

*Addis Ababa
University*

(Since 1950)



College of Business and Economics

School of Commerce

**Factors Affecting Particleboard Buyers' Level of Satisfaction: The Case of
Ethiopian Chip wood and Furniture Company (ECAFCO) S.C**

By

Zahra Abdulwahid

**A Thesis Submitted to Addis Ababa University School of Commerce for the
Degree of Masters of Art in Marketing Management**

June, 2021

Addis Ababa, Ethiopia

**Factors Affecting Particleboard Buyers' Level of Satisfaction, the Case of Ethiopian Chip
wood and Furniture Company (ECAFCO) S.C**

Prepared By

Zahra Abdulwahid

Adviser: Getie Andualem (PhD)

**A Thesis Submitted to Addis Ababa University School of Commerce for the Degree of
Masters of Art in Marketing Management**

Addis Ababa University

School of Commerce

June, 2021

Declaration

I, Zahra Abdulwahid, declare that, this thesis entitled “The Factors Affecting Particleboard Buyers’ Level of Satisfaction: The case of Ethiopian Chip wood and Furniture Share Company”, is the outcome of my own effort and study under the guidance and suggestions of my Research Advisor. The all source of materials used for the study have been acknowledged. This study has not been submitted for any degree in this University and or any other Universities. It is offered for the award of Master of Arts in Marketing Management.

By: Zahra Abdulwahid

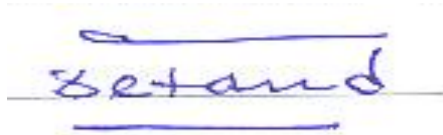
Signature_____

Date_____

Statement of Certification

This Thesis work entitled to certify that, “Factors Affecting Particleboard Buyers’ Level of Satisfaction, the case of Ethiopian Chip wood and Furniture Share Company” Submitted in partial fulfillment of the requirement for the award of the Degree of Masters of Marketing Management to School of Commerce, Addis Ababa University, through the Department of Marketing Management prepared by Zahra Abdulwahid is an original work completed by her under our guidance.

Research Advisor: Getie Andualem (PhD)

A handwritten signature in blue ink, appearing to read "Getie Andualem", is written over a horizontal line. The signature is stylized and cursive.

Signature:- _____

Date: - 22/6/2021

ADDIS ABABA UNIVERSITY SCHOOL OF COMMERCE GRADUATE STUDIED MA PROGRAM

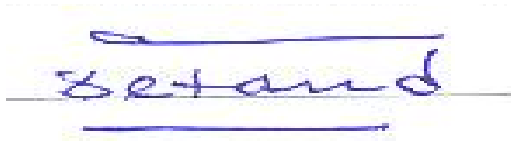
FACTORS AFFECTING PARTICLEBOARD BUYERS' LEVEL OF SATISFACTION: THE CASE OF ECAFCO S.C

Prepared by: Zahra Abdulwahid

Approved by Board of Examiners

Chairman, Department

Signature



Getie Andualem (PhD)
Advisor

Signature

Internal Examiner

Signature

External Examiner

Signature

Acknowledgment

Above all, I say many thanks for the Lord of Lord for the today success I have reached up on and my supervisor to Dr. Getie Andualem who has contributing his thoughtfully guiding and valuable assist with inside this research.

I would like to mention thanks for the Ethiopian Chip wood and Furniture Company's s general manager and marketing and sales department staff for the support they did in giving the information which contributes for this study.

I would like to say thanks also for customers of the ECAFCO's for giving fruitful data and ideas related to this study. Finally, I would like to express my deepest gratitude to honorable families and Friends for your support for the success of this research.

Zahra Abdulwahid

Table of Content

CHAPTER ONE	1
INTRODUCTION	1
1.1 BACKGROUND OF THE STUDY	1
1.1.1 Background of the Company	3
1.1.2 Overview of Particleboard Industry in Ethiopia	3
1.2 STATEMENT OF THE PROBLEM	4
1.3 RESEARCH QUESTION	7
1.4 RESEARCH OBJECTIVE	7
1.5 HYPOTHESES OF THE STUDY.....	8
1.6 SIGNIFICANCE OF THE STUDY	8
1.7 SCOPE OF THE STUDY.....	8
1.8 LIMITATION OF THE STUDY.....	9
1.9 DEFINITION OF TERMS	9
1.10 ORGANIZATION OF THE STUDY	10
CHAPTER TWO	11
REVIEW OF RELATED LITERATURE	11
2.1 INTRODUCTION	11
2.2 THEORETICAL REVIEW	11
2.2.1 CUSTOMER SATISFACTION	11
2.2.2 RELEVANT THEORIES RELATED TO CUSTOMER SATISFACTION	12
2.2.3 LEVEL OF CUSTOMER SATISFACTION	19
2.2.4 THE IMPORTANCE OF CUSTOMER SATISFACTION	19
2.2.5 FACTOR AFFECTING BUYER’S LEVEL OF SATISFACTION	20
2.3 EMPIRICAL REVIEW.....	25
2.3.1 PRODUCT QUALITY	26
2.3.2 PRICE.....	26
2.3.3 COMPLAINT HANDLING	27
2.3.4 INNOVATION.....	29
2.3.5 PRODUCT AVAILABILITY	29
2.3.6 SUPPLIER’S IMAGE AND REPUTATION.....	30
2.4 CONCEPTUAL FRAMEWORK.....	31
CHAPTER THREE	32
RESEARCH METHODOLOGY	32
3.1 INTRODUCTION.....	32
3.2 DESCRIPTION OF THE STUDY AREA	32
3.3 RESEARCH APPROACH.....	32
3.4 RESEARCH DESIGN	33
3.5 POPULATION AND SAMPLING TECHNIQUE	33
3.6 DATA SOURCE AND TYPE.....	35
3.7 DATA COLLECTION PROCEDURES.....	35
3.8 DATA ANALYSIS.....	36
3.9 MODEL SPECIFICATION	36

3.10	ETHICAL CONSIDERATION	38
3.11	VALIDITY AND RELIABILITY.....	39
3.11.1	Validity	39
3.11.2	Reliability.....	39
CHAPTER FOUR		42
RESULTS AND DISCUSSION		42
4.1	INTRODUCTION.....	42
4.2	RESPONDENTS RESPONSE RATE	42
4.3	DEMOGRAPHIC PROFILE OF RESPONDENTS.....	42
4.4	DESCRIPTIVE STATISTIC ON PURPOSE OF USE AND PARTICLEBOARD THICKNESS BUYER PURCHASED	43
4.5	DESCRIPTIVE STATISTICS ANALYSIS AND INTERPRETATION	44
4.5.1	Product Quality	44
4.5.2	Particleboard Price	46
4.5.3	Complaint Handling.....	46
4.5.4	Innovation Practice	47
4.5.5	Product Availability	48
4.5.6	Supplier’s Image and Reputation	49
4.5.7	Summary of Descriptive Statistics	50
4.6	CORRELATION ANALYSIS	51
4.7	MULTIPLE LINEAR REGRESSION ASSUMPTIONS	53
4.7.1	Linear Regression Assumption Test	53
4.7.2	Normality and Linearity.....	53
4.7.3	Multi-Collinearity	54
4.7.4	Homoscedasticity	55
4.8	MULTIPLE REGRESSION ANALYSIS.....	55
4.9	HYPOTHESES TESTING.....	59
4.10	DISCUSSION OF RESULTS.....	60
CHAPTER FIVE		65
FINDINGS, CONCLUSIONS AND RECOMANDATIONS		65
5.1	INTRODUCTION.....	65
5.2	SUMMARY OF MAJOR FINDING.....	65
5.3	CONCLUSIONS	67
5.4	RECOMMENDATIONS	68
5.5	LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCHER.....	70
REFERENCE		71
APPENDIX		79
APPENDIX I: SURVEY (ENGLISH VERSION)		79
APPENDIX II: SURVEY (AMHARIC VERSION).....		84
APPENDIX III: ASSUMPTION TEST OF NORMALITY		90
APPENDIX: IV MEAN SCORE RANGE AND INTERPRETATION		93
APPENDIX: V COMPANY’S (ECAFCO) BROCHURE		94

List of Table

<u>TABLE 3.1: CRONBACH'S ALPHA DATA OF RELIABILITY</u>	41
<u>TABLE 4.1: DEMOGRAPHIC PROFILE OF RESPONDENTS</u>	43
<u>TABLE 4.2: PURPOSE OF USE AND PARTICLEBOARD THICKNESS PURCHASED BY CUSTOMERS</u>	44
<u>TABLE 4.3: PRODUCT/PARTICLEBOARD QUALITY</u>	45
<u>TABLE 4.4: PRICE OF PARTICLEBOARD</u>	46
<u>TABLE 4.5: COMPLAINT HANDLING</u>	47
<u>TABLE 4.6: INNOVATION PRACTICE</u>	48
<u>TABLE 4.7: PRODUCT AVAILABILITY</u>	49
<u>TABLE 4.8: SUPPLIER'S IMAGE AND REPUTATION</u>	50
<u>TABLE 4.9: SUMMERY OF MEAN AND STANDARD DEVIATION</u>	51
<u>TABLE 4.10: SUMMERY OF PEARSON'S CORRELATION</u>	52
<u>TABLE 4.11: NORMALITY TEST (SKEWNESS AND KURTOSIS)</u>	54
<u>TABLE 4.12: MULTI-COLLINEARITY</u>	55
<u>TABLE 4.13: MODEL SUMMERY</u>	56
<u>TABLE 4.14: ANALYSIS OF VARIANCE (ANOVA)</u>	56
<u>TABLE 4.15: COEFFICIENTS</u>	57
<u>TABLE 4.16: SUMMERY OF HYPOTHESES RESULT</u>	60
<u>TABLE 4.17 SCORING RANGE OF LIKER SCALE</u>	93

List of Figure

<u>FIGURE 1: CONCEPTUAL FRAMEWORK (DEVELOPED FROM LITERATURE REVIEW)</u>	31
<u>FIGURE-2 HISTOGRAM</u>	90
<u>FIGURE-3 P-P PLOT</u>	91
<u>FIGURE-4 SCATTER PLOT</u>	92

Acronyms and Abbreviations

ECAFCO: Ethiopia Chip wood and Furniture Company

EDP: Expectancy Disconfirmation Model

SPSS: Statistical Package for Social Science

IV's: Independent Variables

DV: Dependent Variable

Abstract

Determining the factors that affect buyer satisfaction is the most vital for profit making entities to reinforce customer satisfaction and sustain business profitably. The principal objective of this study was to investigate the core factors that affect particleboard buyers' level of satisfaction in Ethiopia Chip wood and Furniture Share Company (ECAFCO S. C). To achieve these, a quantitative research approach is employed using a structured questionnaire. Data was collected from 355 respondents selected using a nonrandom convenience sampling technique. The collected data was analyzed, interpreted, discussed and presented using descriptive, correlation and multiple-linear regression analyses.

The descriptive analysis results revealed that Ethiopian Chip wood and Furniture Company customers are dissatisfied. They're dissatisfied with product quality, complaint handling, innovation and product availability and indifferent to the supplier's image and reputation and particleboard price of the company. The correlation result showed that there's a positive and significant association between the six independent variables and buyer satisfaction. On the other hand, the results of multiple regression analysis revealed that the independent variables (product quality, price, innovation, product availability, compliant handling and supplier's image and reputation) have a positive and significant influence on buyer satisfaction. Product/particleboard quality and innovation have a highly significant influence on explaining buyer satisfaction as compared to other independent variables. And 72.5% of the response variable (buyer satisfaction) is elucidated by these six independent variables.

Based on the study results, the researcher recommends that Ethiopian Chip wood and Furniture Company should be concerned about those influencing factors, especially product quality and innovation to satisfy unsatisfied existing particleboard buyers as well as to attract a potential buyer. So, ECAFCO must establish sophisticated particleboard production technology, and provide improved and various latest particleboard to sustain in the market.

Keywords: *Buyer/customer satisfaction, particleboard, influencing factors, ECAFCO*

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Particleboard is a new form of engineered wood product that's made from gluing collectively sawdust, wooden chips, sawmill and synthetic resin (Komah, 2018). Particleboard invented in 1887 (Gene W, 2020). It referred to as low density fiberboard or chipboard (LDF) (McCoy Mart, 2020). Kronospan (2021) explained that the main customers for particleboard are the fixtures production and refurbishment/construction sectors. Particleboard is best for inner components, additionally can be coated with an ornamental floor for application kitchen, bathroom, bedroom, and workplace furnishings and shelving (Kronospan, 2021). Also, Gebi (2015) cited in his study, as chip wood is used for ceiling, roofing & partition of interior house, and used as raw material in making fixtures.

McCoy Mart (2020) explained that there are various type of engineered wood products used to make fixtures and other wooden items for interior and external usage such as single layer particleboard, three-layer particleboard, graded-density particleboard, melamine particleboard, cement bounded particleboard, veneered particleboard, and laminate sheet. But, it used for various internal applications, depending on the grading of the particleboard (Wood Solutions, 2020). Million Insights (2018) explained that particleboard market is segmented based on raw materials such as Flakes, shaving, chip, and sawdust; end-users like infrastructures, constructions, furniture, and others that might be explored in the future. The market demand for glued-wood composite products, which includes particleboard, medium-density fiberboard and plywood, has currently augmented dramatically all through the world, in particular for housing creation and fixtures production (YiZheng et al., 2006).

The main objective of this study is to find out factors affecting particleboard buyers' level of satisfaction. A buyer's satisfaction is a characteristic of the product's perceived overall performance and the buyer's expectancies (Kotler and Keller, 2012). The client is dissatisfied, if the product's performance below expectancies. If overall performance equals expectancies, the client is relieved. If overall performance exceeds expectancies, the client is exceedingly relieved or delighted (Kotler and Armstrong, 2012). High satisfaction directs to undue customer loyalty, companies have to make sure that they meet and exceed customer expectancies (Kotler and

Keller, 2012). Losing worthwhile clients can dramatically effect on a corporation's profits (Kotler and Keller, 2012). Even extra since the value of attracting a new buyer is estimated to be five instance the value of maintaining a present day buyer happy (Kotler and Keller, 2012). Also, Solomon et al. (2006) stated in this form customer dissatisfaction is commonly because of expectancies exceeding the company's capacity to deliver. When faced with unrealistic expectancies concerning what it could do, the corporation can both accommodate those needs with the aid of using enhancing the variety or high-satisfactory of products it offers, modify the expectancies, or possibly even select to desert the customer if it isn't always viable to meet his or her needs (Solomon et al., 2006).

Customer satisfaction totally shaped by overall quality, price, and expectations (Andrson, Fornell, Lehmann, 1994). Management study Guide Team (2020) also explained that supplier behavior such as customer response, compliant control etc and overall performance of product and offering that are the capability of supplier-how to nurture the goods and offerings efficiently and how skilled employees are affect customer satisfaction. Image and reputation of company is also one of the factors that affect customer satisfaction. For example, Martensen et al. (2000) cited in Mekonnen (2019) indicate that image expected to have a positive relationship and an essential element in the customer satisfaction towards the customer expectations, and satisfaction and loyalty of customers to the business enterprise. Jonathan (2005) stated that companies that fail to cope with growing dissatisfaction among their customer base risk their long-term health. So, Rahman, H. et al. (2014) found that finer responsiveness to customer results to finer customer satisfaction since company success is related to responsiveness to customer.

Generally, according to marketing theory, to be successful, a company has to provide greater customer value and satisfaction than its competitors do (Kotler and Armstrong, 2012). Satisfied clients purchase once more and inform others more or less their precise experiences. Dissatisfied buyers frequently shift to rivals and disparage the product to others (Kotler and Armstrong, 2012). Therefore, in order to maintain competitive advantage over the competitors and brand reputability and generate sustainable substantial profit, company must listen and response to customers' need and wants, for example, continuously improving offering. So, to do this, monitoring and finding out factors that affecting buyer's level of satisfaction on regular is must. For example, Kotler and Keller (2012) stated that many business entities are systematically measuring how properly they deal with clients, figuring out the elements shaping

satisfaction, and converting operations and business orientation as a result. Wise companies degree customer satisfaction regularly, due to the fact its far one key to customer retention (Kotler and Keller, 2012). Kotler and Keller (2012) also stated that companies need to monitor their competitors' performance too, their customer loss rate and to touch the one who've stopped shopping for or who've switched to any other provider to discover why. Totally, the importance of monitoring/measuring factors affecting buyer's level of satisfaction is unquestioned to successfully run business. Thus, this thesis tried to find out factors affecting particleboard buyers' level of satisfaction, the case of Ethiopian Chipwood and Furniture Company based on primary and secondary data.

1.1.1 Background of the Company

Ethiopian Chipwood and Furniture Company (ECAFCO) located in Addis Ababa Nefas Selk Lafto Sub-City, established in 1957 E.C. and started the production of Chipwood a year later ECAFCO not only offers Chipwood product but also involved in construction, furniture and services sectors. The company offering prefabricated house and conventional building, construction materials such as Chipwood, stayropore block office and household furniture etc. ECAFCO particleboard crafted from wood (eucalyptus tree) and 8mm, 10mm, 13mm, 16mm and 19mm thickness supplied to the market (ECAFCO n.d; Gebi 2015). It was privatized in 2008 G.C. (Gebi, 2015). The company serves local market.

1.1.2 Overview of Particleboard Industry in Ethiopia

The history of wood industry in Ethiopia back to ETHARSO (Ethiopian Hardboard and Soft board Factory), that was established by private Italian interests; at first as a general wood-working shop and parquetry plant (UNIDO, 1990). The fiberboard plant was added in 1969. But in 1974 the fiberboard plant was nationalized while wood working and parquetry plants remain in the private ownership (UNIDO, 1990).

Ethiopia is one of the first countries to have introduced particleboard manufacture in developing Africa (UNIDO, 1990). The particleboard of Ethiopian Chip wood and Furniture Company (ECAFCO) was established 1957 and converted to state enterprise during Deng regime (UNIDO, 1990). Particleboard output amounted to 6,157 m³ in the operating year 1988-89. Of that, 65% of particleboard supply was absorbed by the building construction sector and the company supply met 39% of the demand only (UNIDO, 1990). During this time, a

further problem in the utilization of particleboard in the furniture industry was its low quality, which is reflected in the high rejected rate of particleboard inputs and the difficulty in controlling the quality of finished products (UNIDO, 1990).

In generally in Ethiopia, wood processing industry has more than a hundred-year history and production experience, but it is not as mature and advanced as its age (Chemical and Construction Input Industry Development Institute, n.d). Even if, there is an increment in number of establishment and number of worker employed in the sector, still it is trivial compared to the prospective of the sector for the development and the capability to minimize unemployment rate (Chemical and Construction Input Industry Development Institute, n.d).

1.2 Statement of the problem

For companies that are attentively oriented toward solving customer needs and wants (consumer- targeted), maintaining customer satisfaction is each an intention and philosophical instrument (Kotler and Keller, 2012). So, to attain a goal, in this dynamic and competitive world, company should produce and delivering superior and competitive quality product which fulfill and satisfy buyers' needs and expectation interims of quantity and quality with fair price than rivalry. Kotler and Keller (2012) stated that a highly satisfied customer commonly remains unswerving longer, buys extra while the company introduces new and upgraded products, talks favorably to others about the company and its products, will pay less interest to competing manufacturers and is much less touchy to charge, give products or services thought to the enterprise, and expenses much less to serve than new clients due to the fact transactions can end up routine.

Anwar and Christan (2016) concluded in their study product quality, price quality and service quality and marketplace are among factors that can torment customer satisfaction. Jahanshahi et al. (2011); Jahanshahi et al. (2011); Senthilkumar (2012); Suhendar and Ruswanti (2019) also found that the quality of product can effect on buyer satisfaction. Again, Ismail, Nazief and Boge (2016) indicated that quality of product and price of product has a very good extent of generality to enhance consumer satisfaction. But, Rahman (2014a); and Rahman, H. et al. (2014) found that as price and quality of the offering has an insignificant impact on getting the customers satisfied. With respect to quality, Andrson, Fornell & Lehmann,(1994) found that just as current quality is expected to have a positive influence to determine overall customer satisfaction, so should all past experiences with quality, as captured by expectations. With

regard to supplier's reputation, Zhao and Smith (2006) indicated that supplier reputation become extensively associated with customer monetary satisfaction, to customer social satisfaction, and to customer trust. Complaint handling is another influencing variable assessed in this study. By encouraging complaints whilst they are justified and by actively handling customer problems, the company can preserve valued customers (Hoyer and MacInnis, 2010). On the other hand, Naveed et al. (2012) indicated that innovation influence customer satisfaction in each organization due to the fact that organization brings revolutionary adjustments in its goods to get customer satisfied and meet their needs. Innovation categorized as New-to-the-world products (invention that create a whole new market) and New-to-the-firm products (products that take the firm in a new direction) (Garcia, 2014). Product availability is defined as the probability of a product being available in saleable circumstance while a customer comes to seek it on a store shelf (Moussaoui et al. 2016 cited in Drilon and Gabriel 2017). Andrew (2010) stated in such way that business have not only to make products that customer wants but also to make affordable to a sufficient number (enough quantity) to create profitable demand.

Except one study by Rediat and Genet (2019) that assessed the effect of marketing mix on customer satisfaction in Hawassa Chipwood Factory, research on factors affecting particleboard buyers' level of satisfaction almost null per researcher in Ethiopia. However, a lot of research undertaken on factors affecting customer satisfaction and found out various factors though their organization characteristics, situation, purpose, approach, time, and etc. were different. For example, Azeb (2010) assessed factors affecting internet customer satisfaction; Yimer (2014); Berhanu (2016); Fikirte (2016) and Azeb (2020) assessed customer satisfaction influencing factors in banking industry, Getachew (2018) investigate factors affecting customer satisfaction of customer services of bonded warehouse operation in Addis Ababa, Fasika (2018) assessed factors affecting satisfaction of motor insurance customer, Mihret (2019) investigate factors affecting customer satisfaction on tap water services delivery in Addis Ababa water and sewerage authority, and Yodit (2019) assessed factors affecting customer satisfaction on application based tax services in Addis Ababa. We can't generalize the above study finding for this research due to scope (concept, methodology, geographic, organization, target population and so forth) variation. So, it needs to examine factors affecting buyers' level of satisfaction as per the industry.

Overall, choosing accurate factors affecting buyers' level of satisfaction is difficult, because satisfaction affected both controllable factors and uncontrollable forces. Need in no way complete satisfied; satisfaction is only temporary (Hoyer and MacInnis, 2010).

