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**THE IMPACT OF SERVICE QUALITY ON CUSTOMER SATISFACTION**  
**IN LIFAN MOTORS P.L.C.**  
**AN EMPIRICAL STUDY THROUGH SERVQUAL**

**Prepared By:**

**Edlawit Zewge**

**Advisor:**

**Dr. Berhanu Denu (PhD)**

**A Research Paper Submitted to the School of Commerce Department of Marketing Management, Addis Ababa University in partial fulfillment of the requirements for The Degree of Master of Arts in Marketing Management.**

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**Addis Ababa, Ethiopia**

**ADDIS ABEBA UNIVERSITY  
SCHOOL OF COMMERCE GRADUATE STUDIES  
MA PROGRAM**

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***BY: - Edlawit Zewge***

***Approved by Board of Examiners***

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***Chairman, Department***

\_\_\_\_\_  
***Signature***

\_\_\_\_\_  
***Advisor***

\_\_\_\_\_  
***Signature***

\_\_\_\_\_  
***Examiner***

\_\_\_\_\_  
***Signature***

## ***Letter of Certification***

This is to certify that Edlawit zewge carried out her project on the topic entitled “**THE IMPACT OF SERVICE QUALITY ON CUSTOMER SATISFACTION IN LIFANMOTORS P.L.C AN EMPIRCAL STUDY THROUGH SERVQUAL**”. This work is original in nature and is suitable for submission for the award of Master of Marketing Management.

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**Dr. Berhanu Denu**  
***(The Project Advisor)***

## ***Declaration***

I, Edlawit Zewge , declare that this research entitled “**THE IMPACT OF SERVICE QUALITY ON CUSTOMER SATISFACTION IN LIFANMOTORS P.L.C AN EMPIRICAL STUDY THROUGH SERVQUAL**”, is the outcome of my own effort and study and that all sources of materials used for the study have been duly acknowledged. I have produced it independently except for the guidance and suggestion of the Research Advisor.

This study has not been submitted for any degree in this University or any other University. It is offered for the partial fulfillment of the degree of MA in Marketing Management.

***By: Edlawit zewge***

Signature \_\_\_\_\_

Date \_\_\_\_\_

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## **Abstract**

The study focused on the assessment of service quality and customer satisfaction with Lifan motor's spare part sales and vehicle maintenance service. The primary objective of this study is to assess the overall satisfaction level of customers with vehicle maintenance service. The study was conducted among Lifan motor's customers in Addis Ababa. The five SERVQUAL dimensions developed by Parasuraman et al (1988) were used to assess the customer satisfaction, but the measurement was using SERVPERF scale. A sample of 250 respondents was selected using simple random sampling method among which 244 were collected where 172 (70.5 %) were males and 72 (29.5%) were females. The finding shows that the majority 93.4% (228) were satisfied with the service of Lifan motors provided to them.

The result of the study also indicated that next to assurance empathy is the second most important dimension which can influence the overall satisfaction of the customers. Therefore the company should work to improve the other dimensions namely tangibility, reliability and responsiveness to insure their customer's satisfaction.

**Key words:** Service quality, customer satisfaction, SERVQUAL, SERVPERF

## CHAPTER ONE

### 1. Introduction

*This chapter presents an overview of the entire study. It includes background of the company, background of the study, structure of the paper, statement of the problem, research objectives, research questions, hypothesis of the study, significance of the study, definition of terms, delimitations of the study, and limitation of the study*

#### 1.1 Background of the Company

Founded in 1992, Lifan Industry (Group) Co. Ltd (hereinafter called Lifan Group) with more than 13,653 employees is one of the biggest private-owned enterprises in China. Over the past 18 years, specializing in research and development, manufacturing and marketing (including international trade) of automobile, motorcycle and engine, Lifan Group has rapidly matured into a prestigious enterprise with the integration of financial sector, real estate and football industry. In 2009, Lifan won a sales income statistics of 13.3 billion RMB, and 380 million USD for exportation. It was listed in "Top Enterprises in China" of Forbes and ranked the 88th. In June 2009, Lifan won Chinese "Nation Card" becoming one of 100 famous enterprises which can represent national economic development since the establishment of People's Republic of China

#### LIFAN ETHIOPIA

Yangfan Motors PLC is a subsidiary branch of Lifan Motors (China) engaged in assembling and distributing Lifan vehicles in Ethiopia having a history of pioneer and branded its product as a leading Ethiopian assembled car. The company started its business with a capital of \$2 million in 2009 and in May, 2014 invested \$ 4.5 million for acquiring an assembling plant which possess modern& high tech machines which enables the company to assemble & deliver 5000 vehicles per annum. Currently, 9 different models are assembled & marketed such as; LIFAN 520, LIFAN 520i HB, LIFAN 320, LIFAN 620, LIFAN 530, LIFAN X60, LIFAN MINI-VAN, LIFAN MINI-CARGO & LIFAN MINI-TRUCK.

Beside the assembly factory with (200m x 50m) or 10,000 m<sup>2</sup> located inside Eastern industry zone located at Dukem, Oromia Region, two service stations located at Kera, around supreme court provide complete after sales service for about 120 vehicles per day.

In line to the main Addis Ababa showroom & service station, the company has sub-dealer who provides both sales and after sales service at Mekelel, Hawassa&Diredawa.

## **1.2 Background of Study**

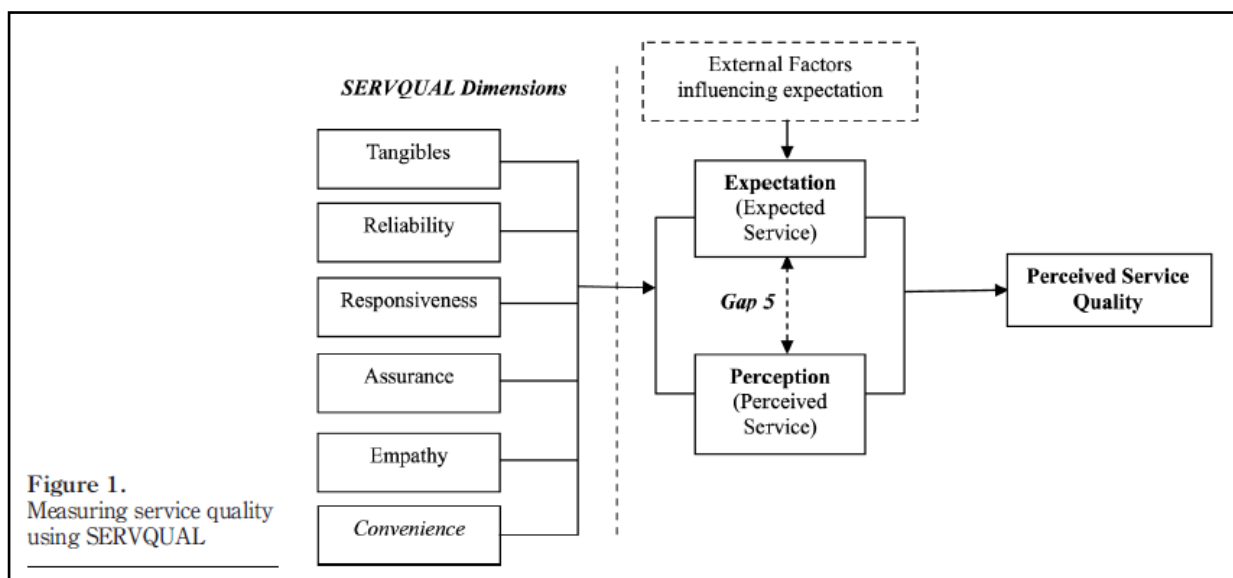
In this chapter, it is discussed about the service quality concept, its importance for practitioners especially the manager, retailers and the sales advisors in Lifan motors plc itself. This research also explains on how the concept is being measured and outlines various models of service quality and introduces the SERVPERF model in particular. Furthermore, at the same time this study highlighted why it is of particular interest to study the relation between service quality and customer satisfaction in Lifan motors and why SERVPERF model is applied in this research.

Service quality is an approach to manage a business processes in order to ensure full satisfaction of the customers which will help to increase competitiveness and effectiveness of the service industry. Quality in service is very important especially for the growth and development of service sector business enterprises (Rahaman et al, 2011). It works as a factor of customer satisfaction (Ruyter and Bloemer, 1995). ISO standards are one of the popular measurement tools of service quality, where quality is defined as the totality of features and characteristics of a product, process or service (Islam & Ahmed, 2005).

There aren't many researches done on lifan motors or other assembly cars in Ethiopia but there is one research on lifan motor done in 2012 regarding their marketing strategy, the researchers found out that the organization follows customer based marketing strategy and regarding shipment, the organization faces some bureaucratic difficulties at the port which can lead to delays.

And also the organization uses only direct channel to distribute its automobiles and it takes 1 ½ months to reach its destination because of major problems with custom clearance the customers recommended that some improvements should be made Like: - the AC (heat control system), and branches should be opened in different areas. However, they believe the cars are good in fuel

efficiency and price. Furthermore the researchers recommended that they should keep up their marketing strategy and level of employee motivation. According to the sample of 42 automobiles, model 620 is more preferable by the customers. However, the company's sale shows that from the 2000 customers they have, most of them bought the automobile model 520. There is no study conducted on service quality and customer satisfaction regarding Lifan motors. Different strategies are formulated to retain the customer and the key of it is to increase the service quality level. Typically, in automotive sectors, customers perceive difference cars' service for different type of car brands. Parasuraman et. al (1988) and Zeithaml et., al (1990) noted that the key strategy for the success and survival of any business institution is the deliverance of quality services to customers. The quality of services offered will determine customer satisfaction and long term loyalty (Naik et al. 2010).



Parasuraman et al. (1988) figure 1

Based on the figure above, Parasuraman et al. (1988) has initially identified 97 attributes which were found to have an impact on service quality. These 97 attributes were the important criteria to enhance the customers' expectations and perceptions on delivered service. However, all these attributes fit into ten dimensions and later being condensed into five dimensions of service quality (Parasuraman et al., 1988) because of the overlap across the ten criteria (Jannadi and Al-Saggaf, 2000). Finally, the best five dimensions to measure the service quality are; tangibility, reliability, responsiveness, assurance and empathy.

A SERVQUAL dimension is a good scale to measure the service quality performance in various specific industries. In this regard, researcher used this model because it takes deep attention on customer's expectation and perception of service provided at an organization (Shahin, 2005, p.3). Parasuraman's SERVQUAL model is widely used to measure perceived service quality in various industry such as retailing, restaurants, banking, telecommunication, services, airline, catering, hotels, hospitals, automotives, education and so on (Ladhari, 2009).

Parasuraman et al. (1988) also found that the customer's perception of service quality depends on the range of gap distance between the customer expects before receive a service in a service center and what he or she actually perceive after see and use the service by their own. Thus, service quality is in fact defined as the gap between customers' expectation of service and their perception of the service experience. A service quality gap exists when there are shortfall occur in which the service provider would like to close (Lewis et al., 1994). For examples, insufficient of sales, planning procedures and marketing research, organization do not focus on the demand quality, unsystematic service development service, lack of personnel training and so forth. This gap model is one of the best-received discoveries, a practice of problem solving and most heuristically valuable contributions to the service literature according to Brown and Bond (1995).

