infrastructure					
2.1.	In Ethiopia there are sufficient inland					

	clearance exercise their right and			
	responsibilities towards multimodal transport			
	service quality.			
2.2.	In the country sufficient infrastructure to			
	improved multimodal transport service quality			
	and customer satisfaction.			
2.3.	Sufficient highway, railways and rail port can			
	be increased import goods and customer			
	satisfaction.			
2.4.	Privatizing multimodal transport system is			
	better than state-owned multimodal transport			
	system in service quality.			
	3. ICT Application			
3.1.	Customers are able to get sufficient			
	information for modern technology about their			
	cargos.			
3.2.	Ethiopian shipping and logistics service			
	enterprise offer sufficient online information			
	service for multimodal transport system			
	customers.			
3.3.	To simplify multimodal transport service, there			
	is integrated information system between			
	ESLSE, CUSTOMS, and FREIGHT			
	FORWARDERS.			
3.4.	Used modern ICT applications in multimodal			
	transport service have significant effect on			
	customer satisfaction.			
	4. Competence/Skill			

4.1.	The structure of government transport minister			
	or department is suitable for multimodal			
	transport service development.			
4.2.	There are professional and competent			
	employees in ESLSE.			
4.3.	The high level performance of service quality			
	in ESLSE is to great impact customer			
	satisfaction.			
4.4.	Good competency in multimodal transport			
	operator has significant effect on customer			
	satisfaction.			
4.5.	A good competence towards multimodal			
	transport system has the efficiency of the			
	import business in the country.			
	5. Cost			
5.1	Providing high level service quality and			
	reasonable cost in multimodal transport			
	system.			
5.2	A high restriction of multimodal transport			
	regulation is additional cost for customers.			
5.3	Sufficient dry port with customs facilitations it			
	could reduce customer cost.			
5.4	Appropriate ICT application in multimodal			
	transport service can minimize customer cost.			

## **PART III: Instruments customer satisfaction**

	1. Customer Satisfaction			
1.1	High level of service performance is to upgrade			
	customer satisfaction in multimodal transport system.			
1.2	Sufficient highway, railway, rail station and dry ports			
	are creating customers satisfaction.			
1.3	Improving multimodal transport service is creating			
	loyal customer.			
1.4	Multimodal transport operator has high service			
	performance improving customer satisfaction.			
1.5	A good employee's encouragement has a positive			
	impact for customer satisfaction.			

### MANY THANKS FOR YOUR VALUABLE CO- OPERATION

## Appendix II

## Demographic

Sex of respondents	Frequency	Percent
Male	80	54.8
Female	66 146	45.2 100
Total	140	100
Education level of respondents	Frequency	Percent
Grade 12 completed	2	1.4
Certificate	1 5	0.7 3 4
College Diploma	5 84	57.5
First Degree	54 146	37.0 100
Second Degree and above	110	100
Total		
Job Title level of respondents	Frequency	Percent

CEO/Manager	0	0
Deputy G/manager	0	0
Den't Manager	4	2.7 14 A
	21	14.4
Division Head	52	35.6
Senior Officer	48	32.9
Officer	146	100
Junior Officer		
Total		
Years stayed at the organization respondents	Frequency	Percent
Under 2 years	3	2.1
2-5 years	19 72	13.0 49.3
6-10 years	52	35.6
over 10 years	146	100

## Customer satisfaction concerning service quality regulation dimensions

Item 1	Ν	Mean	Std. Deviation
Multimodal			
transport systems			
are too restricted	146	4.27	0.790
by gov't			
regulation.			

146	3.97	0.770
146	1.92	0.725
146	4.55	0.797
146	4.03	0.737
146 146	4.14 <b>3 81</b>	0.650
	146 146 146 146 146	146       3.97         146       1.92         146       4.55         146       4.03         146       4.14         146       3.81

## Customer satisfaction concerning service quality infrastructure dimensions

Item 1	Ν	Mean	Std. Deviation
In Ethiopia there are sufficient inland clearance exercise their right and responsibilities towards multimodal transport service quality.	146	1.87	0.667
In the country sufficient infrastructure to improved multimodal transport service quality and customer satisfaction.	146	1.83	0.625
Sufficient highway, railways and rail port can be increased import goods and customer satisfaction.	146	4.45	0.734
Privatizing multimodal system is better than state- owned multimodal transport system in service quality.	146	4.08	0.686
Average score	146	3.05	0.678

Item 1	Ν	Mean	Std. Deviation
Customers are able			
to get sufficient			
information for			
modern technology	146	1.91	0.684
about their cargos			
in ESLSE.			
Ethiopian shipping			
and logistics			
service enterprise			
offer sufficient			
online information	146	1.51	0.754
service for			
multimodal			
transport system			
customer.			
To simplify			
multimodal			
transport service,			
there is integrated			
information system			
between SELSE,	146	3.96	0.838
CUSTMOS, and			
FREIGHT			
FORWARDERS.			
Use modern ICT			
application in			
multimodal			
transport service	146	4.03	0.756
have significant			
effect on customer			
satisfaction.			
Average score	146	2.85	0.758