In Ethiopia, the demand for Chipwood is met both from import and domestic production. Abebe W. (2019) stated that in Ethiopia market context there is a high discrepancy between demand and supply of forest product due to population and economic growth. According to Abebe on the average Ethiopia imported 65,610 meter cubes of various industrial wood products from year 2007-2017 of that 6554 meter cube is particleboard. Musa (2018) explained that for different purposes, Ethiopia is still importing particleboard from Saudi Arabia, China, Russia, Dubai, among others. The imported particleboard comprises different Chipwood, Medium Density Fiberboard (MDF), Timber that meet tensile strength and quality standard (Musa, M. 2018). Dagne Abetie (2018) also explained in his study as the existing companies are not fully meeting the demand of the country due to this particleboard are importing from abroad. Likewise, Rediate A. & Genet G.Tirfe (2019) found that the demand of the Chipwood market still is not satisfied. For instance, in survey analysis with respect to Ethiopian Manufacturing Sectors, Addis Ababa Chambers of Commerce and Sectoral Association (AACCA) (2014) proved that about 86% of manufactures underutilized their capacity due to low working capital and high cost of credit, breakdown of power and shortage of imported inputs from foreign markets. Addis Ababa Chambers of Commerce and Sectoral Association also identified as production cost of the domestic products were high, which might increase the selling price of products. So, even if the side effect of these barriers might directly affect the suppliers' capacity to satisfy the markets, indirectly might dissatisfy buyers. With respect to company under study, Gebi (2015) explained in his study as ECAFCO machinery/production tool was outdated and declined in production capacity. According to UNIDO (1990) also 65% of ECAFCO particleboard supply purchased by the building construction sectors and mentioned that as company's particleboard further problem in utilization in the furniture industry due to its low quality. Hence, the particleboard buyers could not satisfy with existing local suppliers in one or other things specially with ECAFCO, as may be inefficiencies of supplier to supply adequate product, and or unable to provides various improved quality particleboard using sophisticated production technology and high pricing etc.

In sum up, the country's huge infrastructure expansion and urban centers' remarkable building construction activities provided an opportunity for rapid increase in demand for construction

materials (Gebi Sh., 2015). However, with growing construction development and furniture product market demand in the Ethiopia, the current wood industry in general, and ECAFCO specifically short in satisfying the market both interims of quantity and quality as mentioned above, and therefore all wood industry operating in Ethiopia should recognize the need for creating and delivering quality product that satisfies and meets the market demand at fair price.

Therefore, it is significant to analyses the factors that affect particleboard buyers' level of satisfaction, because the product is an important input in supporting construction and furniture industries of Ethiopia. On the other hand, in spite of its relevance, the study also significant since it's the first study carry out on factors affecting particleboard buyers' level of satisfaction in Ethiopia so far, though a considerable number of research undertaken on customer satisfaction as discussed above. At first hand, this research examined factors affecting particleboard buyers' level of satisfaction in the case of Ethiopia Chip wood and Furniture Company (ECAFCO).

1.3 Research question

Depending on the research problem raised in this study, the researchers develop the following research questions:

- ❖ To what extent does ECAFCO's product quality affect buyers' level of satisfaction?
- ❖ To what extent does ECAFCO's particleboard pricing affect buyers' level of satisfaction?
- ❖ How does complain handling in ECAFCO affect buyers' level of satisfaction?
- ❖ How does ECAFCO's innovation affect buyer' level of satisfaction?
- ❖ To what extent does product availability in ECAFCO affect buyers' level of satisfaction?
- ❖ How does the company's image and reputation affect buyers' level of satisfaction?

1.4 Research objective

While the main objective of the study is to find out the core factors affecting particleboard buyers' level of satisfaction, the specific objective are the following:

- ❖ To analyses the effect of product quality on buyers' level of satisfaction;
- ❖ To examine the effect of price on buyers' level of satisfaction ;
- ❖ To examine the effect of complaint handling on buyers' level of satisfaction;

- ❖ To determine the effect of innovation on buyers' level of satisfaction;
- ❖ To analyses the effect of product availability on buyers' level of satisfaction and
- ❖ To determine the effect of company image and reputation on buyers' level of satisfaction.

1.5 Hypotheses of the Study

- H1: Product quality affects buyers' level of satisfaction;
- H2: Price affects buyers' level of satisfaction;
- H3: Compliant handling affects buyers' level of satisfaction;
- H4: Innovation affects buyers' level of satisfaction;
- H5: Product availability affects buyers' level of satisfaction;
- H6: Supplier's image and reputation affects buyers' level of satisfaction;

1.6 Significance of the study

The study analyzed the key factors that affect particleboard buyers' level of satisfaction and also interpreted the impact it has on the company over all competitiveness in satisfying and generating return. The significance of studying buyers' level of satisfaction indisputable, Abkari and Radmand (2016) explained in their study 66% of unsuccessful organizations, failed since they did not consider their customer satisfaction as a priority. So, the study is significant for the company under study in this way:

- It reflects the company position relative to rivalry;
- It identifies potential market opportunities;
- It indicates improvement that the company must take action on to satisfy its customers and identifies buyer expectation, needs and desires; etc.

The findings of the study hopefully provide a holistic picture of existing factors that affect buyers' level of satisfaction. The information that generated shall benefit the organization under study and others like competitors, industry analysis and individuals who would like to engage in this investment.

1.7 Scope of the study

The scope of this study focused on factors affecting particleboard buyers' level of satisfaction specific to the Ethiopian Chip wood and Furniture Share Company. Additionally, the study methodologically delimited to quantitative and survey questionnaires while geographically to

Addis Ababa city, customer of ECAFCO. With respect to conceptual issue, the independent variables such as product quality, price, compliant handling, innovation, product availability and supplier's image and reputation whereas buyer satisfaction as dependent variable studied in this study.

1.8 Limitation of the study

Though the researcher provides questionnaires with language participant understand, there might be a response bias since the data collection instrument was a self-administered questionnaire. The second limitation would be sampling biases, since the sampling design is non-probability convenience sampling. The reason behind why researcher selects this sampling is because of lack of customers list and so this makes difficult to select the sample frame randomly and collect the data accordingly, and moreover not easy to find the customers of the company that is found in different part of Addis Ababa sub city and as well it would be economically expensive and time-consuming. But to minimize biases that might be generated due to sampling, the researcher use large sample, control and assess the representative of the survey sample. Also, the researcher distributes questionnaires to where large number of ECAFCO customers found and do not make judgments about who should be asked to participate in the study. Lastly, the generalizability of the finding and the conclusion drawn from the study also limited to ECAFCO since the study specific to this company.

1.9 Definition of terms

Buyer/customer: Customer is an individuals and businesses that purchased goods and services from another business (Khartit K., 2021).

Buyer satisfaction/ Customer satisfaction: the two are defined similarly. A buyer's satisfaction is a function of the product's perceived performance and the buyer's expectations (Kotler and Keller, 2012). Or customer satisfaction it is the extent to which a product's perceived performance matches a buyer's expectations (Kotler and Armstrong, 2012).

Particleboard-is a new type of engineered wood product which is manufactured from gluing together sawdust, wood chips, sawmill and synthetic resin (Komah 2018).

Particleboard/Chipwood/Chipboard-the term is synonymy and used interchangeable (ECAFCO n.d; Komah 2018; Wood Solutions 2020).

1.10 Organization of the study

The study was organized in five chapters. The first chapter includes background of study, statement of the problem, research question, research objective, and significance of the study, scope of the study, limitation of the study and definition of terms. The second discusses the research methodology, research approach, research design, population and sampling and data analysis technique. The third chapter discusses the review of related literature from both theoretical and empirical data. The fourth chapter described the results and discussion while the fifth chapter deals with summery of findings, conclusion and recommendations of the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

In this chapter, the review of related literature in the area of factors affecting Particleboard buyers' level of satisfaction presented. Theoretical and empirical reviews are reviewed. Finally, the chapters also present the conceptual framework of the study.

2.2 Theoretical Review

2.2.1 Customer Satisfaction

Customer satisfaction is the degree to which a product's perceived performance suits a buyer's expectations (Kotler and Armstrong, 2012). And or a buyer's satisfaction is a function of the product's perceived overall performance and the buyer's expectations (Kotler and Keller, 2012). Similarly, Solomon et al. (2006) also defined as consumer satisfaction/dissatisfaction is determined generally by attitude/feeling someone has regarding a product after it's been purchased. Consumers have interaction in consistent manner comparing the materials they purchase as they combine those goods into their day by day intake activities (Solomon et al., 2006).

How do customers shape their expectancies? Expectations end result from past shopping experience, friends' and associates' recommendation and marketers' and competitors' information and promises (Kotler and Keller, 2012). As well as, another authors Andrson, Fornell & Lehmann (1994) also stated that expectations accrued facts about quality from advertising, word of mouth, and popular media which is comprise information based on not actual consumption experience. When something performs the way we thought it would, we may not think much about it. If, on the other hand, it fails to live up to expectations, negative affect may result. Furthermore, if performance happens to exceed our expectations, we are satisfied and pleased (Solomon et al, 2006). According to Solomon et al. (2006) customer dissatisfaction is usually due to expectations exceeding the company's ability to deliver. When confronted with unrealistic expectations about what it can do, the firm can either accommodate these demands by improving the range or quality of products it offers, alter the expectations, or perhaps even choose to abandon the customer if it is not feasible to meet his or her needs (Solomon et al, 2006).

2.2.2 Relevant Theories Related To Customer Satisfaction

Satisfaction is each a subjective feeling and an objective evaluation that a decision has fulfilled a need or goal (Hoyer and MacInnis, 2010). Dissatisfaction happens while consumers have poor emotions and trust that their dreams or wishes have now no longer been fulfilled (Hoyer and MacInnis, 2010).

In order to explaining customer satisfaction different theories have been conceptualization based on various standards are the Dissonance Theory, the Contrast Theory, the Expectancy Disconfirmation Paradigm (EDP), The Comparison Level Theory, The Value–Precept Theory, the Attributes Theory, The Equity theory, The Evaluation Congruity Theory, The Performance-Importance Model and the Person-Situation-Fit Model. And the majorities of these theories suggest that customer satisfaction is a relative concept and judged in relation to a standard (Atila and Fisun, 2008). Except two models, which are more relevant for services industry that is Importance-Performance Model and the Person-Situation-Fit Model, the following theories including Kano model are reviewed in this study.

The Dissonance Theory: - Suggests that someone who anticipated a high-value product and obtained a low-value product could apprehend the disparity and experience in a cognitive dissonance (Atila and Fisun 2008 cited Cardozzo 1965). This concept holds that ‘post experience evaluation are generally a function of the expectancy degree since the task of identifying disconfirmation is assumed to be psychologically sore, Thus customers are posited to perceptually distort expectation-discrepant overall performance so as to concur with their previous expectation degree’ (Atila and Fisun 2008 cited Oliver, 1977). According to this model, to acquire a greater product evaluation, business firms need to try to lift up expectancies significantly beyond the product overall performance (Atila and Fisun 2008 cited Yi, 1990). But this Theory fails to take in to account the concept of ‘tolerance level’ (Atila and Fisun, 2008). Overall, the Dissonance Theory unsuccessful as a complete rationalization of consumer satisfaction, however, it contributes to the understanding of the fact that expectations aren’t static in that they could alternate all through a consumption experience (Atila and Fisun, 2008).

The Contrast Theory:-The Contrast ideas should count on that ‘ends result deviating from expectancies will motive the scenario to favorably or unfavorably respond to the disconfirmation experience in that a negative disconfirmation is assumed to result bring about a deficient product assessment, whereas positive disconfirmation have to cause the product to be

very much appraised' (Atila and Fisun, 2008 cited Oliver 1977). Atila and Fisun (2008) cited Yi (1990) stated that customer intensify the difference, if real product performance less than the customer's expectations. If the Contrast Theory had been implemented to a consumption context, then the deficient overall performance could be worse than minimally deficient, and desirable overall performance would be higher than a score of desirable could propose (Atila and Fisun, 2008 cited Oliver 1997). But, under the dissonance concept, the opposite effects occur, perceived overall performance, whether it is less or more favorable than the consumer's expectations, is attracted to the original expectation level (Atila and Fisun, 2008).

Expectancy Disconfirmation Paradigm (EDP):-According to this model consumers purchase goods and services with pre-buy expectations about the predicted performance (Atila and Fisun, 2008). They stated that the expectancy degree then becomes a standard against which the product is judged. That is, as soon as the service or product has been used, consequences are in comparison towards expectancies. According the authors, if the final results suit expectancy affirmation happens while disconfirmation happens wherein there may be a distinction among expectancies and consequences. A customer is either satisfied or dissatisfied due to positive or negative distinction among expectancies and perceptions (Atila and Fisun, 2008). Similarly, Solomon et al. (2006) also stated that satisfaction, then, is incredibly encouraged by prior expectations concerning all aspects of quality. According to the expectancy disconfirmation model, the perspective that consumers shape beliefs about product performance based on previous experience with the product and/or communications about the product that imply a certain level of quality; their actual satisfaction relies on the degree to which performance is consistent with these expectations (Solomon et al ,2006)

The Comparison Level Theory: -This Concept agree that there are more than one essential determinants of comparison level for a product: (1) clients previous consumption practice with comparable products, (2) situationally produced expectancies (the one created via different marketing promotional efforts), and (3) the consumption familiarity of different patrons who function as referent persons (Atila and Fisun, 2008).The situationally brought expectancies had little impact on the user satisfaction extent though expectancies depend on earlier knowledge had been the main determinant of buyer satisfaction. Consumers can also give much less outlook about piece of information disseminated by producers, once they have knowledge about offers and accurate data from other user of the product/offer too (Atila and Fisun 2008 cited Yi, 1990). Thus, the use of past experience suggested by the Comparison Level Theory as the

comparison standard in customer satisfaction evaluations can also additionally serve managers to evaluate their performance with their rivals, and adopt required actions to catch-up or for product differentiation (Atila and Fisun, 2008).

The Value Percept Theory: –According to this Theory satisfaction is an emotional reaction this is induced with the aid of using a cognitive evaluative technique wherein the perceptions of goods and services are in comparison to one's values, needs, wishes or desires (Atila and Fisun, 2008 cited Westbrook & Reilly, 1983). The value-disparity described as the degree to which the product offers functions and overall performance attributes required or desired. The disparity became assessed on only on distinct differential scale anchored with ‘offers some distance much less than my needs’ and ‘offers precisely what I need’ (Atila and Fisun, 2008).

The Attribution Theory: -Is about causality and blame (Hoyer and MacInnis, 2010). According to this concept if offering doesn't longer satisfy customers' needs, customers' may try locate justification depending on three factors (Focus, stability and controllability) (Hoyer and MacInnis, 2010). This theory assumes that customers generally tend to search for reasons for product successes or screw ups and generally characteristic those successes or screw ups the use of a 3 dimensional schema (Atila and Fisun 2008 referred to Folkes, 1989; Oliver & DeSarbo, 1988; Pearce & Moscardo, 1984; Weiner et al 197; Hoyer and MacInnis 2010):

- Locus of Causality (internal or external) know as focus: this happened when the acquisition final results, for example, made the buyer displeased and may be attributed to internal or external situation. The situation become internal when buyer blame themselves and or external when buyer blame the marketer or the firm.
- Stability (stable/everlasting or volatile/temporary): Stable reasons are consideration not to differ over time, while unstable reasons are consideration to oscillate and range over time.
- Controllability (volitional/ controllable or non volitional/uncontrollable): Both customers and companies can either has managed an effect or unable to controllable constraints.

Customers are much more likely to be disappointed if the root is seemed to be lasting, marketer related, and not under the client's control (Hoyer and MacInnis, 2010). Attribution concept can offer marketers with guidance in how to deal with current or potential perceptions of customer dissatisfaction. If the cause of the dissatisfaction absolutely is permanent, marketer related, and

under the marketer's control, something ought to be done to correct the problem or give the customer with restitution (Hoyer and MacInnis, 2010). Atila and Fisun (2008) cited Folkes (1984) demonstrate that the locus of causality dominates satisfaction judgments and satisfaction is related greater with internal than with external factors. The attribution theory further appears to be more beneficial to use in ascertaining customer dissatisfaction and complaining behavior (Atila and Fisun, 2006).

The Equity Theory: -According this Theory, satisfaction exists while purchasers understand their output/input ratio as being fair (Atila and Fisun 2008 cited Swan & Oliver, 1989). Whether a customer feels equitably indulged or not may depend up on different factors together with the fee paid, the advantages received, and the effort and time expended for the duration of the transaction and the experience of preceding transactions (Atila and Fisun 2008 cited Woodruff *et al* 1983). This indicated that comparative baseline may take a lot of various forms (Atila and Fisun 2008). Another Authors Hoyer and MacInnis (2010) stated that the hub of equity concept regarding fairness of exchanges between people and their belief of these exchanges, which helps in understanding consumer satisfaction and dissatisfaction. Fairness in the exchange the belief that people's inputs are equivalent to their outputs in an exchange (Hoyer and MacInnis, 2010). This concept has likeness with the Comparison Level concept which thinks that bases of comparison utilized by buyers in satisfaction judgments can be greater just expectancies (Atila and Fisun, 2008). This concept is different from other concepts, in that satisfaction is evaluated relative to other parties (people) in an exchange and the outcomes of all parties sharing the same experience are taken into consideration (Atila and Fisun, 2008). According to this model, satisfaction is visible as a relative judgment that takes into account both the qualities and benefits acquired through a purchase in addition to the cost and efforts borne by a customer to obtain that purchase (Atila and Fisun 2008). Atila and Fisun cited Fisk and Coney (1982), for instance, determined that customers were much less pleased and had a less optimistic attitude toward an organization once they heard that other clients obtained relatively a better price deal and better offering than them. And or mean their perceptions of equitable cure by the organization translated into satisfaction judgments and even affected destiny expectancies and buy intentions.

Hoyer and MacInnis, (2010) also stated that as long as buyer recognize that their inputs and outputs are equitable with regards to the ones of the seller, they will be satisfied. This response is accurate in terms of the goods and services itself as well as in terms of interactions with

employees while shaping a complaint (Hoyer and MacInnis, 2010). In other words, customers who recognize that they've been handled fairly in the complaint process can be greater satisfied, much more likely to shop for again, and much more likely to unfold positive word of mouth (Hoyer and MacInnis, 2010). However, if an inequity exists, customers will be disappointed (Hoyer and MacInnis, 2010). So they stated that Marketers need to work towards providing fair exchanges, despite the fact that customer' perceptions of fairness have a tendency to be biased toward themselves.

One area in which marketers can directly have an effect on fairness perceptions is the salesperson-customer interaction (Hoyer and MacInnis, 2010). The authors stated that salespeople need to make every effort to ensure that their inputs fit customer inputs by listening to consumer needs, answering questions, and seeking to offer an awesome deal. Promotions can also augment perceptions of equity in an exchange (Hoyer and MacInnis, 2010). They stated that giving a lower price or a free gift with purchase can make customers experience that they are getting greater out of the exchange. In addition, companies need to make certain that outputs are high-satisfactory by providing a quality product at a fair price, as target's loyal customers are pleased by the store's value-priced designer house wares (Hoyer and MacInnis, 2010).

The Evaluative Congruity Theory-Is cognitive corresponding procedure wherein a belief is in comparison to evoked referent cognition to be able to assess an action or stimulus, so, according to this concept satisfaction is a function of evaluative congruity. The end result of this cognitive procedure is believed to create an emotional or motivational state. Customer satisfaction/dissatisfaction are considered as an emotional state because it prompts the customer to assess alternative course of action to decrease a current dissatisfaction state and /or reap a future satisfaction state (Atila and Fisun, 2008 cited Sirgy, 1984). This model argues that there are three congruity states; negative incongruity, congruity, and positive incongruity (Atila and Fisun, 2008).

Negative incongruity is analogous to the confirmation/disconfirmation theory as a cognitive state that outcomes from a negative discrepancy between the valence levels of a perception and an evoked referent cognition, which makes dissatisfaction On the other hand, Congruity is a cognitive state that results in a non-significant or negligible discrepancy among a belief and an evoked referent cognition, which ends up in an impartial assessment state or a satisfaction state. The third state called positive incongruity-state results from a positive discrepancy between a

perception and an evoked referent cognition, which generates satisfaction (Atila and Fisun, 2008). Unlike the EDP, this model views the customer satisfaction/dissatisfaction as a function of one or more congruities between perceptual and evoked referent states and states that the occurrence of multiple comparison processes could explain consumer satisfaction better (Atila and Fisun, 2008).

The original Evaluative Congruity concept more explicitly, supposed that satisfaction can be explained by one or more cognitive congruities, including among (1) new product performance after utilization and anticipated product performance earlier than use, (2) new product performance after use and old product performance earlier than use, (3) expected product performance after purchase and ideal product performance before purchase, (4) expected product performance after purchase and deserved product performance after use. Such discrepancies are argued to independently impact customer's overall satisfaction with a given product (Atila and Fisun, 2008 cited Sirgy, 1984).

The key significant points of the Evaluative Congruity model appears to be its top potential in determining the distinct states of satisfaction/dissatisfaction generating from distinct combinations of expectations and performance outcome better than the EDP (Atila and Fisun, 2008 cited Chon 1992; Chon, Christianson Cin-Lin, 1998). According to the Evaluative Congruity Theory, distinct expectation-overall performance combinations would possibly lead to different satisfaction states (Atila and Fisun cited Chon & Olsen, 1991; Chon, 1992; Chon et al 1998; Sirgy, 1994). Furthermore, Sirgy more proposed that product images must be categorized as being functional (i.e. physical benefits related to the product) and symbolic (i.e., self image) and disputes that buyer satisfaction/dissatisfaction isn't most effective an evaluative function of the customer's expectancies and overall performance, however it's also an evaluative function of the customer's self image and product image congruity (Atila and Fisun, 2008). The functional congruity explained customer satisfaction better than symbolic congruity (Atila and Fisun, 2008 cited Chon and Olsen, 1991).

It is critical to observe that even though Evaluative Congruity Theory has been presented as an option approach to give an explanation for satisfaction practice, its methodological mechanism is similar to that of the Expectancy-Disconfirmation paradigm (Atila and Fisun, 2008 cited Oh & Parks, 1997). That is, both the Evaluative Congruity and Expectation-Disconfirmation models are based on the disconfirmation concept which presupposes that customers shape

expectancies about the product previous to buy and evaluate those expectancies towards perceived overall performance after the product is used. Both models, however, might not be appropriate to use in consumption conditions in which customers do not have prior expectations such as with unfamiliar products (Atila and Fisun, 2008).