### **1.3 Statement of the problem**

In this globalization era, customers are exposed with varieties of quality car whether by locally or internationally. Nowadays, Ethiopian consumers are more interested with the car that are manufactured by Korea and Japan companies such as Toyota, Honda, Hyundai, Mitsubishi, Nissan, Subaru, Mazda, Lexus, Kia and Suzuki. Product from the east countries are the consumer current choice instead of buying the locally assembled cars. It is because the qualities offered by them are very good indeed and they also have loyalty program for their customers. So the question should be how can Lifan motors can compete with this cars and the other cars that are assembled locally?

Since their products are not that similar in price and quality as Lifan motors the competition between the local ones are mainly based on service pattern, service quality, and customers' expectation. Being different and perform quality in terms of customer service compared to the

other dealer can also be one of the strategies to promote the consumers to prefer lifan motors . Therefore, in order to attract customers, serve their needs and retain them, service providers and researchers are actively involved in understanding customers' perception of service quality. It is believed that in highly competitive environment, clients are becoming more demanding regarding the service they are provided with. Therefore, it is important for the company to understand their customer's perception of service quality. Assembling cars in Ethiopia is a new phenomena that is being notice in recent years and as any new businesses people were resistant to put their trust on the products and the assembling companies has been working hard to improve the perception and for the most part they succeeded but there are still some concerns regarding the after sales service quality, clients mention some problems regarding the after sales service like lack of confidence on the workers, having doubts on the companies materials associated with the service and lack of follow up after sales These problems have effect on the quality of the company's services and therefore, a formal and comprehensive investigation and researching of services quality of is a necessary prerequisite for its services quality improvement.

By offering quality and effective customer service plus with the product quality itself, it can make Lifan motors different from the other cars that are assembled in Ethiopia, when customer service meets or exceeds the customer expectations, the customer start to put confident and trust towards the company's abilities and thus inclined and willing to spend more money to purchase the company's products or services.

So, in this research, there were a lot of questions that can be rolled out in order to maintain the service quality Therefore, the problem of the study was to determine the overall satisfaction of customers with the service provided by Lifan motors. Further, this study investigated the relationship of service quality and customer satisfaction using the SERVPERF instrument (tangibles, reliability, responsiveness, empathy, assurance) given by Parasuraman, et al. (1988)

#### **1.4 Research Objectives**

This study was undertaken to investigate the relationship between the service quality and its impact on customer satisfaction. It focused on the relationship of the five (5) independent variables of SERVQUAL model (Spreitzer, 1995) which are tangibles, reliability,

responsiveness, assurance and empathy with the identified dependent variable; customer satisfaction.

**Specific objectives of the study are:**

- To assess the overall satisfaction of the company's customers.
- To determine the relationship between service quality and customer satisfaction.
- To determine the relative importance of each of the SERVPERF dimensions on the company's service quality.
- To determine the influence of SERVPERF dimensions on customer satisfaction

**1.5 Research questions**

- What is the overall customer satisfaction on service quality provided by Lifan motors?
- What is the relationships between the overall service quality and customer satisfaction in Lifan motors?
- How significant are the dimensions in predicting overall service quality and satisfaction with assembled car service Lifan motors provide?
- Which dimensions of the service quality are important to customers of Lifan motors

**1.6 Hypotheses of the Study**

This study tests the following hypotheses:-

- H1: The tangibles have significant positive influence on customer satisfaction..
- H2: Reliability has significant positive impact on customer satisfaction
- H3: Responsiveness has significant positive effect on customer satisfaction
- H4: Assurance has significant positive impact on customer satisfaction
- H6: There is a positive relationship between overall SERVPERF dimension and customers satisfaction
- H7: The tangibles have significant positive influence on overall service quality
- H8: Reliability has significant positive impact on overall service quality
- H9: Responsiveness has significant positive effect on overall service quality

H10: Assurance has significant positive link with overall service quality

H11: Empathy has significant positive link with overall service quality

## 1.7 Significance of the Study

This study has a great advantage for different parties. First for most the findings are useful to the company to know their strength and weakness regarding their service quality and if their customers are satisfied with the services they are providing, knowing this will help them improve their service quality in the liking of the customers. Second this research also helps similar firms who operate in the same industry to get a glimpse of the customer's perspective regarding the service quality they are expecting. At the third place the researcher aim that the findings are anticipated to provide concrete information to the customers about how Lifan motors plc measure their service quality and what they are doing to improve their services to get more loyal customers. This research enhances the researcher's knowledge of how the service quality is regarding locally assembled cars in Ethiopia and what it should be done to improve it. Furthermore, this research serves as a preliminary basis for future study on this regard.

## 1.8 Definition of terms

**Service quality:** means the difference between the customer's expectation of service and their perceived service. In this study, the assessment standards of Zeithaml, Parasuraman & Berry (1990) will be used, which consist of five dimensions: tangibility, reliability, responsiveness, assurance, and empathy.

**Servqual:** is an instrument for measuring service quality, in terms of the discrepancy between customers' expectation regarding service offered and the perception of the service received; respondents are required to answer questions about both their expectation and their perception

**SERVQUAL:** A model used for measuring service quality developed by Parasuraman et al. (1988).

SERVQUAL dimensions:

- Reliability: The ability to perform the promised service dependably and accurately.

- Assurance: Knowledge and courtesy of employees and their ability to inspire trust and confidence.
- Responsiveness: The willingness to help customers and to provide prompt service.
- Empathy: Caring and individualized attention that the firm (service provider) provides to its customers.
- Tangibles: Physical facilities, equipment, appearance of personnel and communication materials.

**Customer satisfaction:** Satisfaction generally recognized as a pleasurable outcome, ‘a desirable end state of consumption or patronization. Precise definitions of satisfaction vary, but common themes emphasize that it is a customer’s judgment of the consumption experience formed through some kind of psychological process that involves some form of comparison of what was expected with what was received.

### **1.9 Delimitation of the study**

The research project was confined only to Lifan motors customers in Addis Ababa who visited the spare part and vehicle maintenance shop during the data was collected, which includes customers from governmental organizations, nongovernmental organizations and individuals who bought the cars for personal use.

### **1.10 Limitation of the study**

The possible limitations of the study are inability to incorporate all Lifan motors customers and customers in the other region of the country due to time constraint and other resource limitations. Therefore, it is difficult to generalize the findings and results to the whole Lifan motors customers in Ethiopia

### **1.11 Structure of the Paper**

The study is organized in such a way that it would give coherent flow of ideas to the basic findings. It is divided in to five chapters each with brief descriptions. The first chapter deals with back ground of the study, the overall identification of the problem, objective of the study, significance of the study, the extent to which the study was undertaken or (delimitation of the

study) and with its potential problems or limitations that come across while the study is conducted. On The second chapter prior literatures by other researchers regarding to the service quality and other related issues like criteria for service quality, models of service quality, quality measurement, approaches to improve service quality will be presented .

In the third chapter of the study research design and methodology that each activity carried out and detail procedures to be followed will clearly listed and this will consist about the study area, research design and research participants. Furthermore, sample size and sampling method, method of data collection, sources, and research instruments, description of variables (define key concepts and terms in the context of the research Study by using operational definitions) and data analysis technique will be presented. Moreover, after the required data is collected, it will be analyzed by different analysis techniques and presented in the sequential manner. And finally on chapter five conclusions on the overall study, recommendation on the concern to be improved amended or changed will be presented and also it includes limitation and further area of research.

## CHAPTER TWO

### 2. Review of Related Literature

*This chapter demonstrates the review of related literatures. It includes customer satisfaction, determinants of customer satisfaction, Models for customer satisfaction, Measures of service quality, Model of service quality gap and criticisms of SERVQUAL.*

#### 2.1 Customer Satisfaction

The concept of customer satisfaction occupies a central position in marketing thought and practice (Ho & Wu, 1999). In today's highly competitive world customer satisfaction is important for all organizations to create and keep competitive advantage and to get feedback about the quality of marketing decisions (Ptterson, 1993; Taylor & Baker, 1994: as cited in Goode, Davis, Moutinho & Jamal, 2005). According to Singh and Khanduja (2010) satisfied customers form the foundation of any successful business as customer satisfaction leads to repeat purchase, brand loyalty, positive word of mouth and profitable relationships. Therefore a firm should concentrate on the improvement of service quality and charge appropriate fair price in order to satisfy their customers, which would ultimately help the firm to retain its customers (Gustafsson et al., 2005). According to Hanif, Hafeez and Riaz (2010) customer satisfaction makes the customers loyal to one service provider. Hence, customer satisfaction is very important in today's business world and the profitability and survival of any organization depends on the ability to create high degree of satisfaction.

Studies have shown that it costs about five times to gain a new customer as it does to keep an existing customer (Naumann, 1995) as cited in Samuel (2006) and this result into more interest in customer satisfaction. Thus, several companies are adopting customer satisfaction as their operational goal with a carefully designed framework.

##### 2.1.1 Definition of Customers' Satisfaction

Most researchers agree that satisfaction is an attitude or evaluation that is formed by the customer comparing their pre-purchase expectations of what they would receive from the product to their subjective perceptions of the performance they actually did receive (Sriyam, 2010). According to Hansemark and Albinson (2004) as cited in Zekiri (2011) "satisfaction is an

overall customer attitude towards a service provider, or an emotional reaction to the difference between what customers anticipate and what they receive, regarding the fulfillment of some needs, goals or desire". Kotler and Keller (2006) defines satisfaction as a person's feelings of pleasure or disappointment resulting from comparing a product's or service's perceived performance (or outcome) in relation to his or her expectations. Customer satisfaction is also defined as an "evaluation of the perceived discrepancy between prior expectations and the actual performance of the product" (Samuel, 2006). These definitions of customer satisfaction have in common that, if the performance falls short of expectations, the customer is dissatisfied. If the performance matches the expectations, the customer is satisfied. If the performance exceeds expectations, the customer is highly satisfied or delighted. In conclusion, customer satisfaction is defined as a result of customer's evaluation to the consumption experience with the services. However, the customers have different levels of satisfaction as they have different attitudes and perceived performance from the product/service.

### **2.1.2 Determinants of Customer Satisfaction**

The customer satisfaction literature confirms that the most direct determinants of satisfaction are quality of service, customer expectation and perceived value and performance (Parasuraman, et al., 1988, Wang & Lo 2002; Kotler & Keller, 2006). Most scholars accept that service quality basically relates to what the customer perceives of the product/service performance. According to Ahmed et al. (2010) quality is the main determinant of customer's satisfaction in both manufacturing and service quality. Gronroos (2001) stated that perceived service quality is an important determinant of customer satisfaction that has both cognitive and affective dimensions beyond just cognitive assessment of customers of the offering of service providers.

