

# ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES COLLEGE OF BUSINESS AND ECONOMICS DEPARTMENT OF MARKETING MANAGEMENT

# FACTORS AFFECTING BRAND CHOICE OF THREE WHEELER (Rickshaws) BUYERS (THE CASE OF ADDIS ABABA)

BY:

# ASTER ENDASHAW

# **ADVISOR:**

# Dr. MESFIN WORKNEH

**ADDIS ABABA, ETHIOPIA** 

**JUNE, 2020** 

# St. Mary's University

# School of Graduate Studies Marketing Management MA Program

# FACTORS AFFECTING BRAND CHOICE OF THREE WHEELER (Rickshaws) BUYERS (THE CASE OF ADDIS ABABA)

By:

# ASTER ENDASHAW ADVISOR:

# Dr. MESFIN WORKNEH

# THESIS SUBMITTED TO SCHOOL OF GRADUATE STUDIES OF ST. MARY'S UNIVERSITY IN PARTIAL FULFILLMENTS OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF ART IN MARKETING MANAGEMNET

# St. Marry University College

# School of Graduate Studies-MA Program

## FACTORS AFFECTING BRAND CHOICE OF THREE WHEELER

(Rickshaws) BUYERS (THE CASE OF ADDIS ABABA)

By:

# **ASTER ENDASHAW**

# APPROVED BY BOARD OF EXAMINERS

Dean, Graduate Studies

\_\_\_\_\_

Thesis Advisor

Internal Examiner

External Examiner

Signature and Date

\_\_\_\_\_

Signature and Date

Signature and Date

Signature and Date

# DECLARATION

I, the undersigned graduate student, hereby declare that this thesis is my original work, and that all sources of the materials used for this thesis have been duly acknowledged. This research study is being submitted in partial fulfillment of the requirement for Master of Arts degree in Marketing Management.

Aster Endashaw

Signature & Date

# **ENDORSEMENT**

This is to certify that Aster Endashaw carried out her thesis on "FACTORS AFFECTING BRAND CHOICE OF THREE WHEELER (Rickshaws) in case Addis Ababa. And Submitted in Partial Fulfillment of the Requirements for The Award of the Degree of Masters of Art in Marketing Management at St. Marry University with My Approval as University Advisor.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Mesfen Workeneh – Advisor

# Acknowledgement

First and foremost, I would like to thank the Almighty God, for the gift of life and love and for knowing me better than I know myself. I wish to express my sincere thanks and gratitude to my advisor **Dr**. **MESFIN WORKNEH** for his excellence guidance, unrestricted and friendly support to make this project real.

Last but not the least, I would also like to thank my staff and my classmates who share me their idea and provided me moral and valuable information related to the research project.

THANK YOU ALL!!!

#### ASTER ENDASHAW

# Table of Contents

APPROVED BY BOARD OF EXAMINERS	ii
DECLARATION	iii
ENDORSEMENT	iv
Acknowledgement	v
ABSTRACT	ix
CHAPTER ONE	1
1. INTRODUCTION	1
1.1Background of the Study	1
1.2 Statement of the problem	4
1.3. Basic research questions	6
1.3.1. General research questions	6
1.3.2. Specific research questions	6
1.4 Objectives of the Study	6
1.4.1 General objective	6
1.4.2. Specific objectives	6
1.5. Significance of the Study	7
1.6. Scope of the Study	7
1.7. Organization of the Research Report	8
1.8 Definition of terms	8
1.8.1 Conceptual Definition	8
CHAPTER TWO	9
Review of Related Literature	9
2.1 Introduction	9
2.2 Theoretical Reviews	9
2.3 Model of Consumer buying Behavior	10
2.4 Concept of Branding	14
2.5 Factors determine the brand choice of buyers	17
2.6 Empirical Review of Auto rickshaw (Rickshaws)	20
2.7 Research hypotheses	21
2.8 Conceptual Framework	22

CHAPTER THREE	23
Research Design & Methodology	23
3.1 Introduction	23
3.2 Research Design	23
3.3 Research Approach	24
3.4. Data Type and Sources	25
3.5 Target Population	25
3.6 Sampling Technique and Sample Size	26
3.6.1 Sampling technique	26
3.6.2 Sample Size	26
3.7 Method of Data Analysis	27
3.8 Reliability Test and Validity Test	28
3.9 Ethical Considerations	30
CHAPTER FOUR	31
ANALYSIS AND INTERPRITATION	31
4,1 INTRODUCTION	31
4.2 General information of the respondent	31
4.4 Descriptive Analysis of variables	34
4.5 Test of normality of the Data	34
4.6 Inferential Statistics	37
4.6.1Correlations Analysis	37
4.7Assumptions Testing in Linear Multiple Regressions	40
4.7.1 Model summary	40
4.7.2 Multi collinearity Test	41
4.7.3 Regression Coefficient Analysis of the Model and hypothesis testing Table	43
CHAPTER FIVE	47
5.1 Introduction	47
5.2 Summary of the Major Findings	47
5.3 Conclusion	49
5.4 Recommendations	50
5.5 Limitation of the study	51
Reference	52
APPENDICES ONE	54

APPENDICES	TWO6	65

List of tabel

TABLE 3. 1 CRONBACH ALPHA; FOR BRAND CHOICE DIMENSION	29
TABLE 3. 2 CRONBACH ALPHA; FOR BRAND CHOICE DIMENSION	29

TABLE 4. 1 RESPONSE RATE OF QUESTIONNAIRES ADMINISTERED	31
TABLE 4. 2 DEMOGRAPHIC DISTRIBUTION OF RESPONDENTS	32
TABLE 4. 3 BRAND DISTRIBUTION OF THE RESPONDENTS SURVEY RESULT, 2020	34
TABLE 4. 4Tests of Normality Survey result, 2020	35
TABLE 4. 5CORRELATION TABLE	38
TABLE 4. 6 MODEL SUMMARY SURVEY RESULT, 2020	40
TABLE 4.7 ANOVA SURVEY RESULT, 2020	41
TABLE 4. 8 MULTI COLLINEARITY TEST TABLE	42
TABLE 4.9 REGRESSION COEFFICIENT SURVEY RESULT, 2020	43
TABLE 4. 10 Hypotheses Survey result, 2020	45

# List of figure

FIGURE 2. 1 CONCEPTUAL	FRAMEWORK	22

FIGURE 4. 1 NORMALITY CHART
-----------------------------

## ABSTRACT

Every consumers in the market has his/her own brand choice. three wheeler veichle product consider certain factor affecting before purchasing products.the objective of this study was to analyze the factors affecting consumers brand choice in addis ababa.the dependent variables included in this study are brand image, reliability, price, safty, fuel consumption, durability: while buying behavior is the dependent variable.the objective of the study is to identify determinig factors that affect brand choice of three wheeler buyer in Addis ababa.researchers previous working experience at automotive industry was lead to counduct the study. Data were collected from four district representing addis ababa population using questionnaire to 314 consumers .the respondent were sampled based on non probability convenient samplingwas adopted for selecting the respondent .the thesis was divide into a theory part and emperical part .Both descriptive, ANOVA and multipleregeression .qualitative and quantitative research method wereapplied in this study .the result of the study has indications that brand image, reliability, price, safty and durability factors have effect on a consumers buying behavior in selecting of three weheeler vihacles . In the reliability table, it is calculated that the research validity and reliability is 0.774% which is great. Moreover, the study finding shows that, there is variation on brand choice based on respondent's income level.

**Key words**: brand choice, model of buying behavior, brand image, reliability, safety, availability of spare part, fuel consumption, durability, durability

# **CHAPTER ONE**

# **1. INTRODUCTION**

This chapter presented an overview of the entire study. it includes the background of the study, statement of the problem, research question and research objectives, significance of the study, scope of the study, organization of the paper and definition of terms.

### **1.1Background of the Study**

Ethiopia is a landlocked country and mostly imports the goods from other countries. Ethiopia was ruled by Italian for five years approximately (1935-41) and this brief period resulted in laying down of the road and railway line. Subsequent to the Italian invasion of 1935-41, expansion of modern transportation began in the country and public transportation, like taxi and bus services, rail transportation. The transport sector is one of those economic sectors whose administration is shared between the federal government and the regional states (A,Temesgen 2007).

The transport ministry of government of Ethiopia reports that alternative methods of transport such as buses, metro taxis, railways and other means are used as a popular means for satisfying demands of local public, further it has revealed that massive infrastructural expansion in land, air and domestic travels is undertaken with the most common mode of public transportation being Minibuses and three wheeler taxis. For movement of the people in the city from one place to another a good transport system is necessary. A well-developed internal transport system leads to economic activity to develop the cities or nation. It helps in increase of production thereby raising the standard of living of the people and removes the problem of distance, help the people of different regions to come in contact with each other, encourage exchange of ideas and culture and also promote cooperation, employment of the people of the country. The major factor of a good transport system is time management. The entire economy of the modern country depends on the effective system of transport.

Three-wheeler taxis that were made in India, first came to Ethiopia in 2005. They have become very popular as a convenient method of transport in regional cities and certain parts of the capital

city, Addis Ababa. The three-wheeled auto-Rickshaw, commonly called as Bajaj was first introduced in Dire Dawa city that is located about 500 kms from capital Addis. Since it was first introduced this vehicle has become very popular as an important transport option in most cities. This increase in demand is primarily responsible for the increase in price. It should be noted that the spare part costs are four times less for a Bajaj as compared to mini bus with significant fuel efficiency (Seyoum,H, 2014).

Bajaj is an informal term used to refer to rickshaws although market competition has increased during past few years. The demand of three wheeler auto rickshaws is increasing for several reasons, one of the reasons being its affordability in terms of price in comparison to other means of transport as well as efficient fuel consumption. Market for three wheelers is very becoming high in Addis Ababa as the city is getting wider.

The three wheeler vehicles are mainly Restrict Tri-axel vehicles and horse pulled carts to move in the city, but shall be given temporary permit to provide service at the outskirts of the city where public transport is not served (Addis Ababa city transport authority policy August 2011)

The customers are changing very fast due to availability of number of similar products and brands and at the same time a customer is confused. The experience of using the same brand and product has its advantages as well as disadvantage which influences the customer's behavior. For the manufacture it is necessary to identify customers need and satisfy the same. The three wheeler auto rickshaw industry is very much competitive in Ethiopia with the presence of different brands such as RE, TVS, Atul, Force and Piaggio. Therefore, assessing various factors which influence the Customer's behavior and the service level to be delivered is essential.

Brand preference has a significant role in building brand. In order to understand and to value the true image of the Company it is found that the brand equity's elements should be logical. Similarly it is found that the customer preference Does have a positive impact on the attributes that build confidence and assist in increasing sales (Mkhitaryab,D., 2014). It is also found that factors such as loading ability, Performance, Resale value, Serviceability, Warranty etc have an important role to play especially in consumer preference of Heavy Commercial Vehicles (Ruban Kumar, K &Surulivel, 2016).

In another study it was found that pricing and fuel efficiency are the major factors while factors such as technology, pick-Up, comfort are the least important of the factors that influence the sample car owners (Rajasekar,T 2015). The Accessibility, ambition, value, comfort ability, efficiency, and need were found to be important factors affecting brand Preference in case of small cars. (Anandh,K&Shyama Sundar,K.,2014). Results also showed that sex, age, income, Family size, type of driving license, fuel type, a significant increase in the monthly income, and costs of having SRC-K Licenses are determinants of consumers' demand for light commercial vehicle (Ali Kemal, C.et.al.,2015).

Another study shows that safety, interior, modernity, economy, and value for money are the five major factors which Persuade consumers to purchase a particular automobile. Conclusion can be made that the brands of automobiles purchased and influencing factors has a relationship by the respondents (Kojo Mensah Sedzro et.al. 2014).