Overall, Atila and Fisun (2008) indicated that there is widespread agreement among these satisfaction theories as satisfaction is an evaluative judgment, which ends up from a contrast of product overall performance to some types of evaluation criterion. The majority of those concepts, for example, the Expectancy Disconfirmation Paradigm, the Comparison Level Theory, and the Evaluative Congruity Theory agree that product overall performance greater than previous expectancies or some type of requirements indicates satisfaction, while dissatisfaction is the final results whilst product overall performance falls short/below of that standard and or criterion(Atila and Fisun, 2008). Thus, majority of the satisfaction theories embraces the disparity concept between the actual outcome and the expected (Atila and Fisun, 2008). So, according to authors this is the core most satisfaction model. While numerous contrast requirements had been proposed withinside literature, no agreement exists regarding which standard might be the most appropriate (which standard best predicts customer satisfaction) (Atila and Fisun, 2008).

Kano Model:-One approach to customer satisfaction, known as the Kano-model, operates with three types of expectation: basis, performance and enthusiasm expectations. The first consists of the implicit and taken-for-granted qualities expected from a product. If these aren't satisfied, the product by no means is capable of stay as much as the customer's requirements, however even though fulfilled, they don't profile the product due to the fact these qualities are taken as a right as a minimum. For the performance expectations satisfaction is comparatively to how well the product lives up to the expectations. Such quality requirements are regularly specified and articulated by the customer. As for enthusiasm-related product features, it is inaccurate to name them expectations since their essential character is that they aren't expected by the customer. Therefore, such positive surprises can result in a totally wonderful feeling of satisfaction, for the reason that product quality becomes even higher than expected. Moreover, studies proof shows that product experience is vital for customer satisfaction. When customers don't have experiences they are relatively simple to satisfy, however with increasing experience they become more difficult to satisfy. Subsequently, once they attain a positive degree of familiarity with offering, satisfaction once more will becomes less complicated to

obtain, for the reason that customers are now specialist and this allows preference and generates extra realistic expectations. Additionally, satisfaction degrees are explained not only by the product bought however also by the expectations about the quality of another product that were not bought. In different words, the better the expectations about unselected options, the decrease the extent of satisfaction with the selected good. A general conclusion which one must draw from this sort of dialogue is that customer ambition can be more than one and the service or product provide so complex to evaluate that any measurement of satisfaction ought to be used with caution (Salomon et al, 2006).

2.2.3 Level of Customer Satisfaction

David (2010) cited in Mekonnen (2019) stated that the degrees of satisfaction differ relying on alternatives and the consumer may have other products against which they can compare the company's products. However, customer satisfaction almost always reported at an aggregate level but measured at the individual level. Kotler and Keller (2012) stated that buyer satisfaction is ranked on a degree from one to five. At a totally low degree of satisfaction (at first degree), Buyer are possibly to desert the organization or even bad-mouth it. From second to four degree, buyers are quite pleased however nevertheless locate it simple to leave whilst a higher provide comes along. At five degree, the buyer is may be very possibly to repurchase or even disseminate positive statement about the organization

2.2.4 The Importance of Customer Satisfaction

Kotler and Armstrong (2012) stated why is it so vital to satisfy the customer? Customer satisfaction is a key to constructing profitable relationships with consumers to preserving and developing consumers and reaping their customer lifetime value. Satisfied clients purchase a product again, communicate favorably to others just about the product, pay much less interest to competing product and advertising, and purchase other products from the company at the same time as discontented consumer responds differently (Kotler and Armstrong, 2012). They involve in bad statement about the company which frequently travels farther and quicker than good statement. It can rapidly harm consumer attitudes about a company and its products (Kotler and Armstrong, 2012).

2.2.5 Factor Affecting Buyer's Level of Satisfaction

Customer satisfaction is the overall impression of customer about the supplier and the products and services delivered by the supplier (Management study Guide Team, 2020). Following are the important factors that could affect customer satisfaction are department wise capability of the supplier, technological and engineering or re-engineering aspect of products and services, type and quality of response provided by the supplier, supplier's capability to commit on deadlines and how efficiently they are meet, customer service provided by the supplier, complaint management, cost, quality, performance and efficiency of the product, supplier's personal facets like etiquettes and friendliness, suppliers ability to manage whole customer life cycle and compatible and hassle free functions and operations (Management study Guide Team, 2020).

The Team classified these factors under two categories: supplier behavior and performance of product and offering. Provider/supplier conduct - in the main relies up on at the conduct of its senior subordinates, managers and inner personnel. All the functional activities like customer reaction, compliant control and so on are the factors that rely on how skillful and trained the internal and human resource of the supplier are whereas product performance that is regarding all the products and services of the supplier depends on the capability of supplier to how to nurture the products and services efficiently and how skilled employees are (Management study Guide Team, 2020). Dissatisfaction of customers when supplier are unable to entertain customers or their business strategy fail to build a good relationship with customers, they probably end up with customers dissatisfaction (Management study Guide Team, 2020). Management study Guide Team (2020) explained that it is very important for the supplier to concentrate on customer needs and provides him the required products and services.

Consumer's (or Buyer's) approach arises out of consumers' dissatisfaction with products, services and the organizations that offer them (Jonathan, 2005). So according to this viewpoint dissatisfaction generated from: the marketing system was unresponsive to customer wants; marketing practitioners were unscrupulous; marketers made claims that were not borne out by the actual performance of the product; consumers sought increased product quality and etc. (Jonathan, 2005).

The sum of functions and characteristics of a service or product that endure on ability to fulfill implied needs' is known as quality (Kotler and Keller, 2012). Satisfaction will also depend on

product and service quality (Kotler and Keller, 2012). According to Kotler and Keller (2012) Quality mean it is ‘fitness for use,’ ‘conformance to requirements,’ and ‘freedom from variation’. The seller has delivered quality each time its product or service meets or exceeds the customers’ expectation (Kotler and Keller, 2012). Performance quality (Grade) and conformance quality are different (Kotler and Keller, 2012). Performance quality is the level at which the product’s primary characteristics operate whereas conformance quality is the degree to which all produced units are identical and meet promised specifications (Kotler and Keller, 2012).

Solomon et al. (2006) also stated that product quality affects customer satisfaction. Solomon et al. (2006) stated that the one way to describe quality is to set up uniform standards to which products from around the world should conform. The broad set of guidelines is known as ISO standards (Solomon et al., 2006). Ismail, Nazief and Boge (2016) cited Garvin (1987); Kotler and Keller (2012) thought that the quality of the product includes numerous measurements, specifically performance, features, reliability, compliance, durability, service ability, aesthetics, and perceived quality. Kotler and Armstrong (2012) stated that product quality is one of the marketer’s most important positioning tools. According to Kotler and Armstrong quality has a direct effect on product or service performance; thus, it is intimately connected to customer value and satisfaction.

Level and consistency are the two dimensions of product quality (Kotler and Armstrong, 2012). The Authors stated that in developing a product, the marketer need to first pick a quality level that will assist the product’s positioning. Thus, Product quality means overall performance quality that is the cap-potential of a product to carry out its functions (Kotler and Armstrong, 2012). Beyond quality level is high quality that can also mean high levels of quality consistency, which mean conformance quality is freedom from defects and consistency (the quality that customer pay for and expect) in delivering a targeted level of performance (Kotler and Armstrong, 2012). Kotler and Armstrong recommended that all each companies should attempt for high levels of conformance quality.

According to Kotler and Keller (2012) and Kusdiyah (2012) cited in Ismail, Nazief and Boge (2016) described that as price may be measured from competitor price, affordable price, faire price, discounted price and price suitability dimension. Kotler and Keller (2016) cited Susan M. Keaveney (1995) factors leading to customer switching behavior; pricing is among the factors,

which are high price, price increases, unfairness price and deceptive price as it leads the customers to switching behavior. According to Alan Zimmerman and Jim Blythe (2013) on other hand customers weigh functional, operational, financial, relational, and personal benefits against acquisition and internal costs as well as potential risks in figuring out whether or not a price is fair. Thus, establishing the right price is crucial; Kucuk (2017) stated that price is the major exchange medium in any transaction. There may be no exchange without the right price (Kucuk, 2017). There are three vital elements at once and circuitously effect price and pricing decisions: demand for the product; the cost of producing the product and the marketplace; and purchaser' awareness of the value elements of the product in comparison to different options to be had in the marketplace (Kucuk, 2017). Customer will provide an interest to the price paid by other customers, no one is glad to pay greater cash compared to other customers (Ismail, Nazief and Boge, 2016). The equity of the price will affect the consciousness of the customers and it in the long run will affect their willingness to grow to be a purchaser (Ismail, Nazief and Boge, 2016).

Jonathan (2005) stated that companies that fail to deal with growing dissatisfaction among their customer base risk their long-term health. Complaining is much more likely whilst motivation, ability, and opportunity are high, and it is also much more likely as the extent of dissatisfaction or the severity of the trouble increases (Hoyer and MacInnis, 2010). By encouraging complaints whilst they are justified and by actively handling customer problems, the company can preserve valued customers (Hoyer and MacInnis, 2010). When customer dissatisfied, marketers ought to at once take steps to reassure customers (Solomon et.al, 2006). Solomon et.al (2006) stated that once the company confronts the trouble truthfully, consumers are regularly inclined to forgive and forget. But whilst the company seems to be dragging its heels or overlaying up, on the other hand, consumer resentment will grow. As the authors stated later this situation lead the company to collapse. Kotler and Armstrong (2012) also stated that most unhappy customers by no means inform the company about their problems. Therefore, a company must gauge customer satisfaction on a regular basis. It must installation structures that inspire clients to complain. In this way, the organization can learn the way properly it's far doing and the way it's able to improve (Kotler and Armstrong, 2012). If customers know about the product however aren't shopping for due to the fact they maintain unfavorable attitudes toward it, marketers ought to find ways to change either the product or consumer perceptions (Kotler and Armstrong, 2012). So, complaint handling construct is a significant factor that affects the buyer level of satisfaction positively if well handled.

Innovation means to create a new product or make and implement a new process; the primary motive of innovation is to gain sustainable competitive edge or enhance the performance of the organization and to get customer satisfaction (Leonard-Barton, 1992 cited in Naveed et al. 2012). But it does not mean that innovation is all the time dealt with a completely novel issue that is launch in a market however it's also innovation to enter in a new market with new features (Naveed et al., 2012). When term innovation used, it means advent of something new by companies that satisfy its customers and growth the marketplace share (Naveed et al., 2012). Oslo Manual (OECD) (2005) cited in Diaw and Asare (2018) described that innovation are goods, procedures, approach (organizational or marketing) that is substantially improved; develop originally, and those that have been implement from other companies. Garcia (2014) categorized innovation as New-to-the-world products (invention that create a whole new market) and New-to-the-firm products (products that take the firm in a new direction). According to Garcia, New to the firm are not new to the world, but are new to the firm, takes this form: additions to existing product lines-product line extensions, flankers, or brand extensions; improvement or revisions to existing products-minor changes to improve existing products; repositioning-products that take on new uses; and cost reductions-products that replace existing products by providing similar performance at a lower cost. Kucuk (2017) stated that the primary precedence of the innovation must be to fix consumers' problems while enjoying a competitive advantage over available alternatives in the market. Thus, innovation is helpful strategy to enhance buyers' level of satisfaction and compete in the marketplace.

Technology mean is 'a set of processes, tools, methods, procedures and equipment used to produce goods or services' (Schroeder (1989); Howells (2005) cited in Ryding, 2010). The fast transforms in the technology are defied for the companies to satisfy the customers and to make their loyalty through innovative products (Naveed et al., 2012). Naveed et al. (2012) stated that when a company makes revolutionary product, customer satisfaction is achieved and the loyalty of the customers also increases towards their product. Innovation influence customer satisfaction in each organization due to the fact that organization brings revolutionary adjustments in its goods to get customer satisfied and meet their needs (Naveed et al., 2012). Martin (2019) explained that Company has to try incessantly to introduce changes and upgrades to their products to make them more attractive to target audience. Martin (2019) also stated that keeping your customer's test and changing requirements in mind is of utmost importance, especially when you're competing with so many other companies. ECAFCO, due to outdated technological manufacturing lacks new product developments that are new for its company and

including particleboard varieties which mostly needed by market, but not new to competitors and customer (Company Report, 2012). Gebi (2015) also explained in his study as the production machinery is outdated that established in 1966 G C. Thus, this technological incapability might affect buyer satisfaction.

Product availability is defined as the probability of a product being available in saleable circumstance while a customer comes to seek it on a store shelf (Moussaoui et al. 2016 cited in Drilon and Gabriel 2017). A company can have the best price and value in the marketplace with a matching message supported by promotion techniques, however if the product isn't always there while customers want it, customers and revenue are lost (Kucuk, 2017). Andrew (2010) also stated in such way that business have not only to make products that customer wants but also to make affordable to a sufficient number (enough quantity) to create profitable demand. So, Product availability might affects customer satisfaction.

Image and reputation are those relate to the organization and the popularity of its company identity (Graeme, John and Ruth, 2001). Organization's goodwill/image is the status of an organization and it is an actual cherished intangible asset. Goodwill or high reputation develops a promising image of the organization in the minds of the public/customers' (Public Administration Higher Study, 2020). A company image is the customer institutions to the organization or corporation making the product or providing the service (Keller, 2013). Keller (2013) stated that like individual brands, a corporate or company brand may evoke in consumers a strong association to a product attribute. A corporate image will rely up on some of elements which include the goods an organization makes, the actions it takes, and the way wherein it communicates to customers (Keller, 2013). According to Keller (2013) common product attributes, benefits or attitude are from its product quality and innovativeness; people and relationship-customer orientation; value and programs-concern with environment and social responsibility; and corporate credibility-expertise, trustworthiness and likability. Two specific product-related corporate image associations are high quality and innovation—deserve special attention (Keller, 2013). Keller (2013) stated client perceptions that organization makes offerings of the very best excellent due to the fact that a superb company image affiliation. Quality is one of the most important, if not the most important, decision factors for consumers; and an innovative corporate image association creates consumer perceptions of a company as developing new and unique marketing programs, especially with respect to product

introductions or improvements (Keller, 2013). Interestingly, consumers saw a company with an innovative corporate image as not only expert but also trustworthy and likable (Keller, 2013).

Reputation is described as a collective evaluation of a company's past actions and future prospects that describe the company's overall appeal to all its key parts when compared to other leading competitors (Fombrun, 1996; Roberts and Dowling, 2002; Fombrun and Shanley, 1990 cited in Zhao and Smith, 2006). It displays a corporation's general distinctiveness in the society (Dollinger, Golden and Saxton, 1997 cited in Zhao and Smith 2006). Provider's reputation impacts customer attitudes and beliefs with regard to customer satisfaction because it is an extrinsic information cue for the customer (Ping 1993; Selnes 1998 cited in Zhao and Smith 2006). Concerning ECAFCO, Gebi (2015) explained in his study that ECAFCO is the main Chip wood board generating organization in Ethiopia since long years. The company's particleboard due to its quality prescribed among customers (Gebi, 2015). So, this likeability of product might enhance buyers' satisfaction. This study measures supplier's image and reputation from product the company made, the relationship it has with customers/responsive to customer, and its credibility aspect only.

In general, as I understand from the existing literature and study document, customer satisfaction measurement is not precise, I suppose due to this reason many researchers employed different measurements which give them fruitful result depending the type and characteristics of population under study. Thus, the measurements/variables the researcher employees in this study are product quality, price, complaint handling, innovation, product availability and image and reputation to identify and analyzes factors affecting particleboard buyer's level of satisfaction, the case of ECAFCO S.C.

2.3 Empirical Review

Abkari and Radmand (2016) explained in their study 66% of unsuccessful organizations, failed since they did not consider their customer satisfaction as a priority. According to Hsieh et al., (2007) cited by Abkari and Radmand (2016) showed that in customer oriented organizations; fully satisfaction customers repurchase 6 times more than satisfied customers in a period of 1-2 years. Tuli & Bharadwaj (2009) cited in Thogori and Jane (2014) observes that satisfied customers are possibly to acclimatize a behavior of enhance in buy as well as a continuous buy from the firm. In addition, Hanif, M., Hafeez, S., Riaz, A.,(2010) stated that customer satisfaction is extremely essential as satisfied customer could assist in building good reputation

of brand and add value to the brand name and unfold a superb expression. Customer makes long term profitable association with brand, if they satisfied (Hanif, M., Hafeez, S., Riaz, A., 2010). Rahman, H. et al. (2014) concluded that customer satisfaction is a dynamic phenomenon. Therefore, keeping up preferred extent of customer satisfaction requires company proactive responsiveness in accessing, building & retaining satisfied customers for sustainable competitive advantages in marketplace (Rahman, H. et.al, 2014). In this study the researcher measures the particleboard buyers' level of satisfaction using the following six variables, the case of ECAFCO.

2.3.1 Product Quality

Customer satisfaction has actual effect on profitability and study conducted among a large sample of Swedish consumers discovered that product quality affects customer satisfaction, which in turn results in augmented profitability among corporations who provide quality products (Solomon et. al., 2006).

A lot of researches justifies that product quality is among the factor that affects the buyer satisfaction. Ismail, Nazief and Boge (2016) also proved that the product quality improvement and the competitive price could increase customer satisfaction. The study by Jahanshahi et al. (2011) shows that as there were high positive correlation among the constructs of customer services and product quality with customer satisfaction and loyalty. So Jahanshahi et al. (2011) found that the quality of product encourages customer satisfaction. Other researchers, Senthilkumar (2012) and Suhendar and Ruswanti (2019) study result showed that product quality has an effect on buyer satisfaction. Anwar and Christan (2016) also revealed that product quality is among the factors that influence and increase customer satisfaction. With respect to factors affecting customer preference in the selecting particleboard and MDF, Fatemeh, Majid and Amin (2013) found in their study about particleboard rank priorities for factors in the selection by consumers: Nile and screw holding ability, homogeneity in structure, edge strength of panel, durability and bending strength.

2.3.2 Price

Price can be used as a beneficial useful resource to boost revenue as well as customer satisfaction (Ehsani and Ehsani, 2015). Herrmann et al., (2007) show that while price perceptions instantly have an effect on satisfaction judgments as well as obliquely by

perceptions of price fairness. Suhendar and Ruswanti (2019) also found that price perceptions affect customer satisfaction. Ali et al. (2010) found that as consumer satisfaction and price reasonability has significant association. According to Ali et al. (2010) the customers can leave the organization if he/she gets more reasonable prices to other providers. Ali et al. (2010) proved that fairness of price is the strongest determinant of consumer satisfaction and the competitive advantage to retain consumers for longer period of time. Hanif, M., Hafeez, S., Riaz, A., (2010) stated that price fairness is refers to consumers' assessments of whether a seller's price is reasonable, acceptable or justifiable. Hanif, M., Hafeez, S., Riaz, A., (2010) indicated in their study as price fairness had a significant effect on customer satisfaction. Ismail, Nazief and Boge (2016) also found that as competitive price could increase customer satisfaction. Malik et al. (2012) indicated that price has significant association with customer satisfaction. Malik et al. (2012) found that increase in price has shown to have a negative impact on customer satisfaction. Ismail, Nazief and Boge as indicated in their study the comparisons with previous research give an explanation for that the price and product quality has a good degree of generality to enhance consumer satisfaction. Anwar and Christan (2016) concluded in their study customer satisfaction can affected by many factors such as product quality, price quality and service quality and marketplace. In addition, as Kotler and Armstrong (2012) stated the study finding, even in an improved economy, Fifty five percentages of purchasers say they could instead get the attractive price than the good brand. So according to this study nearly two-thirds say they will now shop at a different store with lower prices even if it's less convenient. Thus, to increase customer satisfaction company must consider, and set the right or fair price.

2.3.3 Complaint Handling

Some companies suppose they're getting a sense of customer satisfaction by tallying complaints, but research show that while customers are dissatisfied with their purchases about 25 percent of the time, only about 5 percent complain (Kotler and Keller, 2012). The rest 95% either sense complaining isn't always really well worth the attempt or don't understand how or to whom to complain. Customers simply prevent purchasing from the organization. Among the clients who list a complaint, 54% to 70 % will make business with the organization again if their complaint is determined (Kotler and Keller, 2012). According to Kotler and Keller (2012) the percent surprisingly increased to 95 percent if the customer feels the complaint was resolved quickly. So customers whose complaints are satisfactorily resolved inform an average of 5 people about the good treatment they received (Kotler and Keller, 2012). The average

disappointed client, but gripes to 11 customers. If every of those tell nevertheless other people, the number exposed to bad word of mouth may grow exponentially (Kotler and Keller, 2012). No matter how flawlessly designed and applied a marketing program is, errors will happen (Kotler and Keller, 2012). The best thing a company can perform is make it uncomplicated for customers to complain (Kotler and Keller, 2012). Suggestion forms, toll-free numbers, Web sites, and e-mail addresses permit for quick, two-way communication (Kotler and Keller, 2012). The 3M Company claims that over two-thirds of its product development thoughts come from listening to customer complaints (Kotler and Keller, 2012). Given the potential downsides of having an unhappy customer, it's critical that marketers deal with negative experiences properly (Kotler and Keller, 2012).

Although a large percentage of consumers do not complain, it is still in the marketer's best interests to be responsive when any consumers do (Hoyer and MacInnis, 2010). Rahman, H., et al. (2014) also found that company achievement is related to with responsiveness to customer; higher responsiveness to customer leads to higher customer satisfaction. Customers get dissatisfied when they are not entertained appropriately concerning their complaints (Rizwan and Ganesh, 2011). In their study Rizwan and Ganesh found that about 50% of customers are satisfied and 50% are the customers who do not stand in the category of satisfaction. Customer care and complaint management system may impact very negatively if not handled in a strategic way (Rizwan and Ganesh, 2011).

Speedy reaction is important: fifty seven percentage of the consumers in one survey stated that how speedy a website responds to e-mail affects their decision to shop for from that site in the future(Hoyer and MacInnis, 2010). According to Hoyer and MacInnis (2010) clearly, clients could be greater happy and much more likely to shop for once more in the event that they get a rapid reaction, mainly if it entails getting a reasonable exchange/refund policy or money back. Dissatisfied customers who have been treated fairly can become even more loyal in the future (Hoyer and MacInnis, 2010). For example, a customer who installation a complaint website to publicize his issues with a Sony electronics product transformed the web website online to an enthusiastic fan site after the organization resolved the problem (Hoyer and MacInnis, 2010). So, if company handle complains wisely and give quick response by careful listening to customers' buyers' level of satisfaction enhanced.

2.3.4 Innovation

Gebi (2015) in his study indicated that as ECAFCO machinery was outdated and its production capacity declined. When the buyers B2B, Joseph and William (1999) cited Balakrishnan and Wernerfelt (1986) indicated that a competing technology offers benefits to the buying firm. For example, according to the study another big reason behind Toyota's achievement is its manufacturing (Kotler and Keller, 2012). The company is the master of lean production and incessant development so that its plants can produce as many as eight distinctive models at the same time, bringing huge increases in productivity and market responsiveness (Kotler and Keller, 2012). Petr, Jiri and Maria (2014) stated that companies logically have to continuously improve product quality based on the requirements of customers, and maintain customers' satisfaction amongst others via quality of their products.