The second most important determinant of customer satisfaction is customer expectation. It has been found out that expectation plays a major role in determining satisfaction. According to expectancy disconfirmation theory (Parasuraman et al., 1988) customer is satisfied if the performance of product/service is equal to his/her expectations (positive disconfirmation) and he/she is dissatisfied if the product/service performance is perceived to be below his/her expectation (negative disconfirmation). If expectation exceeds perceived performance, the customer is highly satisfied. The other perspective of the disconfirmation is that customer

satisfaction relates to a comparison of customer perceive quality with perceived performance, rather than comparing expectation with perceived performance (Gronroos 2001). Customer satisfaction is also driven by perceived value. Several studies have shown that perceived value is significant determinant of customer satisfaction (Anderson et al. (1994); McDougall and Levesque (2000). Turel and Serenko (2004) in their investigation of telecom services in Canada suggested that the degree of perceived value is a key factor affecting customer satisfaction. Though the concept of value is relative and has several dimensions to it, Zeithmal (1988) considers customer value as the overall assessment of the utility of a product based on perception of what is received and what is given.

The perceived value process involves a trade-off between what the customer gives such as price/money, sacrifice, perceived risk, opportunity cost, and learning cost in exchange for what he/she gets such as quality, benefits, utilities (Wang & Lo, 2002; Zeithmal, 1988). Conceptually, since what the customer gets for what he/she gives is based on performance of the product /service, what he/she gives became a standard for comparison. In this, a sort of disconfirmation occurs in that the customer becomes satisfied if the performance of product/service is equal to what he/she gives (positive disconfirmation); he/she is dissatisfied if the product/service performance is perceived to be below what he/she gives (negative disconfirmation). If what he/she gives exceeds perceived product/service performance, the customer is highly satisfied. It is called as value-disconfirmation.

Researches manifest the fact that there is some kind of intertwine relationships among all antecedents of customer satisfaction (Wang & Lo, 2002). It is established empirically that customers overall cognitive or affective evaluation is based on basically the service quality, but the customer's perception of the performance of the service quality encountered is compared with some cognitive or affective standard like his/her expected quality, perceived quality or value quality.

### **2.1.3 Customer's Expectation**

Customers' expectation is what the customers wish to receive from the services. Expectations are the results of prior experience with the company's products. Singh and Khanduja (2010) proposed that customers, expectation is formed by many uncontrollable factors which include

previous experience with other companies, and their advertising, customers, psychological condition at the time of service delivery, customer background and values and the images of the purchased product. In addition, Zeithaml et al. (1990) stated that customer service expectation is built on complex considerations, including their own pre-purchase beliefs and other people's opinions. Similarly, Miller also stated that customers' expectation related to different levels of satisfaction. It may be based on previous product experiences, learning from advertisements and word-of-mouth communication.

The diversity of expectation definitions can be concluded that expectation is uncontrollable factors which including past experience, advertising, customers perception at the time of purchase, background, attitude and product's image. Furthermore, the influences of customer's expectation are pre-purchase beliefs, word of mouth communications, individual needs, customers' experiences, and other personal attitudes. Different customers have different expectation based on the customer's knowledge of a product or service. Studies supported that expectations precede satisfaction for instance: Turel and Serenko (2004) found in Canada that perceived expectations are positively correlated with customer satisfaction. Anderson, Fornell and Lehmann (1994), who conducted investigation on Swedish firms, argue that there is a positive and significant relationship between expectations and customer satisfaction.

#### **2.1.4 Customer Perception**

Perception is the basis for personal interpretation of the world. According to Zekiri (2011) perception is an opinion about something viewed and assessed and it varies from customers to customers, as every customer has different beliefs towards certain services and products and it plays an important role in determining customer satisfaction. Customer satisfaction is determined by the customers' perceptions and expectations of the quality of the products and services. Perception is a way of forming impressions about oneself, other people and daily experience. It also serves as a screen or filter through which information passes before it has an effect on people. Even though it is subjective the quality or accuracy of a person's perceptions has a major impact on his or her responses to a given situation. According to Mitchel (1978: as cited in Mussie 2010) perceptions are those processes that shape and produce what one actually experiences. Since perceptions are influenced by many external and internal factors such as

cultural, social, psychological and economic, the ways in which the customer perceives services are highly subjective. What a customer perceives can differ from objective reality.

According to disconfirmation theory, the extent of satisfaction or dissatisfaction that a consumer has with a particular service encounter is determined by the difference between the customer expectations of performance and the actual perceived performance of the service (Oliver, 1996: cited in Samuel 2006). Any difference between them is referred to as disconfirmation. If the service experienced is better than expected, then positive disconfirmation or high levels of satisfaction will result. If, however, the service performance falls short of what was expected, then negative disconfirmation or dissatisfaction will result as discussed under the model. Therefore, it is imperative to understand how consumers perceive the quality of the product offering, including the service element, and how these perceptions impact upon the consumer's ultimate purchase decision. Having understood the consumers' perception of quality the organization should be able to identify whether or not a gap exists between the customers' expectation and the manager in the development of appropriate managerial quality systems, which should maximize consumer satisfaction. The needs of survival and prosperity in the increasingly competitive marketplace are the main driving forces in the provision of superior quality services. According to Kotler and Keller (2006) successful companies add benefits to their offering that not only satisfy customers but surprise and delight them. Delighting customers is a matter of exceeding expectations.

### **2.1.5 Models for Customer Satisfaction**

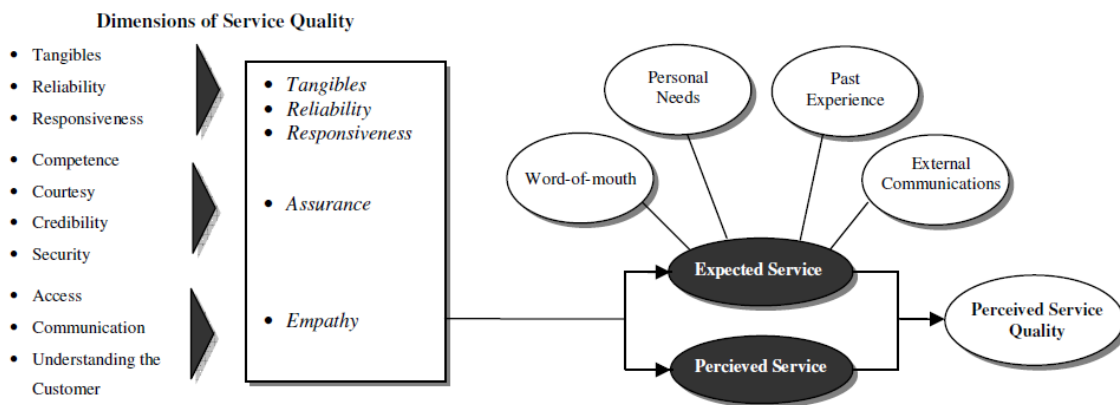
Fernandez-Gonzalez and Prado (2007) in their study of "Measurement and analysis of customer satisfaction: company practices in Spain and Portugal" discussed about different models of measuring customer satisfaction by referring various literatures. According to Fernandez-Gonzalez and Prado (2007), customer satisfaction can be measured by SERVQUAL Model (Parasuraman et al., 1988). Moreover it can be measured using Expectancy-Disconfirmation Model, Performance only Model (SERVPERF) Attribute Importance Model, Norms Model and Attribution Model (Reisiq & Chandek, 2001; Al-Hawari & Ward, 2006; Kandumpully, 2002; Kurtenbasch, 2000; Tontini & Silveira, 2007; Kim, Lee & Yun, 2004; Fecikova, 2004 & Casado & Ruiz, 2002: all are cited in Mussie, 2010). Among all these models, the SEVQUAL Model is

still the most robust in measuring customer satisfaction in many organizations. Since the aim of this study is to assess service quality dimensions impact on customer satisfaction, the focus will be on SERVQUAL model.

### 2.1.5 The SERVQUAL Model

Zeithaml et al. has presented a generic model and appertaining measurement system for perceived service quality, which is SERVQUAL. The model prior to SERVQUAL is “the gap model” by the same authors. The gap model presents 5 different gaps which a company should avoid. Gap 5, known as the customer gap, represents the specific construct measured upon in the SERVQUAL model. SERVQUAL is grounded in the earlier writings of the expectancy-disconfirmation theory in which quality is measured from the difference between the expectations (E) and evaluation of the performance (P). The results can be categorized as confirmation or disconfirmation and the outcome is the level of satisfaction (Oliver, 1980; Parasuraman et al., 1985). Meanwhile, the incorporation of disconfirmation theory in the model indicates the close relation between service quality and satisfaction.

**Figure: 2.1 The Servqual Model**



*Source: Zeithaml, Parasuraman & Berry, 1990*

## 2.2 Service quality

Service quality has been given increased attention in recent years, due to its specific contribution to business competitiveness. Because of the difficulties in defining and measuring service quality, it is a concept that has aroused considerable interest and debate in the research literature

(Wisniewski,2001). According to M. Rahaman, Abdullah and A. Rahman (2011) service quality is an approach to manage business processes in order to ensure full satisfaction of the customers which will help to increase competitiveness and effectiveness of the industry. Definition of service quality revolves around the idea that it is the result of comparison that customers make between their expectations about a service and their perception of the way the service has been performed. Service quality can thus be defined as the difference between customer expectations of service and perceived service performance.

Parasuraman et al. (1988) defined service quality as the difference between customer expectations and perceptions of service. Service quality is a measure of how well the services (as received) match expectations (as preconceived). According to Parasuraman, Zeithaml and Berry (1985); Dehghan (2006) customers will be dissatisfied if expectations are greater than performance that is perceived quality is less than satisfactory. They proposed service quality to be a function of pre-purchase customer expectations, perceived process quality, and perceived output quality. Customers form service expectations from many sources, such as past experiences, word of mouth, advertising and previous experience with the service (Kotler & Keller, 2006). The notion of service quality involves more than the outcome quality; the methods and manner by which the service is delivered are of great importance.

The ISO 9000, 9001, and 9004 plain English definition state the quality of something can be determined by comparing a set of inherent characteristics with a set of requirements. If those inherent characteristics meet all requirements, high or excellent quality is achieved. If those characteristics do not meet all requirements, a low or poor level of quality is achieved. Quality is, therefore, a question of degree. As a result, the central quality question is: How well does this set of inherent characteristics comply with this set of requirements? In short, the quality of something depends on a set of inherent characteristics and a set of requirements and how well the former complies with the latter.

According to this definition, quality is a relative concept. By linking quality to requirements, ISO 9000 argues that the quality of something cannot be established in a vacuum. Quality is always relative *to* a set of requirements. On the other hand, Quality has been defined (Taylor and Baker, 1994) as superiority or excellence (Zeithaml, 1988), or, as the consumer's overall impression of the relative inferiority/superiority of the organization and its services (Bitner and Hubbert, 1994; Keiningham *et al.*, 1994-95).