The Addis Ababa Transportation Authority (AATA) has completed an assessment of the market, impact and incidents of accidents of the three wheeled vehicles known as the Bajaj. They are now planning to impose a new tax and increase regulations. The new tariff will be based on the passenger capacity of vehicles, the market, the operational cost, and environmental pollution. It is expected to be implemented before the end of this Ethiopian year. In places like Kality, Asko, Summit, and Jemmo people are currently using more Bajaj to take people from the main road to gravel or cobblestone roads by their homes. (AATA, 2015)

A random recent sampling of AATA in five sub cities in Addis shows that over 5,500 three wheelers are working in the city. They charge from 2.50 up to five birr to transport people around 2.5 km. They carry approximately 635,000 people every day. Seven years ago the authority stopped giving licenses to these vehicles saying they did not meet the standard of a mass transport vehicle. (AATA, 2015)

However, some vehicles which were licensed in Oroimia, SNNP, Amahara and other parts of the country are working illegally in the new condominiums and villages which are found on the outskirts of the city. MitekuAsmare, head of AATA told Capital that new regulation will also determine how and where the vehicles will be working in Addis. "We will have a broad discussion with the owners of the Bajaj about the place they will be working, the price, and the licenses. Then we will formulate a standard working procedure. This hopefully will be finished

in a few months." The increasing population on the outskirts of cities has caused the price of the Bajaj to double. On average, the price of a three-wheel vehicle in 2012 was around 66,900 Br in 2012. It now costs 120,000 birr. (AATA, 2015)

Data from the Ministry of Transportation indicates that as of last fiscal year 14,793 Bajaj are legally working in Amahara, Afar, Harar, SNNP and Ormia. Of the legally registered vehicles 2,132 are working in Amahara 2,302 in Afar, 536 in Harar, 4,671 in SNNP and 5,152 in Oromia. If all of the unlicensed bajaj are included the number could be as high as 200,000. (AATA, 2015)

Currently Indian and local investors assemble the bajaj in Ethiopia. Their first Ethiopian appearance was in Dire Dawa. At the time, the inner cities and towns had transportation systems dominated by minibuses or horse-drawn carriages. In random surveys people claim to earn between 300 and 500 birr per day operating a Bajaj. Bajaj Auto came into existence in India as Bachraj Trading Co Ltd in November 1945. Currently, the company distributes its products in 16 countries and dominated the Ethiopian market until 2014. (AATA, 2015)

However, in 2014, the brand found itself in the middle of a court battle. Individuals and companies who were involved in the import and trading of the Bajaj brand were accused by a public prosecutor of one billion birr in tax fraud. New brands that are now the most visible in the market, such as Piaggio and TVS, are seeing that demand is outstripping supply. (AATA, 2015)

### 1.2 Statement of the problem

The vehicles industry is an important segment of the economy in any country as it links industries and services. It is the key driver of any growing economy. It plays an important role in growing the economy in each country and one way to strengthen the industry is to improve consumer insight into vehicle buying behavior.

Besides, competitive pressure of importing different brands of three wheeler vehicles companies arising in Ethiopia has led the companies to look for an edge to be competitive in vehicles industry. The competing to get attention from the consumers like RE, Piaggio, atul, force etc. Therefore, the objective of this stud will identify the factors influencing consumer buying behavior while buying three wheeler vehicles from different ground consumer's choice is limited to few brands from a range of brands available in the market. The brand preference of consumers might be affected by marketing strategy of firms. Moreover, consumers may have their own

choice criteria in selection of a particular brand from a set of brands in a given product category. Ethiopia's three wheeler vehicle potential is underpinned by the state-driven economy and a government that is geared toward industrialization, which makes an industry need an emphasis to study on. Despite the current limited disposable income, Ethiopia's vehicle market is dominated by Few counted imported of three wheeler vehicles – particularly even if there are many brands of three wheeler vehicles in the global market.

This shows it is very critical for companies to understand the customer's requirement and provide the products that satisfy their needs. Consumers brand preference represents a fundamental step in understanding consumer choice, in most product category; consumers have more choices, more information and higher expectations than ever before. To move consumer from trial to preference, brands need to deliver on their value preposition, as well as dislodge someone else from the consumer's existing preference set.

Thus this study will have conducted to identify the underlying factors of consumer's brand choice for three wheeler vehicle, it will lead importers to formulate a better marketing programs. It will also be an effective and helpful reference for other researchers the main research question of the study will determine factors that affect brand choice of three wheeler (bajaj) vehicle buyers in Addis Ababa.

There are minimum number of international journals and studies in Ethiopia that's try to show the customer preference regards to buying automobile Mr.Mohdarif sheik a lecturer in Asella University, Ethiopia and associate professor at Hyderabad business school, India Studied about determinants brands preference of three wheeler vehicles and show trends in the drivers as general and Denansogemechu in 2017 studied "factors affecting brand choice of automobile buyers" but still there is no specific case that show the determinant **factors that influence the brand choice of buyers while buying three wheeler(Rickshaws) were not addressed**. This study will conducted to identify the underlying factors of consumers brand choice for three wheeler vehicle, it will lead importers to formulate a better marketing programs by finding out the factors that affects(influence) choice of buyers .it was Observed that is found to be an initiation to conduct the study will lack of theoretical evidence that can be used as an insight to understand customers" perception towards building a brand through the use of brand equity dimensions, Thus It will also be an effective and helpful reference for other researchers. Under this main research question, the following specific research questions were addressed;

## **1.3.** Basic research questions

The research questions that need to be addressed include the following:

## 1.3.1. General research questions

What are the factors that influence the brand choice of three wheeler (Rickshaws) buyers in Addis Ababa?

# 1.3.2. Specific research questions

1. Which determinant factors more significantly affect choice of three wheeler vehicles brand?

2. What are the most preferred brands of three wheeler vehicles in Addis Ababa?

3. What are the internal (Spare part, Fuel consumption, Safety,) and external (Durability, Reliability, Price,) factors affecting the choice of three wheeler vehicles brands?

4 How the determinant factors affect among different brands of three wheelers in Addis Ababa

# 1.4 Objectives of the Study

## 1.4.1 General objective

The general objective of the study is to identify determining factors that affect brand choice of three wheeler (Rickshaws) buyers in Addis Ababa.

# 1.4.2. Specific objectives

The specific objectives of the study are:

- $\checkmark$  To identify the most preferred brand among the set of brands available in the city.
- ✓ To identify which determinants are more significantly affect choice of three wheeler vehicles brand.
- ✓ To investigate the internal and external factors affecting the brand choice of three wheeler vehicles
- ✓ To evaluate the determinant factors that affect brand choices of three-wheelers vehicles among the others brands

#### **1.5. Significance of the Study**

Three wheeler vehicles market in Ethiopia is growing rapidly. Different three wheeler vehicles brands are introducing to the market and at the same time, demand is increasing. The introduction of various brands will lead to tight competition, which in turn make consumers to face brand choice decision in the market. In such a situation, it becomes necessary for manufacturers to understand the major factors attracting buyers to one's own brand, so that they can succeed in the market and win the competition. A clear understanding of the factors that influence brand choice is critical to ensure that a company's branding and marketing efforts are matched with the needs of buyers. Though there are a number of studies conducted on brand preference, most of these studies are consumer durables. There are a few studies on brand preference of automobiles but none on three wheeler autos especially in Ethiopian context. Having identified this major gap, this study is carried out to categories factors that influence brand preference of three wheeler auto rickshaw buyers in Addis Ababa, therefore this study can help marketers to design a better marketing strategy by identifying the factors that determine buyers brand choice Thus; the study will have a theoretical contribution in the area of product purchase decision and buyers brand choice criteria in the context of Ethiopian market specifically in Addis. Furthermore, the study will give insight for other researchers to explore and investigate more in the area, in a broader scope and wider context.

### **1.6. Scope of the Study**

This study would try to show the main factors that determine the buyers brand choice in three wheeler vehicles to achieve this aim, the scope of the study is to identify different factors, i.e. Brand image, Reliability and durability, Price, Availability of spare parts, Safety, Fuel consumption, that influence a brand choice of a three wheeler (Rickshaws) in the city.

The scope of the study limited to Addis Ababa, capital city of Ethiopia focusing on three wheeler vehicles importers of three wheelers (Rickshaws). This geographical limitation is not only chosen because of time, access and cost restriction, but also it is believed that a considerable number of owners and buyers of three wheeler vehicles are available in Addis Ababa. More specifically data were collected from the owners of three wheeler vehicles, may be they are self-

employee with their three wheeler, different importers and distributors by distributing structured questioners that are related with the main variables the researcher wants to touch within convenient time for the respondents.

# 1.7. Organization of the Research Report

The study has been divided in to five chapters. The first chapter includes the research background, problem statement and research questions, objective of the study, significance of the study, scope of the study and organization of the report and followed by the discussion of concepts and theories related to the area of study (chapter two, literature review). The third chapter describes the research design, participants of the study, the data source, data collection and analysis techniques and procedures. The fourth chapter deals will deal with data analysis, interpretation and discussion of the findings. Finally, in the last chapter; summery, conclusion and recommendations were being included.

## **1.8 Definition of terms**

## **1.8.1** Conceptual Definition

• Marketing Concept; "The marketing concept is marketers can sell more if they

Produce the consumer needs and wants than to produce what they want to sell. In marketing concept consumer needs and wants became the firm's primary focus. Hence basically marketing concept is a philosophy of consumer oriented" (Leon G. Schiffman, 2007 pp.).

- **Brand Awareness:** is related to the strength of the brand trace in memory as reflected by consumers" ability to recall or recognize the brand under different conditions. (Keller (2004).
- **Brand preference:** is the degree of brand loyalty in which a customer definitely prefers one brand over competitive offerings and will purchase this brand if it is available. (Dibb S., Simikin L., Pride W.M., and Ferrell O.C. (2006)).

# **CHAPTER TWO**

# **Review of Related Literature**

### **2.1 Introduction**

This chapter also provides an insight to readers about the theoretical reviews, empirical reviews and the conceptual framework of the study is presented at the end of this chapter.

Consumers who are familiar with a brand usually possess basic information regarding that brand, especially about its characteristics which may be either material or non-material and the interrelationship that exist between them (Sujan,M&Bettman,J.R 1989).

### **2.2 Theoretical Reviews**

#### **Consumer Brand Preference**

A brand loyalty shows that a consumer chooses a brand among competing brands and not accepts any other as substitute (Kotler & Keller, 2003). Customers prefer the car brands according to their income level. Product image is the component which plays a dynamic role in the brand preference and that image based on consumer's awareness and related information about vehicles.

The people belonging to middle class like to prefer price as leading element to select the vehicle on the other hand the quality, performance or package of a product brand are mainly considered by elite class people. That's why the price is the element which is firstly compared among different brands of cars by the consumers. People mostly prefer to purchase cars which gave great quality with low price (Kwok, Uncles, & Huang, 2006). The five elements of making the decision about choosing the cars such as value or price, quality of the product, brand participation, brand advocacy and brand involvement.

#### **Consumer Buying Behavior**

The modern market consists of a big variety and diversity of packages, designs, products, goods, and services. It develops and innovates daily and makes improvements in strategies permanently. However, it would not put so much effort into the development if the consumer and the overall society would not need and require new products, product ideas and functions. The market is the dependable sector of industry and the consumers are only one indispensable element of market performance which allows the industries to exist and grow. In order to create an appropriate product or service, companies need to understand the consumers, their behavior and perception, and to meet their needs and requirements. Consumer behavior is the process involved when individuals or groups of people select, purchase, use or dispose of products, services, ideas or experiences to satisfy their needs and desires (Solomon &Bamossy&Askegaard& Hogg 2010).

There are different people with different roles who are involved in this process: the purchaser, whose function is to buy the product or service; the user who uses the actual product or service; and the influencer who provides information and recommendations for or against the product or service without buying or using it. Prices level of different products has impact on consumer behavior connection because the brand price makes the brand image in the eyes of consumer.

#### 2.3 Model of Consumer buying Behavior

According kotler& Armstrong (2010) Consumers make many buying decisions every day, and the buying decision is the central point of the marketer's effort. Most large companies research consumer-buying decisions in detail to answer questions about what consumers buy: where they buy, how and how much they buy, when they buy and why they buy. Marketers can study actual consumer purchases to find out what they buy, where and how much. But learning about the whys of consumer buying behavior is not so easy the answer is often locked deep within the consumer's mind.

Often, consumers themselves do not know exactly what influence their purchase. Since, the mind is a whirling, swirling, jumbled mass of neurons bouncing around, colliding and continuously creating new concepts and thoughts and relationships inside every single person's brain all over the world. Therefore, the central question for marketers is: how do consumers respond to various marketing efforts the company might use.

#### **Brand Participation**

The participation of the consumer in branded products has achieved the company destination. The brand preference increased when consumer participated in product promotion. The brand preference increased due to participation by consumer in brand or company activities (Bagozzi&Dholakia, 2006). Some consumers don't attach with any product brand and don't participate in brand promotion activities (Blanchard & Markus, 2004).

#### **Brand Advocacy**

Brand advocacy is identification, supports and promotion of the brand to other people, user or consumers who are the user of same or other brands" (Bhattacharya &Sen, 2003). Promotion of the brand product to the other users shows the brand advocacy and brand loyalty.Brand advocacy shows the consumer perception, thinking, interest and uses of the product only which delivered to other people to advocate this brand which is used his own and differentiate from other brands (Dutton &Dukerich, 1991; Scott & Lane, 2000).

#### **Brand Involvement**

Brand involvement shows the how much customer has information, interest and concern about branded products to choose in specific income level. Brand involvement was the only main and primary criteria to explain the consumer behavior about your product and its feelings (Chakravarti&Janiszewski, 2003).