Previous studies indicated that innovation has a positive effect on customer satisfaction. For example, Naveed et al. (2012) in their study, innovation is treated as an independent variable, customer satisfaction as moderating while brand loyalty as dependent variable. Naveed et al. found that as there is a positive association between innovation and customer satisfaction. Daragahi (2017) also found that innovation has an effect on customer satisfaction and Daragahi proved that more innovations improve customer satisfaction. So, according to Panayides (2006) cited in Diaw and Asare (2018) in order to survive in current conditions of market, firms within the industry must enhance their innovation capabilities to satisfy market demands and customer preferences to maintain a long-term competitive advantage. Even the study by Anderson et al. (2004) showed that if businesses fail to satisfy customers as effectively and efficiently as competitors, customers and investors turn elsewhere. Diaw and Asare (2018) found that a significant positive relationship between innovation and customer satisfaction. Diaw and Asare (2018) determined that as product and service innovation is believed to be the key in satisfying and retaining customers. This study's concern is to measure innovations which are new to the firm as of sophisticating production and information technology, product improvement and development and its effect on buyer satisfaction.

2.3.5 Product Availability

With regard to product availability a lot of researchers study the effect of product availability on customer satisfaction, the case of retailer store. But this study measures product availability in manufacture/supplier store. Evidence from prior studies; Oliver (2012) indicated that the

availability of product frequently possibility to boom revenue and consumer satisfaction. Supplier needs to deliver the right quantity at the right time since poor availability mean dissatisfied customers and poor financial performance over the long run, and can cost at least 5% of sales (Oliver (2012). For example, according to Akiva (2009) cited in Thogori and Jane (2014) also confirmed that inadequacy of sufficient stocks imply that business firms aren't capable of match supply and demand and this highly impact customer satisfaction and the company's bottom line and or revenue. Study on retailer industry by Ranjan and Puri (2012) also found that lack of availability of product or out-stock has negative impacts on the customer's satisfaction, and Emmelhainz et al. (1991) cited in Ranjan and Puri (2012) also indicated that 32% switched brands, and 41% bought other product or variety, even as 14% intended to visit to a different shop. Thus, when supplier/manufacturer sold and or distributes the product directly, availability of product in store might affect buyers' level of satisfaction.

2.3.6 Supplier's Image and Reputation

Gupta (2002) cited in Mekonnen (2018) found that there is evidence between corporate and reputation which helps competitive advantage for the firms by successfully differentiating it from competitors. The advantages are including, willing to purchase, willingness to pay a premium price, and lead to customer satisfaction. Stephen et al. (2007) cited Bloemer and Ruyter (1998) stated that image does affect satisfaction, which in flip direct to store loyalty in the situation of retailing. Diaw and Asare (2018) cited Anderson et al. (2004) also mentioned satisfaction level established by purchaser's eagerness to pay greater and tremendous word of mouth for a specific brand. Zhao and Smith (2006) also indicated that supplier reputation was significantly related to buyer economic satisfaction, to buyer social satisfaction, and to buyer trust. Their study result indicated that reputation is linked to both economic and non-economic satisfaction. Satisfied customer could assist in building good reputation of brand and add value to the brand name and unfold a superb expression (Hanif, Hafeez and Riaz, 2010). According to Hanif, Hafeez, and Riaz customer makes long term profitable association with brand, if they satisfied. Though the case of study was on Hospitality Industry, Mekonnen (2018) found that service quality, price and corporate image significantly and positively affect customer satisfaction.

2.4 Conceptual Framework

With the use of the related literature conceptual framework helps to hypothesize and test certain relationships is designed as the following. In this research there are independent and dependent variables. While the independent/predictor variables are product quality, price, complaint handling, innovation, product availability, and supplier's reputation and dependant/response variable of this study is particleboard buyers' level of satisfaction. Thus, this dependent variable expected to be influenced by independent variables (See Figure 1).

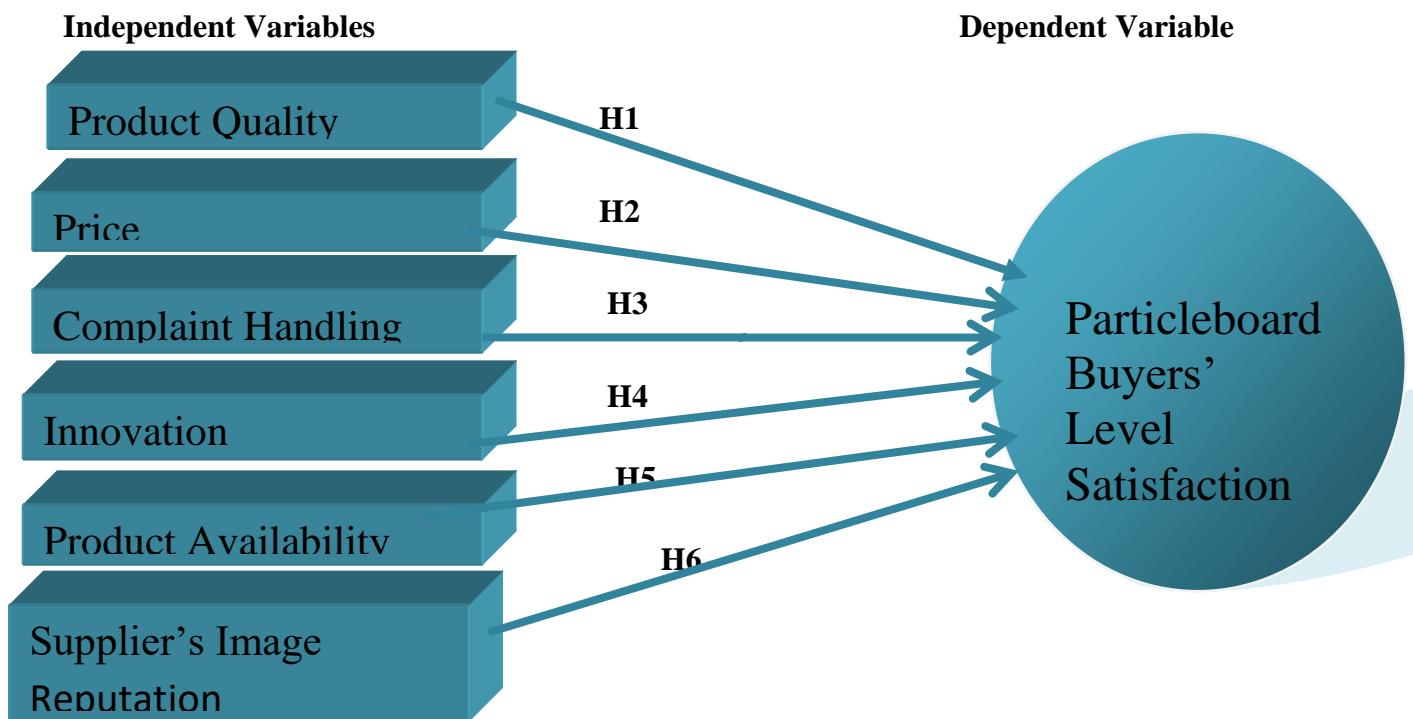


Figure 1: Conceptual Framework (developed from literature Review)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter deals with research methodology employed to carry out the research. In this chapter description of the study area, research approach, research design, population and sample, data source and type, data collection technique, ethical consideration, data analysis is discussed.

3.2 Description of the study area

The study area of which sample selected from was Addis Ababa, Ethiopia. So the target populations of this study were only business buyer, customer of Ethiopia Chipwood and Furniture Share Company (ECAFCO) found in Addis Ababa, and purchased particleboard from the company.

3.3 Research Approach

The researcher employed quantitative research approach in order to study factors affecting particleboard buyers' level of satisfaction. Research approaches are a plan and procedure for the research that span the decision from broad assumption to detail methods of data collection, analysis, and interpretation (Creswell, 2009). Research approach classified as qualitative, quantitative and or combined techniques (Creswell, 2009).

However, the researcher selected to employed quantitative approach depending on purpose of research, research questions and mode of enquiry designed. Quantitative approach entails research that employ statistical analyses to acquire their findings. Key features include formal and systematic measurement and the use of statistics (Marczyk, Dematteo and Festinger, 2005). This approach employed to compute numeric data that will collected in the form of survey questionnaires.

The study is categorized as quantitative if the variation in a phenomenon, situation or issue quantified. Also quantitative research approach is more suitable to verify the degree of a problem/phenomenon and where question is predetermined (Ranjit K., 2011). As well Leedy

and Ormrod (2001) cited in Carrie W. (2007) mentioned that quantitative research is specific in its surveying and experimentation, as it builds upon existing theories.

A quantitative approach was used “as it is suitable to test relationships using hypothesis” (Zikmund 2003). This survey method will be used to “easily facilitates the collection of data from large group of respondents since it requires minimum investment to develop and administer and is relatively easy for making generalization” (Zikmund, 2003). Quantitative approach best, if the problem call for (a) the identification of factors that influence an outcome; (b) the utility of an intervention or and understanding the best predictors of outcome; also to test a theory and generalized the finding /explanatory; if the topic is not new or addressed with many researchers (Johan W. Creswell and J. David Creswell cited in METHODSPACE, 2019). Similarly, Nikita Th. (2020) stated that using quantitative analysis is works better if theory or hypothesis wants to test or confirm.

Thus, the best qualified approach to undertake this study is quantitative since it fit with research purpose, research problem and question as well mode of inequity designed.

3.4 Research Design

Research design refers to the plan used to examine the question of interest (Marczyk, Dematteo and Festinger, 2005). To analysis factors affecting particleboard buyers’ level of satisfaction, the case of Ethiopia Chipwood and Furniture Company, both descriptive and explanatory techniques were employed. While descriptive study used to describe what is prevalent with respect to the issue/problem under study and explanatory research attempts to clarify why and how there is a relationship between two aspects of a situation or phenomenon (Ranjit K., 2011).

This study used descriptive study to describe the factors affecting particleboard buyers’ level of satisfaction as well as used to describe the demography/customer information as it is whereas used explanatory study to analyze the determining factors and or determine the relationship between variables.

3.5 Population and Sampling Technique

According to Marczyk, Dematteo and Festinger (2005) every one of individuals which are significant to the researcher is population. Thus, the population is the entire collection of all observations of interest to the researchers. Selecting participants is one of the most important aspects of planning and designing a research study (Marczyk, Dematteo and Festinger, 2005).

The populations considered in this study were business buyer, customers of ECAFCO. The study target location was only Addis Ababa City.

Sampling is the process of selecting a few respondents (a sample) from a bigger group (the sampling population) to become the basis for estimating the prevalence of information of interest to you (Ranjit K., 2011). Or it is a representative portion of the population which is selected for study (Robert and Richard, 2008).

The sampling design for this population was convenience sampling that is nonprobability sampling. Nonprobability sampling designs are used when the number of elements in a population is either unknown or cannot be individually identified (Ranjit K., 2011). Convenience sampling involves selection of participants because they are convenient and accessible (Robert and Richard, 2008). Of a nonprobability sampling convenience sampling is the most suitable sampling for quantitative research approach, and mostly used by marketing research. This approach enables to obtain a large number of completed questionnaires quickly and economically (Zikmund, 2003).

The reason why the researcher not uses the probability random sampling and obliged to employed nonprobability convenience sampling because of lack of customers list, so this make difficult to select the sample frame randomly and moreover not easy to find the customers of the company that found in different part of Addis Ababa sub city and as well as it would be economically expensive and time consuming. Thus, the researcher choice to uses convenience sampling which helps to collect the data from those who are the most accessible customer's of the company.

Sample Size

The sample size for this study was determined by using the formula developed by Cochran (1963) the equation 1 to yield a representative sample for proportion:-

$$no = \frac{Z^2 pq}{e^2} = \frac{(1.96)^2 \times (.5) (.5)}{(0.05)^2} = 385$$

Where

no = Sample size

e = the desired level of precision

p = the estimated proportion of an attribute that is present in the population, and q is $1-p$.

Z^2 = the abscissa of the normal curve that cuts off an area α at the tails ($1 - \alpha$ equals the desired confidence level, i.e. 95%). The value of Z is found in statistical tables which contain the area under the normal curve.

The above sample size is the representative sample proportion at 95% confidence level and 5% precision when the population is large and unknown.

3.6 Data Source and Type

This study is based on survey questionnaire and so it employed the primary source in order to achieve the research objective and answer research questions. The data collected consist of quantitative data. Quantitative approach was employed to collect numerical data designed in the form of structured survey questionnaires with the uses of liker scale.

3.7 Data Collection Procedures

The data collection procedures employed by research was questionnaires. Accordingly, structured questionnaires were developed and distributed to ECAFCO customers to collect quantitative primary data. A five liker rating scale measurement used that the respondents asked to indicate their level of agreement and disagreement. The questionnaire has two sections: the first section deals with collecting personal information of participants using a nominal scale which have five questionnaires, and the second section is about customer intention factors affecting their level of satisfaction which measure the dimensions of the hypothesized factors.

Under the second section, close-ended structured questionnaires are designed that answered with use of liker scale. Therefore, a total of 37 questionnaires designed to analyses factors affecting buyers' level of satisfaction using six measurements such as product quality, price, complaint handling, innovation, product availability, and supplier image and reputation. Each of measurement has six, four, six, five, three, and six items respectively. And seven items designed with respect to the six independent variables to measure overall satisfaction. While questionnaires related to product quality, innovation and product availability totally developed by researcher whereas some of questionnaire related to price, complaint handling, and supplier's image and reputation with modification adopt from Mekonnen (2019); Seble (2016); Sisay (2016); Million (2013); and one from Zhao and Smith (2006) which related to overall satisfaction with respect to supplier reputation. So, the questionnaire items adopt from

Mekennen and Seble are (No 7 & 10) and (No 12, 13, 15 &16) whereas from Sisay and Million are (26 &27), (28&29) respectively. The left developed by the researcher.

The English version of the questionnaires translated to Amharic version to distribute the questionnaires for the respondents. The researcher has modifies the questionnaires when necessaries. The customers were selected based on their willingness and convenient. The data were collected from the customers at the company as well as by going to where the company customers were available that is their sales display/shop such as marketo, mesalemia, Piasa, Megenagna, Shoala etc, and working offices.

3.8 Data Analysis

Statistical procedures allow researchers to describe groups of individuals and events, examine the relationships between different variables, measure differences between groups and conditions, and examine and generalize results obtained from a sample back to the population from which the sample was drawn (Marczyk, Dematteo and Festinger, 2005).

Data analyses is the process whereby researchers take the raw data that have been entered to the data matrix and create information that can be used to tackle the objective for which the research was undertaken. The researchers should take the raw data to present in the form of table, charts or graphs in order to be observed the total distribution on a single variable or the pattern of relationships between two or more variables (Kent, 2007). In this study table and graphs was used.

The collected data with uses of survey questionnaire from primary source will analyzed using both descriptive (mean, frequency and standard deviation) and inferential statistical of linear regression analysis with the help of a Statistical Package for the Social Sciences (SPSS 23.0) version. Linear regression analysis used to test the developed hypotheses and make prediction.

3.9 Model specification

The researcher employed the correlation and multi linear regression between the factors affecting buyers' level of satisfaction. Linear and multiple-model regression analysis are conducted in order to see how much these variable affect buyers' level of satisfaction. So, buyers' level of satisfaction(BLS) taken as dependent variable and Product Quality (PQ), Price (PR), Complaint Handling (CH), Product Availability (PA), Innovation (INNV), and Supplier's Image and Reputation (SIR) are take as independent variables.

The linear regression model represents the conceptual framework of this study mathematically expressed as follow:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_5 X_6 + \epsilon \dots \dots \dots (1)$$

$$OBS = \alpha + \beta_1 PQ_1 + \beta_2 PR_2 + \beta_3 CH_3 + \beta_4 PA_4 + \beta_5 INNV_5 + \beta_5 SIR_6 + \epsilon \dots \dots \dots (2)$$

Where:

Y= OBS (dependent variable)

α =is a constant (the intercept of the model);

β=is regression coefficients of X_i which indicates the mount of change in Y given a unit change in the X_i variables and

$X_1 = PQ$

$X_2 = PR$

$X_3 = CH$

$X_4 = PA$

$X_5 = INNV$

$X_6 = SIR$

ε=is the error term

Under the assumption of

- $\epsilon \sim N(0,1)$ mean zero and variance 1
- Linear relationship between outcomes (Y) and explanatory variable X

- Outcome (Y) should be normally distributed for each value of explanatory variable(X)
- Standard deviation of (Y) should be approximately the same for each value of (X) fixed independent observations
- The observations(explanatory variables) should be independent

Description of Variable

The conceptual framework of this study contains two main categories of variable that is dependent and independent variable.

Buyer Satisfaction: is dependent variable which might be affected by product quality, price, complaint handling, innovation, product availability and Supplier's image and reputation.

Product Quality: is independent variable high product quality increases buyers' level of satisfaction.

Price: is independent variable so setting fair price enhances buyers' level of satisfaction.

Complaint Handling: is independent variable handling complaint (response speed and access system) increases buyers' level of satisfaction.

Innovation: is independent variable so continuous improvement of product and innovating process increases buyers' level of satisfaction.

Product Availability: is independent variable so availability of particleboard at company store at any time buyers need enhances buyers' level of satisfaction.

Supplier's Image and Reputation: is independent variable so high trust /belief and perception about company and company's particleboard product increase buyer level of satisfaction.

3.10 Ethical Consideration

In order to make the study ethically acceptable, the researcher respects the right of study participants: participants were briefed about the aim of the study and will be asked for their cooperation to solve the problem under study. There should be no bias or discrimination in the selection and recruitment of research participants. And also respondent name wasn't mentioned, and all data is collected for the purpose of the study and therefore would be kept confidential.

3.11 Validity and Reliability

Whilst validity relates to the appropriateness of the measure to assess the construct it purports to measure, reliability relates to the accuracy and stability of a measure (Robert and Richard, 2008).

3.11.1 Validity

Robert and Richard (2008) stated that validity concerned about to what extent does the testing instrument actually measure the construct/concept/variable it purports to measure? So validity relates to the questions: ‘what does the assessment device measure?’ or ‘Is it measuring what it is supposed to measure? Validity is hard to measure afterwards, thus it must be confirmed before the questionnaire is sent out. The questions should measure relevant issues unambiguously and they should cover the entire research problem. Validity is always related to the theory it is applied to and the concepts of the theory. It can be approached in two different ways: internally and externally. Internal validity will tell if the measurements of the research match with the concepts presented in the theory section. External validity tests if other researchers arrive to the same results and conclusions from the research material (Heikkilä 2001). To enhance the validity the researcher careful designs the relevant questionnaire, and rechecked with advisor before being sent out, not to overlook the essential point missed.

3.11.2 Reliability

Reliability is dependability of a measurement technique, and concerned with the consistency (Robert and Richard, 2008). Reliable study is replicable; accordingly to be replicable, the finding of the study must be consistent and stable this called reliability (Robert and Richard, 2008).

Reliability shows how precise the results are. Reliability can be examined both internally and externally. Internal reliability is determined through measuring same statistics item more than one times. The dimension is dependable is reliable, if the end result is the identical every time. External reliability means that the measurements can be repeated in different studies and situations. A reliable study requires the same results as in the original study. Low reliability decreases validity, but nonetheless reliability is independent from the validity of the research (Heikkilä, 2001).

If the dimension is dependable, then there may be much less risk that the acquired rating is because of random elements and dimension blunders. Measurement reliability could be

measured with use of statistical evaluation which expressed as a correlation coefficient that tells us something gap proximately the connection among units of scores/variables. So, this research engaged Cronbach's alpha to estimate the inner consistency of variables. It is a reliability coefficient that indicates how well the items in a set are positively related to one another. Structured questionnaires with liker-scale would be used to remove unstructured answers.

Moreover, Cronbach's alpha is a coefficient of reliability used to measure the internal consistency of the scale; it represented as a number between 0 and 1 and items which scored above the acceptable value are maintain. According to Tavakol & Dennick (2011) stated that if a research study has more than one construct, it may not be logic to report the score alpha for the study as a whole as the question that have large number will enhance the scale score of alpha.

In principle therefore, alpha should be calculated for each of the concepts rather than for the entire test or scale. According to Zikmund et al. (2010) reliability scale is fair when Cronbach's alpha score is between 0.6 and 0.7; and adequate when it is equal or above .70. Thus, 0.6 is the minimum scale accepted while 0.7 and above is the higher scale accepted in this study.

In order to increasing reliability and minimizing measurement error the administration of measurement strategies should be consistent across all of the participants taking part in the study. Second, the researchers should make certain that the participants understand the instructions and content of the instrument or measurement strategy. So, the researcher provides questionnaires with language participant understand and if necessary clarifies for them. Third, the researcher practice before the study begins or entered in to data collection. Finally, every effort should be made to ensure that data are recorded, compiled, and analyzed accurately. Data entry should be closely monitored and audits should be conducted on a regular basis.

The coefficient alpha range for each variable is analyzed, the finding indicate that all the independents and dependent variable of this study met the acceptable level since the reliability test conducted for each variable of the instrument was adequate enough as shown form table 3.1 below. So, we conclude that each construct are understood by most of the respondents. The result of reliability test for six independent variable product quality, price, complaint handling, innovation, product availability, supplier's image and reputation is summarized in table 3.1 below.

Table 3.1: Cronbach's Alpha Data of Reliability

Variables	Cronbach's Alpha	No of Items
Independent Variables		
Product Quality	0.770	6
Price	0.710	4
Complaint Handling	0.830	6
Innovation	0.881	5
Product Availability	0.794	3
Supplier's Image and Reputation	0.802	6
Dependent Variable		
Buyer Satisfaction	0.810	7
No of Items		37

Source: Own survey (2021)

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

In this chapter, the data collected is analyzed, interpreted, discussed and presented using the statistical tools which includes descriptive, correlation and multi-linear regression. SPSS version 23.0 was used to analyze the data. The returned questionnaires; respondent's information; the descriptive analysis; correlation, assumptions for regression and regression analyses were carefully carried and interpreted accordingly.

4.2 Respondents Response Rate

Of a total of 385 questionnaires distributed, 355 were returned while 30 questions were rejected since the customers refused/declined to fill it. Therefore, 355 questions served as data for analyses to present the findings and draw a conclusion. These returned questionnaires represent 92.21% response rate.