## **Customer satisfaction concerning service quality ICT application dimensions**

Item 1	Ν	Mean	Std. Deviation
The structure of			
gov't transport			
minister or			
department is			
suitable for	146	2.01	0.843
multimodal			
transport service			
dev't.			
There are			
professional and			
competent	146	4.09	0.704
employees in			
ESLSE.			
The high level			
performance of			
service quality in			
ESLSE is to great	146	1.69	0.914
impact customer			
satisfaction.			
Good competency			
in multimodal			
transport operation			
has significant	146	4.08	0.696
effect on customer			
satisfaction.			
A good			
competency in			
multimodal			
transport system			
has the efficiency	146	4.37	0.715
of the import			
business in the			
country.			
Average score	146	3.25	0.774

## Customer satisfaction concerning service quality competence/skill dimensions

Item 1	Ν	Mean	Std. Deviation
Providing high			
level service			
quality and			
reasonable cost in	146	1.86	0.749
multimodal			
transport system.			
A high restriction			
of multimodal			
transport			
regulation is	146	4.12	0.875
additional cost for			
customer.			
Sufficient dry port			
with facilitation			
customs is could		1.00	
reduce customer	146	4.23	0.839
cost.			
Appropriate ICT			
application in			
multimodal	146	4.15	0.825
transport service			
can minimize			
customer cost.			
Average score	146	3.59	0.822

## **Customer satisfaction concerning service quality cost dimensions**

Source: Owen survey result June 2020 n =146

#### Mean and standard deviation of customer satisfaction ESLSE

Item 1	Ν	Mean	Std. Deviation
High level of			
service			
performance is to			
	146	4.09	0.787

upgrade customer			
satisfaction in			
multimodal			
transport system.			
Sufficient			
highway, railway,			
rail station and dry			
ports are creating	146	4.20	0.852
customers			
satisfaction.			
Improving			
multimodal			
transport service is		1.24	0.040
creating loyal	146	4.21	0.840
customer.			
Multimodal			
transport operator			
has high service			
performance	146	4.48	0.888
improving			
customer			
satisfaction.			
A good			
employee's			
encouragement has	1.4.5		0.515
a positive impact	146	4.06	0.717

for customer			
satisfaction.			
Average score	146	4.21	0.817

## **Table 4.9 Person Correlations matrix correlation**

				ICT			
		Regulation	Infrastructure	application	Competence	Cost	Satisfaction
Regulation	Pearson Correlation	1	.441**	.410** <sup>*</sup>	868**	.442**	.773***
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	Ν	146	146	146	146	146	146
Infrastructure	Pearson Correlation	.441**	1	.444**	.508**	.529** <sup>*</sup>	.512**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	Ν	146	146	146	146	146	146
ICT	Pearson Correlation	.410** <sup>*</sup>	.444** <sup>*</sup>	1	.326**	.445**	.732***
application	Sig. (2-tailed)	.000	.000		.000	.000	.000
	Ν	146	146	146	146	146	146
Competence	Pearson Correlation	.868** <sup>*</sup>	.508**	.326**	1	.426**	.822** <sup>*</sup>
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	Ν	146	146	146	146	146	146
Cost	Pearson Correlation	.442** <sup>*</sup>	.529** <sup>*</sup>	.445**	.426** <sup>*</sup>	1	.497**
	Sig. (2-tailed)	.000	.000	.000	.006		.000
	Ν	146	146	146	146	146	146
Satisfaction	Pearson Correlation	.773** <sup>*</sup>	.512** <sup>*</sup>	.732**	.822**	.497**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	Ν	146	146	146	146	146	146

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

#### Source: Owen survey result June 2020 n =146

#### Table 4.10 Multicollinearity Test Stasitcs

	Collinearity dtasditcs	
	Tolerance	VIF
Regulation	.115	8.700
Infrastructure	.373	2.684
	.464	2.155

ICT application	.153	6.521
Competence/skill	.569	1.757
Cost		
0000		





#### 4.11 Multiple regression analysis of model summary

			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	.960 <sup>a</sup>	.921	.918	.11180

a. Predictors: (Constant), Cost, ICT application
Competence/skill, Infrastructure, Regulation
b. dependant variable: customer satisfaction
Source: Owen survey result June 2020 n =146

#### Table 4.12 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.429	5	4.086	326.898	.000 <sup>b</sup>
	Residual	1.750	140	.012		
	Total	22.179	145			

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), Cost, ICT application, Competence/skill, Infrastructure Regulation

## Table 4.13 multiple regression coefficients for service quality and customer satisfaction

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	8.367	.690		12.118	.000
	Regulation	.121	.064	.062	1.98	.020
	Infrastructure	.111	.085	.051	1.99	.002
	ICT application	.757	.049	.536	15.379	.000
	Competence/ skill	.563	.141	.672	11.083	.000
	Cost	.336	.129	.082	2.596	.010

a. Dependent Variable: Customer satisfaction

#### Source: Owen survey result June 2020 n =146