However, while a universally accepted definition of quality is still not available the majority of writers on service quality support a customer centred definition (e.g. Eiglier and Langeard – quoted in Le Blanc and Nguyen, 1988; Garvin, 1983; Gummesson, 1988; Kathawala and Elmuti, 1991; Lewis, 1989; Oakland, 1986) with the reservation that customer expectations are not necessarily consistent or predictable (Haywood-Farmer, 1987; Peters, 1985). Therefore, quality is much more difficult to define for a service than it is for a physical good. With a physical good, quality can often be measured by specifying certain physical features that the product should possess. There is a range of different perspectives on quality. As per Garvin (1988) quality can be organized under five main headings:

1. Quality is 'innate excellence'. This view suggests quite simply that we know excellence from repeated experience of it (either our own or others'). Although it may be one approach that many people would feel comfortable with, from a management perspective it is vague and imprecise.
2. Quality is product attributes. This approach assumes that quality is a precise and measurable variable, provided by specified amounts of product attribute (the fuel consumption of a car, its power, its acceleration, etc.). This approach has many attractions because of its specificity and measurability, but fails to take into consideration the needs and preferences of customers.
3. Quality is user-based. This approach proposes that definitions of quality are based on the perspective of the customer and the extent to which a product meets those needs.
4. Quality is supply-based. This approach has similarities with the product attributes based approach in that it centers on conformance to internally developed specifications. This is largely an operations-driven approach, which focuses on productivity and cost consideration.

5. Quality is value-based. This approach emphasizes the trade-off between performance and price, and is often described as 'affordable excellence'.

However, when thinking about service quality, the most common view is that service quality is subjective – that is to say, it is based on the customers' perception of how well the service matches their needs and expectations. Therefore, in line with this fact, user-based approach is more compatible to the nature of the services. Yet, the criteria customers use to evaluate services quality may thus be complex and difficult to determine precisely and consequently, the package of variable open to manipulation and more difficult to control. For this, customer do not evaluate a services solely on its outcome, they also consider the process of delivery (Zethmals et al. 1990) as possibly also the context (Gronors, 1990, Kptler, 1994; Woudan and Bitta, 1997; Palmer, 1994; Schiffman and Kanuk, 1994).

Hence, quality is sought by all organization, especially in the services sector. This is particularly true in the banking sector. However, banks have no recognized publicly-available and standard scale to measure the perceived quality of banks service, in general. Available instrument include either scales contextually developed by specific banks to cope with occasional problem or instrument not especially designed for banking services but rather to measure the perceived services quality across a broad spectrum of services. Among such general instrument, the most popular is SERVQUAL, a well-known scale developed by Parasuraman et al. which has been used in both original and adapted version by a variety of banks

It is widely accepted that quality products and services product benefits not only by lowering costs through reduced waste and decreased deficiencies in product and service, but also by increasing competitiveness through the establishment of a good reputation and the attraction and retention of customers. Service quality is a concept that has aroused considerable interest and debate in the research literature because of the difficulties in both defining it and measuring it with no overall consensus emerging on either (Wisniewski, 2001). Furthermore, much of this focus on services quality and product quality in services industries has been conducted in developed countries (Herbig and Genestre, 199; Yaves et al., 1997) even though services are among the fastest-growing sectors in emerging countries. This rapid growth makes any attempt to generalize such research finding from developed countries to emerging countries problematical (Yongue et. al, 2001).

However, researchers agree that a central topic in service research is service quality, which is a critical determinant of business performance as well as firms' long-term viability (Bolton and Drew, 1991; Gale, 1994). This is because service quality leads to customer satisfaction which in turn has a positive impact on customer word-of-mouth, attitudinal loyalty, and purchase intentions (Gremler and Gwinner, 2000).

As cited by Christopher Lovelock in its principles of service marketing and management, most physical goods tend to be relatively high in "search attributes." These are characteristics that a customer can determine prior to purchasing a product, such as color, style, shape, price, fit, feel, and smell. Other goods and some services, by contrast, may emphasize "experience attributes" that can only be discerned after purchase or during consumption (e.g., taste, wear ability, ease of handling, quietness, and personal treatment). Finally, there are "credence attributes"—characteristics that customers find hard to evaluate even after consumption. Examples include surgery and auto repairs, where the results of the service delivery may not be readily visible. However, when thinking about service quality, the most common view is that service quality is subjective – that is to say, it is based on the customers' perception of how well the service matches their needs and expectations. Service quality is what consumers perceive it to be. While recognizing that the user-based view of service quality means that quality is defined by the customer, any attempt to manage service quality requires an understanding of how customers evaluate the service they receive and which elements are most important. Because we have adopted a subjective view of service quality, the most common way to think about how consumers evaluate a service is the idea that they will have expectations about the sort of service that they will receive. They will then compare the actual service with the expected service. If the actual service meets or exceeds the expected service, then the level of quality will be seen to be relatively high. If the actual service is below what was expected, then consumers will perceive that the quality of service is poor (Christine et al, 2004).

There are a number of different "definitions" as to what is meant by service quality. One that is commonly used defines service quality as the extent to which a service meets customers' needs or expectations (Lewis and Mitchell, 1990; Dotchin and Oakland, 1994a; Asubonteng *et al.*, 1996; Wisniewski and Donnelly, 1996). Service quality can thus be defined as the difference between customer expectations of service and perceived service. If expectations are greater than

performance, then perceived quality is less than satisfactory and hence customer dissatisfaction occurs (Parasuraman *et al.*, 1985; Lewis and Mitchell, 1990). Another definition forwarded by Howcrof (1991), It is about meeting customer needs satisfactorily by matching to his expectations. Perceived quality reflects the opinion of the consumer regarding the superiority or global excellence of a product or service (Zeithaml, 1988). Perceived services quality is a customer judgment (a form of attitude) and results from comparisons consumer make between their expectations and their perception of the actual services performance (Lewis, 1989). Thus in the banking sector, perceived services quality result from the difference between customers' perception for the services offered by the bank (received services) and their expectations vis a vis the banks that offer such services (expected services).

Similarly, the definition produced by Howcroft (1991) that service quality in banking implies consistently anticipating and satisfying the needs and expectations of customers. In particular, it is customer centered, but in requiring the definition of needs it does not presume upon the customers' prior knowledge or technical competence, while in allowing for expectations it implies that the service should take account of this prior knowledge and experience. It also implies an awareness of the dynamic nature of customer expectations in requiring that these be anticipated (R.F. Blanchard et al, 1994)

However, finding the components of perceived quality has proven to be more elusive. Perception, obviously, is one of those components. Many authors pretend expectations to be a second component. Generally speaking, most researchers acknowledge that customers have expectations and that they play a certain role as standards or reference points used by consumers to evaluate the performance of a company (Oliver, 1980; Brown and Swartz, 1989; Bolton and Drew, 1991a, 1991b; Zeithaml et al., 1990, p. 143; Parasuraman et al., 1985, 1988, 1994). However, the inclusion or not of expectations as a determinant of perceived service quality have resulted in two conflicting paradigms of which includes, the disconfirmation paradigm and perception paradigm. The former approach assumes that customers evaluate a service by comparing their perceptions of the service received with their expectations. While, the later maintain that expectations are irrelevant and even misleading information for a model intended to evaluate perceived service quality.

### **2.2.1 The relationship between service quality and customer satisfaction**

Service quality is an important tool to measure customer satisfaction and there is a close relationship between service quality and customer satisfaction (Kadir, Rahmani & Masinaei, 2011). Wang and Lo (2002) in their study of china's telecommunication industry found that service quality has positive or negative influence on customer satisfaction. Ahmed et al., (2010) in their study Impact of Service Quality on Customers Satisfaction in telecom sector found that all the SERVEQUAL dimension have a significant relationship with the satisfaction of customers. Many authors who studied the relationship between perceived service quality and customer satisfaction have shown that service quality determines customer satisfaction (Anderson et al., 1994; Rust & Zahorik, 1993; Wang & Lo 2002; Yavas, Benkenstein & Stuhldreier 2004). However, although much has been written on the relationship between service quality and satisfaction Caruana, Money and Berthon (2000) found that customers who believe that the service firm provides high levels of service quality does not mean that highly satisfied. In other words, satisfaction does not depend on service quality alone and higher levels of quality are worthwhile the extent that customers believe that value is being enhances.

### **2.3 Measurement and Perspective of Service Quality**

New product development has become a critical ingredient for success in today's rapidly changing marketplace. Management must have effective processes in place to develop the products on which future profits depend. An important part of the development process is effective measurement of success and failure. With multiple mandates for new products, however, the approach to measuring success has become even more complicated. Measures need to be developed that will effectively capture the objectives for the new product in a timely matter. This can allow adjustments to new products shortly after launch and provide valuable information early in the development of the next generation of new products. However, the measurement issue is a complex problem for service sector executives.

While the traditional financial measures are still needed, the industry is recognizing that a more rounded approach is required. By gaining a fuller picture of the dimensions of success or failure, executives are better able to relate the eventual outcomes of new services to the original objectives that the product was designed to meet The use of multidimensional measures,

however, also raises a number of questions; such as: What types of measurement technique are commonly being used? How effective are these measures? What other types of measurement currently not in use would executives find helpful? This research is directed at answering some of these questions by benchmarking techniques currently in use in the financial services industry, by determining how informative management finds them, by isolating measurement approaches that are the most useful, and by identifying measurement approaches that are still needed (Scott *et. al*, 1996).

The development, launch and sale of new financial services is inherently risky. Not only is it difficult to adhere to a prescribed development process for something as intangible as a service, it is difficult to determine whether the new service has been successful once launched. Hence, success of new services cannot always be measured in the same way as tangible product success. Such traditional quantitative guideposts as profitability and unit sales often present only part of the success equation for new services. Many other factors such as cross-sales, customer loyalty and perceived quality also factor into the success formula. Although traditional success measurements are still appropriate for many situations, additional tools are now being developed to assist in identifying where firms are successful, and strategies are being built around these areas. Developing new measurement tools has required innovation and creativity; in many cases, the process is just beginning. However, companies that master measurement of new service success and, thereby, are able to refine the development process, will possess significant competitive advantages over their competitors (Scott *et. al*, 1996).

The measurement of new product success is an area of growing interest among both executives and scholars. However, a consensus still has not been reached as to the techniques that are most appropriate and, more importantly, the effectiveness of these techniques. As cited by Yaves *et al.*, (1997) and Bahia and Nantel, (2000), Banks, in particular, have no recognized publicly available standard scale by which to measure the perceived quality (both services quality and product quality) of bank service in general and related issues are still subject to continued debate. This lack of measurable quality standard exists despite the strategically important role of banking services in any nation's economy, and despite the significance of quality related issues as has been widely recognized throughout the world (Yongue *et al*, (2003). In broad terms, attempts to define and understand service quality have developed in two distinct directions – one stream of

research originated in Europe (largely Scandinavia), while the other developed in North America as stated by Christine T. Ennew and Nigel Waite cited in *Financial Services Marketing* (2007).

## **2.4 Dimensions OF Service Quality**

Relative importance of dimensions Parasuraman et al. (1988) have observed that their instrument (SERVQUAL) can be used to evaluate the relative importance of the dimensions of quality in influencing customers' overall perceptions of a service. The relative weight that customers seem to give to each quality dimension can be determined. One of the important results that have been reported in the early studies of relative importance is that customers are quite consistent in both their imputed and their direct rankings of the importance of the service quality attributes.