4.3 Demographic Profile of Respondents

The demographic profile section depicted the general characteristics of the respondents who take part in the study, and it is vital part since it portray from whom data collected. The summary of sex, range of age and level of education presented (See Table 4.1).

The majority of the respondents were males i.e. 81.7%; while 18.3% were females. Regarding age range, 12.6% of respondents were between 27- 30 years, 40.6% between 31-40 years, 43.4% between 41-50 years, and 3.4% of them were greater than 50 years. The majority 84% of respondents age falling between 31-50 years.

The education status of respondents were secondary (9–12th Grade) 10.4%; college diploma 55.8%; first degree 32.1%; and second degree and above 1.7% respectively. Of which diploma and first-degree holders take up 87.9%. This shows that most of the respondents are educated, and they have fully understood the questionnaire infilling it.

Table 4.1: Demographic Profile of Respondents

		Frequency	Percent	Cumulative Percent
Gender	Male	290	81.7	81.7
	Female	65	18.3	100
	Total	355	100	
Age Group	27-30	45	12.6	12.6
	31-40	144	40.6	53.2
	41-50	154	43.4	96.6
	>50	12	3.4	100
	Total	355	100	
Level of Education	Secondary(9 – 12th Grade)	37	10.4	10.4
	Diploma	198	55.8	66.2
	First Degree	114	32.1	98.3
	Second Degree and Above	6	1.7	100
	Total	355	100	

Source: Own survey (2021)

4.4 Descriptive Statistic on Purpose of Use and Particleboard Thickness Buyer Purchased

As shown from table 4.2 below, for inquiry with regard to “for what purpose the company’s particleboard is suitable to use”, majority 73.2% of the respondents reply that as the company’s particleboard suitable for interiors partition and ceiling, each occupy 43.9% and 29.3% respectively. This indicates that the company’s particleboard most suitable for construction. And 26.8% of respondents portray as it is also suitable for furniture making.

With respect to particleboard thickness, 8 mm is the most frequently purchased by buyers from the company which occupies 33.2%, followed by 13 mm (21.4%); 10 mm (19.2%); 16 mm (13.2%); 19 mm (9.9%) and other (customized particleboard) (3.1%). Customized particleboard is a panel prepared based on customers’ orders (See Table 4.2).

Table 4.2: Purpose of Use and Particleboard Thickness Purchased By Customers

		Frequency	Percent	Cumulative Percent
Purpose of Use	Interior Partition	156	43.9	43.9
	Ceiling	104	29.3	73.2
	Furniture	95	26.8	100
	Total	355	100	
Particleboard Thickness Customers Buy	8mm	118	33.2	33.2
	10mm	68	19.2	51.4
	13mm	76	21.4	73.8
	16mm	47	13.2	87
	19mm	35	9.9	96.9
	Other(Customized Particleboard)	11	3.1	100
		355	100	

Source: Own survey (2021)

4.5 Descriptive statistics Analysis and Interpretation

In order to assess satisfaction level of ECAFCO’s customers, a five point liker scale used. The descriptive statistics analysis analyzed using central tendency (arithmetic mean) and measure of dispersion (Standard deviation (SD)) to illustrate the average responses of respondents for each item and interpretation is concluded depending on grand mean of each independent variable. While the smaller the SD mean the smaller the spread of scores which indicates the respondents to some extend have similar opinion and the larger the SD mean the greater the dispersal of scores that is shows the respondents have diverse response. Also, as necessary, the research uses frequency percentage to interpret the data. The mean score used to interpret the descriptive statistics adopted from Sözen and Güven (2019). Show in appendix.

4.5.1 Product Quality

Regarding product/particleboard quality, the respondents were asked six items (See Table 4.3). So, the first ranked item is “Particleboard meets quality standard and uniformity in thickness” with mean score 2.54, the second item is “overall the quality of company particleboard” with mean score 2.48, the third item is “provide quality particleboard that fulfill buyer need” with mean score 2.47, the fourth item is “durability of particleboard” with mean score 2.46 and the fifth item is “company particleboard quality relative to competitors offering” with mean score

2.44 and the last is “delighted with company particleboard” with mean score 2.27. The grand mean of company’s product quality is 2.4437, which indicate that majority of respondent have disagreed on ECAFCO particleboard quality.

The result shows that the respondents have disagreed on company’s particleboard quality as of conformity/standard and durability. The study also revealed that customers aren’t delighted or satisfied with company product, thus, the company unable to provide quality particleboard which fulfills buyer need; this indicates that the company particleboard performance less than buyer expectation consequently the buyer dissatisfied. In addition, customers proved that as company product quality is lower than competitors offering. UNIDO (1990) publication also reported that as Company’s particleboard has low quality due to the fact that mostly not purchased by furniture sectors.

Depending on this, I conclude that ECAFCO’s particleboard has low quality and competitive in fulfilling buyer need. Evidence from previous study showed that Nile and screw holding ability, homogeneity in structure, edge strength of panel, durability, and bending strength of particleboard are among consumers selection criterion (Majid and Amin, 2013). So, in order to meet both construction and furniture sectors buyer expectation, company should produce particleboard according to conformity quality (standard set as baseline) and delivery durable particleboard than competitors in the industry.

Table 4.3: Product/Particleboard Quality

Item Statistics	Mean	Std. Deviation
The company particleboard meets quality standard and it thickness have uniformity	2.54	.974
ECAFCO provides quality Particleboard which fulfills buyers need	2.47	1.012
The company particleboard quality is good relative to competitors offering	2.44	.917
The company’s particleboard durability is good	2.46	.957
You are delighted with company’s particleboard quality	2.27	.850
Overall, the quality of company’s particleboard is very good	2.48	.937
Grand Mean = 2.4437		

Source: Own Survey (2021)

4.5.2 Particleboard Price

Here, under price measurement, the respondents were asked four items in table 4.4 below to investigate price fairness. The first item is “ECAFCO’s particleboard price fairness relative to competitors offering with score mean 3.22, the next item is “ECAFCO’s Particleboard price fairness” with mean score 3.19, the third item is “Price of particleboard relative to the quality it has” with mean 3.12, the fourth item is “Price information is clear and understandable to customers” with mean score 3.09. Regarding the company’s particleboard price, the respondents reply neutral response with grand mean score 3.1570. This show that customers of ECAFCO neither satisfied nor dissatisfied; they are indifferent toward particleboard price.

Table 4.4: Price of Particleboard

Item Statistics	Mean	Std. Deviation
ECAFCO Particleboard price is fair	3.19	.941
The company particleboard price is good relative to the quality it has	3.12	.968
The company particleboard price is fair and good than competitors	3.22	.970
Price information is clear and understandable to customers	3.09	.980
Grand Mean = 3.1570		

Source: Own Survey (2021)

4.5.3 Complaint Handling

The third independent variable is complaint handling. Under this variable, a series of six statements presented to respondents. As shown from table 4.5 below, the first ranked statement is “continuously buying company product and recommend it to other buyers” with mean score 2.53, the second is “system establishment to encourage complaint customers” with mean score 2.50, the third is “company policies and procedures” with mean score 2.49, The fourth is “talk positively about the product of the company” with mean score 2.37, the fifth is “takes feedback from customer and makes corrective action” with mean score 2.36, and the last is “response to the complaint quickly” with mean score 2.32. The result of descriptive statistics indicated that most of the respondents have disagreed with grand mean score 2.4286. This demonstrates that ECAFCO’s complaint handling system is completely poorest. So, ECAFCO should resolve the issue that prompted the customer’s disparagement as business buyers have a significant impact on company sales volume and revenue if they switched the company.

Table 4.5: Complaint Handling

Item Statistics	Mean	Std. Deviation
The company established system such as suggestion form/box, web site, e-mail, telephone line etc to encourage the complaint customers	2.50	.868
The company response to the complaint quickly	2.32	.889
The company policies and procedures considered the situation	2.49	.861
The company takes feedback from its customer and makes corrective action to delight its customers	2.36	.840
I will buy the company's product continuously and recommend ECAFCO particleboard to other buyers	2.53	.821
I will talk positively about the product of the company every chance I get	2.37	.858
Grand Mean = 2.4286		

Source: Own Survey (2021)

4.5.4 Innovation Practice

The study designed five items to assess ECAFCO innovation practices. The result of descriptive statistics shown in table 4.6 below, the first ranked statement from innovation is “sophisticating production technology than the competitors in the industry” with mean score 2.51, second is “provides improved new particleboard to satisfies customers need” with mean score 2.43, the third is “offer various sophisticated particleboard to satisfied customers' preference than the past” with mean score 2.37, the four item is “implemented website, email, social media, etc. to access timely and complete information for customers” with mean score 2.35, and the fifth item is “particleboard quality more improved than the past” with mean score 2.25. With respect to company's innovation practice, the majority of respondents reply disagree with grand mean score is 2.3831. This depicted that ECAFCO's customers are dissatisfied with company innovation practices. Thus, the company has to improve particleboard quality and offer various new particleboards to satisfy both existing and potential buyers, as well as has to sophisticate its production technology to meet buyer interest than competitors. In addition, company should also develop effective well-designed web, email, social media, etc. to makes business process

easy. In other words, company must use the best alternative tool and system to share update and complete information to the buying customers, thereby enhance buyer satisfaction.

Table 4.6: Innovation Practice

Item Statistics	Mean	Std. Deviation
The company's particleboard production technology is more sophisticated than the competitors in the industry	2.51	.890
The company provides improved new particleboard to satisfies its customers need	2.43	.852
The company's particleboard quality more improved than the past	2.25	.771
The company offer various sophisticated particleboard to satisfied its customers preference than the past	2.37	.842
The company has implemented website, email, social media, etc to access timely and complete information for its customers	2.35	.846
Grand Mean = 2.3831		

Source: Own Survey (2021)

4.5.5 Product Availability

Product availability is the fifth construct. A series of three items the respondents were asked to rank. The first ranked item is “able to supply adequate particleboard” with mean score 2.40, the next statement is “getting particleboard from the company store at any time with required quantity” with mean score 2.36, and third item is “no supply gab” with mean score 2.21. Thus, the finding of the descriptive statistics from table 4.7 indicates that majority of respondents show disagree level with grand mean of 2.3211 on product availability. Most of the respondents agree that as there is supply gab. So if company cannot change this situation or provides sufficient product to the buyers, the buyers in the long run may be dissatisfied and forced to leave the company. Hence to keep and satisfies its customers base continuously, the company should produce volume particleboard and makes product available per buyer need.

Table 4.7: Product Availability

Item Statistics	Mean	Std. Deviation
The company could supply adequate particleboard product to the buyers	2.40	.715
You can get particleboard from the company store at a time you needed with required quantity	2.36	.712
There is no supply gab	2.21	.709
Grand Mean =2.3211		

Source: Own Survey (2021)

4.5.6 Supplier's Image and Reputation

Under final measurement-supplier's image and reputation, the respondents have been asked six items to rates. The finding from descriptive statistics in table 4.8 display that highest mean score is "willing to buy a particleboard which is produced by well-known producers" indicating mean difference 3.44, the second items are "company's particleboard reputation" and "communicates and treat customers in respectful manner" which have same mean score 3.22, the third item is "trust on company particleboard and recommend to other buyers" with mean score 3.14, the fourth item is "likability of company's particleboard among buyers" with mean score 3.03 and last statement is "trust on quality of ECAFCO particleboard" with mean score 2.98. The result of descriptive statistics indicates that most of the respondents have neutral response, with grand mean score 3.1714 on supplier's image and reputation. This indicates that customers are indifferent regarding the company's image and reputation.

Table 4.8: Supplier’s Image and Reputation

Item Statistics	Mean	Std. Deviation
The company’s particleboard has reputation	3.22	.994
The company’s particleboard would be very good quality so that it is likeable product among buyers	3.03	.985
I trust the quality of ECAFCO particleboard	2.98	1.008
ECAFCO is the company I trust it most and so that I recommend it to others particleboard buyers	3.14	1.034
I am willing to buy a particleboard which is produced by well-known producers like ECAFCO	3.44	.941
The company communicates and treat its customers in respectful manner	3.22	1.032
Grand Mean = 3.1714		

Source: Own Survey (2021)

4.5.7 Summary of Descriptive Statistics

The table 4.9 below indicates the summary of descriptive statistics grand mean value of each six IV’s designed to measure the satisfaction level of ECAFCO’s customers. As finding shows, the supplier’s image and reputation takes the highest grand mean score (=3.1714), followed by price (=3.1570). The rest takes third to six rank respectively i.e., product quality with grand mean score (=2.4437), complaint handling with grand mean score (=2.4286), innovation with grand mean score (=2.3831) and the last is product availability with grand mean score (=2.3211). The grand mean score for buyer satisfaction (=2.5807). Standard deviation ranges from .59936 to .70864 this indicate that there was low variability in perception on variables observed, or the respondents has almost similar opinion on observed variables.

In generally, the result of descriptive statistics demonstrates that Ethiopian Chipwood and Furniture Company customers are dissatisfied, they are dissatisfied in product quality, complaint handling, innovation and product availability while indifferent in price and supplier image and reputation of the company.

Overall, the customers haven't changed their consumption behavior towards particleboard as a material, and therefore, it is advisable to maintain the existing position by implementing new improved quality particleboard with fair price in order to meets customer expectation. Thus, ECAFCO must revise it business strategies and to ultimately satisfies the customers and run the business in profitable manner than the rivals.

Table 4.9: Summary of Descriptive Statistics

Descriptive Statistics			
	N	Mean	Std. Deviation
Product Quality	355	2.4437	.64290
Price	355	3.1570	.70572
Complaint Handling	355	2.4286	.62968
Innovation	355	2.3831	.69196
Product Availability	355	2.3211	.59936
Supplier's Image and Reputation	355	3.1714	.70864
Buyer Satisfaction	355	2.5807	.67535
Valid N (listwise)	355		

Source: Own Result (2021)

4.6 Correlation Analysis

Correlations are possibly the most essential and valuable measure of relationship between two and or more measurements. Correlation coefficients range from -1.0 to $+1.0$. The closer it gets to 1.0 (whether it is negative/inverse relationship or positive/direct relationship), the stronger the relationship. While correlations of $.01$ to $.30$ are considered small, correlations of $.30$ to $.70$ are considered moderate, correlations of $.70$ to $.90$ are considered large, and correlations of $.90$ to 1.00 are considered very large (Marczyk, Dematteo and Festinger, 2005). In this study the Pearson's coefficient correlation was employed to determine the relationship between the variables.

The table 4.10 below shows the correlation between independent variables (product quality, price, complaint handling, innovation, product availability and supplier's image and reputation) and the dependent variable (overall buyers of satisfaction).

Table 4.10: Summary of Pearson's Correlation

Correlations								
		Product Quality	Price	Complaint Handling	Innovation	Product Availability	Supplier's Image and Reputation	Overall Buyer Satisfaction
Product Quality	Pearson Correlation	1						
	Sig. (2-tailed)							
	N	355						
Price	Pearson Correlation	.385**	1					
	Sig. (2-tailed)	.000						
	N	355	355					
Complaint Handling	Pearson Correlation	.306**	.262**	1				
	Sig. (2-tailed)	.000	.000					
	N	355	355	355				
Innovation	Pearson Correlation	.335**	.307**	.222**	1			
	Sig. (2-tailed)	.000	.000	.000				
	N	355	355	355	355			
Product Availability	Pearson Correlation	.441**	.402**	.288**	.368**	1		
	Sig. (2-tailed)	.000	.000	.000	.000			
	N	355	355	355	355	355		
Supplier's Image and Reputation	Pearson Correlation	.320**	.237**	.352**	.295**	.296**	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.000		
	N	355	355	355	355	355	355	
Overall Buyer Satisfaction	Pearson Correlation	.652**	.544**	.436**	.612**	.571**	.494**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	355	355	355	355	355	355	355

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

Source: Own survey (2021)

As indicated in table 4.10 above there is moderate correlations and positive significant relationship found between product quality and overall buyer satisfaction ($r=0.652$, $p<0.05$), price and overall

buyer satisfaction($r=0.544$, $p<0.05$), complaint handling and overall buyer satisfaction ($r=0.436$, $p<0.05$), innovation and overall buyer satisfaction ($r=0.612$, $p<0.05$), product availability and overall buyer satisfaction($r=0.571$, $p<0.05$), and Supplier's image and reputation and overall buyer satisfaction($r=0.494$, $p<0.05$) which are statistically significant at 0.95% level of confidence. As well as the result indicated there are small to moderate correlation with positive significant relationship exist between the six independent variables.

4.7 Multiple Linear Regression Assumptions

4.7.1 Linear Regression Assumption Test

The assumption test such as normality and linearity, multi-collinearity; homoscedasticity, auto-correlation, and outliers should be carried out before running linear regression to maintain data validity and robustness of the regressed result of the research.

4.7.2 Normality and Linearity

Normality of data distribution assessed using skewness and kurtosis, skewness which measure the overall lack of symmetry of distribution, and whether it looks the same to the left and right of the center of the point and its kurtosis which measure whether the data is peaked or flat relative to a normal distribution (Marczyk, Dematteo and Festinger, 2005). According to George and Mallery (2010) the absolute value of skewness and kurtosis should be within 2 (+2 to -2). The normal probability plot (p-p) graph also computed to test the normality of data. The value of the residuals is normally distributed, P-P plot for the model, the closer the dots lie to the diagonal line, and the closer to normal the residuals are distributed. The p-p plot for the model suggested that the assumption of normality of the residuals may have been violated. However, as only extreme deviations from normality are likely to have significant impact on the finding, the results are probably still valid (www.open.ac.uk). The finding from normal P=P plot reveals no violation of normality assumption. On the other hand, the linearity indicates the linear relationship between independent and dependent variables. So it characterized by straight line. It tasked by producing scatter plots of the relationship between independent variable and dependent variable (www.open.ac.uk). The study assessed the normality of data distribution using skewness and kurtosis (numerically) as well normal probability plot (p-p) graph (See on appendix). The finding justifies that all items that form the variables are normally distributed, show table 4.11 below.

Table 4.11: Normality Test (Skewness and Kurtosis)

Descriptive Statistics							
	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Product Quality	355	2.4437	.64290	.707	.129	-.727	.258
Price	355	3.1570	.70572	-.376	.129	-.863	.258
Complaint Handling	355	2.4286	.62968	.930	.129	-.109	.258
Innovation	355	2.3831	.69196	.984	.129	.270	.258
Product Availability	355	2.3211	.59936	.911	.129	.779	.258
Supplier's Image and Reputation	355	3.1714	.70864	-.296	.129	-.985	.258
Overall Satisfaction	355	2.5807	.67535	.617	.129	-.902	.258
Valid N (list wise)	355						

Source: Own Survey (2021)

4.7.3 Multi-Collinearity

Multi-collinearity is avoiding very high correlations between independent variable's (IV's) (Robert and Richard, 2008). It manipulates using Tolerance and Variance Inflation Factor (VIF). The VIF measure the impact of collinearity among the IV's in a multiple regression model on the precision of estimation. It expresses the degree to which collinearity among the predictors degrades the precision of an estimate (Robert and Richard, 2008). Typically, a VIF value greater than 10.0 is of concern (Robert and Richard, 2008; Pallant, 2007). Tolerance is an indicator of how much of the variability of the specified independent is not explained by the other independent variables in the model, and less than 0.10 indicated multiple correlation with other variables (Pallant, 2007). If VIF scores below 10.0, the assumption of multi-collinearity is fine, while tolerance score must be above 0.2 (www.open.ac.uk). So, the study result indicates that the regression models are free of collinearity since the maximum VIF and Tolerance value illustrated in table 4.12 are below the threshold value of 10 and above 0.2.

Table 4.12: Multi-Collinearity

		Coefficients ^a	
Model		Collinearity Statistics	
		Tolerance	VIF
1	Product Quality	.702	1.425
	Price	.759	1.318
	Complaint Handling	.809	1.236
	Innovation	.789	1.268
	Product Availability	.691	1.447
	Supplier's Image and Reputation	.790	1.266

a. Dependent Variable: Overall Buyer Satisfaction

Source: Own Survey (2021)

4.7.4 Homoscedasticity

The variability of scores for one variable should be roughly similar at all values of the other variable (Robert and Richard, 2008). The authors stated that Different between obtained and predicted dependent variable values should normally be distributed and variance of residuals the same for all predicted scores (homoscedasticity). These assumptions can be tested by inspecting residual scattered graphs and histograms. The finding of this study is acceptable since the scattered plot graph look like a random array of dots. Show in appendix part.

Another assumption, the value of residuals is independent using Durbin-Watson that is the individual data points to be independent from one another, or uncorrelated. The statistics can be varying 0-4 value. Below 1 and above 3 are causes for concern. Thus, as indicated in the model summary table 4.13 below the finding of the study show that **2.109** value, which is acceptable (www.open.ac.uk). In general, the data satisfied the assumption of multi-collinearity, normality of residuals, and homoscedasticity while no outliers were identified.

4.8 Multiple Regression Analysis

A multiple regression was performed between overall buyer satisfaction as the dependent variable and rating of product quality, price, compliant handling, innovation, product availability and supplier's image and reputation as independent variables. So, the result from

table 4.13 shows that the adjusted **R Square** up to 72.5% of the variation in buyer satisfaction is explained by variation in the six of the predicting variables taken together.

Table 4.13: Model Summary

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.851 ^a	.725	.720	.35731	2.109
a. Predictors: (Constant), Supplier's Image and Reputation , Price, Innovation , Complaint Handling, Product Quality , Product Availability					
b. Dependent Variable: Overall Buyer Satisfaction					

Source: Survey Result (2021)

As shown from model summary table 4.13 of the regression analysis, all independent variables had significantly contributed to the predication of buyer satisfaction. Evidence is the **R²** which revealed that up to **72.5%** of buyer satisfaction depends on six IV's explained in this study; the rest of the **27.5% depend** on other variables or factors that unexplained in this research. Also, the model indicates that as there is strong relationship between the six IV's and DV which is (.851).

Table 4.14: Analysis of Variance (ANOVA)

ANOVA ^a						
Model		Sum of Squares	df.	Mean Square	F	Sig.
1	Regression	117.031	6	19.505	152.782	.000^b
	Residual	44.428	348	.128		
	Total	161.459	354			
a. Dependent Variable: Overall Buyer Satisfaction						
b. Predictors: (Constant), Supplier's Image and Reputation , Price, Innovation , Complaint Handling, Product Quality , Product Availability						

Source: Survey Result (2021)

As show in table 4.14 above, Analysis of Variance (ANOVA) indicates that the model is significant (**F= 152.782, p=.000**) at the 5% level of significant. So, this implying that there is **statistically significant association between product quality, price, complaint handling,**

innovation, product availability and supplier’s image and reputation and buyer satisfaction. Or these six IV’s influenced DV (buyer satisfaction).