Brand involvement shows the relationship with consumer satisfaction that how much he was satisfied by the performance of brand (McColl-Kennedy & Fetter Jr, 2001; Mudie, Cottam, &Raeside, 2003). The use of the brand shows the experience and past knowledge of the consumer (Zaichkowsky, 1987). In earlier researches many researchers concisely described three elements of the brand involvement as personal, physically and situational. Printed media, radio and television are different sources to deliver the message or advertising the brand which have changed the preference of the consumer and its involvement towards the brand (Wright, 1973)

#### **Price of Brand**

The consumer expected at the time of take purchase decision from the selection of car model to meet their quality, brand images, performance, charge appropriate cost, sales & after sales

quality criteria at least (Aghdaie&Yousefi, 2011). Mostly consumer prefer only product price. The price of the product has impact on consumer purchasing decision process & also the sales

Margin (Osman, Talib, Sanusi, Shiang-Yen, &Alwi, 2012). The price of the product is that which is expected to pay by purchasing of product.

There are two types of price of product that prevail in the market. The brand image is the key element of the product when some products have high price in the market. Some products have low brand price which is useful technique by brand & consumer rely on the previous price value for the brand (Swani&Yoo, 2010). Different Consumers who are familiar with a brand usually possess basic information regarding that brand, especially about its characteristics which may be either material or non-material and the inter relationship that exist between them (Sujan,M&Bettman,J.R 1989).

There is a significant impact of brand participation, sponsorship, involvement, price and quality on preference of brand by a consumer (Najam& Maryam 2016). In a study it was found that the consumer's preference was identified in terms of four factors i.e., branding, packaging, taste and validation and price (Lazim&Haliza, 2011).

In the study conducted by Banerjee, it was found that there is a significant impact of individual and brand personality on the preferred brand which implied that at the time of expressing their preference for brand, consumers found individual personality and personality of the considered brand of sports utility vehicle as vital. Brand personality that is strong and clear indicated a favorable opinion about the brand. The result of this study further showed that at the time of buying decision characteristics such as personalities of both product and corporate brand are showing an influence over their preferences (Banerjee, S.,2016).

A change in the basic vehicle attributes may result in loss of market share as it was observed in a study conducted by Train and Winston. They found that most of the loss in the share for U.S. manufacturers in terms of market share can be better understood from the changes that are made in certain fundamental vehicle attributes as is understood from changes in transmission type, reliability, and body type, price, size, power, operating cost (Kenneth E. Train & Clifford Winston 2007Kenneth\_and\_Clifford).

A study by Sriram (2006) revealed that the effect of the brand preference is greater than the effect that is created by the attractiveness of the brand's product line. With the assumption of reasonable margin of profit, this study further evaluated the effect increased advertising expenditures for the largest and the smallest brands and concluded that it is possible for these brands to increase their profitability by increasing advertising capital (Sriram,S et.al., 2006).

Brand preference has a significant role in building brand. In order to understand and to value the true image of the company it is found that the brand equity's elements should be logical. Similarly it is found that the customer preference does have a positive impact on the attributes that build confidence and assist in increasing sales (Mkhitaryab,D., 2014). It is also found that factors such as loading ability, Performance, Resale value, Serviceability, Warranty etc have an important role to play especially in consumer preference of Heavy Commercial Vehicles (Ruban Kumar, K &Surulivel, 2016).

Further findings about functional image congruity, showed that it has a negative impact of symbolic image congruity on brand preference of Chinese consumers. When a brand's perceived symbolic image is in upward incongruity it does not restrain brand familiarity (Hu,J.,et.al.,2012).

Another study conducted in Ghanaian automobile industry identified that the features of a car, consciousness as well as accessibility of the product do have a strong impact on brand choice (Narteh,B.et.al, 2012).

Studies also revealed that factor analysis was used and results disclosed that consumers are more inclined by product strategies, technical know-how and satisfaction level (Giridhar,A.et.al., 2015). Therefore, consumers are more influenced by the USP of a commodity. Furthermore, this study also conducted discriminant analysis which revealed that consumers are more influenced by product strategies, technology know how degree of satisfaction and service in the same order while are least influenced by the factory workshop features.

In another study it was found that pricing and fuel efficiency are the major factors while factors such as technology, pick-up, comfort are the least important of the factors that influence the sample car owners (Rajasekar,T 2015). The accessibility, ambition, value, comfortability, efficiency, and need were found to be important factors affecting brand preference in case of small cars. (Anandh,K&Shyama Sundar,K.,2014). Results also showed that sex, age, income,

family size, type of driving license, fuel type, a significant increase in the monthly income, and costs of having SRC-K licenses are determinants of consumers' demand for light commercial vehicle (Ali Kemal, C.et.al. 2015).

Another study shows that safety, interior, modernity, economy, and value for money are the five major factors which persuade consumers to purchase a particular automobile. Conclusion can be made that the brands of automobiles purchased and influencing factors has a relationship by the respondents (Kojo Mensah Sedzro et.al. 2014).

A number of studies are conducted using factor analysis, the most general use of the factor analysis is to find out whether the responses to a set of items used to determine an exacting idea can be grouped together in order to form a similar index of the concept (Duncan,C., 2003). Psychologist have been traditionally using this technique to study the dimensions of an individual's intelligence (Thomson, G.H., 1951) Similarly economists have been using factor analysis to study behavior of consumer by assessing consumer's living standards and individual consumer charity behavior (Schokkaert& Van Ootegem, 1990).

### 2.4 Concept of Branding

Brands are not new to marketing. Historically, the concept of brand was first used by the ancient Egyptian brick-makers who drew symbols on bricks for identification (Farquhar, 1990). Other examples of the use of brands were found in Greek and Roman times; at this time, due to illiteracy shopkeepers identified their shops using symbols. Moreover, in the Middle-Ages, craftsmen marked their goods with stamps as a trademark by which to differentiate their skills.

The next milestone of brand evolved in North America with the growth of cattle farming as a kind of legal protection, proof of ownership and quality signals (De Chernatony and McDonald, 2003).

Brand definitions are numerous; different authors provide their own explanation towards the meaning of a brand. The definitions are useful to understand a brand from different perspectives. Keller (2004), define brand as a perceptual entity rooted in reality, but it is also more than that reflecting the perceptions and perhaps even the idiosyncrasies of consumers. This definition states that brand is what resides in the minds of consumers and the ultimate goal of all efforts in creating a brand is creating a perceived value of products and services in the minds of

consumers. Kapferer (2008), support Keller,,s definition by explaining a brand as a set of mental associations, held by the customer, which add to the perceived value of a product or service. These associations should be unique (exclusive), strong (salient), and positive (desirable).

The above definitions have something in common which explain what a brand is. Brand is an added value, which identify and differentiate a product from other brands/products.

Moreover, brand will be meaningful when consumers able to create a mental association in their mind. DeChernatory and McDonald (2003) offer a definition that incorporates many scholars view. —A successful brand is an identifiable product, service, person or place, augmented in such a way that the buyer or user perceives relevant, unique added values which match their needs most closely. Furthermore, its success results from being able to sustain those added values in the face of competition.

According to Keller (2004), brands used to identify the source of a product and allow consumers to assign responsibility to a particular manufacturer or distributor. Brands play a significant role by signaling quality and other important characteristics of a product. In effect, they can reduce the risk associated with a product purchase decision.

Aaker (1991) defined brand equity as "a set of five categories of brand assets (liabilities) linked to a brand's name or symbol that add to (subtract from) the value provided by a product or service." He identified five brand equity constructs: brand awareness, brands perceived quality, brand associations, brand loyalty; and other proprietary brands assets, such as patents, trademarks, and channel relationships. According to Kapferer, (2008) there are two perspectives from which brand equity can be viewed. One is customer-based, it focuses exclusively on the relationship customers have with the brand (from total indifference to attachment, loyalty, and willingness to buy and re-buy based on beliefs of superiority and evoked emotions). The other relates to suppliers, brand equity is viewed as a financial asset. It aims at producing measures in monetary values. Both approaches have their own champions. Interestingly, regardless of one,,s perspective, literature appears to be consistent in the opinion that brand equity is generated by consumers, who base their (re)purchase behaviors on the judgment of a brands value to themselves (Keller, 2004).

For example, as per Kotler and Keller (2006), brand equity is the customer's subjective and intangible assessment of the brand, beyond its objectively perceived value. Similarly, Kotler et al., (2005), define brand equity as the positive outcome that the customers show to the product or service. Moreover, as per the Official Marketing Science definition, brand equity is the set of associations and behavior on the part of a brand's customers, channel members and Parent Corporation that permits the brand to earn greater volume or greater margins than it could without the brand name (Kapferer, 2008).

#### **Brand Preference**

Because brand preference is indispensable in highly competitive businesses, practitioners and researchers have long spotlighted the concept. The term brand preference refers to the degree of brand loyalty in which a customer definitely prefers one brand over competitive offerings and will purchase this brand if it is available (Dibb et al., 2006). However, if the brand is not available, the customer will accept a substitute brand rather than expending additional effort finding and purchasing the preferred brand (Dibb et al., 2006). Customers form brand preferences to reduce the complexity of the purchase decision process (Gensch, 1987). The process of forming brand preference involves, first, being exposed to many brands, followed by a complex purchase decision process. Customers often delete some product brands from their memory; then, among remaining brands of products, customers memorize the brands of products they would consider purchasing in the future (Roberts &Lattin, 1991).

#### **Brand Identity**

Brand identity is the representation of the company's reputation through the conveyance of attributes, values, purpose, strength and passion. It is the aggregation of what the organization does. Brand identity is an organization's mission, personality, promise to the consumers and competitive advantages. It is a basic means of consumer recognition and represents the brand's distinction from its competitors (Brand identity and brand building concept. 2010. Drypen.in internet site. Referred to10.10.2011. <u>http://drypen.in/branding/brand-identity-a-brand-building-concept.html</u>).

#### **Quality of Brand**

The product quality only checked by compare it with other competitive brand product. At the time of pre-purchasing the consumer checked the product & compares it with another same product & makes decision on the base of the results which product is better or not. The product quality has great impact on consumer behavior & their taste for selection the product with highly connection of product quality. The consumer behavior can change only on the basis of the analyzing the quality of the product & services that provide by the brand company (Taylor, Hunter, & Lindberg, 2007).

We get the product quality information by external & internal resources. The external resources are directly transferring the message from company to consumer. The product quality plays an important role between innovativeness & new product which is recently introduced (Chevalier &Mayzlin, 2006). Before using the product, we can't judge the quality of product.

The thinking about the product transferred to other are not correct information because at the time of launching the product in the market nobody can't accessed the quality of brand product and said anything

#### 2.5 Factors determine the brand choice of buyers

Although, many studies have been conducted in various product categories, literature on brand choice in the vehicles specifically three wheeler vehicles in Ethiopia is relatively insignificant. Thus, considering different studies conducted in different product categories for the selection of relevant variables/factors for this research. Therefore, in this study, eight variables are considered; Brand image, Reliability, Price, availability of spare parts, Safety, Fuel consumption, Durability and Social value.

#### **Reliability and durability**

In terms of value reliability, consumers consider a vehicle to be reliable if it is likely to have fewer problems than other vehicles (Consumer Report, 2010). Vehicle reliability has been found to have a positive impact on the consumers" likelihood of choosing a vehicle (Woodset al, 2010). Reliability and quality are interrelated, perceived quality has direct impact on customer purchase decision and brand loyalty especially during the time customers have less or no information of the products that they are going to purchase (Armstrong and Kotler, 2003). Besides, reliability is

one of the criteria to be considered for vehicle choice (destoop.com, 2010). Consumers want their vehicles to be both reliable, simple to maintain and to repair.

The benefits that consumers see in buying a vehicle with high reliability include lower costs of repair and higher resale value (BuyingAdvice.com, 2007). Therefore, consumers are likely to be concerned about vehicle reliability when researching their upcoming vehicle purchase.

According to Dr. S. T. Foster, a professor at Boise State University it is one dimensions of quality. And like most of the other quality dimensions, durability is a transcendent, product based, user based, manufacturing based, and value based concept. Also he describes durability as "the degree to which a product tolerates stress or trauma without failing." (Foster P6). Like the other dimensions of quality, it is easier to plan durability into a products design and manufacturing process than it is to alter the finished product. There are many ways to increase a product's durability. You can increase it by using durable parts and modules in your product. Another way to increase durability is to use redundancy. Redundant parts can vastly increase durability; however, it will increase the products weight and cost as well. And finally another way to increase durability is to design a product for the most demanding user, that way to the average user the product appears to be very durable.

### Safety

In terms of safety, consumers consider safety to be one of the most important considerations in buying a three wheeler vehicle. The vehicle safety performances are ratings before purchasing a vehicle (Kojo Mensah Sedzro et.al. 2014).

In addition, consumers are increasingly seeking safety features in their vehicles (Deloitte, 2010) and are willing to pay more for a vehicle to obtain improved safety levels (Harris, 2001). Furthermore, the Deloitte study also predicted that the current economic crisis will leave customers to value vehicle safety more than before and seek vehicles with enhanced safety features. Consumers' increasing demand for safety has led manufacturers to think and develop safety-related innovations and features (such as automatic crash notification, emergency assistance, and remote vehicle diagnostics) in their recent models (Deloitte, 2009; Dannenberg &Burgard, 2007).