In an effort to conceptualize services quality (by taking in to account all the aspects of customer perceived services quality, including those already addressed in the existing instrument and those that are left out in the empirical services quality literature) Sureshchandar et al. (2001) identified five factors of services quality as critical from the customer's point of view. These includes: core service or service product; human element of service delivery; systematization of service delivery: non-human element; tangibles of service- service scopes; and social responsibility.

Services unique selling proposition can be woven around different criteria (tangibility, customization, labor intensity, etc.). This criterion in turn could be the key performance dimension. Different user groups can see each type of service in turn as performing on a number of factors across different dimensions. From among these factors, some are the key factors (KFs) and are relatively more important for the consumer. A number of these key factors could be simultaneously important for these user groups, though the relative importance of these dimensions may vary from one user group to another. There may also be a general shift in consumer preference for a dimension, for example, from "medical-care" through "patient-care" to "hospital-care," in case of the consumers of healthcare. Their importance may also vary from one consumer to another with regard to the second issues is which of the dimension of service quality will be dominant in the service quality, given that the measurement items have been operationalized (Lapirree, 1996). Based on this assumption, different researchers have raised different dimensions of services quality that should be paramount in the eyes and perceived attitude of the customer. Among this, KoushikiChoudhury (2007) suggests that customers

distinguish four dimensions of service quality in the case of the retail banking industry in India, namely, attitude, competence, tangibles and convenience.

The SERVQUAL scale is the principal instrument widely utilized to assess service quality for a variety of services. Parasuraman et al., (1988) have conceptualized a five dimensional model of service quality such as: reliability, responsiveness, empathy, assurance and tangibility. Their measurement instrument is known as SERVQUAL, which has become almost the standard way of measuring service quality. Alternatively, SERVPERF is based on the “performance only” perspective and operationalizes services quality as customers’ evaluations of the service encounter. As a result, SERVPERF uses only the performance items of the SERVQUAL scale (Brady et al., 2002; Cronin and Taylor, 1992, 1994). These five dimensions Includes:

- **Reliability**, which is concerned with the extent to which customers can depend on the organization to perform the promised service, to do it accurately and to get it right first time. Performing the service dependably and accurately is paramount to service customers, has been strongly supported by research (Zeithaml *et al.*, 1990). According to Zeithaml *et al.* (1990), service providers’ apologies start to wear thin when a company is careless in performing the service, when it makes frequent mistakes and when it is casual about keeping its service promises. Under these circumstances, customers lose confidence in the firm and little can be done to regain it. The study by Zeithaml and Bitner (2003) further revealed that it is very important to do the service right the first time; in case a service problem does crop up, by resolving the problem to the customer’s satisfaction, the company can significantly improve customer retention. However, companies fare best when they prevent service problems altogether and fare worst when service problems occur and the company either ignores them or does not resolve them to the customer’s satisfaction
- **Assurance**, which is concerned with the extent to which the organization and its staff are competent, courteous, credible and trustworthy. It also considers the extent to which the consumer feels secure.
- **Tangibles**, which includes the appearance of physical facilities such as the interior of the branch, the appearance of staff and the appearance and quality of communication

materials. The service quality factor tangibles are defined by whether the physical facilities and materials associated with the service are visually appealing at the bank. These are all factors that customers notice before or upon entering the bank. Such visual factors help consumers form their initial impressions. A crucial challenge in service marketing is that customers cannot see a service but can see the various tangibles associated with it - all these tangibles, the service facilities, equipment and communication materials are clues about the intangible service. If unmanaged, these clues can send to the customer's wrong messages about the service and render ineffective the marketing strategy of the company. On the other hand, improving quality through tangibles means attention to the smallest details that competitors might consider trivial. Yet, these visible details can add up for customers and signal a message of caring and competence

- **Empathy**, which is concerned with factors such as accessibility, good communications, understanding of customer's needs approachability and friendliness. On the other hand, Sandip Gosh Hasra and BL Srivastava (2009) in their study indicated that the bank should pay attention to these dimension of service quality and pay more attention to dimension of assurance-empathy to increase loyalty to a company, willingness to pay, customer commitment and customer trust. Whereas, Sudesh (2007) revealed that poor service quality in public sector banks is mainly because of deficiency in tangibility, lack of responsiveness and empathy
- **Responsiveness**, which is concerned with how the organization, through its staff, responds to customers. Important issues include the extent to which staffs are helpful, prompt and able to solve problems

Moreover, in one key study (Parasuraman et al., 1988), reliability was demonstrated to be the most important dimension and empathy (a composite of understanding and access) the least important across a seemingly wide array of service types. Zeithaml et al. (1990) also report, using a variation of SERVQUAL that tangibles proves to be consistently unimportant. A pertinent question here is that whether such a generalization is possible. Chowdhary (2000) suggest that generalizations are difficult to make because of variation in the basic nature of services (labor or capital intensity) and that the type of industry affect the design of service. It

was seen that empathy and responsiveness were found to be more important for labor intensive industry while tangibles and reliability affected the assessment of quality dimensions in case of capital intensive services. This was also confirmed by the results from a similar study done for “Management Education” where the single most important dimension was the knowledge of the teacher (assurance) (Nimit et al., 2007).

Yet , another writers, Joshua A J and Moli.P.Koshi(2005) in their study on ‘Expectation and perception of service quality in old and new generation banks’, observed that the performance of the new generation banks across all the service quality dimensions are better than those of old generation banks. However, Al-Fazwan (2005) in his study found that the bank should concentrate on accessibility dimension. He stated that the particular bank should take maximum efforts to raise the level of services to meet out the customer expectations. Therefore, estimate of the expected value of actual quality in the service context will need numerous observations to establish parameters reference points and link with theory.

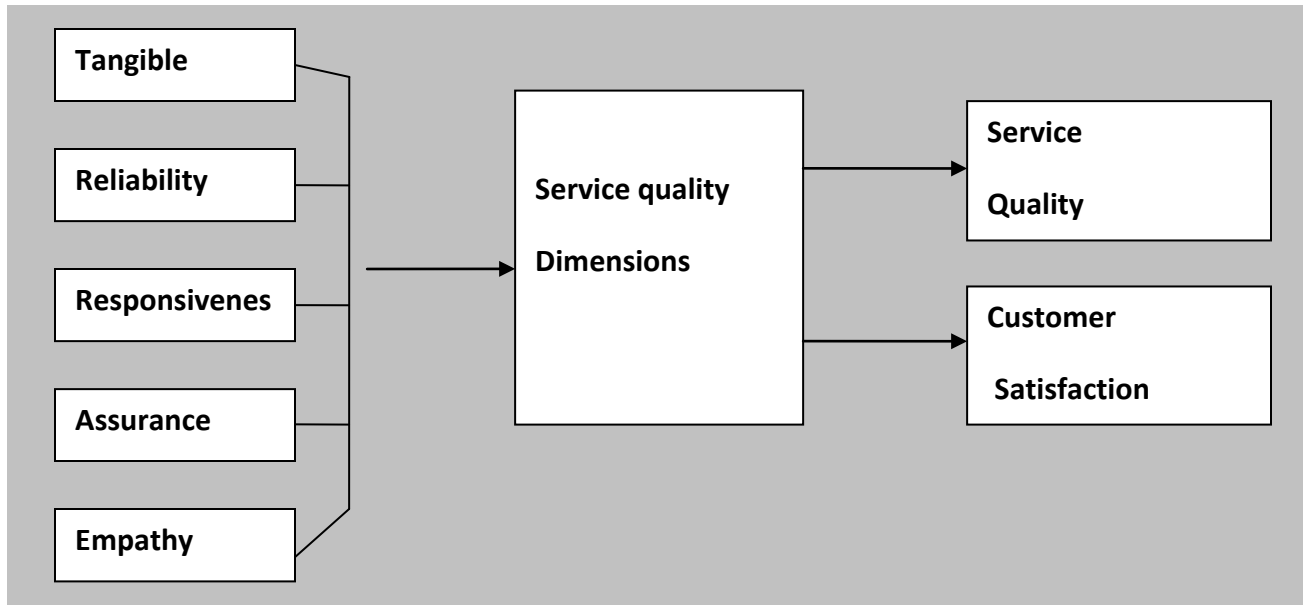
Finally, research comparing the predictive validity of SERVQUAL with SERVPERF has been based on assessing which of the two measures is a better predictor of service quality. Service quality has been used as the criterion because it is a global representation of the quality of the service offered by an organization (Cronin and Taylor, 1992, 1994; Jain and Gupta, 2004; Kettinger and Lee, 1997; Quester and Romaniuk, 1997). In their comparison of SERVQUAL with SERVPERF, Cronin and Taylor (1992) built their argument for the superiority of SERVPERF over SERVQUAL by empirically showing that SERVPERF is a better predictor of service quality than SERVQUAL (Francois et. al, 2007). Yet, in response to the criticisms, Parasuraman et al. (1994) claimed that many of those concerns are questionable and offered a set of research directions for addressing unresolved issues

## **2.5 Conceptual Frame work**

The aim of this section is to summarize the idea from past literature and to bring out the contributions for this study area which is taken from a thesis by JENET MANYI AGBOR done on The Relationship between Customer Satisfaction and Service Quality: a study of three Service sectors in Umea. Thus this part starts with the idea generated and the contribution follows The general idea from the past literature is that there is a relationship between customer satisfaction

and service quality; also that service quality could be evaluated with the use of five service quality dimensions and the most useable is the SERVPERF scale. Following the two clarifications about the different views of customer satisfaction of a customer of either being transaction-specific or cumulative (Boulding et al., 1993; Andreassen, 2000). The theoretical frame work treats customer satisfaction as transaction-specific. Thus, customers in this paper are those who receives the service, satisfaction denotes customer's desire to maintain a business relationship with the organization and it is also the feelings of the customers towards the services provided to them by the organizations; while customer satisfaction in this study is the pleasures obtained by customers for the services provided to them by the employees of the organizations. It has been proven that "perceived service quality is a component of customer satisfaction" (Ziethaml et al. 2006, p.106-107). Other researchers had proven also that there is a relationship between customer satisfaction and service quality (Sivadas & Baker-Prewitt, 2000, p. 73-82; Wang et al., 2002, p. 50-60; Kuo-YF, 2003, Liang & Zhang, 2009, p. 113-12, Gera, 2011, p. 2-20; Sureshchandar, et al., 2002 p. 363-379).

Moreover, the SERVQUAL model has been proven to be the best model to measure service quality in service sectors especially with the customer perspective. This idea generates an assumption that the five dimensions of SERVQUAL model could have a direct relationship with customer satisfaction. (Figure 1) The questions that arose from this assumption is that is there a significant relationship between customer satisfaction and service quality dimensions? Is there a significant relationship between customer satisfaction and service quality? Also, it has been stated that service quality is the overall assessment of a service by the customers, (Eshghi et al., 2008, p.121). Also, the five dimension of SERVPERF model has been proven to be the main yardstick used by most of the researchers in the evaluation of service quality (Wilson et al., 2008, p. 79; Bennett & Barkensjo, 2005, p. 101, Negi, 2009; Wang & Hing-Po, 2002). This idea generates an assumption that each of the five dimensions of SERVPERF model could have a direct relationship with service quality. (Figure 1) The question that arose from this assumption is that: 'Is there a significant relationship between Service quality and the five dimensions of SERVPERF model?'