Table 4.15: Coefficients

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		β	Std. Error	Beta		
1	(Constant)	-.758	.119		-6.351	.000
	Product Quality	.330	.035	.314	9.348	.000
	Price	.185	.031	.193	5.986	.000
	Complaint Handling	.124	.034	.116	3.703	.000
	Innovation	.308	.031	.315	9.952	.000
	Product Availability	.176	.038	.156	4.614	.000
	Supplier’s Image and Reputation	.160	.030	.168	5.300	.000

a. Dependent Variable: Overall Buyer Satisfaction

Source: Survey Result (2021)

Unstandardized coefficients (β) have used to indicate magnitude of the unique contributions, and standardized beta weights can also be used to compare the relative contributions of each predictor (Robert and Richard, 2008).

As shown from the coefficients table 4.15 above the values of unstandardized coefficients (β) found as ($\beta = .330, P < .05$), ($\beta = .185, P < .05$), ($\beta = .124, P < .05$), ($\beta = .308, P < .05$), ($\beta = .176, P < .05$), and ($\beta = .160, P < .05$) for product quality, price, complaint handling, innovation, product availability & supplier’s image and reputation respectively & all are statistically significant. These significance levels indicate that all variables contribute significant and positive contribution to the buyers’ level of satisfaction. All hypothesis are accepted because the result of significance level is $< 0.05\%$.

The primary questions of this study were “To measure to what extent does ECAFCO’s product/particleboard quality, particleboard price, and product availability affects buyers’ level of satisfaction”. So, the study revealed that product quality /particleboard quality has the highest

degree of influence on buyer satisfaction followed by price, and product availability which is 0.330, .185 and .176 Beta respectively. But according to study result product quality have relatively the highest degree of impact on buyer level of satisfaction followed by innovation and price that are 0.330, .308 and .185 respectively, whereas the rest takes fourth to sixth rank that is product availability (.176), supplier’s image and reputation (.160), and complaint handling (.124). Thus, the first highest predictor of attributes is product/particleboard quality, second is innovation while the smallest is complaint handling.

From the above table 4.15 we computed the following regression Equation to Measure Buyer Satisfaction:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \epsilon \dots \dots \dots (1)$$

$$OBS = -0.758 + 0.330PQ + 0.185PR + 0.124CH + 0.308INN + 0.176PA + 0.160SR + \epsilon \dots \dots \dots (2)$$

Where:

Y= Overall Buyer Satisfaction

α =is a constant (the intercept of the model);

β1, β2, β3, β4, β5, β6 = the regression unstandardized coefficient of each IV’s variables.

PQ=Product Quality

PR=Price

CH= Complaint Handling

PA=Product Availability

INN=Innovation

SR= Supplier’s Image and Reputation

ε=is the error term

The second question the study designed to answer were, “How does complaint handling, innovation practices, and image and reputation of ECAFCO’s affect buyers’ level of satisfaction?” Based on unstandardized coefficient value (β) of regression model showed in table 4.15 above, the average amount of change in buyers satisfaction caused by a unit change in the six IV’s, in other word the unique contribution the six IV’s are analyzed. Hence, keeping other variable constant, for one unit increase in the innovation, the buyer satisfaction will increase by 0.308 units; for one unit increase in the complaint handling, the buyer satisfaction will increase by 0.124 units; and for one unit increase in the supplier’s image and reputation, the buyer satisfaction will increase by 0.160 units. The rest three variables, for one unit increase in the product/particleboard quality, the buyer satisfaction will increase by 0.330 units; for one unit increase in the price fairness, the buyer satisfaction will increase by 0.185 units; and for one unit increase in the product availability, the buyer satisfaction will increase by .176 units.

Since from the six IV’s, product/particleboard quality and innovation contributes the strongest unique effect on buyer satisfaction, so ECAFCO must give high attention to improve particleboard quality; and provide various latest particleboards to satisfy buyers’ need than the rivalry in the industry. As well, the company must establish the latest particleboard production machinery and adapt information technology to deliver timely information for its customers.

4.9 Hypotheses Testing

Depending on the finding from regression analysis table 4.15 above, the developed hypotheses of six IV’s (product quality, price, compliant handling, innovation, product availability, supplier’s image and reputation) are statistically significant at p -value is less than 0.05. So, accordingly, all the six hypotheses are accepted and retained in the model. Show summary of hypotheses finding in table 4.16 below.

Table 4.16: Summary of Hypotheses Result

Hypotheses	Reason	Result Or Decisions
H1: Product quality affects buyers' level of satisfaction.	$\beta=.330$ $t=9.348$ $P<0.05$	Accepted
H2: Price affects buyers' level of satisfaction.	$\beta=.185$ $t=5.986$ $P<0.05$	Accepted
H3: Compliant handling affects buyers' level of satisfaction.	$\beta=.124$ $t=3.703$ $P<0.05$	Accepted
H4: Innovation affects buyers' level of satisfaction.	$\beta=.308$ $t=9.952$ $P<0.05$	Accepted
H5: Product availability affects buyers' level of satisfaction.	$\beta=.176$ $t=4.614$ $P<0.05$	Accepted
H6: Supplier's image and reputation affects buyers' level of satisfaction.	$\beta=.160$ $t=5.300$ $P<0.05$	Accepted

Source: Survey Result (2021)

4.10 Discussion of Results

Buyer satisfaction is a key in order to form lucrative relationships with customers to protecting and developing customers and reaping their customer lifetime value (Kotler and Armstrong, 2012). So, the researcher motivated to assess the main core factors affecting particleboard buyers' level of satisfaction using six predictors. Multiple-linear regression implemented based on the research objective and to answer research questions that were planned to measure the extent and magnitude the six IV's has on DV (buyer satisfaction) as discussed in previous part of the study. The result from multiple-regression in table 4.15 shows that all the six IV's has a positive and statistically a significant result. As such the researcher accepted all the six developed hypotheses. A detailed of the discussion presented as follow:

H1 is accepted since $\beta=0.330$ at $P<0.05$ as presented in table 4.16. Product quality is the first significant factor in influencing buyer satisfaction in this study. Product quality is significantly different from zero and is important in the model. Regression coefficient of product quality 0.330 indicates that holding other factors constant, if product quality increases by 1% then buyer satisfaction will increase by 33%. Thus, Product quality contributes a strongest unique effect on buyers' level of satisfaction. So, buyers get satisfied if company provides standard and durable competitive quality particleboard. Consistent with this study a lot of study concluded that as product quality influence a customer satisfaction. Senthilkumar (2012); Suhendar and Ruswanti (2019) study result showed that product quality has an effect on buyer satisfaction. Ismail, Nazief and Boge (2016) also proved that the product quality improvement and the competitive price could increase customer satisfaction. Anwar and Christan (2016) also revealed that product quality is among the factors that influence and increase customer satisfaction. Likewise, Solomon et al. (2006) found that product quality affects customer satisfaction, which in turn results in augmented profitability among corporations who provide quality products. The study by Jahanshahi et al. (2011) found that the quality of product encourages customer satisfaction. Inconsistent with this study, Rahman (2014a) and Rahman, H. et al. (2014) found in their study finding as quality of the offering has an insignificant influence on customer satisfaction.

H2 is accepted as price fairness factor is significantly different from zero and is important in the model ($\beta =.185$ at $P<0.05$). This result indicates that price fairness positively and significantly affects buyer satisfaction. The regression of coefficient indicated that, holding other factors constant, a 1% increase of price fairness will lead to increase buyer satisfaction by 18.5%. Thus, customers get satisfied if the company particleboard price is fair relative to quality it has and competitors' in the industry. Making price information clear is also a vital of important in satisfying buyers. Price is the third most important predictor that has positive and significant influence on buyer satisfaction. The finding of this study similarly with Hanif, Hafeez and Riaz, (2010) that proved price fairness had an important influence on buyer satisfaction. Hanif, Hafeez and Riaz, (2010) stated that price fairness is refers to consumers' assessments of whether a seller's price is reasonable, acceptable or justifiable. Ali et al. (2010) proved that fairness of price is the strongest determinant of consumer satisfaction and the competitive advantage to retain consumers for longer period of time. Malik et al. (2012) indicated that price has significant association with customer satisfaction. Anwar and Christan (2016) concluded in their study customer satisfaction can affected by many factors such as product quality, price

quality and service quality and marketplace. Kotler and Armstrong (2012) stated the study finding, even in an improved economy, Fifty five percentages of purchasers say they could instead get the attractive price than the good brand. So according to this study nearly two-thirds say they will now shop at a different store with lower prices even if it's less convenient. Contrary to this study, Rahman, H. et al. (2014) found that as price has an insignificant impact on getting the customers satisfied.

H3 is accepted as $\beta=0.124$ at $P<0.05$. This third construct, complaint handling is the least significant factor in influencing buyer satisfaction in this study. The complaint handling is significantly different from zero and is important in the model. This result indicates that complaint handling is positively and significantly affects buyer satisfaction. Regression coefficient of complaint handling 0.124 implies that holding other variables constant, when complaint handling increases by 1% then the buyer satisfaction will increase by 12.4%. So, if a company establishing a system such as suggestion box, website, e-mail, telephone line etc. to encourage the complaint customers, response to complaint promptly, adapt flexible policies and procedures, taking feedback and making corrective action then buyers takes it positively and get satisfied accordingly they continuously buy company's product, talk positive about company product and further recommend to other buyers and vice versa. This study agree with Rahman, H., et al. (2014) also found that company achievement is related to with responsiveness to customer; higher responsiveness to customer leads to higher customer satisfaction. Rizwan and Ganesh, (2011) also found that about 50% of customers are satisfied and 50% are the customers who do not stand in the category of satisfaction. Similarly, near to Rizwan and Ganesh, in this study also overall on average about 48.6% customers of ECAFCO are those who are satisfied with the way company handled complaint while 51.4% are dissatisfied. Even though, a large percentage of consumers do not complain, it is still in the marketer's best interests to be responsive when any consumers do (Hoyer and MacInnis, 2010). According to Hoyer and MacInnis (2010) clearly, clients could be greater happy and much more likely to shop for once more in the event that they get a rapid reaction. For instance, the 3M Company claims that over two-thirds of its product development thoughts come from listening to customer complaints (Kotler and Keller, 2012). Given the possible downsides of getting an unpleasant consumer, it's important that marketers address with negative experiences properly (Kotler and Keller, 2012). Overall, Rahman, H. et.al (2014) indicated that keeping up preferred extent of customer satisfaction requires company proactive responsiveness in accessing, building & retaining

satisfied customers for sustainable competitive advantages in marketplace. Also, Tuli & Bharadwaj (2009) cited in Thogori and Jane (2014) observes that satisfied customers are possibly to acclimatize a behavior of enhance in buy as well as a continuous buy from the firm.

H4 is accepted since $\beta=.308$ at $P<0.05$, Innovation is the second significantly contributed to explain buyer satisfaction in this study. Innovation is significantly different from zero and is important in the model. The regression coefficient of innovation 0.308 implies that, holding other factors constant, a 1% increase in innovation will lead to increase buyer satisfaction by 30.8%. Therefore, innovation contributes the strongest unique effect on buyer satisfaction. Buyer satisfaction enhanced positively, if company continuously providing improved and latest various particleboards which meets customer need and preference, and use the latest particleboard production technology than competitors in the industry as well as access timely and complete information to the customers by implementing alternative information technology as website, e-mail, social media etc. This study agrees with Naveed et al. (2012) that showed innovation affect customer satisfaction positively. They showed that as there is positive association between innovation and customer satisfaction. Daragahi (2017) also found that innovation has an effect on customer satisfaction and Daragahi proved that more innovations improve customer satisfaction. Also, according to Panayides (2006) cited in Diaw and Asare (2018) in order to survive in current conditions of market, firms within the industry must enhance their innovation capabilities to satisfy market demands and customer preferences to maintain a long-term competitive advantage. Diaw and Asare (2018) also found that a significant positive relationship between innovation and customer satisfaction. Diaw and Asare (2018) determined that as product and service innovation is believed to be the key in satisfying and retaining customers.

H5 is accepted as $\beta=.176$ at $P<0.05$. Product availability is the fourth significantly important factor affecting buyer satisfaction in this study. Product availability is significantly different from zero and is important in the model. Therefore, Product availability contributes positive significant effect on buyer satisfaction. The regression coefficient of product availability 0.176 implies that, holding other factors constant, a 1% increases in product availability will lead to increase buyer satisfaction by 17.6%. This implies that if customer gets product at any time they need from the company store with required quantity and or company could be able to supply adequate particleboard then all these leads to buyer satisfaction. Similarly with this study, Oliver (2012) indicated that the availability of product frequently possibility to boom revenue and

consumer satisfaction. Supplier needs to deliver the right quantity at the right time since poor availability mean dissatisfied customers and poor financial performance over the long run, and can cost at least 5% of sales (Oliver (2012). For example, according to Akiva (2009) cited in Thogori and Jane (2014) also confirmed that inadequacy of sufficient stocks imply that business firms aren't capable of match supply and demand and this highly impact customer satisfaction and the company's bottom line and or revenue.

H6 is accepted because supplier's image and reputation has coefficient $\beta=0.160$ with the significant level $P<0.05$ has a positive effect on buyer satisfaction. Supplier's image and reputation is significantly different from zero and is important in the model. It is fifth significantly contributed in creating buyer satisfaction. Regression coefficient of supplier's image and reputation 0.160 implies that holding other variables constant, if supplier's image and reputation increase by 1% then the buyer satisfaction will increase by 16%. Therefore, supplier's image and reputation contributes positive significant effect on buyer satisfaction. This implies that if company's particleboard would be very good quality, both company and its particleboard is trustable and likable among buyers, this leads to buyer satisfaction, thereby buyers willing to purchase product and further recommend to others too. Additionally, the way company communicates and treats customer also significantly contributed to explain buyer satisfaction. The study finding agrees with Mekonnen (2018) that found out corporate image significantly and positively affect customer satisfaction; also with Bloemer and Ruyter (1998) cited in Stephen et al. (2007) image does impact satisfaction. In addition, Gupta (2002) cited in Mekonnen (2018) found that there is evidence between corporate and reputation which helps competitive advantage for the firms by successfully differentiating it from competitors. The advantages are including, willing to purchase, willingness to pay a premium price, and lead to customer satisfaction. Diaw and Asare (2018) cited Anderson et al. (2004) also mentioned satisfaction level established by purchaser's eagerness to pay greater and tremendous word of mouth for a specific brand. Satisfied customer could assist in building good reputation of brand and add value to the brand name and unfold a superb expression (Hanif, Hafeez and Riaz (2010). According to Hanif, Hafeez, and Riaz customer makes long term profitable association with brand, if they satisfied. Zhao and Smith (2006) supplier's reputation significantly related buyer social satisfaction and to buyer trust also consistent with this study from this point of view only.

CHAPTER FIVE

FINDINGS, CONCLUSIONS AND RECOMANDATIONS

5.1 Introduction

In this chapter, summary of research finding, conclusion of the findings, recommendations and area further researched are presented. The conclusions and recommendations drawn focused on addressing the objective, which was to examine the core factors affecting particleboard buyers' level of satisfaction of Ethiopian Chip wood and Furniture Share Company (ECAFCO) and their effect on buyer level of satisfaction.

5.2 Summary of Major Finding

The main objective of this study was to find out the core factors affect buyers' level of satisfaction. So, in order to examine buyer satisfaction influencing factors conceptual framework which was skeleton on six constructs (product quality, price, complaint handling, innovation, product availability and supplier's image and reputation) developed based on existing literature. Accordingly, the study was conducted to answer research question: "To what extent product quality, price and product availability, and how does complaint handling, innovation, supplier's image and reputation affects buyers' level of satisfaction in ECAFCO?".

The study was conducted in Addis Ababa on business customers of ECAFCO S. C, and 355(92.21%) of customers were returned the data. Based on research objective, inferential statistics of linear regression was used to analyze data and test the developed hypotheses and make prediction. Also, descriptive statistics used to describe data as it is. Hence, the finding of descriptive, correlation, and regression are presents as below:

The result of descriptive statistics used to describe respondents demography, purpose of use, and particleboard thickness buyers purchased and the six IV's buyer influencing factors with the use of frequency and the mean value.

Regarding respondent's demography, among respondents, 81.7% were males and 18.3% were females. 84% of respondent's age falling between 31 – 50 years. Educational background of respondents were secondary school 10.4%, diploma 55.8%, first degree 32.1%, masters and above 1.7%. With respect to use purpose 73.2% of respondents confirmed that as the company particleboard most suitable for constriction (interior partition (43.9%) and ceiling (29.3%))

while 26.8% of respondents also for furniture. Regarding particleboard thickness: 8 mm 33.2%, 13 mm 21.4%, 10 mm 19.2%, 16 mm 13.2%, 19 mm 9.9% and other 3.1% (customized particleboards) were among particleboard thickness purchased by buyer.

Summary of descriptive statistics result on buyer influencing factors and overall buyer satisfaction are as follows:-

- The grand mean “product quality” is 2.4437, indicating that the majority of respondents are reply disagree level with the items listed in the study. This clearly shows that most of the company customers are unsatisfied with company’s particleboard quality.
- The grand mean of “particleboard price” is 3.1570, indicating that the majority of respondents are reply neutral level with the items listed in the study. So, these shows that as customers are neither agree nor disagree with the fairness of company price.
- The grand mean of “complaint handling” is 2.4286, indicating that the majority of respondents are reply disagree level with the items listed in the study. This demonstrates that as ECAFCO’s complaint handling completely poor.
- The grand mean of “innovation” is 2.3831, indicating that the majority of respondents are reply disagree level with the items listed in the study. This shows that as there is innovation gab on production machinery, information technology, and product improvement and development. So, based on this evidence, I conclude that company is incapable to provide various latest quality particleboards that could satisfy both furniture and constriction sectors, and to deliver timely and complete information.
- The grand mean of “product availability” is 2.3211, indicating that majority of respondents reply disagree level with the items listed in the study. This shows that as there is particleboard supply gap.
- The grand mean of “supplier’s image and reputation” is 3.1714, indicating that majority of respondents response rate are neutral level with the items listed in the study. This indicates that respondents are indifferent with company’s image and reputation.
- The grand mean for “overall buyer satisfaction on six IVs” is 2.5807, indicating that majority of respondents reply disagree level with the items listed in the study. These imply that overall the company’s customers are dissatisfied.

The finding from Pearson’s correlation indicates that all IV’s are significant and positive moderate correlation with DV, i.e. product quality and overall buyer satisfaction ($r=0.652$, $p<0.05$), innovation and overall buyer satisfaction ($r=0.612$, $p<0.05$), product availability and

overall buyer satisfaction ($r=0.571$, $p<0.05$), price and overall buyer satisfaction ($r=0.544$, $p<0.05$), Supplier's image and reputation and overall buyer satisfaction ($r=0.494$, $p<0.05$) and complaint handling and overall buyer satisfaction ($r=0.436$, $p<0.05$).

The result of regression analysis shows that all IV's are statistically significant. So, all variables contribute significant and positive contribution to the buyers' level of satisfaction. All hypotheses are accepted because the result of significance level is $<0.05\%$. R^2 revealed that up to 72.5% of buyer satisfaction depends on six IV's explained in this study; the rest of the 27.5% depend on other variables or factors that unexplained in this research. Also, the model indicates that as there is strong relationship between the six IV's and DV which is ($R=.851$).

The finding from coefficients unstandardized (β) show that the most important factors influencing buyer satisfaction are product quality ($\beta=.330$) and innovation ($\beta=.308$) followed by price ($\beta=.185$), product availability ($\beta=.176$), the supplier's image and reputation ($\beta=.160$) and complaint handling ($\beta=.124$). Thus, product/particleboard quality and innovation has relatively the highest degree of impact on buyer satisfaction.

5.3 Conclusions

Sustainability in the market depends on buyer satisfaction, so to attain this, business companies should audit buyers' needs and wants, and strive to satisfy customer demand. The overall objective of the study is to assess the core factors that affect particleboard buyers' level of satisfaction specific to the Ethiopian Chip wood and Furniture Share Company. Thus, the study revealed that the independent variables that are product quality, innovation, price, product availability, supplier's image and reputation, and complaint handling contribute a significant positive contribution in getting buyer satisfied, However product/particleboard quality and innovation are the most important factors in influencing buyer satisfaction. Buyers get satisfied if a company provides standard and durable competitive quality particleboard at a fair price than competitors.

Price is a decisive issue since there is no transaction without the right price, so, if the company can set the right price or sell the product at a fair price relative to quality and competitors' offering, the buyer might be satisfied and become loyal to the firm, if not, the buyer could switched to alternative providers.

On the other hand, innovation is among strategic issues that firms must consider attentively since it is dynamic in nature, and also a helpful tool to successfully run business, thereby satisfying customers' demand. The study revealed that innovation is the second most important factor in determining buyer satisfaction. Thus, if a firm sophisticating its production technology but also innovating process to access timely and complete information, and continuously improved and offers various latest quality particleboards with required quantity, customers' need and preference might be fulfilled significantly. Similarly, if a company's particleboard is very good quality, both the company and its particleboard are trustable and likable among buyers, and thereby buyer satisfaction is positively enhanced.

Furthermore, as building a positive image enhances a company's reputability and has a significant contribution to explaining buyer satisfaction, thus treating customers in a respectful manner is a helpful approach for customer-oriented company. In addition, establishing a system to encourage complaint customers, adapting flexible policies and procedures, responding to complaints quickly, taking feedback and making corrective action are advantageous because buyers take this as positive and get satisfied. Consequently, they continuously buy the company's product, talk positive about the company's product and further recommend to other buyers.

In general, since a customer is a valuable asset, so to retain their life value and stay long in the business environment, making an effort to satisfy customers' demand must be a primary goal of every business organization.

5.4 Recommendations

Based on the finding of the study, the following recommendations are forwarded to the company under study:

- ❖ Product quality is the most influencing factor in this study in determining buyer satisfaction positively. Therefore, ECAFCO has to overcome quality gap to alter the existing condition with full effort and produce competitive quality particleboards which meet conformity/standard/criterion set as world and durable particleboard to enhance buyer satisfaction, especially furniture makers. As the result of the study indicates, Company's particleboard is more suitable for construction than furniture; so much exertion is expected to delight furniture makers. In other words, in order to enhance particleboard performance

quality and change both construction and furniture sector buyer expectations, the particleboard produced by ECAFCO must have a uniform thickness or homogenous in structure.