#### Price

Price is one of the most investigated elements of the traditional marketing mix largely because it generates revenue to organizations (Keller, 2003); represents what is sacrificed by consumers to obtain a product (Zeithaml, 1988). Dodds and Monroe (1985) found that price is an important cue to qobtain when other cues available are limited, when the product cannot be evaluated before purchase, and when there is some degree of risk inherent in making wrong choice; a key variable that influences consumers" purchase intention (Zeinab&Seyedeh, 2012). Price is often viewed as a dominant factor in the guiding process when it comes to making a purchase decision. Price in general has always been a determinant factor on consumers" brand choice when selecting a product or service. It is assumed that when a consumer is facing a buying decision in a product category, consumers observe a price to take into account on their current inventory position in the category. This helps them to maximize their immediate utility that they gain from the purchase. However, when consumer faces brand with varying prices and perceived quality levels, they would have to make a choice consistent with the relative importance attached to both attributes (Zeinab&Seyedeh, 2012).

#### **Brand image**

A brand image is how the consumers perceive the brand (Aaker 1996, 69). Aaker (1991, 109-110) explains that brand image is a set of associations which might not even reflect the objective reality. Arnold (1998, 94) says that brand image refers to the way in which certain groups decode all of the signals resonating from the product or service. An online writing (Brand image, www.asiamarketresearch.com/glossary/brandimage. htm) explains the concept of brand image as follows: Brand image can be reinforced by brand communications such as packaging, advertising, promotion, customer service, word-of-mouth and other aspects of the brand experience. Advertising, are usually evoked by asking consumers the first words/images that come to their mind when a certain brand is mentioned (sometimes called "top of mind"). When responses are highly variable, non-forthcoming, or refer to non-image attributes such as cost, it is an indicator of a weak brand image. It is the key of how consumers make their choices after gathering information about the particular brand and the alternatives. (Brand image. Asia market research internet site. Referred to 10.10.2011. (www.indianmarketresearch.com/glossary/brand-image.htm).

#### Availability of spare parts

The motor vehicle aftermarket covers all goods and services intended to maintain a vehicle in good condition after its purchase and throughout its useful life. The motor vehicle aftermarket generates turnover in terms of retail sales. When this expenditure is broken down, the largest item consists in maintenance and repair services and the purchase of spare parts followed by fuel and lubricants vehicle purchases and car insurance of expenditure corresponds to other individual vehicles-related services. Half of the turnover generated by vehicle repair and maintenance works corresponds to servicing, as specialist labor is increasingly required to repair and maintain a vehicle, and also more commonly to diagnosing the causes of faults or breakdowns and to preventing future problems. The other half corresponds to the purchase of spare parts to replace damaged parts or, in the case of lubricants for example, to ensure that the vehicle's internal components such as the engine operate correctly. Although the repair and maintenance sector brings together an offer by repairers and demand from private individuals, insurers and vehicle fleets, and is therefore situated downstream in the chain, an analysis of the spare parts distribution sector needs to look at the value chain as a whole, from the manufacture of the spare parts to their sale to the end consumer, usually as part of repair or maintenance works.

#### **Fuel Economy**

Fuel economy is as important a factor in a consumer's choice of vehicle as are safety and reliability. The impact of volatile gasoline prices can be seen in all markets; Consumers across all markets expect to see greater emphasis on fuel efficiency and a significant shift to alternative-fuel vehicles in the coming decade. Electric/battery, water, hydrogen and solar were among the anticipated fuel sources for vehicles of the future (Indian motorcycle industry, 2009). Furthermore, Austin and Dinan (2005) assume that consumers fully value lifetime fuel savings when considering fuel economy in their vehicle choices.

#### **2.6 Empirical Review of Auto rickshaw** (Rickshaws)

A brand shows the meaning and direction of any product and identify product with due to time and space. Brand may have several components including brand name, brand image, logo, design, packaging and promotion. Brands of automobile imported in India are prioritized for its quality, price, comfort level, fuel efficiency, design, colors, interior and exterior looks. Brand choice or brand behavior is the words which are used interchangeably for brand preference which means that to identify the consumer choice among different brands. Consumer brand preference is linked with brand loyalty, which means repurchase again and again by long period of time (Ghose&Lowengart, 2013). Brand involvement is the level of interest by consumer to purchase a specific brand and loyal with this brand. Most of the consumers involve those products which have high cost and massive impact on consumer life (Rijnsoever, Farla, &Dijst, 2009). Brand advocacy is that to recommend the favorite brand to other without any cost and this advocacy is only doing who are fully contented with specific product brand (Katz, 1994). Brand participation is that, consumers intensely participate, gives opinion to company about product (Casaló, Flavián, &Guinalíu, 2010). Quality of the product has usually high price due to his popularity of product design, functions and technology use to build that product. Quality of the product impact on company EPS, shareholder wealth and attract to new investor toward investment. Price of the product is that to charge a value against selling of product which is based on product quality and its performance (Loureiro, Sardinha, &Reijnders, 2012).

#### 2.7 Research hypotheses

Based on the literature review and the hypothesized connections presented in the conceptual

Framework the following hypotheses were tested:

H1: Brand image has positive significant effect on brand choice for three wheeler vehicles buyers.

H2: product Reliability has positive significant effect on brand choice for three wheeler vehicle buyers.

H3: Price has positive significant effect on brand choice for three wheeler vehicle buyers.

H4: Availability of spare parts has positive significant effect on brand choice for three wheeler vehicle buyers.

H5: Safety has a positive significant effect on brand choice for three wheeler vehicle buyers.

H6: Fuel economy has a positive significant effect on brand choice for three wheeler vehicle buyers

H7: durability has a positive significant effect on brand choice for three wheeler vehicle buyers

## 2.8 Conceptual Framework

Based on the related literature review the conceptual frame work was developed which includes Brand image, Reliability and durability Price, availability of spare parts, Safety and Fuel consumption, as the independent variable that influence a brand choice (dependent variable) particular three wheeler vehicle brand.



(Source; research own conceptual framework 2020)

FIGURE 2. 1 CONCEPTUAL FRAMEWORK

# **CHAPTER THREE**

# **Research Design & Methodology**

## **3.1 Introduction**

This chapter presented detailed discussion of the research methodology employed in the study. Hence, topics related to research design, data type and source, target population, sampling technique and sample size, data collection procedure and method of data analysis were covered. Explanation about the reliability and validity of the study is also included in this chapter.

## 3.2 Research Design

Descriptive research is aimed simply at describing phenomena and is not particularly concerned with understanding why behavior is the way it is regarding the average member of a group. (creswell & plano clark,2007) Exploratory research It is often the starting point of a research project into phenomena (known as an exploratory study) of which we know very little (creswell & planoclark, 2007)

Explanatory research is deeper in the sense that it describes phenomena and attempts to explain why behavior is the way it is (creswell & planoclark, 2007)

Thus this study will be trying to identify and explain factors that determine brand choice of buyers. Therefore, for this purpose quantitative research approach would use by researcher because the researcher uses different statistical tools to measure and quantify the report.

Explanatory research design method is also used to understand about factors affecting consumer brand choice among the alternative three wheeler vehicles and provide theoretical explanation so; this research uses explanatory research design. Each of these strategies plays a distinct but complementary role in order to get an answer on the research problem. Explanatory research is deeper in the sense that it describes phenomena and attempts to explain why behavior is the way it is. Thus this research would try to identify what are the determinant factors that are influence brand choice of three wheeler vehicles buyers while buying. Therefore, for this study the appropriate design is explanatory research design.

### **3.3 Research Approach**

There are three types of research approaches Quantitative, qualitative and mixed research approach

Quantitative research involves studies that make use of statistical analyses to obtain their findings. Key features include formal and systematic measurement and the use of statistics. It is means of testing objective theories by examining the relationship among variables. These variables in turn can be measured typically on instruments so that numbered data can be analyzed using static procedures the final written report has a set structure consists of introduction literature and theory methods results and discussion. (creswell,2008)

Qualitative research involves studies that do not attempt to quantify their results through statistical summary or analysis. Qualitative studies typically involve interviews and observations without formal measurement. A case study, which is an in-depth examination of one person, is a form of qualitative research. Qualitative research is often used as a source of hypotheses for later testing in quantitative research. It is a means of exploring and understanding the meaning individuals or the group ascribe to a social or human problem. The process of research involves emerging questions and procedures. The final report has a flexible structure. (creswell, 2008)

Mixed research it has an approach to enquiry that combine or associate both qualitative and quantitative approaches. It involves philosophical assumption the use of qualitative and quantitative approach and the mixing of both studies. Thus it is more than simply collecting and analyzing both kinds of data it also involves the use of both approach in tandem so that the overall strength of the study is greater than qualitative or quantitative research (creswell&plano clark,2007)

Among the above research approach and research design represents the major methodology driving the study, being distinctive and specific research approaches which are best suited to answer the research question (Comack,1996). It explains and justifies the type and method of data collection, source of information, sampling strategy and time-cost constraints. The research

methodology can be classified using the variety of ways, such as methods of data collection, time dimensions, researcher participation and the purpose of the study (Blumberg, 2008).

Thus this study is trying to identify and explain factors that determine brand choice of buyers. Therefore, for this purpose quantitative research approach would use by researcher because the researcher uses different statistical tools to measure and quantify the report. Explanatory research design method is also used to understand about factors affecting consumer branch choice among the alternative three wheeler vehicles and provide theoretical explanation so; this research uses explanatory research design. Each of these strategies plays a distinct but complementary role in order to get an answer on the research problem. Explanatory research is deeper in the sense that it describes phenomena and attempts to explain why behavior is the way it is. Thus this research would try to identify what are the determinant factors that are influence brand choice of three wheeler vehicles buyers while buying. Therefore, for this study the appropriate design is explanatory research design.

#### **3.4. Data Type and Sources**

The study was conducted based on both the primary and secondary data. The primary data were collected from respondents of the study using a structured questionnaire. Secondary data for the study was collected from different journals, research studies books, articles, internet websites report.

#### **3.5 Target Population**

Firstly, the population of the study needs to be chosen. Population is defined as "the complete set of units of analysis that are under investigation, while element is the unit from which the necessary data is collected" (Davis 2000, pp. 220). Hence, for many research questions and objectives, considering all possible cases or population elements seems unfeasible to collect or to analyze all the data available. For instance, it is believed that more than 5,500 of three-wheel (Rickshaws) are in operation in Addis Ababa at different locations. So, it is difficult to consider in this study the total population. For that reason, sample three-wheel owners and importers do select from the estimated number of three-wheel vehicles working in Addis Ababa.

### 3.6 Sampling Technique and Sample Size

### 3.6.1 Sampling technique

Sampling technique is non-probability sampling method of convenient sampling technique is used to select the existing respondent and who are easily accessible.

### 3.6.2 Sample Size

Sample Size is a number that is calculated based on the population size and the levels of error and confidence the researcher sets. This is the number of people that will need to complete the survey in order for the results to be accurate within the tolerances that are set earlier (Krejcie& Morgan, 1970).

And Population Size is the total number of people that the researcher could send the survey out to. This is the total number of people to which the researcher will be generalizing the results of the findings (Krejcie& Morgan, 1970).

Based on the data Addis Ababa transport authority encoding the total number of three-wheel vehicle Rickshaws are around 5,500 Considering the size and time it is difficult to collect data from the whole population. So, to avoid such limitation I will draw sample from the whole population. According to Field (2005), whenever it is possible to access the entire population, it is possible to collect data from sample and use the behavior within the sample to infer things about the behavior of the population. Field also states that "the bigger the sample size, the likely it reflects the whole population. Accordingly, in this study to make the sample more representatives, the sample size of the study will be determined using the formula adopted from Kreijcie and Morgan's (1970).

Thus, the formula used to calculate the sample size is

 $n= (N/1+N (e))^{2}$  Where: n= sample size N= total population that is 5,500 e= is the error term, which is 5% (i.e. at 95% confidence interval)

Using the above formula, the simple size of the study will be determined as

 $n=(5,500/1+5,500(0.05))^{2}$  $n=(5,500/1+275)^{2}$
$n = (19.9275)^2$ <u>n = 397.1</u>

Therefore, the sample size is 397 customers.

#### **3.7 Method of Data Analysis**

Primary data was collected in this study. To conduct the analysis exhaustively, the data was analyzed with the combination of both descriptive statistics like mean, frequency, and cross tabulation of the variables and inferential statics like correlation analysis to examine direction and significant of the correlation of the variables considered under this study and regression analysis to examine the relationship between the dependent variable and the independent variables with Pearson correlation and liner multiple regression techniques, one-way ANOVA was also applied.

Before analyzing, the collected and coded data was checked for any possible errors while entering or coding the data. This process is essential and will save a lot of headache later, according to (Pallant, 2005).