**Figure 1: The relationship between customer satisfaction and Service quality for this study**

If customers agree that they are satisfied and give the reasons for satisfaction as service Quality; service quality dimension has significant relationship with service quality and Customer satisfaction, then a conclusion could be drawn that service quality has a Significant relationship with customer satisfaction and with service quality dimensions.

## CHAPTER THREE

### 3. RESEARCH METHOD

*This chapter explains the research methodologies used and it covers, research design, conceptual frame work, , population of the study, source of data and data collection method ,data collection instrument, sample size, sampling technique, method of data analysis.*

#### 3.1 RESEARCH DESIGN AND METHODOLOGY

According to (john w. creswell 2006) research is a systematic inquiry aimed at providing information to solve problems. So that, In order to solve the problem or answer the research questions appropriate methodology should be designed in order to show how research questions will be answered in the most rigorous method. First in order to assure everybody is talking about the same subject matter the study variables have defined according to the concept they are used in the context.

##### 3.1.1 Type of Research and design

According to (john w. creswell 2006) research can be classified as descriptive, explanatory and exploratory depending on the specific purpose that the research tries to address.

**Descriptive research** sets out to describe and to interpret what is. It looks at individuals, groups, institutions, methods and materials in order to describe, compare, contrast, classify, analyze and interpret the entities and the events that constitute the various fields of inquiry. It aims to describe the state of affairs as it exists.

**Explanatory research** aims at establishing the cause and effect relationship between variables. The researcher uses the facts or information already available to analyze and make a critical evaluation of the data/information.

**Exploratory research** is less formal, sometimes even unstructured and focuses on gaining background information and helps to better understand and clarify a problem. It can be used to develop hypotheses and to develop questions to be answered.

The objective of this study is to investigate the level of customer satisfaction with the service provided by Lifan motors department (spare parts sales and vehicle maintenance service) and explain the relationship between customer satisfaction and service quality. In order to investigate the objectives and answer the hypothesis, descriptive and explanatory research method was employed. The questionnaire survey technique was used to collect data and the questions were developed based on the SERVPERF questionnaire developed by Parasuraman et al (five SERVPERF dimensions). In this study through the use of such statistical tools as regression analysis, reliability analysis using Cronbach's alpha, descriptive statistics using frequency distribution, diagrams and cross tabulation to assess and describe the impact of service quality on customer satisfaction of Lifan motors and to collect the relevant data.

### **3.2 The population of the study**

The population is the totality of entities in which the researcher is interested in, i.e. the collection of individuals, objects or events about which the researcher wants to make inferences (Diamantopoulos and Schlegelmilch, 2006). The population taken for sampling was limited to the geographical location of Addis Ababa due to time limitation, resource constraints, and convenience because of these reasons the participants are Lifan motors customer's in Addis Ababa who visited the spare part sales and vehicle maintenance service of the company during data collection period.

### **3.3 Source of Data and data collection method**

The study used both primary data. The primary data which was collected from the company's customers through questionnaires to investigate the SERVPERF dimensions on locally assembled cars customers' satisfaction from customer's point of view. Quantitative data was collected through a self-administered questionnaire of five point Likert scaled questionnaire ranging from "strongly disagree"(1) to "strongly agree"(5). The questionnaire was distributed to customers who visited Lifan motors department of spare parts sales and maintenance shop during data collection period.

### 3.4 data collection Instruments

Because perceived quality is conceptualized as the customer's overall attitude towards the excellence of service, many researchers have relied on a single overall quality question, measured on a scale ranging from poor to excellent (Rust and Oliver, 1994). More generally, however, service quality perception is thought to be based on several quality attributes (Grönroos, 1990; Hauser and Clausing, 1988). Parasuraman *et al.* (1985, 1988) and Zeithaml *et al.* (1990), developed a multi-item scale (SERVPERF) where they have integrated the most important of the criteria contributing to the formation of customer perceptions of service and which signal quality to the customer. These are: reliability – reflecting the technical quality of the outcome of the service encounter, i.e. what is received by the customer; and tangibles, responsiveness, assurance and empathy – reflecting the functional quality of the process itself, i.e. how the service is provided.

When examining the literature, it becomes clear that there is no consensus on which model is more appropriate in a general sense. SERVPERF heightened the interest of many researchers but there are some arguments against its validity. Criticisms include the use of different scores, applicability, dimensionality, lack of validity, etc. Moreover, critical reviews of SERVPERF are offered by Asubonteng *et al.* (1996) and Buttle (1996). And that SERVPERF scale provides a useful tool for measuring overall service quality. Moreover, Lee *et al.* (2000) empirically compare SERVQUAL (performance minus expectations) with performance-only model (SERVPERF). Some authors also conclude that the results from the latter appeared to be superior to the former. Therefore, beside the mentioned argument, it will be easy to avoid the questioners being boredom to the respondents of the questioners while giving their response for the same type of question but different purpose, SERVPERF scale is chosen for this study. The data regarding service quality dimensions was asked to be rated by the customers using a five point likert scale, where 1 stands for strongly disagree and 5 stands for strongly agree. All the data were collected from the company's customers through questioners.

The measurement of independent variables of the study will be service quality. Service quality was operationalized by using Parasuraman *et al.*'s (1988) by using the widely known five-components (i.e. tangibles, reliability, responsiveness, assurance and empathy). But the

measurement will be using SERVPERF scale. The five dimensions of services quality After defining each dimension, respondents will be asked to rate the overall quality on a five-point scale ranging from “very poor” to “very good” as well as their level of overall satisfaction on a five-point scale ranging from “very unsatisfied” to “very satisfied”.

### **3.5 Sampling**

#### **3.5.1 Sample size**

Sample size determination is a scientific task that should be performed with proper care. The following formula was used to determine the sample size for a given unknown population (Krejele and Morgan, 1970).

$$\text{Sample size } n = \frac{Z^2 * p * q}{d^2}$$

Where,  $Z$  = Z-standard variation at a given confidence level usually set as 1.96 for a p5 percent confidence level,  $p$  = sample proportion,  $q = 1 - p$  and  $d$  = degree of accuracy desired usually set at 0.062.

If the population is too large to determine the reasonable estimate of key proportion, it is recommended to assume to estimate of 50% so that the sample size will be large enough.

Therefore, considering the above given points the sample size for this study is calculated as

$$\begin{aligned} n &= \frac{1.96^2 * 0.5 * 0.5}{0.062^2} \\ &= 249.84 \\ &= 250 \end{aligned}$$

#### **3.5.2 Sampling technique**

Probability samples are those based on simple random sampling, systematic sampling, stratified sampling, cluster/area sampling whereas non probability samples are those based on convenience sampling, judgment sampling and quota sampling techniques( Malhotra andBriks, 2006 p,387). For this stud the researcher used probability sampling specifically convenience sampling

technique for taking sample from 250 customers of Lifan motors which includes customers from governmental organizations, nongovernmental organizations and individuals who bought the cars for personal use, in doing this the researcher used every ethical procedure that is in the book

### **3.6 Method of Data Analysis**

The Statistical Package for Social Sciences (SPSS) version 21.0 was used to analyze the collected data. Specifically the statistical tools that were used for this study were

- The descriptive statistics (frequency distribution, diagrams and cross tabulation) were used to assess the level of customer satisfaction, overall quality of service and level of customer satisfaction, overall quality of service with respect to sex and types of organization.
- To assess the influence of service quality dimensions and over all service quality on customer satisfaction and service quality dimensions on over all service quality both simple and multiple linear regression models were used.
- To check the existence of collinearity (Multicollinearity) between the independent variables variance inflation factor (VIF) were used. Among the independent variables those have VIF value greater than 100, severe multicollinearity exist, between 10 and 100, moderate multicollinearity and less than 10 no multicollinearity exist in the model.
- To check linearity of the dependent variable P-P plot were employed. If the P-P plot indicates straight line with the imaginary line, the dependent variable is linear.

## CHAPTER FOUR

### 4. Data Analysis and Discussion

*This chapter consists of results of the reliability analysis, respondents' characteristics, overall service quality analysis, overall customer satisfaction analysis, the influence of service quality dimensions on customer satisfaction and the relationship between service quality dimensions and overall service quality and summary of major findings.*

#### 4.1 Reliability Analysis

Reliability of the data collection instrument for the service quality and constructs perception was assessed using Cronbach's Alpha. Higher Alpha coefficients indicate higher scale reliability (Santos, 1999: as cited in Eze et al., 2008). Specifically, Nunnally (1978: as cited in Eze et al., 2008) suggests that scales with 0.60 Alpha coefficients and above are considered acceptable.

To test the reliability of the SERVQUAL instruments, which helps to review the internal consistency of each scale item, Cronbach's coefficients (alpha) were computed as shown in Table 4.1.

As shown in table 4.1 Scale Reliability (Cronbach's Alphas) of Service Quality, the Cronbach's Alpha coefficients for perception service quality items range from 0.71 to 0.853, which are greater than the cutoff value of 0.6 suggested in the literature of Eze et al., (2008). And the overall Cronbach's alpha coefficient for perception-scale items was 0.911. Therefore, the perception scales used in this study demonstrate high reliability.

**Table 4.1: Scale Reliability (Cronbach's Alphas) of Service Quality**

Dimension	Items	Alpha Coefficients for dimensions	Alpha coefficients if item deleted
Tangibles	T1	0.72	0.650
	T2		0.675
	T3		0.635
	T4		0.685
Reliability	R1	0.752	0.748
	R2		0.663
	R3		0.635
	R4		0.722
Responsiveness	Rs1	0.72	0.674
	Rs2		0.65
	Rs3		0.659
	Rs4		0.653
Assurance	A1	0.71	0.690
	A2		0.646
	A3		0.617
	A4		0.629
Empathy	E1	0.853	0.818
	E2		0.846
	E3		0.823
	E4		0.841
	E5		0.813
<b>Reliability of the total expected scale 0.911</b>			

Source: SPSS output of my own primary data

#### 4.2 Respondents Characteristics

A total of 250 questionnaires were administered and data were collected from Lifan motor customers' in Addis Ababa, Ethiopia. The administered questionnaires were successfully

responded with 97.6% response rate. The frequency and the percentage distribution of the characteristics of respondents were summarized in Table 4.2.

**Table 4.2 Characteristics of the respondents (n = 244)**

Variables	Categories	Count	Percent
Sex	Male	172	70.5
	Female	72	29.5
Type of organization	Government	56	23.0
	Private	138	56.6
	Non-profit	30	12.3
	Embassies	20	8.2
Age Category	< 30 years	44	18.0
	30 - 39 years	128	52.5
	40 - 49 years	50	20.5
	>= 50 years	22	9.0

**Source: SPSS output of my own primary data**

As Table 4.2 shows, out of the 244 respondents 172 (70.5 %) were males and 72 (29.5%) were females. This indicates that around two thirds of Lifan motor users were male customers. Among the types of organization that used Lifan motor, private organizations account 138 (56.6%) whereas government organizations 56 (23.0%), non-profit organizations 30 (12.3%) and Embassies 20 (8.2%).