- ❖ The second significant factor in this study is innovation in explaining buyer satisfaction. The majority of customers have disagreed with company innovation practices. So, unable to innovate or inefficiency of production technology dissatisfied buyers, more easily can switch customers to other capable suppliers. It is clear that in order to satisfy customers' needs, technological advantage helps the company. So, ECAFCO must reverse this bottleneck and establish sophisticated production technology; provide improved and various latest quality particleboards which could satisfy both furniture and construction sectors' preference than competitors, and even to survive in industry. The second concern of this study was process innovation/implementing information technology. Since we are in the era of the digital age to enhance buyers' satisfaction, companies should have to adapt effective well designed web, email, social media, and or use all alternative tools which help to access complete information to the buying customer timely.
- ❖ In today's competitive world, as obvious, business buyers search for price alternatives before making price decision. So, the most advantageous company is the one that provides fair price. Therefore, ECAFCO has to provide a fair price since it has a positive significant effect on customer satisfaction.
- ❖ As the finding indicates, the majority of respondents agree that there is supply gap. Thus, in order to satisfy and keep customers, companies should produce volume particleboard and make product available per buyer's need because product availability contributes a positive significant effect in getting customers satisfied.
- ❖ The results of the study find that a supplier's image and reputation contributes to a positive significant effect on buyer satisfaction. Hence, to enhance buyer satisfaction, a company should produce likable quality product which is trusted most by buyers, and also improve the way it communicates and treats its customers.
- ❖ The result of the study revealed that more than half of customers were dissatisfied with a company's complaint handling. This demonstrates that ECAFCO's complaint handling system is completely poor. Hence, ECAFCO should resolve the issue that prompted the customer's disparagement. So, to overcome this, a company has to establish a system such as suggestion box, website, e-mail, telephone line etc. to encourage complaint customers,

response to complaints promptly, adapt flexible policies and procedures, taking feedback and making corrective action to get customers satisfied.

In general, the company has to improve product quality, adapt production and process innovation, handle complaints in a well manner, and make products available to enhance buyer satisfaction; and thereby maintain the existing position. Above all, ECAFCO, to survive in the market and run business profitably, should have to improve the quality of particleboard and provide various particleboards that meet both current and potential buyer expectations to the utmost.

5.5 Limitations and Directions for Future Researcher

As study specific to Ethiopian Chip wood and Furniture Company there is a concern whether the result are generalizeable to other company in and outside Ethiopia, so the proposed model needs to be validated in different company and countries of same industry. In addition, since the researcher use nonrandom convenience sampling, future researchers have an opportunity to validate the model using random sampling design. Also, an interesting area future researcher assess is the effect of company's production technology on particleboard quality and or factors affecting particleboard quality since this study only focused on the effect of innovation on customer satisfaction.

REFERENCE

- Abebe, W (2019), 'Forest Product Import and Export Balance', *Ethiopia Press Agency*, [online] 01 December 2020, Available from <<http://www.press.et /2019/11/7/>>, (7th November 2020)
- Addis Ababa Chambers of Commerce and Scetorial Association, and DAB-DRT (2014), Manufacturing Survey Analysis, [Online] Available from: <<http://addischamber.com>> (29 October 2020).
- Ajang, T., Hamed M., Ahmad J. Latibari and Mehran R. (2011) Analysis of Wood-Based Panels Import to Iran: Simultaneous Equations Model Approach. *African Journal of Business management*, [Online] 5(34), 13169-13175, doi:10.5897/AJBM11.991
- Alan Zimmerman and Jim Blythe, (2013). Business to Business marketing Management: A Global Perspective. 2nd ed. London: Routledge publication.
- Ali, J. F.; Ali, I.; Rehman, K.; Yilmaz, A. K.; Safwan, N.; Afzal, H. (2010), Determinants of consumer retention in cellular industry in Pakistan, *African Journal of Business Management*, 4(12), 2402–2408.
- Anderson, E.W., Fornell, C. & Mazvancheryl, S.K. (2004), “Customer Satisfaction and Shareholder Value”, *Journal of Marketing*, Vol. 68, pp 172–185.
- Anwar, A., & Christan, B. (2016), Factors that affect and enhanced customer satisfaction, *Journal of Business and management*, [Online] 4(9), 80-88. Available from <<http://www.questijournals.org>> (16 December 2020)
- Andrew Whalley (2010), Strategic Marketing, [Online] First Edition, Available from: <<http://www.etd.aau.edu.et>> (20 November 2020)
- Atila, Y. and Fisun Y. (2008), Tourist Satisfaction and Complaining Behavior: Measurement and Management Issues in the Tourism and Hospitality Industry (Customer satisfaction Theories: A Critical Review), Nova Science Publishers, New York.
- Azeb Assefa (2010), Factors Affecting Internet Customers Satisfaction, the case of Ethiopian Telecommunication Corporation Business Customers, Master Thesis, Viewed July 2020, Addis Ababa University Theses Database.
- Azeb Kedir (2020), Factors Influencing Customer Satisfaction of E-banking Services, the case of Buna International Bank S.C, Master Thesis, Viewed 7 July 2021, Addis Ababa University Theses Database.

- Berhanu Misker (2016), Factors Affecting Customer Satisfaction in Banking Services, a case of Dashen, Master Thesis, Viewed 28 October 2020, Addis Ababa University Theses Database.
- Benjamin Diaw and Gideon Asare (2018), Effect of Innovation on Customer Satisfaction and Customer Retention in the Telecommunication Industry in Ghana: Customers' Perspectives, *European Journal of Research and Reflection in Management Sciences* [Online] 6(4): 2056-5992). Available from: <<http://www.researchgate.com>>
- Carrie Williams (2007), Research Methods. *Journal of Business & Economic Research*, [Online] 5 (3), Available from: <www.clutejournals.com>
- Chemical and Construction Input Industry Development Institute (n.d), The Ethiopian Wood Processing Industry, Wood profile PDF. [Online] viewed 22 November 2020, Available from: <<http://www.cciidi.gov.et>>.
- Cochran, W. G. (1963), Sampling Techniques. 2nd Ed, New York: John Wiley and Sons, Inc.
- Creswell, J.W. (2009). Research design: quantitative, qualitative and mixed methods approaches'. 3rd ed. California: Sage Publications.
- Dagne Abetie (2018) 'Particleboard Production from Maize Cob' Master Thesis, University of Addis Ababa, Viewed 24 November 2020, Addis Ababa University Theses Database.
- Daniella Ryding (2010), the Impact of New Technologies on Customer Satisfaction and Business to Business Customer Relationships: Evidence from the Soft Drinks Industry. *Journal of Retailing and Consumer Services*, [Online] 17(2010), 224-228. Available from: <<http://www.elsevier.com/locate/jretconser>>
- Dennick, R., Tavakol, (2011). M. Making sense of Cronbach's alpha. *International Journal of Medical Education*, ISSN: 2042-6372.
- Drilon, P. and Gabriel V. (2017), Improving Product Availability: The case study at IKEA Kitchen and Dining, [Online] Master Thesis, LUND University. Viewed 12 December 2020, Available from <<http://www.lup.lub.lu.se>>.
- Ehsani, Z and Ehsani, M. H., (2015), Effect of Quality and Price on Customer Satisfaction and Commitment in Iran Auto Industry, *International Journal of Service Sciences, Management and Engineering*. No.1. Vol 5. pp.52-56
- Erol Sözen and Ufuk Güven (2019). The effect of Online Assessments on Students' Attitudes towards Undergraduate-Level Geography Courses. doi.org/10.5539/ies.v12n10p1
- Ethiopia Chipwood and Furniture Company (2012), Annual Reports, ECAFCO
- Ethiopian Chip Wood and Furniture Company (n. d), [Brochure]. ECAFCO

- Eugene W. Anderson, Claes Fornell, and Donald R. Lehmann (1994), Customer Satisfaction, Market Share, and Profitability: Finding From Sweden. *Journal of Marketing*, [Online] 58: 53-66. Available from: <www.jstor.org> [12 December 2020].
- Fasika Tatek (2018), Assessment of Factors Affecting Customers Satisfaction of Motor Insurance Customer, in Selected Insurance Companies, Addis Ababa, Master Thesis, Viewed July 2020, Addis Ababa University Theses Database.
- Fatemeh S., Majid A., and Amin A. (2013), a multiple criteria analyses of factors affecting markets of engineered wood products with respect to customer preference: a case study of particleboard and MD, *For. Sci. Pract.* 15: 61-69. DOI: [10.1007/s11632-013-0110-4](https://doi.org/10.1007/s11632-013-0110-4)
- Firouze H. Abkari and Lida Radmand (2016) ‘Investigation of effect of buyer’s post-purchase remorse in products with high levels of rumination’, *International Business management* [Online] 10(7): 1183-1191, Available From: <<http://www.medwelljournal.com>> [15 December 2020]
- Gebi Shuka (2015), The Value Chain Analysis of Chip wood and Furniture Company, the case Ethiopian Chip wood and Furniture Company, [Online] Master Thesis, University of St. Mary, Addis Ababa, Viewed 5th October 2020, <<http://www.repository.smuc.edu.et>>.
- Gene Wengert (2020), Panel principles: Particleboard. [Online] Available from <<http://www.woodworkingnetwork.com>> [5th November 2020]
- George, D. and Mallery, M. (2010), *SPSS for Windows Step by Step: A Simple Guide and Reference*, 17.0 updated (10a edition), Boston, Pearson publication.
- Getachew Tesfaye (2018), Factors Affecting Customers Satisfaction of Customers Services of Bonded Warehouse Operation, the Case of Addis Ababa Kaliti Customer Branch Office, Master Thesis, Viewed July 2021, Addis Ababa University Theses Database.
- Gholamreza Askarpour Daragahi (2017). The Impact of Innovation on Customer Satisfaction: A Study of the Cosmetics Producer in Tehran (International Review Article). Professional Paper, [Online] 2017, (1-2), Faculty of Business Economics and Entrepreneurship, Available from <<http://www.researchgate.net>> (November 15 2020)
- Graeme, D., John E (2001) *Strategic Marketing: Planning and Control*, Second Edition. London: Reed Elsevier plc group.
- Hanif, M., Hafeez, S., Riaz, A., (2010), Factors Affecting Customer Satisfaction, *International Research Journal of Finance and Economics*, ISSN 1450-2887 Issue 60 (2010). Available from <<http://www.eurojournals.com/finance.htm>>

- Heikkilä T., (2001) *Tilastollinen tutkimus (Statistical Research)*, Third Edition. Helsinki, Edita. pp.30 &187; pp.29 &186
- Herrmann, A.; Xia, L.; Monroe, K. B.; Huber, F. (2007), the influence of price fairness on customer satisfaction: an empirical test in the context of automobile purchases. *Journal of Product & Brand Management*, 16(1), 49–58
- Ismail Razak, Nazief, N. and Boge, T. (2016), ‘Study on The impact of product quality and price on customer satisfaction with the mediator of customer value’, *Journal of Marketing and Consumer Research* [Online] 30: 2422-8451, Available from: <<http://www.iiste.org>> (17 December 2020).
- Jahanshahi, A.A, Gashti, M.A.H, Mirdamadi, S.A, Nawaser, K, and Khaksar, S.M.S. 2011.Study of Effects of Customer Service and Product Quality on Customer Satisfaction and Loyalty, *International Journal of Humanities and Social Science*.Vol.1 No.7.pp.253-260
- Jayanthi Ranjan and Sandeep Puri (2012), Out of Stock Conditions Affecting Customer Satisfaction and Customer Loyalty, *Journal of Business and Retail Management Research Online*, 6 (2). Available from: <<http://www.jbrmr.com>> (20 December 2020).
- Jonathan, G. (2005), *Foundation of Marketing*. DOI 10.1007/978-0-230-21227-5
- Joseph P. Cannon and William D. Perreault Jr. (2010) ‘Buyer-Seller Relationships in Business Markets’, *Journal of Marketing Research*, [Online] 36(4), 439-460. Available from: <http://www.jstoe.org/stable/3151999/> (12 December 2020)
- Kent, R. (2007), *Marketing Research: Approach, methods, and application in Europe*. Italy: Rotolito.
- Kevin Lane Keller (2013). *Strategic Brand Management: Building, Measuring and Managing Brand Equity*. Fourth Edition, London: Pearson Education Limited.
- Khartit K. 2021, Definition of Customer. www.investopedia.com/terms/c/cusomer.asp
- Komah Berhe (2018), ‘Study on Production and Economic Analysis of Particleboard from Sugarcane Bagasse’, Master Thesis, Viewed 28 October 2020, Addis Ababa University Theses Database.
- Kotler, Ph. and Armstrong, G., (2012), *Principal of Marketing* [Online], 14th edition, Available from: <[http:// www.etd.aau.edu.et](http://www.etd.aau.edu.et)> (20 November 2020).
- Kotler, Ph. and Keller, K., (2012) *Marketing Management*. 14th edition, New Jersey: Pearson Education, Inc.

- Kronospan (2021) *Particleboard (chipboard) panels: Multi-purpose materials* [Online] Available from <<http://www.kronospanworldwide.com>> (January 2021)
- McCoy Mart Team (2020) what is a particleboard and what is its different type [Online]. Available from: <<http://www.mccoymart.com>> (17 December 2020).
- Malik, M. E, Ghafoor, M. M. and Igbal, H. K. (2012), Impact of Brand Image, Service Quality and Price on Customer Satisfaction in Pakistan Telecommutation Sector, *International Journal of Business and Social Science*. Vol.3.No.23. pp.123-129
- Management Study Guide (2020) *Factors Affecting Customer Satisfaction*. [Online] Available from: <<http://www.managmentguide.com>> (12 December 2020).
- Marczyk, G., Dematteo, D., and Festinger, D. (2005), *Essential of Research Design & Methodology: A Practical overview of proven methods for research design*. Canada: John Wiley and Sons Inc.
- Martin luenendonk (2019) Marketing environment: explanation, components and importance. [Online]. Available from <<http://www.cleverism.com>> (01 December 2020).
- Mekonnen D. Gebremariam (2019), *Factors Affecting Customer Satisfaction: the case of Debre Berhan Hotels*, [Online] Master Thesis. University of Debre Berhan, Viewed 12 December 2020, Available from: <<http://www.etd.dbu.edu.et>>.
- Mersha Fikirte (2016), *Factors Affecting Customer Satisfaction, the case of Commercial Bank of Ethiopia Customers in Addis Ababa*.
- METHODSPACE (2019), Criteria for selecting a research approach. Available From: <<http://www.methodspace.com>>.
- Mihret Kiros (2019), *Factors Affecting Customer Satisfaction on Tap Water Services Delivery in Addis Ababa Water and Sewerage Authority, the case of Guard Shola Branch*, Master Thesis, Viewed July 2021, Addis Ababa University Theses Database.
- Million Insights (2018), *Particleboard Market Size Analysis, Segmentation, Industry Outlook and Forecasts, 2011-2022*. [Online] Available from: <<http://www.millioninsight.com>> (3rd November 2020).
- Million Tekeste (2013), 'Determinant of Customer Based Equity: The Case of Ethiopian Beer Industry' Master Thesis, University of Addis Ababa, School of Commerce, Library.
- Musa M. 2018, Ethiopia: 'Pioneers in Particleboard Work Ethiopia'. *The Ethiopian Herald*, Addis Ababa, June. Viewed 5th November 2020, <[http://www.all African.com](http://www.allAfrican.com)>.
- Naveed, Tahir and Akhtar, Irum and Cheema, Khaliq Ur Rehman (2012), 'the impact of Innovation on Customer Satisfaction and Brand Loyalty: A study on the student of

- Faisalabad', [Online], Available from :<<https://mp.ra.ub.uni-muenchen.de/53197/>> (December 2020).
- Nikita Thattamparambil (2020), How to choose the research method best suit for your study Available From: <<http://www.editage.com>>
- Oliver Wyman (2012), Getting Availability Right, Bringing Out of Stock under Control [Online], Available from :< <http://www.oliverwyman.com>> (December 15 2020)
- Pallant, J. (2007). SPSS Survival Manual: A Step by Step Guide to Data Analysis using SPSS for Windows (3rd ed.), England: McGraw Hill Open University Press.
- Petr Suchánek, Jiří Richter, and Maria Králová2 (2014), Customer satisfaction, Product Quality and Performance of Companies (Review of Economic Perspective Article), [Online] 14(4), 329-344, Available from: doi: 10.1515/revecp-2015-0003
- Public Administration Higher Study (2020), *internal environment factors analysis*. Available from: <<http://www.higherstudy.com>> (Viewed November 27 2020).
- Rahman, M. H. (2014a), Factors Affecting Customer Satisfaction in Mobile Telecommunication Industry in Bangladesh, *Business Management and Education*, 12 (1), 74–93. Doi 10.3846/bme.2014.06
- Rahman H., Redwanuzzaman, Masud-Ul-Hasan and Asfaqur Rahman (2014), Factors affecting customer satisfaction on Grameenphone users in Bangladesh, *Global Journal of Marketing and Business Research*, [Online] 14:2249-4888. Available from: <<http://www.globaljournal.org>>
- Ranjit Kumar (2011), *Research Methodology, a step-by step guide for beginners*. Third Edition, Available from <www.sociology.kpi.ua>
- Rediat Afework and Genet Gebre Tirfe (2019), Assessing the effect of marketing mix element on customer satisfaction, the case of Hawassa Chipwood Factory, *Business and Management*, 21: 01-12. DOI: 10.9790/487X-2104050112/j. businessman. 2019.04.18
- Rizwan Khan & Ganesh Narawane (2011), *Examining Factors Affecting Customer Satisfaction thesis, A Case Study of a Swedish Firm*, [Online] Master Thesis, University of SKÖVDE, Viewed 12 December 2020, Available from <[http://www. divaportal.org](http://www.divaportal.org)>
- Robert, B. Burns, and Richard, A. Burns (2008), *Business Research Methods and Statics Using SPSS*, Los Angeles: Sage publication
- Rosanna Garcia (2014), *Creating and Marketing New products and Services*. London: CRC press.

- Seble Woldemariam (2016), 'Effect of Service Recovery on Customer Satisfaction and Behavioral Intention: the case of Ethiopian Airlines Cargo' Master Thesis, University of Addis Ababa, School of Commerce, Library.
- Senthilkumar, V. 2012. A study on the effects of customer service and product quality on customer satisfaction and loyalty, *Namex International Journal of Management Research*, 2(2): 123-129.
- Sisay Mengesha (2016), 'The Effect of Brand Image on Customer Purchase Decision, the case of Zenebe Ferew Real Estate', Master Thesis, University of Addis Ababa, School of Commerce, Library
- Solomon, M., Bamossy, G., Askegaard, S., and Hogg, M. K. (2006), *Consumer Behaviour: A European Perspective*, Third Edition, Pearson Education Limited, England.
- Stephen L. Sondoh, Maznah W. Omar, Nabsiah Abdul Wahid, Ishak I., and Amran H., (2007) The effect Brand Image on Overall Satisfaction and Loyalty Intention in the Context of Color Cosmetic. *Asian Academy of management Journal*, Online, 12(1), 83-107, Available from: <http://www.researchgate.net> (December 11, 2020).
- Suhendar, U. and Ruswanti, E. (2019). Effect of product quality, perception of price and Satisfaction to Customer Loyalty (study on Agroindustrial Company Indonesia). *International Journal of Economic, Commerce and Management*. [Online] Vol. VII, Issue 3. Available from <<http://ijecm.co.uk>> [March, 2021].
- Thogori M. and Jane Gathenya (2014), Role of Inventory Management on Customer Satisfaction among the Manufacturing Firms in Kenya: A case Study of Delmonte Kenya. *International Journal of Academic Research in Business and Social Science*, Online] 4(1): 2222-6990, doi: 10.6007/IJARBS/v4-i1/517
- Umit Kucuk ed. (2017), Visualizing Marketing from Abstract to Intuitive: DOI 10.1007/978-3-319-48027-5
- United Nations Industrial Development Organization (1990), Together for Sustainable Future, *UNIDO publication*, [Online] Available from <<http://www.unido.org> > (26 November 2020)
- Wayne, D. Hoyer and Deborah J. MacInnis (2010). *Consumer Behavior*, Fifth Edition. USA: South Western Cengage Learning
- Wood solutions (2020) *Particleboard also known as Chipboard*, [Online], Available from <<http://www.woodsolutions.com.au>> (3rd November 2020).
- www.open.uk.co. Assumptions of Multiple Regression pdf

- Yimer Yonathan (2014), Assessment of Factors Affecting Customers' Satisfaction in Automated Teller Machine Services, the case of United Bank S.C in Addis Ababa, Master Thesis, Viewed July 2021, Addis Ababa University Theses Database.
- Yodit Bakele (2019), Factors Affecting Customer Satisfaction of Application Based Tax Services, the Case of RIDE, Master Thesis, Viewed July 2021 Addis Ababa University Theses Database.
- Yushan Zhao and Lois Smith (2006) 'How Supplier Involvement Influence Buyer Satisfaction and Trust: Study of Industrial Markets', *Journal of Innovative Marketing* [Online] 2(2), Available from <<http://www.businessperspectives.org>> (13 December 2020).
- Zikmund, W .G. (2003), *Business Research Methods*, Seventh edition, Ohio: Thompson South-Western.
- Zikmund et al, (2010), *Business Research Methods*.8th Edition. Mason, OH: South-Western Cengage Learning, United States.

APPENDIX

Appendix I: Survey (English Version)

Addis Ababa University School of Commerce
Department of Marketing Management
Post Graduate Program



Buyer's Levels' of Satisfaction Questionnaires

Dear Respondents,

I am a student at Addis Ababa University School of Commerce. My name is Zahra Abdulwahid. I am conducting a research on a topic, “*Factors Affecting Particleboard Buyers' Level of Satisfaction (the case of ECAFCO)*” in a partial fulfillment of the requirements for the award of MA degree. I kindly request you to spend some minutes of your time in answering the questionnaire designed to assess the satisfaction level of particleboard buyer. Your responses will be used only for academic research and any information which you provide will be kept confidential. Your genuine response will have significant effect on the result of the study. Writing your name on the questionnaire is not mandatory. Please tick one in appropriate box that best suits your perspective for each statement. I thank you very much for your kind cooperation.