The data screening process involves a number of steps:

Step 1: Checking for errors. First, one needs to check each of the variables for scores that are out of range (i.e. not within the range of possible scores).

Step 2: Finding the error in the data file. Second, one needs to find where in the data file this error occurred (i.e. which case is involved).

Step 3: Correcting the error in the data file. Finally, one needs to correct the error in the data file itself.

The secondary data was then presented using frequency distribution tables to systematically arrange data values with a count of how many times each value occurred in a dataset. Then, the data was analyzed using descriptive statistics where summarizing of the data was done through measures of central tendencies (mean, mode, and median), measures of dispersion (variance and standard deviation) and distribution. The results of this analysis were presented by tables.

After descriptive analysis, the regression model was specified defining the explanatory and the explained variables in the study. This then determined the type of regression the study used, which was multiple regressions (where its assumptions were checked with collinear diagnostics). The type of relationship for multiple regressions by default was a random or stochastic where for each value of the independent variable X, there will be some values of the dependent variable Y only with some probability, in order to accomplish all the above requirements, the researcher will use software to analyze the data. As a result, SPSS and Microsoft Excel will be applied to analyze the collected mass of data.

# 3.8 Reliability Test and Validity Test

#### **Reliability Test**

Reliability is the extent to which measurements are repeatable –when different persons perform the measurements, on different occasions, under different conditions, with supposedly alternative instruments which measure the same thing. In sum, reliability is consistency of measurement or stability of measurement over a variety of conditions in which basically the same results should be obtained (Drost, 2007). To assess the internal consistency of variables in the research, Cronbachs alpha reliability test technique test was applied. According to Field (2006) and Zikmund (2010) Cronbachs alpha coefficient greater than 0.7 indicate the reliability of the data.

Cronbach's alpha is used in this study to assess the internal consistency of the research instrument, which is developed questionnaire. Cronbach's  $\alpha$  (alpha) is a coefficient of reliability used to measure the internal consistency of a test or scale; it resulted as a number between 0 and 1. As the result approaches to 1 the more is the internal consistency of the items, which means all the items measure the same variable.

The result of the coefficient alpha for this study's instrument was found to be 0.774, as indication of acceptability of the scale for further analysis since all the seven items of brand choice dimensions (brand image, price, reliability and safety, availability of spare part, durability, and fuel consumption) measure the same variable, which is brand choice. Besides the overall reliability test, the items under each of the seven brand choice dimensions are also tested to check if they measure the same dimension or not. Most of the dimension consistency test result was acceptable meaning greater than 0.7. Cronbach (1951) describes that sometimes measurements with low reliability result might still influence the scale measure and the overall

Dimensions	Cronbach's Alpha	N of items
	<b>A</b>	
Brand image	0.771	7
Reliability	0.770	3
Price	0.815	5
Spare part	0.809	2
Safety	0.734	3
Fuel consumption	0.716	2
Durability	0.881	4
Consumer Buying decision	0.708	2
Over all reliability	0.774	28

reliability tastes results indicate excellent internal consistency. Thus considering the results are acceptable further analysis is conducted (reliability test result t available on Appendix part).

Source: Survey result (2020 n=314)

Table 3. 1 Cronbach alpha; for brand choice dimension

Survey result, 2020

#### **Reliability Statistics**

Cronbach's Alpha	N of Items		
.774	28		

Table 3. 2 Cronbach alpha; for brand choice dimension

Survey result, 2020

#### Validity Test

Validity is the extent to which differences found with a measuring instrument reflect true differences among those being tested, (Kothari, 2004). In other words, Validity is the most critical criterion and indicates the degree to which a measure what it is supposed to measure. In order to ensure the quality of the research design content and construct validity of the research.

The content validity will be verified by the advisor of this research, who looked into the appropriateness of the questions and the scales of measurement.

#### **3.9 Ethical Considerations**

The participants in this study will be selected with full consent and informed to respond for questionnaires with confidence and understanding the purpose of the thesis; and the researcher will assure that as he will keep the information confidential and the data will have used only for intended purpose.

# CHAPTER FOUR ANALYSIS AND INTERPRITATION

#### **4,1 INTRODUCTION**

The main focus of this chapter is on presentation of data analysis, empirical findings and results of the survey of the factors that affect brand choice of three wheeler vehicles in Addis Ababa. The data analysis was made with the help of Statistical Package for Social Science.

Out of these 397 questionnaires distributed to customers, 314 questionnaires were collected back and properly filled. Thus, the analysis is based on the valid 314 questionnaires (with 79.1% response rate) response while the remaining 83 (20.9 %) questionnaires were not returned back.

TABLE 4. 1 Response rate of Questionnaires Administered

Particulars	Correctly filled and returned	Not returned	Total
Frequency	314	83	397
Percentage	79.1%	20.9%	100%

Source: own survey 2020

#### 4.2 General information of the respondent

Out of the 397 questionnaires sent out, only 314 were returned during a period of covid 19 (corona vires). They were not fully completed, and the rest 314 representing a response rate of 95.5 %. The first part of the questionnaire consists of the general profile of respondents. This part of the questionnaire requested a limited amount of information related to general and company status of the respondents. Descriptive statistics (frequency distribution) is used to discuss the general demographic characteristics of respondents (Age, gender occupation) and general information of respondent which are suitable for study that are discussed in the table below.

# **Frequency Table**

Demographic	measurement	frequency	Valid percentage
variable	18.25		26.4
AGE	18-25	0.5	20.4
	26.25	175	
	26-35	175	55./
	36-44	33	10.5
	45<	21	6.7
	5.00	2	.6
TOTAL		314	100
GENDER	FEMALE	37	11.8
	MALE	248	79.0
TOTAL		314	100
EDUCATION LEVEL	primary education	119	37.9
	secondary education	69	22.0
	diploma	74	23.6
	first degree	51	16.2
TOTAL		314	100
what is your income per day	200<	124	39.5
	200-400	78	24.8
	400-500	65	20.7
	500>	19	6.1
TOTAL		314	100
Which brand wheelers vehicles do you have?	Tvs	129	41.1
	Re	75	23.9
	Piaggio	65	20.7
	Force	20	6.4
	Atul	22	7.0
	other	3	1.0
TOTAL		314	100

# TABLE 4. 2 Demographic distribution of respondents

(source survey data 2020)

As the table shown above 26.4 % of the respondent is aged between age 18-25 and 55.7 % of the respondent is aged between 26-35 and 10.5 % of the respondents are aged between 36-44 and the remaining respondents are 6.7 % aged above 45. Generally, the above table shows that the largest no from the respondents are younger age (26-35) consumer.

From the total 314 respondents 37 (11.8%) are females and 248(79%) of them are male this tell us largest respondents are male.

The above table shows that from the total respondents of 314, 37.9 % are under primary education and 22 % from the total respondent's secondary education completes" and also 23.6 % respondents are diploma graduates and totally the remaining respondents are first degree 16.2 %. From this table we can conclude that most of the respondents are primary education.

The above table shows us the income distribution of the respondents that is categorized us the income of the respondents per day. From the total respondents 39.5% are under the categories of income less than ETB200 and 24.8 % of the respondents are categorized under of income ETB 200-400 also 20.7 % of the respondents are categorized under per day income ETB 400-500 and the remaining respondents are under income of ETB 500 and above. This shows that from the total respondents the largest participants (39.5 %) are categorized under per day income of ETB less than 200

This tables show us from the total respondents314; 41.1 % respondents are the owner of TVS brand and 23.9 % from the total respondents have RE brand and the other brand is PIAGGIO from the total respondents cover20.7% the remaining brand that the respondents have are FORCE, ATUL and other brands it has coverage from the total respondents in percentile 6.4%, 7.0% and 1% respectively. Generally, from the above table we can conclude that TVS is more preferred brand in a city.

#### 4.4 Descriptive Analysis of variables

Descriptive statistics were used to describe the basic features of the data in a study. It provides simple summaries about the sample and the measures. The researcher used descriptive Statistics to present quantitative descriptions in a manageable form; each descriptive statistic reduces lots of data into a simpler summary (Gelman, 2007).

	Ν	Minimum	Maximum	Mean Std. Deviation Skewness Kurtosis		Skewness		rtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Brand image	314	7	32	24.60	6.040	-1.459	.138	2.040	.274
Reliability	314	3	15	11.22	3.185	545	.138	812	.274
Price	314	5	25	14.82	5.825	498	.138	688	.274
spare part	314	2	10	7.46	2.910	897	.138	648	.274
Safety	314	3	15	9.77	3.462	922	.138	245	.274
Fuel consumption	314	2	10	7.57	2.220	-1.301	.138	.818	.274
Durability	314	4	20	16.39	4.207	-1.954	.138	3.118	.274
Valid N (listwise)	314								

**Descriptive Statistics** 

#### TABLE 4. 3 brand distribution of the respondents Survey result, 2020

Based on the above table brand image have the highest mean among factors that affect consumer buying decision behavior by score mean 24.60. this shows that the level of agreement on brand image more towards to agree. Whereas, durability, price, reliability, safety, and A-spare part, F-consumption factors have 16.39, 14.22, 11.22, 9.77 and 7.57, 7.46 mean scores respectively. This indicates that the level of agreement on durability, price, reliability, safety, and spare part, fuel consumption factors more towards to neutral. The finding Cleary indicated brand image affects consumer buying behavior regarding brand three wheeler vehicle's selection.

#### 4.5 Test of normality of the Data

Among the others, one of the assumptions was normality of the data should be tested before running the analysis of the data using skwness and Kurtosis.

According to Fieled (2005), normally distributed data assumed that the data are from one or more normally distributed populations. The rationale behind hypotheses testing relies on having normally distributed populations and so if these assumptions are not met then the logic behind hypothesis testing is flawed.

Therefore, value of S (Skewness) and K (Kurtosis) and their respective standard errors were computed. An absolute value greater than 1.96 Z-score for Skewness and less than 3.29 for Kurtosis is expected to be significant at p< 0.05. Large sample will give rise to small standard errors and so when sample sizes are big, significant values arise from even small deviations from normality for both skewness and Kurtosis (Fieled, 2005).

The result of skewness and kurtosis of the five construct dimension of buying decision, against the predicted variables of brand choice was within the acceptable  $\pm 1.96$  and hence, we conclude that the data are normally distributed.

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Brandimage	.178	314	.000	.843	314	.000
Reliability	.170	314	.000	.902	314	.000
Price	.183	314	.000	.896	314	.000
Avai.sparepart	.223	314	.000	.789	314	.000
Safety	.249	314	.000	.847	314	.000
Fuelconsumption	.303	314	.000	.810	314	.000
Durability	.249	314	.000	.714	314	.000

**Tests of Normality** 

a. Lilliefors Significance Correction

#### TABLE 4. 4Tests of Normality Survey result, 2020

Normal distribution is one of the most important assumed statistical procedures. Astandard normal distribution is one with a mean of zero and a standard deviation of one (Garson, 2012). A common test for normality is to run descriptive statistics to get skewness and kurtosis. Skiwness should be within -2 and +2 range if the data is normally distributed. Kurtosis shows the peak ness or flatness of distribution and the distribution shall commonly fall between -2 and +2, although a few other authors like (Garson, 2012), are more lenient and allow kurtosis to fall within -3 and +3.

Following the above justification, the normality test was done for seven variables on SPSS software version 20, which resulted in all the variables skewness fall within -2 and +2 range and all the variables kurtosis fall within -3 and +3 range. Therefore, it is observed that, the data used for the study is normally distributed.



Figure 4. 1 normality chart

Survey result, 2020

Normality of a data should be test before running the regression analysis because multiple regressions require that the independent variables in the analysis be normally distributed. According to Brooks (2008), as cited by Abate (2012) if the residuals are normally distributed, the histogram should be bell- shaped and thus this study implemented graphical methods to test

the normality of data. From the Histogram figure, it can be noted that the distribution is normal curve, demonstrating that data witnesses to the normality assumption.

As the assumption holds as the histogram was a bell- shaped and the residuals were normally distributed around its mean of zero. Besides, the normal probability plots were also used to test the normality assumption as shown by the Normal P P-Plot Figure as you can see from the above.