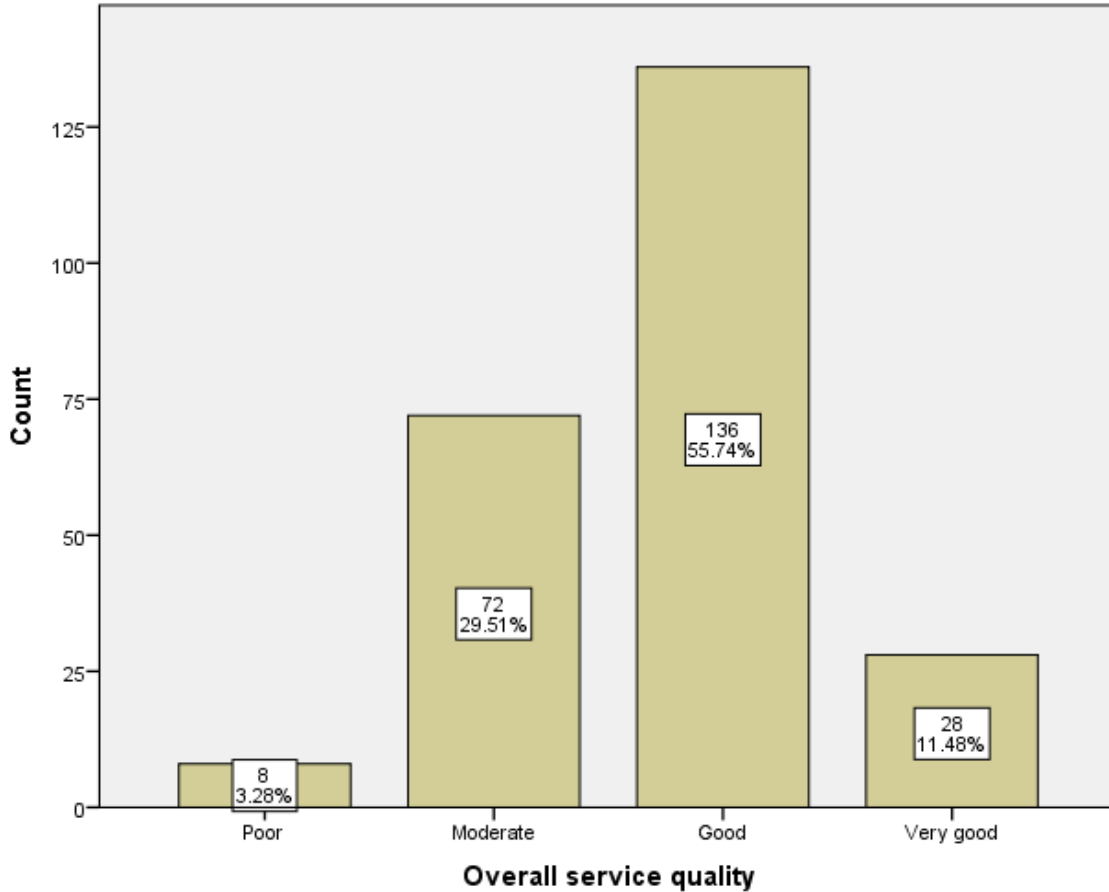
The age of respondents' was categorized in to four. That is, respondents' whose age is less than 30 years were 18% (44), from 30-39 years were 52.5% (128), from 40-49 years were 20.5% (50) and respondents whose age equal to or above 50 years were 9.0 (22). Out of the four age categories, age category 30-39 years had the heights percent which is more than half of the other categories.

### **4.3 Overall Service Quality Analysis**

As it was discussed by various researchers, service quality is the most important factor to assess customer satisfaction. To analyze the perception of service quality of Lifan motor P.L.C

company descriptive statistics was applied. Service quality was classified in to five points from the lowest very poor to the highest very good. The result was displayed in Figure 4.1 below.

**Figure 4.1 overall service equality of Lifan Motor P.L.C Company rated by customers**



**Source: SPSS output of my own primary data**

Based on the result of Figure 4.1, no one said the service quality of the company is very poor, 3.28% (8) respondents said poor, 29.51% (72) respondents said moderate, 55.74% (136) respondents said good and 11.46% (28) respondents said very good. Therefore, according to the finding a total of 67.22% of respondents said there is good and above service quality of the company.

**Table 4.3 cross tabulation of sex and types of organization with overall service quality**

		Overall service quality									
		Very poor		Poor		Moderate		Good		Very good	
		Coun t	percen t	Coun t	percen t	Count	percen t	Count	percen t	Count	percen t
Sex	Male	0	.0	6	2.5	50	20.5	96	38.5	22	9.0
	Female	0	.0	2	.8	22	9.0	42	17.2	6	2.5
Total		0	0	8	3.3	72	29.5	136	55.7	28	11.5
Type of organi zation	Government	0	.0	0	.0	18	7.4	32	13.1	6	2.5
	Private	0	.0	6	2.5	40	16.4	80	32.8	12	4.9
	Non-profit	0	.0	2	.8	8	3.3	10	4.1	10	4.1
	Embassies	0	.0	0	.0	6	2.5	14	5.7	0	.0
Total		0	0	8	3.3	72	29.6	136	55.7	28	11.5

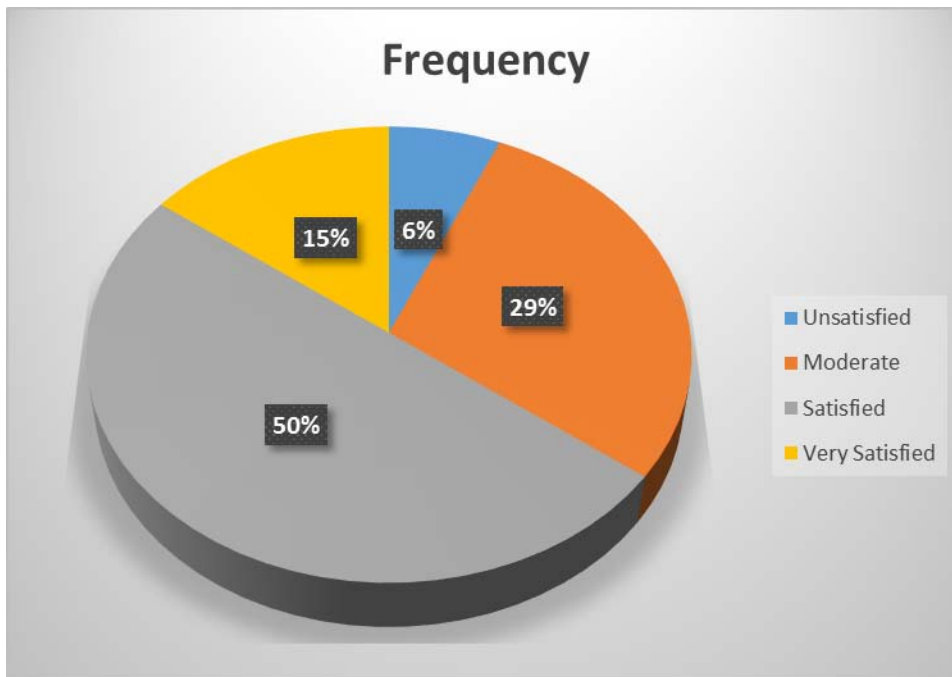
**Source: SPSS output of my own primary data**

Based on the expectancy disconfirmation theory the customers who have moderate quality are considered as good quality. As a result Table 4.3 shows, among the total respondents 68% and 29.5% of male and female respondents rated the service quality of the company as good and above respectively. This accounts a total of 97.5% of the total respondents were rated the service quality of the company as good and above. Among the respondents from the sex category 2.5% rated the service quality of the company as poor. Moreover, 23% of respondents coming from government office rated the service quality of the company as good and above, 54% coming from private office, 11.5% coming from Non-profit organization and 8.2% coming from embassies rated as good and above. In general, out of the total respondents coming from different types of organization 96.6% were rated the service quality as good and above. Only 3.3% of the respondents from the four types of organization rated the service quality of the company as poor. No one of the respondents both sex categories and types of organization rated the service quality of the company very poor.

#### 4.4 Overall Customer Satisfaction Analysis

The dependent variable (customer satisfaction) was analyzed with the descriptive statistics (frequency distribution). The customer satisfaction level was classified in to five points: ranges from the very unsatisfied (1) to the very satisfied (5). The following pie-chart represents the outcome of the analysis of the Key account customer overall satisfaction with the service quality of the company (frequency distribution in percentage).

**Fig. 4.2: Pie-chart representation of overall customer satisfaction**



**Source: SPSS output of my own primary data**

As shown in Figure 4.2 the percentage of the overall Lifan motor service satisfaction of the respondents show that no one (0.0%) responded very unsatisfied, 6% respondents were unsatisfied, 29% had a moderate satisfaction, 50% respondents were satisfied, and 15% respondents were very satisfied. Moreover, 29% respondents' had moderate satisfaction and only 6% respondents are unsatisfied with the services quality. Based on the above result the cumulative of 65% respondents were satisfied with the services quality of the company. Based on the expectancy disconfirmation theory the customers who have moderate satisfaction are considers as satisfied customers. Hence, 93% respondents are satisfied with the services quality of the company.

**Table 4.4 cross tabulation of sex and types of organization with overall customer satisfaction**

		Overall satisfaction of customers with the service provided by Lifan Motors									
		Very unsatisfied		Unsatisfied		Moderate		Satisfied		Very Satisfied	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Sex	Male	0	.0	8	3.3	56	23.0	84	34.4	24	9.8
	Female	0	.0	8	3.3	14	5.7	38	15.6	12	4.9
Total		0	0	16	6.6	70	28.7	122	50	36	14.7
Type of organization	Government	0	.0	0	.0	22	9.0	24	9.8	10	4.1
	Private	0	.0	14	5.7	38	15.6	70	28.7	16	6.6
	Non -profit	0	.0	0	.0	6	2.5	16	6.6	8	3.3
	Embassies	0	.0	2	.8	4	1.6	12	4.9	2	.8
Total		0	0	16	6.5	70	28.7	122	50	36	14.8

**Source: SPSS output of my own primary data**

As per Table 4.4, among the total respondents 67.2% and 26.2% of male and female respondents are satisfied with the service quality of the company respectively. This accounts a total of 93.4% of the total respondents are satisfied by the service quality provided by the company. In a total 6.6% of the respondents are unsatisfied with the service quality. While, 22.9% of respondents coming from government office are satisfied with the service quality, 50.9% coming from private office, 12.4% coming from Non-profit organization and 7.3% coming from embassies rated as good and above from the total respondents. This accounts a total of 93.5% of the total respondents were satisfied by the service quality provided by the company. A total 6.5% of the respondents from the four types of organization are unsatisfied with the service quality of the company. No one of the respondents both sex categories and types of organization are very unsatisfied with the service quality of the company.