Zahra Abdulwahid

Mobile: - 251 9 40 19 30 85

E-mail Address: zahraabdulwahid@yahoo.com

Part I: General Information

1. Gender: A. Male B. Female

2. Age: _____

3. Level of education:

1. Illiterate 2. Primary (\leq Grade 8) 3. Secondary (9 – 12th Grade)

4. Diploma 5. First Degree 6. Second degree or above

4. For what purpose the company particleboard suitable to use?

1. For interior partition

2. Ceiling

3. Furniture

4. Other (please specify _____)

5. Could you indicated which particleboard thickness you buy: 8mm 10mm

13mm 16mm 19mm Other please specifies_____)

Part II: Factors Affecting Buyers' Level of Satisfaction

Instruction:

Please respond to each item by putting a tick (“√”) mark in the box relating to the opinion that identifies your level of agreement:

(1=Strongly Disagree; 2= Disagree; 3= Neutral; 4=Agree; 5=Strongly Agree)

	Questionnaire Items	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
I	Product Quality					
1.	The company particleboard meets quality standard and it thickness have uniformity					
2.	The company particleboard durability is good					
3.	ECAFCO provides quality Particleboard which fulfills buyers need					
4.	The company particleboard quality is good relative to competitors offering					
5.	Your are delighted with company's particleboard quality					
6.	Overall the quality of company's particleboard is very good					
II	Price	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
7.	ECAFCO Particleboard price is fair					
8.	The company particleboard price is good relative to the quality it has					
9.	The company particleboard price is fair and good than competitors					
10.	Price information is clear and understandable to customers					

III	Complaint Handling	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
11.	The company established system such as suggestion form/box, web site, e-mail, telephone line etc to encourage the complaint customers					
12.	The company response to the complaint quickly					
13.	The company policies and procedures considered the situation					
14.	The company takes feedback from its customer and makes corrective action to delight its customers					
15.	I will buy the company's product continuously and recommend ECAFCO particleboard to other buyers					
16.	I will talk positively about the product of the company every chance I get					
IV	Innovation	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
17.	The company particleboard production technology is more sophisticated than the competitors in the industry					
18.	The company provides improved new particleboard to satisfies its customers need					
19.	The company particleboard quality more improved than the past					
20.	The company offer various sophisticated particleboard to satisfied its customers preference than the past					
21.	The company has implemented website, email, social media, etc to access timely and complete information for its customers					
V	Product Availability	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
22.	The company could supply adequate particleboard product to the buyers					
23.	You can get particleboard from the company store at a					

	time you needed with required quantity					
24.	There is no supply gap					
VI	Image and Reputation	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
25.	The company's particleboard has reputation					
26.	The company's particleboard would be very good quality so that it is likeable product among buyers					
27.	I trust the quality of ECAFCO's particleboard					
28	ECAFCO is the company I trust it most and so that I recommend it to others particleboard buyers					
29	I am willing to buy a particleboard which is produced by well-known producers like ECAFCO					
30	The company communicates and treats its customers in respectful manner					
**						
31	I am satisfied with overall the company's particleboard product quality					
32	I am satisfied with overall the company's particleboard price					
33.	I am satisfied with overall the way the company handled complain					
34.	I am satisfied overall because when I needed to buy the company particleboard product is always available					
35	Overall I am satisfied with company technology because I am getting improved quality particleboard products as per my interest					
36.	I am satisfies with the overall manner in which I am treated by this company					
37	Overall I am satisfied with this company particleboard product					

**በአዲስ አበባ ዩኒቨርሲቲ
የንግድ ስራ ኮሌጅ
መርኬቲንግ ማናጅመንት ትምህርት ክፍል**



የጽሑፍ መጠይቅ

ይህ መጠይቅ የተዘጋጀው እኔ ዘህራ አብዱልዋህድ በአዲስ አበባ ዩኒቨርሲቲ ንግድ ስራ ኮሌጅ የመርኬቲንግ ዲፓርትመንት ለማደርገገው ለሁለተኛ ዲግሪ ትምህርት ማሟያ ጥናት ይሆን ዘንድ ነው። በዚህ መሠረት የመመረቂያ ፅሁፍ በኢትዮጵያ ቼፕወድ ና ፈርንቸር ካምፖሊ የቼፕወድ ዳንበኞች እርካታ ተግዳሮት 'Factors affecting Particleboard Buyers' Level of Satisfaction the case of Ethiopia Chipwood and Furniture Company' በሚል ርዕስ እየሰራሁ እገኛለሁ።

ውድ የኢትዮጵያ ቼፕወድ ና ፈርንቸር ከንፓን (ኢክፍኮ) ዳንበኞች የዚህ መጠይቅ ዋና አላማ የተቃኘው የኢትዮጵያ ቼፕወድ ና ፈርንቸር ካምፖሊ የቼፕወድ ዳንበኞች እርካታ ተግዳሮት የተመለከቱ መረጃ ከዋና ዳንበኞች ማግኘት ነው። በመሆኑም የምትሰጡት መረጃ ለትምህርት ተግባር ብቻ የሚውልና ሚስጥሩም የተጠበቀ መሆኑን ላረጋግጥላቼ እወዳለሁ። የእርስዎ መልስ በጣም አስፈላጊ በመሆኑ ለመልካም ትብብርዎና ውድ ሰዓትዎን ሰውተው ስለተባበሩኝ አመሰግናለሁ።

ዘህራ አብዱልዋህድ
ስልክ:- 09 40 19 30 85

ክፍል 2፡ በድርጅቱ ደንቦች እርካታ ለማለት የተዘጋጀ ማጠይቅ ነው። ከዚህ በታች በተሰጠው ሰንጠረዥ እያንዳንዱ ጥያቄ አምስት አማራጮች አሉት እነሱም እባክዎ ለሚከተሉት ጥያቄዎች በተሰጡትን መለኪያ መጠን በመጠቀም የሚመዘኑትን ምልክት በማስቀመጥ ያመልክቱ።

1=በጣም አልሰማማም 2=አልሰማማም 3=ሀሳብ የለኝም
 4=እስማማለሁ 5=በጣም እስማማለሁ

ተ.ቁ	የምርት ጥራት በተመለከተ / Product Quality/	በጣም አልሰማማም	አልሰማማም	ሀሳብ የለኝም	እስማማለሁ	በጣም እስማማለሁ
1.	የድርጅቱ ቺፕውድ ደረጃውን የጠበቀ እና ወጥ ውፍረት አለው።					
2.	ድርጅቱ የምያሟረታቸው ቺፕውድ ጥሩ ጥንካሬ አለው።					
3.	ድርጅቱ የገዢዎችን ፍላጎት የሚያሟላ ጥራት ያለው ቺፕውድ ያቀርባል።					
4.	የድርጅቱ ቺፕውድ ጥራት ከሌሎች ገበያ ውስጥ ከሌሎች ምራቶች ጋር ስነፀፃ ጥሩ ነው።					
5.	በድርጅቱ ቺፕውድ ጥራት ተደስተዋል።					
6.	በአጠቃላይ የድርጅቱ ቺፕውድ ጥራት በጣም ጥሩ ነው።					
	ዋጋን በተመለከተ /Price /	በጣም አልሰማማም	አልሰማማም	ሀሳብ የለኝም	እስማማለሁ	በጣም እስማማለሁ
7.	የኢኮኖሚ የቺፕውድ መሸጫ ዋጋ ተመጣጣኝ ነው።					
8.	የድርጅቱ ቺፕውድ መሸጫ ዋጋ ከሌሎች አንጻር ስተይ ጥሩ ነው።					
9.	የድርጅቱ ቺፕውድ ዋጋ ከተፎካካሪዎች					

	አንፃር ስተይ ተመጣጣኝ እና ጥሩ ነው።					
10.	ድርጅቱ ለምርቱ የሚያስከፍለው ዋጋ ለደንበኞቹ ግልጽ፤ የተማላ ና በቀላሉ ለመረዳት የሚያስችል ነው።					
	የዳንበኞች ቅሬታ አያየዝን በተመለከተ /Complaint handling/	በጣም አልሰማም	አልሰማም	ሀሳብ የለኝም	አሰማለሁ	በጣም አሰማለሁ
11.	ቅሬታ አቅራቢውን ደንበኞች ለማበረታታት ከባንያው የአስተያየት መስጫ ቅጽ/ሳጥን፤ ድር ጣቢያ፤ ኢ-ሜል እና የስልክ መስመርን የመሳሰሉ ስርዓትን ዘርግተል።					
12.	ድርጅቱ ከደንበኞቹ ለምቀሪቦት ቅሬታዎች አፋጣኝ ምላሽ ይሰጣል።					
13.	የድርጅቱ መመሪያዎች ና አሰራሮች ሁኔታዎችን የገናዘቡ ናቸው።					
14.	ድርጅቱ ከደንበኛው ግብረመልስ በመወሰድ ደንበኞቹን ለማስደሰት የእርምጃ እርምጃዎችን ይወስዳል።					
15.	የድርጅቱ ምርት ወደፊትም የሚገዛና ለሌሎች ገዢዎችም ምርቱን እንዲገዙ እመክራለሁ።					
16.	በገኘሁት አጋጣሚ ሁሉ ስለድርጅቱ ምርት በአወንታዊነት እናገራለሁ።					
	የምርት እና ቴክኖሎጂ መሻሻል ና ዝማናን ተግባራዊ ማድረግን በተመለከተ /Innovation/	በጣም አልሰማም	አልሰማም	ሀሳብ የለኝም	አሰማለሁ	በጣም አሰማለሁ
17.	የከባንያው የቺፕወድ ማምረቻ ቴክኖሎጂ በኢንዱስትሪው ውስጥ ካሉ ተፎካካሪዎች የበለጠ ዘመናዊ ነው።					

18.	ኩባንያው የደንበኞችን ፍላጎት ለማርካት የተሻሻለ አዳዲስ ቼፕወድ ያቀርባል።					
19.	የድርጅቱ ቼፕወድ ምርት ጥራት ከበሬቱ በተሻለ ተሻሽሏል።					
20.	ድርጅቱ ከበሬቱ ይልቅ የደንበኞቹን ፍላጎት ለማርካት የተለያዩ ዘመናዊ ቼፕወድ ምርቶችን ያቀርባል።					
21.	ድርጅቱ ወቅታዊ እና የተሟላ መረጃን ለደንበኞቹ ለመድረስ ድር ጣቢያ፣ ኢሜል፣ ማህበራዊ ሚዲያ ወዘተ ተግባራዊ አድርጓል።					
	የምርት መገኛትን/ተገኝነትን በተመለከተ /Product Availability/	በጣም አልሰማም	አልሰማም	ሀሳብ የለኝም	እስማማለሁ	በጣም እስማማለሁ
22.	ድርጅቱ በቂ ቼፕወድ ምርት ለገዢው ሊያቀርብ ይችላል።					
23.	በሚፈለገው ብዛት በሚፈልጉት ጊዜ ከኩባንያው መደብር ቼፕወድ ምርትን ማግኘት ይቻላል።					
24.	የአቅርቦት ክፍተት የለም።					
	ለድርጅቱ የሚሰጡት ግምት /Supplier Image/	በጣም አልሰማም	አልሰማም	ሀሳብ የለኝም	እስማማለሁ	በጣም እስማማለሁ
25.	የድርጅቱ የቼፕወድ ምርት በደንበኞቹ ዘንድ ጥሩ ዝና አለው።					
26.	የድርጅቱ ቼፕወድ በጣም ጥሩ ጥራት አለው። በመሆኑ በገዢው ዘንድ ተዋዳጅ ምርት ነው።					
27.	የድርጅቱ ቼፕወድ ጥራት ለይ እምነት አለኝ።					
28.	በኢኮኖሚ ቼፕወድ ክፍተኛ እምነት ያለኝ በመሆኑ ለሌሎች ገዢዎች					

	የምጠቁመዉ ድርጅት ነው።					
29	እንዳ አካፍኮ አይነት በሚገባ ታዋቂ ከሆኑ አሚራቶች የሚመረት ቺፕወድን ለመግዛት ፍቃደኛ ነኝ።					
30	ድርጅቱ ደንበኞቹን በጥሩ ሁኔታ ያስተናግዳል።					

31.	በአጠቃላይ በድርጅቱ የቺፕወድ ምርት ጥራት ረክቻለሁ።					
32.	በአጠቃላይ በድርጅቱ የቺፕወድ ምርት ዋጋ ረክቻለሁ።					
33.	በአጠቃላይ በድርጅቱ ቅሬታ አያየዝ መንገድ ረክቻለሁ።					
34.	የምርት አቅርቦትን በተመለከተ በአጠቃላይ ረክቻለሁ ምክንያቱም የድርጅቱ ቺፕወድ ምርት ለመግዛት ሲፈልግ ሁል ጊዜ ይገኛል።					
35	በአጠቃላይ እንደ ፍላጎቴ የተሻሻለ ጥራት ያላቸው የቺፕወድ ምርቶችን እያገኘሁ ስለሆነ በድርጅቱ ቴክኖሎጂ በጣም ረክቻለሁ።					
36	በዚህ ድርጅት በተደረገልኝ የመስተንግዶ ሥነ ምግባር በአጠቃላይ ረክቻለሁ።					
37	በአጠቃላይ በዚህ ድርጅት የቺፕወድ ምርት ረክቻለሁ።					

Appendix III: Assumption Test of Normality

Figure-2 Histogram

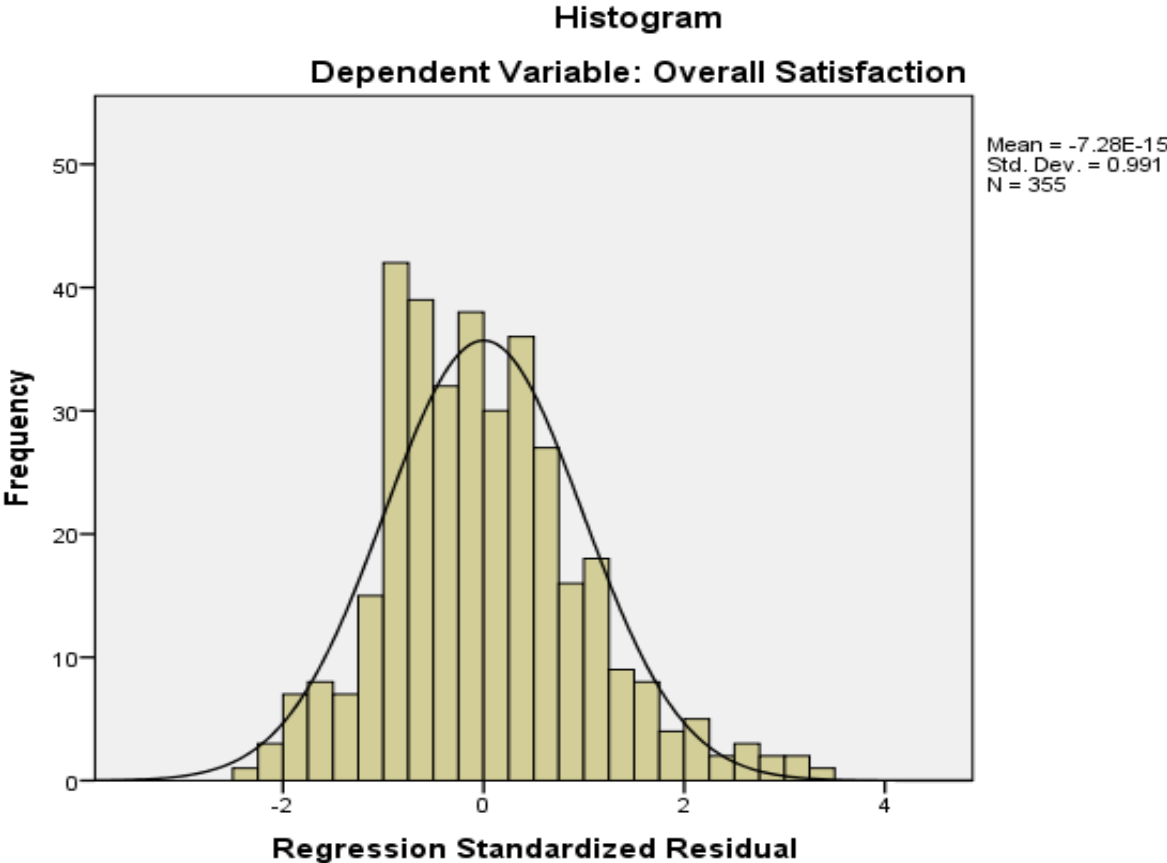


Figure-3 P-P plot

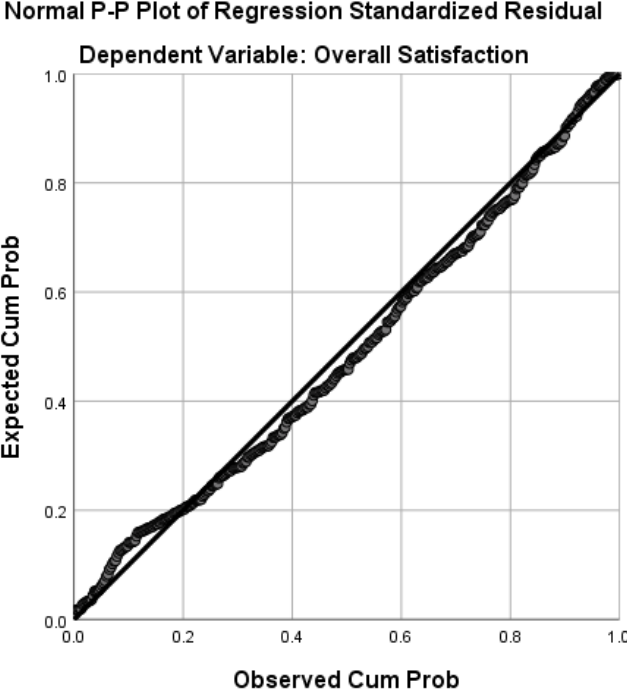
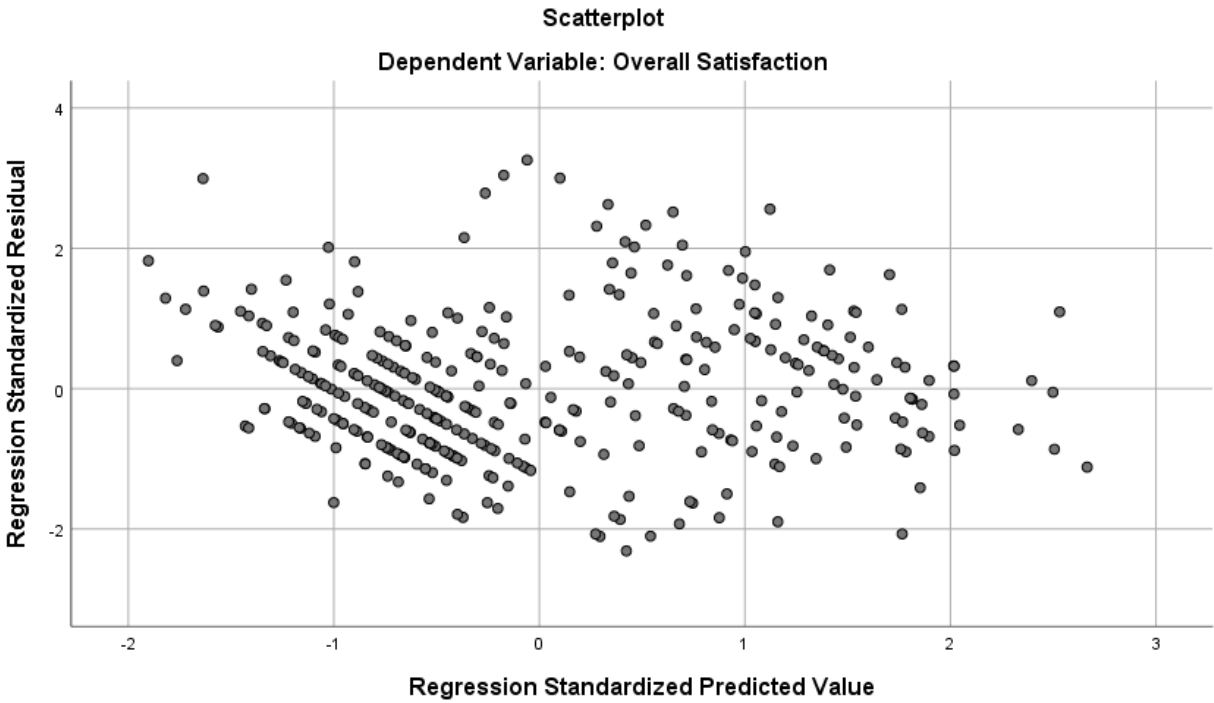


Figure-4 Scatter plot



Appendix: IV Mean score Range and Interpretation

Table 4:17 Scoring Range of Liker Scale

Liker Description	Scale Value	Range
Strongly Disagree	1	1-1.80
Disagree	2	1.81-2.60
Neither/nor Agree	3	2.61-3.40
Agree	4	3.41-4.20
Strongly Agree	5	4.21-5.0

Source: Erol Sözen and Ufuk Güven (2019)

B. Prefabricated House

2. Production Sector

A. Chip wood/ Particle board Production

The company Produces Different Thickness of CHIP WOOD from Eucalyptus tree i.e (8mm, 10mm, 13mm, 16mm and 19mm)

Administration and Library Block constructed for Chelenko, Kuni and Uruga TVET Collage with the

Laboratory and meeting Hall Block constructed for Chelenko, Kuni and Uruga TVET Collage.

Class Room Block constructed for Chelenko, Kuni and Uruga TVET Collage.

Cafeteria constructed for Chelenko, Kuni and Uruga TVET Collage.

Federal High court fence

ECAFCO Address:-
A.A. N/5/Lafo Sub-City Woreda 10
Tel. 0114 42 06 75 Fax 0114 42 15 15

ECAFCO Sc. was established in 1957 E.C. It started producing goods and rendering service a year later. These days the share Company based on customer's need, produces different construction materials. Participates in construction sector and services Sectors

I. CONSTRUCTION SECTOR

The Company's Housing Construction department constructs prefabricated house and conventional buildings for governmental organization and any other customers.

A. Conventional Buildings

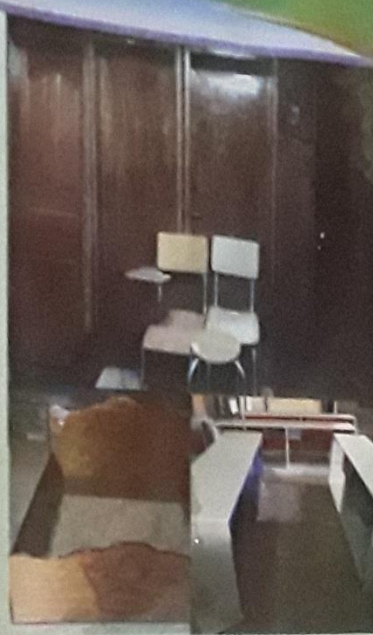
B. STYROPOR PRODUCTION

Styropor products help to
disturbance and it Regulates



C. Furniture Production

The Share Company also produces different
types of office and house hold furniture from
wood and metals



3. SERVICE SECTOR

A. Garage Service

The company has Well-organized Motor and Body
maintenance of Vehicles. There is also equipped car
washing service.



EXAMPLES OF OTHER SERVICES

EC...
impregnate...
Corporation and...
which use for fence construction...
for other customers with faire price.