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

#### 4.6 Inferential Statistics

#### 4.6.1Correlations Analysis

In this study, to process the correlation analysis, data from the scale typed questionnaires were entered in to the SPSS software version 20. Pearson correlation coefficient is used to specify the strength and the direction of the relationship between the independent variable (Durability, Price, Fuel consumption, Safety, Reliability, spare part, Brand image) and the dependent variable i.e. Consumer buying decision. The results of the correlation between these variables are shown in Table 4.5

		Brand image	Reliability	Price	Spare part	Safety	Fuel Consumption	Durability	Buying Decision
Brand Image	Pearson Correlation Sia (2-tailed)	1							
	N	314							
Reliability	Pearson Correlation	.237**	1						
	Sig. (2-tailed)	.000							
	Ν	314	314						
Price	Pearson Correlation	078	064	1					
	Sig. (2-tailed)	.167	.259						
	Ν	314	314	314					
Spare part	Pearson Correlation	026	.126*	.107	1				
	Sig. (2-tailed)	.649	.025	.058					
	Ν	314	314	314	314				
Safety	Pearson Correlation	.056	.159**	.103	.098	1			
	Sig. (2-tailed)	.327	.005	.067	.082				
	Ν	314	314	314	314	314			
Fuelconsum ption	Pearson Correlation	.247**	.075	012	.039	.008	1		
	Sig. (2-tailed)	.000	.187	.834	.494	.884			
	Ν	314	314	314	314	314	314		
Durability	Pearson Correlation	.194**	.311**	030	.161**	.057	.035	1	
	Sig. (2-tailed)	.001	.000	.601	.004	.317	.535		
	Ν	314	314	314	314	314	314	314	
Buyingdecis ion	Pearson Correlation	.329**	.545**	.046	.168**	.237**	.000	.372**	1
	Sig. (2-tailed)	.000	.000	.416	.003	.000	.999	.000	
	Ν	314	314	314	314	314	314	314	314

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

\*Correlation is significant at the 0.05 level (2-tailed).

TABLE 4. 5correlation table

#### Brand image versus buying decision

As indicated in the table above brand image was positively and significantly correlated with buying decision (r=0.329\*\*, p=0.000). In other words, the value of (r=0.329) indicates that brand image and buying decision have moderate and positive relationship in the context of three wheeler vehicle brand choice in the market of Addis Ababa.

#### **Reliability versus buying decision**

As indicated in the table above reliability was positively and significantly correlated with buying decision (r= $0.545^{**}$ , p=0.000). In other words, the value of (r=0.545) indicates that reliability and buying decision have moderate and positive relationship in the context of three wheeler vehicle brand choice in the market of Addis Ababa.

#### Price versus buying decision

As indicated in the table above price was positively and insignificantly correlated with buying decision ( $r=0.046^*$ , p, greater than 0.05 which is 0.416). In other words, the value of (r=0.046) indicates that price and buying decision have weak and positive relationship in the context of three wheeler vehicle brand choice in the market of Addis Ababa.

#### Availability of spare part versus buying decision

As indicated in the table above spare part availability was positively and significantly correlated with buying decision (r= $0.168^{**}$ , p< 0.05which is 0.03). In other words, the value of (r=0.168) indicates that spare part availability and buying decision have moderate and positive relationship in the context of three wheeler vehicle brand choice in the market of Addis Ababa.

#### Safety versus buying decision

As indicated in the table above safety was positively and significantly correlated with buying decision (r= $0.237^{**}$ , p=0.000). In other words, the value of (r=0.237) indicates that safety and buying decision have moderate and positive relationship in the context of three wheeler vehicle brand choice in the market of Addis Ababa.

## Fuel consumption versus buying decision

As indicated in the table above fuel consumption was positively and insignificantly correlated with buying decision ( $r=0.00^*$ , p, greater than 0.05 which is 0.999). In other words, the value of (r=0.00) indicates that fuel consumption and buying decision have weak and positive relationship with insignificant relationship in the context of three wheeler vehicle brand choice in the market of Addis Ababa.

#### Durability versus buying decision

As indicated in the table above durability was positively and significantly correlated with buying decision (r= $0.372^{**}$ , p=0.000). In other words, the value of (r=0.372) indicates that durability and buying decision have moderate and positive relationship with significant enough relationship in the context of automobile brand choice in the market of Addis Ababa.

#### 4.7Assumptions Testing in Linear Multiple Regressions

#### 4.7.1 Model summary

In this research multiple regression analysis was used because there were seven independent variables adapted by the research to be analyzed. Multiple regressions were used to estimate the coefficients of the linear for each independent aggregate variable that best predict the value of the dependent variable.

Model	R	R Square	Adjusted R	Std. Error of the
			Square	Estimate
1	.717ª	.514	.503	1.33199

#### **Model Summary**

a. Predictors: (Constant), Durability, Price, Fuel consumption, Safety, Reliability, spare part, Brand image

#### Source: Survey Result, 2020

#### TABLE 4. 6 Model summary Survey result, 2020

b. Dependent variable; consumer buying decision

ANOVA	8
-------	---

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	575.083	7	82.155	46.305	.000 <sup>b</sup>
1	Residual	542.904	306	1.774		
	Total	1117.987	313			

a. Dependent Variable: Buying decision

b. Predictors: (Constant), Durability, Price, Fuel consumption, Safety, Reliability, spare part, Brand image

#### TABLE 4. 7 ANOVA Survey result, 2020

ANOVA (analysis of variance), used to compare whether the mean of dependent variable differ significantly across the categories of another independent variable. ANOVA provides, the result of test significance for R and R<sup>2</sup>using an F-statistic. According to Cohen J (2010) if the result of the test is significant, with P-value below0.05 then we reject the null hypothesis that different from zero and accept the research R<sup>2</sup> significantly different from zero and there is a relationship between the independent and dependent variable in the population. As it is depicted on the ANOVA table above, the P-value of the dependent variable customer buying decision and the independent variable of before buying constructs of Durability, Price, Fuel consumption, Safety, Reliability, spare part, Brand image is well below .05(P<0.001).Therefore ,we conclude that the R and R<sup>2</sup> between the dependent variable customer buying decision and independent variables of before purchasing construct are statistically significant (different from zero ), based on the opinion collected from customer three wheeler vehicle.

#### 4.7.2 Multi collinearity Test

The basic assumptions should be satisfied in order to maintain data validity and robustness of the regressed result of the research under the multiple regression models. Hence, this study has conducted the assumption tests such as, multi-collinearity, and normality.

This regression is conducted to know how much the independent variable explains the dependent variable. It is also used to understand by how much each independent variable (i.e. brand image, reliability, price, availability of spare part, durability, fuel consumption, safety)

explains the dependent variable, which is Consumer Buying Decision. The results of the regression analysis are presented as follows. To have good results, the independent variables should not be highly correlated with each other. In multiple regression analysis, collnearity refers to the correlation among the independent variables (Pallant, 2007).

Therefore, to make sure that there is low collinearity, the values of Tolerance and VIF (Variance Inflation Factor) should be checked. According to Pallant (2007), tolerance indicates to what extent the independent variables do not explain much of the variability of a specified independent variable and the value should not be small (more than 0.10) to indicate the absence of collinearity. In addition to that, VIF, the inverse of tolerance value, should have a value of less than 10 to avoid any concerns of collinearity (Pallant, 2007).

Hence, the values in the Table below indicate low collinearity because all Tolerance values are above 0.1 and all VIF values are less than 10. Therefore, these tests reflect that the variables used in the study are free from multi collinearity.

Model		Unstandardized Coefficients	Collinearity Statistics		
		В	Tolerance	VIF	
	(Constant)	-2.669			
	Brandimage	.168	.549	1.821	
	Reliability	.145	.617	1.621	
1	Price	.082	.765	1.306	
	Avai.sparepart	078	.605	1.653	
	Safety	.127	.831	1.203	
	Fuelconsumption	189	.841	1.189	
	Durability	.233	.500	2.001	

**Coefficients**<sup>a</sup>

a. Dependent Variable: Buying decision

Source: Own survey (2020),

TABLE 4. 8 Multi collinearity Test table

Model		Unstandardize	ed Coefficients	Standardized	t	Sig.
				Coefficients		
		В	Std. Error	Beta		
	(Constant)	-2.669	.840		-3.178	.002
	Brandimage	.168	.025	.360	6.696	.000
	Reliability	.145	.030	.244	4.818	.000
1	Price	.082	.025	.147	3.227	.001
-	Avai.sparepart	078	.054	073	-1.431	.153
	Safety	.127	.035	.160	3.667	.000
	Fuelconsumption	189	.048	173	-3.975	.000
	Durability	.233	.046	.286	5.082	.000

4.7.3 Regression Coefficient Analysis of the Model and hypothesis testing Table

a. Dependent Variable: Buying decision

#### TABLE 4. 9 regression coefficient Survey result, 2020

The values of the standardized Beta Coefficients ( $\beta$ ) indicate the effects of each independent variable on dependent variable. Furthermore, the values of the standardized Beta Coefficients in the Beta column of the Table above, indicate which independent variable makes the strongest contribution to explain the dependent variable (consumer buying decision), when the variance explained by all other independent variables in the model is controlled.

The study's hypothesis testing was made based on  $\beta$  and *P* values. Hence using those coefficient results, the proposed hypotheses for this study were tested as follows:

Based on the above result and the formula of regression model previously generated, the result of regression could be written as follows

 $CBD = \beta 0 + \beta 1 (BI) + \beta 2 (R) + \beta 3 (P) + \beta 4 (SP) + \beta 5 (S) + \beta 6 (FC) + \beta 7 (D)$ 

$$CBD = -2.669 + 0.168(BI) + 0.145(R) + 0.082(P) + (-0.078)(SP) + 0.127(S) + (-0.189)(FC) + 0.233(D)$$

To test the hypothesis multiple regression was run on SPSS which gives the overall fitness of the model which was presented in the previous paragraphs and the significance of each independent variable in affecting the dependent variable.

The regression model from the above table result shows that keeping other variables constant 0.168 unit increases in brand image will bring a unit increase in the buying decision.0.145-unit increase in reliability will have a unit increase impact on buying

decision of three wheeler vehicle market in Addis Ababa. 0.082-unit increase of price will have a unit increase impact on buying decision of three wheeler vehicle market in Addis Ababa. (-0.078)-unit increase of availability of spare parts of will have a unit increase of buying decision of three wheeler vehicle market in Addis Ababa but availability of spare parts of three wheeler vehicle is insignificant for brand choice in the market since its p, is greater than 0.05 which is 0.153. 0.127 unit increases in safety will bring a unit increase in the buying decision of three wheeler vehicle in the market. 0.233 unit increases in durability will bring a unit increase in the buying decision of three wheeler vehicle in the market. 0.233 unit increases in durability will bring a unit increase in the buying decision of three wheeler vehicle in the market. fuel consumption has significant for brand choice when the value of p<0.05, while it has negative beta value which is -0.189 respectively this means that this variable has inversely relation while buying decision in market of three wheeler vehicle in a city.

Hypotheses	Result	
		Analysis
		Technique
H1: Brand image has positive significant effect on brand choice	Ho: Confirmed	β=0.360,
for three wheeler vehicle buyers		p<0.05
H2: Reliability has positive significant effect on brand choice for	Ho: Confirmed	β=0.244,
three wheeler vehicle buyers.		p<0.05
H3: Price has positive significant effect on brand choice for three	Ho: Confirmed	β=0.147,
wheeler vehicle buyers.		p<0.05

	Ho: Failed	$\beta = -0.73,$
H4: Availability of spare parts has positive significant effect on		p>0.153
brand choice for three wheeler vehicle buyers.		
	H5:Confirmed	β=0.160
<b>H5:</b> Safety has positive significant effect on brand choice for three		p<0.05
wheeler vehicle buyers.		
	H6: Failed	β=-0.173
<b>H6:</b> Fuel consumption has positive significant effect on brand		p<0.05
choice for three wheeler vehicle buyers.		
	H7: Confirmed	β=0.286
H7: Durability has positive significant effect on brand choice for		p<0.05
three wheeler vehicle buyers.		

Source calculated from the research survey data 2020

#### TABLE 4. 10 Hypotheses Survey result, 2020

As the significance value of F statistics shows a value of (.000), which was less than p<0.05. Thus, the model was significant and fit. The strength of each predictor (independent variable) influencing the criterion (dependent variable) can be investigated via standardized Beta coefficient. The regression coefficient explains the average amount of change in the dependent variable that is caused by a unit change in the independent variable. The larger value of Beta coefficient an independent variable has, brings the more support to the independent variable as the more important determinant in predicting the dependent variable.

The results indicate that although all five variables (brand image, reliability, price, and safety durability) had a positive and significant influence on the brand choice of three wheeler vehicle brands, the other variables are fuel consumption and spare part resulted negative beta value -.189 and -.078. fuel consumption is relationship with dependent variable brand choice but its significance is inverse relation. The other is spare part has resulted with negative beta value and insignificant relationship with dependent variable brand choice.

the results of inferential statistics are that three variables like spare part and fuel consumption has no influential effects on dependent variable that is brand choice in three wheeler vehicle market so, we can conclude that this factors are no influences on three wheeler vehicle buyers in a city.

# **CHAPTER FIVE**

#### **Conclusion and Recommendation of the Study**

#### **5.1 Introduction**

The fifth and last chapter of this study revolves around the major findings of the study and what we can conclude from the findings and give recommendation based on these findings. This chapter, moreover, highlighted the limitations of this work and indicated future research areas for anyone interested in the applicability of consumer buying decision.

#### 5.2 Summary of the Major Findings

The primary objective of this study was to determine the factors that affect brand choice of three wheeler vehicle buyers in Addis Ababa. Nowadays the Ethiopian three wheeler vehicle market is getting in to stiff computation through providing different brand of three wheeler vehicle within almost similar purpose.

This study tries to identify which determinant has the highest influence on the overall brand choice. In addition, this study also tries to answer the four research questions it started with in the introduction.

Non-probability sampling specifically a combination of convenience and purposive sampling techniques were used to distribute the questionnaires and to collect the primary data accordingly.

In order to determine the factors that influence the buyers of three wheeler vehicle in a city the researcher test seven independent variable like brand image, reliability, price, availability of spare parts, fuel consumption, durability and safety. By distributing 397 questioners to selected respondent through judgmental and convenience sampled respondents. But from the total distributed questioner 314 (79.1%) of them completed correctly and return within a time. Based on the conceptual frame work and objectives of the study 28 questions were provided in a 5 point Likert scale to the respondents. The gathered data has analyzed by means of descriptive and inferential statistics using SPSS version 20 software.

#### In the inferential statistics part, the following results were achieved.

- ✤ The findings indicate that Brand image was the first most significant variable than other by resulting beta value of 0.360 and significantly related with dependent with value of p<0.05.</p>
- The first hypothesis which states that brand image has positively a significant effect on brand choice of three wheeler vehicle buyers, as a result we can confirmed the null hypothesis and failed alternative one.
- The next hypothesis which states that reliability has positively a significant effect on brand choice of three wheeler vehicle buyers, as a result we can confirmed the null hypothesis and failed alternative one.
- The next hypothesis which states that price has positively a significant effect on brand choice of three wheeler vehicle buyers, as a result we can confirmed the null hypothesis and failed alternative one.
- The next hypothesis which states that availability of spare parts has positively a significant effect on brand choice of three wheeler vehicle buyers, as a result we can failed the null hypothesis and confirmed alternative one.
- The next hypothesis which states that safety has positively a significant effect on brand choice of three wheeler vehicle buyers, as a result we can confirmed the null hypothesis and failed alternative one.
- The next hypothesis which states that fuel consumption has positively a significant effect on brand choice of three wheeler vehicle buyers, as a result we can failed the null hypothesis and confirmed alternative one.
- The final hypothesis which states that durability has positively a significant effect on brand choice of three wheeler vehicle buyers, as a result we can confirmed the null hypothesis and failed alternative one.

#### **5.3** Conclusion

This study was to investigate the factors affecting brand choice of three wheeler vehicle buyers in Addis Ababa. More specifically, in this study the brand image level of consumers, most popular brand in a city and the most significant determinant would also have identified in the study.

- One of the objectives of this study was to find out which brand was more prefer in a city. The data we collected show us the most preferred three wheeler vehicle brand in Addis Ababa is TVS brand among all brands that are available in the market which is 41.1%.
- The results of regression analysis indicated that there is a positive effect of brand image, reliability, safety, durability from this finding; we can conclude that all are influential factors for dependent variable that is brand choice.
- The other main issue we read from the results of inferential statistics is that two variables like spare part, and fuel consumption has no influential effects on dependent variable that is brand choice in three wheeler vehicle market so, and we can conclude that this factors are no influences on three wheeler vehicle buyers in a city.
- One of the objectives of this study was to find out which dimension has the most significant impacts on dependent variable. As indicated in the result among identified and tested independent variables Brand image has the largest value in its significance with dependent variable and beta value so, we can conclude that Brand image has mostly influential factors that is the customer level of minding about the brand because of different reason.
- At the beginning of the study it was hypothesized that all the seven determinants of brand choice had significant impact on brand choice. After the analysis was done, the findings revealed that the major dimension which affects the brand choice of three wheeler vehicle buyers are discussed like brand image, reliability, price and availability of spare parts. so we can conclude that null hypothesis is failed and confirmed alternative hypothesis. the other two variables did not strongly influence the brand choice, the hypotheses drawn were accepted because they had a significant but positive effect on the three wheeler vehicle buying decision.

#### **5.4 Recommendations**

Based on the findings of the study and conclusions made, the following possible recommendations are drawn.

- Keller (2009) posits that since consumers spend little time or effort on the buying decision of low involvement products, brand image alone is sufficient to decide consumer brand choice and determine purchase as consumers are willing to base their choices merely on familiar brands. Hence, it is recommended that three wheeler vehicle companies or sellers should embark on intensive campaign to create stronger brand image. A customer should consider brand image before buying and using a product. Besides, a company should also consider the brand image in order to attract customers and satisfy their needs and be profitable and market leading company. Moreover, brand image is the perception of the brand in the minds of the customers. This image develops over time. Customers form an image based on their interactions and experience with the brand. These interactions take place in many forms and not necessarily involve the purchase or use of products and services.
- The target population was limited to small number of respondents (314).so future researches may use random sample with large population to increase the reliability of the result. This is a newest research and most of considerable buying intension factors may missed by the researcher. But the above indicators are the massive impacted factors (seven variables) when purchasing a three wheeler (research finding approved). Further newest study researcher can identify the above independent variable and they can implement their study.
- This research study is a broad study but it is not a complete study; this research study will open the door to the research who will like to conduct their research in consumer buying behavior at vehicle industry. Because there are few researches studies were done before in the past in buying behavior for vehicle.

## 5.5 Limitation of the study

The period of time was not sufficient because of the situation of covid 19 for the researcher to observe large respondents from different areas of the city; research can be further conducted in other cities of Ethiopia also but, it only focused mainly on one city, Addis Ababa. It was best if it is done in a longer period of time on large geographical area and with fewer burdens of other subjects projects/work load. Some other limitations the researcher has faced also include; some respondents were not willing to cooperate for the questionnaire and some others were lack knowledge to the questionnaire.

# Reference

Aaker, D.A. (1991). Managing Brand Equity: Capitalizing on the Value of a Brand

Name, New York: The Free Press. Abate Ayele, 2012, Factors Affecting Profitability of Insurance Companies in Ethiopia: Panel Evidence, Unpublished Master Thesis, Addis Ababa University, St. Mary University, Addis Ababa, Ethiopia Armstrong, G., & Kotler, P. (2003). Marketing: An Introduction (6th Edition). New Jersey:

Pearson Prentice Hall. Arnold, D. 1992. The handbook of brand management. Reading, Massachusetts, USA: Addison-Wesley Publishing Company. Austin, D. &Dinan, T. (2005). Clearing the Air: The Costs and Consequences of Higher

CAFE Standards and Increased Gasoline Taxes. Journal of Environmental Economics and Management, 50, 562-582. Ballantyne, R., Warren, A., and Nobbs, K. (2006), The evolution of brand choice, Brand

Management, Vol. 13, No. 4/5, pp. 339-352.

Bentz, Y. and Merunka, D. (2000), neural networks and the multinomial logic for brand choice modeling: a hybrid approach, Journal of Forecasting, Vol. 19, pp. 177200. Bhattacherjee,A.(2012)SocialScienceResearch Principles Methods, and Practices, 2nded., Zurich, Switzerland: Jacobs Foundation,

Bhattacherjee, A. 2012.Social Science Research: Principles, Methods, and Practice, 2.0, Free download from Blackboard (my.usf.edu)

10.10.2011. http://drypen.in/branding/brand-identity-a-brand-building-concept.html Brand image. Asia market research internet site. Referred to 10.10.2011.

Ethiopian Investment Commission. (2015). Invest in Ethiopia. Addis Ababa: EIC

Keller K.L., (2004), Strategic Brand Management: Building, Measuring and Managing Brand

Equity, 2nd ed, New Delhi: Prentice Hall of India private limited

Mahadi, A., & Gallagher, K. S. (2009). "Fuel Prices and Consumer Preferences for

Vehicles." Harvard Kennedy School of Government, paper to be presented at the 89th

Annual Meeting of the Transportation Research Board, Washington, DC, January 2010.

McDonald M. and Christopher M. (2003), Marketing A Complete Guide, 1st ed., Palgrave Macmillan

Solomon, M.R., Bamossy, G., Askegaard, S. & Hogg M.K. 2010. Consumer behavior. A

European perspective. Fourth edition. The USA: Pearson Education.

Woodset al, 2010. Reliability Predicted by Consumer Reports.

Zeithaml, V. (1988). "Consumer perceptions of price, quality and value: A means-end model

Chib, S., Seetharaman, P. B., and Strijnev, A. (2004), Model of brand choice with a

No purchase option calibrated to scanner-panel data, Journal of Marketing Research, Vol.XLI, pp. 184-196.

# APPENDICES ONE

# St' marry university Graduate students program Consumer buying decision survey

#### Dear Participant,

My name is Aster Edanshaw studying Master Program at St' marry University in marketing management program. This questionnaire is designed to gather data on "**Factors that influence the brand choice of buyers while buying three wheeler (Rickshaws)**". The purpose of the study is to fulfill a thesis requirement for the Masters of MARKETING MANGMNT (MA) at St. Mary University. Your highly esteemed responses for the questions are extremely important for successful completion of my thesis. The information that you provide will be used only for the purpose of the study and will be kept strictly confidential. You do not need to write your name. Finally, I would like to thank you very much for your cooperation and sparing your valuable time for my request. Indicate your response as per the instruction above each category of questions.

If you have doubts you can contact me via:

E-mail:- ASTERENDESHAW@CBE,COM,ET

Cell phone no: +251910543420

Thank you

choice.				
*	Age: 18- 25 26- 35 36-44 44-45 and above			
*	Gender: Female Male			
*	Highest educational level obtained:			
Prim	ary education Secondary education			
Dipl	oma First Degree			
4. What	is your income per day?			
Less than 200	200 - 400			
400-500	500& More than			
5. Which brand three wheelers vehicles do you have?				
TVS	RE PIAGGIO			
ATUL	FORCE			
Others				

Instruction: Please read each statement carefully and put the tick ( $\sqrt{}$ ) mark under the

Part 2: Determinants of three wheelers vehicles buying

Direction: Please indicate your degree of agreement/disagreement with the following statements by putting the tick ( $\sqrt{}$ ) mark the appropriate choice. 1 = Strong Disagree 2 = Disagree 3 = neutral 4 = Agree 5 = strongly Agree

Key: BI= Brand image, REL= Reliability, PR=Price; AS= Availability of spare part, ST= Safety, FC=Fuel consumption, DR=Durability, BD=Buying decision.

S,no	ITEMS	1	2	3	4	5
BI						
		_			_	
1	I search so many information about three wheeler vehicles					
	brands that I was not previously aware of					
2	I consider any lesser-known brand three wheelers vehicles					
3	A well-known brand three wheeler vehicle					
	is always better in quality than a less known brand					
4	It is important that the brand name alongside					
	Your desired attributes					
5						
	I always go for the well-known branded products.					
6	A lesser-known brand does not necessarily mean inferior					
	auality					
7	I feel more secure when I have three wheelers vehicles with a well – known brand					
,	There more secure when I buy three whereis vehicles with a wen – known brand					
REL						
		1	1	1	1	
8	The quality of three wheelers vehicles influences the					
	Brand choice?					
9	Real service (purpose) of three wheelers vehicles					
	Influence the brand you choice.					
10	Real service (purpose) of three wheelers vehicles					
	Have a positive impact on brand choice of three					
	Wheelers vehicles.					
PR						•

11	Price of three wheelers vehicles influences the brand
	choice
12	My monthly income affects my brand choice while
	buying
13	Low price is one of my priorities when making a
	Buying decision.
14	I prefer a three wheelers vehicles brand that is
	reasonably priced.
15	Price of three wheelers vehicles Have a positive impact on
	brand choice of three wheelers three wheeler vehicles.
AS	
16	Availability of my three wheelers vehicles spare part
	Influences me while buying.
17	Availability of local auto spare parts influence my auto
	Decision
ST	
18	"It's safe to buy a branded product as they always
	Come with better quality"
19	The design of three wheelers vehicles is determine the
	brand choice in the market
20	Medium safety is enough for me to buy three wheelers vehicles
FC	
21	Fuel consumption of my three wheelers vehicles is
	influence me while buying

22	Types of fuel consumed by my three wheelers vehicles			
	influence my buying decision			
DR				
23	Durability of my three wheelers vehicles is influence			
	me while buying			
24	I buy three wheelers vehicles that is produced as per			
	acceptable quality standard			
25	I buy three wheelers vehicle that i consider has a			
	consistence quality			
26	Durability of three wheelers vehicles have a positive impact on the			
	On brand choice of three wheelers vehicles buyers			
BD				
27	The overall determinants are strongly influence the			
	Brand choice of three wheelers vehicles buyers			
28	The overall determinants have a positive impact on the		 	
	Brand choice of three wheelers vehicles buyers			

# ቅድስትማርያም ዩኒቨርስቲ የድረምረቃ ፕሮግራም የደንበኞችየግዢ ውሳኔ ሰርቬይ

## ውድተሳታፊ፣

ስሜአስቴርእንደሻውሲሆንቅድስትማርያምዩኒቨርስቲየማርኬቲንግማናጅመንትፕሮግራምየማስ ተርስፕሮግራምእያጠናሁነው፡፡ይህመጠይቅ "ገዢዎችባለሶስትንማ (ባጃጅ) በሚገዙበትወቅትበብራንድምርጫላይተጽእኖየሚያሳድሩሁኔታዎች" ላይመረጃለመሰብሰብዲዛይንተደርንል፡፡የዋናቱአላማበማርኬቲንግማናጅመንት/ኤምኤ/ ቅድስትማርያምዩኒቨርስቲየማስተርስመመረቂያጽሁፍመስፌርትማሟላትነው፡፡የእርሶየተከበረ ምላሽላሉትዋያቄዎችለእኔመመረቂያጽሁፍበስኬታማመጠናቀቅበጣምጠቃሚነው፡፡ይህመረጃአ ናንተየምትሰጡትለዋናቱአላማብቻየሚውልሲሆንበከፍተኛደረጃሚስጢራዊሆኖይያዛል፡፡ስማች ሁንመጻፍአያስፈል ጋችሁም፡፡በጨመረሻምላላችሁትብብርአናለእኔዋያቄውድየሆነጊዜያችሁን በመሰዋታችሁበጣምአመስግናለሁ፡፡በአያንዳንዱየዋያቄዎችምድብላይባለውትዕዛዝመስረትም

ዋርጣሬዎችካላችሁበሚከተለውአድራሻከእኔ*ጋ*ር*መገናኘ* ትትችላላችሁ፡፡

አ.ሚይል፦ ASTERENDESHAW@CBE, COM, ET

ሞባይልስልክቁጥር፡- +251910543420

አመሰግናለሁ!

ትዕዛዝ፦ እያንዳንዱመግለጫእባክዎንበጥንቃቄበማንበብባልዎትየምላሽምርጫላይ (√) ምልክትአድርጉ፦

- 1. ዕድሜ፦ 18 25 🗆 26 35 🗆 36 44 🗆 44 45 እናከዚያበላይ🗆
- 2. ፆታ፦ ሴት□ ወንድ□
- 3. ያገኙትከፍተኛየትምህርትደረጃ፡-

የመጀመሪያደረጃ <b>ትም</b> ህርት□	የሁለተኛደረጃትምህርት□
ዲፕሎማ□	የመጀመሪያዲግሪ□

4. የቀንገቢዎምንያህልነው?

ከ200 በታች□	200 — 400 🗆
400 — 500 🗆	500 እናከዚያበላይ□

5. ከባለሶስትንማተሸከርካሪዎችየትኛውብራንድአልዎት?

ቲቪኤስ□	<i>ፎርስ□ፒያ</i> ጂዮ□
አቱል□	60
· · • • • -	

ሌሎች□

# ክፍልሁለት፡- የባለሶስትንማተሽከርካሪዎችግቢወሳኞች

ትዕዛዝ፡-

የ800/አለመስማማትዎንደረጃበሚከተለ ትመግለጫዎችላይ√ምልክትበማድረግተገቢምር ጫዎንያመላክቱ።

- 1- በጣምአልስማማም
- 2- አልስማማም
- 3- ድምጸተአቅቦ
- 4- እስማማለሁ
- 5- በጣምእስማማለሁ

イ.	ዝርዝሮች	1	2	3	4	5
ቁ						
የብሪ	ንድምስል					
1	ስለባለሶስትጎማተሽከርካሪዎችብራንዶችበትክክልስለማላውቃቸውበርካ					
	ታመረጃፈልጌያለሁ፡፡					
2	ማንኛውንምየታወቀቅናሽብራንድባለሶስትንማተሽከርካሪዎችከግምት					
	አስገብቻለሁ፡፡					
3	የታወቁብራንድባለሶስትንማተሽከርካሪዎችሁልጊዜምዝቅተኛየታወቁ					
	ብራንዶችይልቅየተሻለጥራትአላቸው፡፡					
4	የብራን <b>ዱስምከ</b> እርሶፍሳንትአኳያጠ <i>ቃሚነው</i> ፡፡					
5	ሁልጊዜምበ <b>ደን</b> ብከታወቀየብራንድምርቶችእ <i>መርጣ</i> ለሁ፡፡					
6	ዝቅተኛየታወቀብራንድየግድዝቅተኛዋራትማለትአይደለም፡፡					
7	<i>የታወቀብራንድያላቸውባለሶስትንማተ</i> ሽከርካሪዎችስንዛይበል <b>ሙን</b> ደሀን					
	ነትይሰማኛል፡፡					
አስተ	ማማኝነት		1			L
8	የባለሶስትንማተሽከርካሪዎዥጥራትየብራንድምርጫላይተጽእኖአለው?					
9	የባለሶስትንማተሽከርካሪዎዥዋናውአንልግሎት/አላማ/					
	የእርሶየብራንድምርጫተጽእኖያሳድራል፡፡					
10	የባለሶስትንማተሽከርካሪዎዥዋናአንልፇሎት/አላማ/					
	ባለሶስትጎማተሽከርካሪዎችብራንድምርጫላይበትተጽእኖአለው።					
ዋጋ			1			
11	የባለሶስት <b>ጎማተ</b> ሽከርካሪዎችዋ,ንየብራንድምርጫላይተጽእኖ,ያደር,ንል					
	::					
12	ግዢበሚፌጽሙበትወቅትወርሃዊንቢዬየብራንድምርጫዬላይተጽእኖአ					
	ለው፡፡፡					
13	የግዢውሳኔሳዴርግዝቅተኛዋ,ንአንዱየእኔተቀዳሚሁኔታነው፡፡					
14	ምክንይታዊተገቢዋ,ጋይለውባለሶስትንማተሽከርካሪዎችእመርጣለሁ፡፡					
15	የባለሶስት <i>ጎማ</i> ተሽከርካሪዎችዋ, <b>ንየባለሶስት</b> ጎማተሽከርካሪዎችላይበንተ					
	<b>ጽ</b> እኖአለው።					
-----	---	--	--	--		
የመስ	\ዋወጫዎችመ <b>ገኘ</b> ት					
16	የእኔባለሶስትንማተሽከርካሪዎዥመለዋወጫመኖርግዢበምፌጽምበትወ					
	ቅትተጽእኖአለው፡፡					
17	የሀገርውስሞየአውቶመለዋወጫዎችመኖርበእኔየአውቶውሳኔሳይተጽእኖ					
	አለው፡፡					
ደሀን	ነት					
18	ሁልጊዜምየተሻለ <b>ዮራትስሳሳቸው</b> ብራንድያሳቸውንምርቶች <i>መ</i> ግዛትደህ					
	ንነትአለው።					
19	የባለሶስትንማተሽከርካሪዎችዲዛይንበነበይውስዋየብራንድምርጫይወስ					
	ናል፡፡					
20	የባለሶስት <i>ጎማተ</i> ሽከርካሪዎችእኔእንድ <b>ገዛ</b> መካከለኛደህንነትበቂነው።					
የነዳ	ጅፍጆታ					
21	የእኔባለሶስትንማተሽከርካሪዎችየንዳጅፍጆታግዢበምሬጽምበትወቅት					
	በእኔላይተጽእኖአለው፡፡					
22	የእኔባለሶስትንማተኘከርካሪዎችበሚጠቀሙበትየንዳጅዓይነቶችየግዢ					
	ውሳኔዬሳይተጽእኖአለው፡፡					
የአገ	<b>እ</b> ግሎትቆይታ					
23	የእኔባለሶስትጎማተኘከርካሪዎችየአገልግሎትቆይታግዢበምሬጽምበት					
	ወቅትተጽእኖአለው፡፡					
24	ተቀባይነትባለውየምራትደረጃየተመረቱባለሶስትጎማተሽከርካሪዎችእን					
	ዛለሁ፡፡					
25	<i>ቀጣይየሆነ</i> ምራትይኖራቸዋልብ <b>ዬከ</b> ፇምትውስ <b>ምየማስገባቸውንባለሶስ</b> ት					
	<i>ጎማተኘከርካሪዎች</i> እንዛለሁ፡፡					
26	የባለሶስትንማተኘከርካሪዎችየአንልማሎትቆይታበባለሶስትንማተኘከርካ					
	ሪዎችንገርዎችየብራንድምርጫውሳይበንተጽእኖአለው፡፡					
የግ	ርውሳኔ					

27	የባለሶስት <i>ጎማ</i> ተሽከርካሪዎችንገርዎችየብራንድምር <i>ጫ</i> ላይአ <b>ጠቃ</b> ላይወሳ			
	<i>፟ኝሁኔታ</i> ዎዥ <b>ጠንካራተጽ</b> እኖአሳቸው።			
28	የባለሶስት <i>ጎማ</i> ተሽከርካሪዎችነገርዎችብራንድምርጫላይአ <b></b> ጠቃላይሁኔ			
	<i>ታዎች</i> በንተጽእኖአላቸው።			

## APPENDICES TWO

## RELIABILTY TEST RESULTS

## Model Summary

Model	R	R Square	Adjusted R	Std. Error of	Change Statistics						
			Square	the Estimate	R Square Change	F Change	df1	df2	Sig. F Change		
		-									
1	.717ª	.514	.503	1.33199	.514	46.305	7	306	.000		

a. Predictors: (Constant), Durability, Price, Fuelconsumption, Safety, Reliability, Avai.sparepart, Brandimage

ANOVA <sup>a</sup>											
Model		Sum of Squares	df	Mean Square	F	Sig.					
	Regression	575.083	7	82.155	46.305	.000 <sup>b</sup>					
1	Residual	542.904	306	1.774							
	Total	1117.987	313								

a. Dependent Variable: Buyingdecision

b. Predictors: (Constant), Durability, Price, Fuelconsumption, Safety, Reliability, Avai.sparepart,

Brandimage

Model	Unstandardized (	Coefficients	s Standardized t Sig. Coefficients		Sig.	Collinearity Statistics		
	В	Std. Error	Beta			Tolerance	VIF	
(Constant)	-2.669	.840		-3.178	.002			
Brand image	.168	.025	.360	6.696	.000	.549	1.821	
Reliability	.145	.030	.244	4.818	.000	.617	1.621	
Price	.082	.025	.147	3.227	.001	.765	1.306	
<sup>1</sup> Spare part	078	.054	073	-1.431	.153	.605	1.653	
Safety	.127	.035	.160	3.667	.000	.831	1.203	
Fuel consumption	189	.048	173	-3.975	.000	.841	1.189	
Durability	.233	.046	.286	5.082	.000	.500	2.001	

## **Coefficients**<sup>a</sup>

a. Dependent Variable: Buying decision

		Brand	Reliability	Price	Spare	Safety	Fuel	Durabili	Buying
		image			part		Consumptio	ty	Decision
							n		
Brand Image	Pearson Correlation	1	.237**	078	026	.056	.247**	.194**	.329**
0	Sig. (2- tailed)		.000	.167	.649	.327	.000	.001	.000
	N	314	314	314	314	314	314	314	314
Reliabili ty	Pearson Correlation	.237**	1	064	.126*	.159**	.075	.311**	.545**
	Sig. (2- tailed)	.000		.259	.025	.005	.187	.000	.000
	Ν	314	314	314	314	314	314	314	314
Price	Pearson Correlation	078	064	1	.107	.103	012	030	.046
	Sig. (2- tailed)	.167	.259		.058	.067	.834	.601	.416
	Ν	314	314	314	314	314	314	314	314
Spare part	Pearson Correlation	026	.126*	.107	1	.098	.039	.161**	.168**
	Sig. (2- tailed)	.649	.025	.058		.082	.494	.004	.003
	Ν	314	314	314	314	314	314	314	314
Safety	Pearson Correlation	.056	.159**	.103	.098	1	.008	.057	.237**
	Sig. (2- tailed)	.327	.005	.067	.082		.884	.317	.000
	Ν	314	314	314	314	314	314	314	314
Fuelcon sumptin	Pearson Correlation	.247**	.075	012	.039	.008	1	.035	.000
	Sig. (2- tailed)	.000	.187	.834	.494	.884		.535	.999
	Ν	314	314	314	314	314	314	314	314
Durabiy	Pearson Correlation	.194**	.311**	030	.161**	.057	.035	1	.372**
	Sig. (2- tailed)	.001	.000	.601	.004	.317	.535		.000
	Ν	314	314	314	<sup>314</sup> 67	314	314	314	314

Buyingd	Pearson	.329**	.545**	.046	.168**	.237**	.000	.372**	1
ecision	Correlation								
	Sig. (2- tailed)	.000	.000	.416	.003	.000	.999	.000	
	Ν	314	314	314	314	314	314	314	314

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

 $\ast.$  Correlation is significant at the 0.05 level (2-tailed).