#### 4.5 The Response of Respondents on the Service Quality Dimensions

To present and discuss the response of Likert scale variables based on descriptive statistics like mean and standard deviation the variable value was defined by utilizing width of class interval (Lind, Marchal, & Wathon, 2003) as follows:

$$\begin{aligned} \text{Interval width of each level} &= \frac{\text{the highest score} - \text{the lowest score}}{\text{number of intervals}} \\ &= \frac{5 - 1}{5} \\ &= 0.80 \end{aligned}$$

Accordingly using this interval width the class width of the class interval would be made for the five scale Likert variables as the following classification Table 4.5.

**Table 4.5** Width of Class Interval

Very unsatisfied (1)	unsatisfied (2)	Moderate (3)	Satisfied (4)	Very satisfied (5)
1.00 - 1.80	1.81 - 2.60	2.61 - 3.40	3.41 - 4.20	4.21 - 5.00

Based on Table 4.5 the researcher can interpret 5-class-intervals of the service quality dimensions responses using mean of the responses. Detail of the discussions for each dimension presented in the sub sequenced section.

##### 4.5.1 The Response of Respondents on the Tangibility Service Quality Dimension

To measure tangibility four items each have five Likert scale values were used. The value of tangibility were obtained by computing the mean of the four items. The descriptive statistics were displayed in Table 4.6.

Based on Table 4.6 the mean of individual tangibility items are between 3.41 and 4.20. As per Table 4.5, Table 4.6 showed that the respondents are satisfied with the service quality of the company in all tangibility items since the mean score of the respondents were laid on the interval 3.41 – 4.20 (Satisfied). Similarly the mean score of tangibility was also in the same interval means that the respondents were satisfied by the tangibility service quality dimension.

**Table 4.6 Descriptive statistics for the response of tangibility items in service quality dimension**

Items	N	Minimum	Maximum	Mean	Std. Deviation
Lifan Motor's physical facilities are visually appealing	244	2	5	3.84	.654
Employee's of Lifan Motor are well dressed and appear neat.	244	2	5	3.84	.659
Materials associated with the service (crane, jack) and the physical facility of Lifan motor is visually appealing	244	2	5	3.78	.796
When Lifan Motor promises to do something by a certain time, it does so.	244	2	5	3.72	.804
<b>Tangibility</b>	<b>244</b>	<b>3.00</b>	<b>5.00</b>	<b>3.8238</b>	<b>.42150</b>

**Source: SPSS output of my own primary data**

#### **4.5.2 The Response of Respondents on the Reliability Service Quality Dimension**

Reliability has four items each have five Likert scale values. The value of reliability were obtained by computing the mean of the four items. The descriptive statistics were displayed in Table 4.7.

Based on Table 4.7 the mean of individual reliability items are between 3.41 and 4.20. Based on Table 4.5 and Table 4.7 the respondents are satisfied with the service quality of the company in all reliability items since the mean score of the respondents were laid on the interval 3.41 – 4.20 (Satisfied). Moreover the mean score of reliability was also in the same interval means that the respondents were satisfied by the reliability service quality dimension.

**Table 4.7 Descriptive statistics for the response of Reliability items in service quality dimension**

	N	Minimum	Maximum	Mean	Std. Deviation
Lifan Motor performs the service right the first time.	244	2	5	3.77	.712
Lifan Motor provides its services at the time it promises to do so.	244	2	5	3.63	.813
Lifan Motor insists on error free records	244	2	5	3.82	.726
Employee's of Lifan Motor tell you exactly when services will be performed	244	2	5	3.75	.797
<b>Reliability</b>	<b>244</b>	<b>2.25</b>	<b>5.00</b>	<b>3.7357</b>	<b>.57940</b>

**Source: SPSS output of my own primary data**

#### **4.5.3 The Response of Respondents on the Responsiveness Service Quality Dimension**

To measure responsiveness four items each have five Likert scale values were used. The value of responsiveness were obtained by computing the mean of the four items. The descriptive statistics were displayed in Table 4.8.

Based on Table 4.8 the mean of individual responsiveness items are between 3.41 and 4.20. As per Table 4.5, Table 4.8 showed that the respondents are satisfied with the service quality of the company in all responsiveness items since the mean score of the respondents were laid on the interval 3.41 – 4.20 (Satisfied). Similarly the mean score of responsiveness was also in the same interval means that the respondents were satisfied by the responsiveness service quality dimension.

**Table 4.8 Descriptive statistics for the response of Responsiveness items in service quality dimension**

Items	N	Minimum	Maximum	Mean	Std. Deviation
Employee's of Lifan Motor gives your prompt service	244	2	5	3.78	.743
Employees of Lifan Motor are always willing to help customers.	244	2	5	3.73	.715
Employees of Lifan Motor are never too busy to respond your requests.	244	1	5	3.57	.851
The behavior of employees of Lifan Motor instills confidence in customers	244	2	5	3.77	.700
<b>Responsiveness</b>	<b>244</b>	<b>2.25</b>	<b>5.00</b>	<b>3.7049</b>	<b>.57379</b>

**Source: SPSS output of my own primary data**

#### **4.5.4 The Response of Respondents on the Assurance Service Quality Dimension**

Assurance has four items each have five Likert scale values. The value of assurance were obtained by computing the mean of the four items. The descriptive statistics were displayed in Table 4.9.

Based on Table 4.9 the mean of individual assurance items are between 3.41 and 4.20. Based on Table 4.5 and Table 4.9 the respondents are satisfied with the service quality of the company in all assurance items since the mean score of the respondents were laid on the interval 3.41 – 4.20 (Satisfied). Moreover the mean score of reliability was also in the same interval means that the respondents were satisfied by the assurance service quality dimension

**Table 4.9 Descriptive statistics for the response of Assurance items in service quality dimension**

Items	N	Minimum	Maximum	Mean	Std. Deviation
The behavior of employees of Lifan Motor instills confidence in customers	244	2	5	3.77	.700
You can feel safe in your transactions with Lifan Motor	244	1	5	3.66	.757
Employees of Lifan Motor are consistently Courteous with you	244	2	5	3.70	.747
Employees of Lifan Motor have the knowledge to answer your question	244	2	5	3.78	.765
<b>Assurance</b>	<b>244</b>	<b>2.50</b>	<b>5.00</b>	<b>3.725</b>	<b>.54283</b>

Source: SPSS output of my own primary data

#### 4.5.5 The Response of Respondents on the Empathy Service Quality Dimensions

Empathy has five items each have five Likert scale values. The value of empathy were obtained by computing the mean of the five items. The descriptive statistics were displayed in Table 4.10.

**Table 4.10 Descriptive statistics for the response of Empathy items in service quality dimension**

Items	N	Minimum	Maximum	Mean	Std. Deviation
Lifan Motor gives you individual attention	244	1	5	3.41	.923
Lifan Motor has employees who give you personal attention	244	1	5	3.36	.852
Employee of Lifan Motor understand your specific needs	244	1	5	3.37	.863
Lifan Motor has your best interests at heart.	244	1	5	3.42	.859
Lifan Motor has operating hours convenient to all its customers	244	1	5	3.54	.881
<b>Empathy</b>	<b>244</b>	<b>1.80</b>	<b>4.80</b>	<b>3.4197</b>	<b>.69539</b>

Source: SPSS output of my own primary data

Based on Table 4.10 the mean of individual empathy items are between 2.61 and 3.40 (moderate) for the second and third items whereas for item one, four and five are between 3.41 and 4.20 (satisfied). Based on Table 4.5 and Table 4.10 the respondents are satisfied in item one, four and five with the service quality of the company since the mean score of the respondents were laid on the interval 3.41 – 4.20 (Satisfied). On the other hand the respondents are moderate in item two and three with the service quality of the company since the mean score of the respondents were laid on the interval 2.61 and 3.40 (moderate). Moreover the aggregate mean of the five items (mean of assurance) was in the interval 3.41 and 4.20 means that the respondents were satisfied by the empathy service quality dimension

#### **4.6 The Influence of Service quality dimensions on Customer Satisfaction**

To investigate the relationship between perceived service quality dimensions of the company and customer satisfaction, multiple linear regression model was applied. The multiple linear regression is used to model the value of a dependent scale variable based on its linear relationship to one or more predictors. The total satisfaction is an aggregation of tangibles, reliability, responsiveness, assurance and empathy.

Table 4.11 presents an output for the multiple linear regression analysis between the service quality (SERVPERF) dimensions and overall satisfaction. The value of “ $R^2$ ” indicates that the proportion of the variation in the dependent variable explained by the regression model (Independent variable). Similarly the value of variance inflation factor (VIF) tells the existence or non-existence of collinearity between independent variables. Details of the SPSS version 21 output were displayed in appendix II.

The results in Table 4.11 indicate that about 51.3% ( $R^2=0.513$ ) of the variation in the overall satisfaction is explained by the SERVPERF dimensions. Similarly, the results demonstrate that there is no existence of multicollinearity between independent variables because the VIF values are less than 10. In addition, the results demonstrate that there is positive and statistically significant ( $p=0.000$ ,  $F=24.418$ ) relationship between the SERVPERF dimensions and overall customer satisfaction. Therefore, at least one of the five SERVPERF dimensions (tangibles, reliability, responsiveness, assurance and empathy) are statistically significant to customer

satisfaction. Thus, this finding leads us to overlook the relationship of individual S SERVPERF dimensions on customer satisfaction.

**Table 4.11: SERVPERF dimensions and Overall customer satisfaction**

SERVQUAL Dimensions	$\beta$	t	Sig.	VIF	Overall sig.	R Square
Tangibles	.109	1.305	.194	1.659	0.000 <sup>b</sup>	0.513
Reliability	.001	.014	.989	2.121		
Responsiveness	.113	1.141	.256	2.354		
Assurance	.364	4.007	.000	1.966		
Empathy	.265	2.846	.005	2.059		

**Source: SPSS output of my own primary data**

As shown in table 4.11, the SERVPERF dimensions separately have different significant levels. That is, there is a positive and statistically significant ( $p = 0.000$ ,  $\beta = 0.364$ ) relationship between assurance and overall customer satisfaction. Hence, hypothesis four ( $H_4$ ) that is assurance has significant positive influence on customer satisfaction is supported. Moreover, among the five service quality dimensions, assurance is the strongest predictor of overall satisfaction.

Similarly, Table 4.11 also shows that there is positive and statistically significant ( $p = 0.005$ ,  $\beta = 0.265$ ) relationship between Empathy and overall customer satisfaction. And next to assurance aspect, empathy is the second most predictor of overall customer satisfaction among the entire service quality dimensions used in this study. Thus, hypothesis five ( $H_5$ ), that empathy has significant positive impact on customer satisfaction is supported.

Moreover, Table 4.11 shows, among the five service quality dimensions three of them (tangibles, reliability and responsiveness) have not statistically significant ( $p > 0.05$ ) relationships with overall customer satisfaction. This means that tangibles, responsiveness, and reliability have no significant impact on customers' satisfaction. Thus, hypothesis one ( $H_1$ : tangibles have significant positive influence on customer satisfaction), and hypotheses two ( $H_2$ : reliability has significant positive effect on customer satisfaction), and hypothesis three ( $H_3$ : responsiveness has significant positive impact on customer satisfaction) are not supported.

#### 4.7 The impact of overall service quality on customer satisfaction

To analyze the relationship between overall service quality and customer satisfaction simple linear regression was applied. Table 4.12 shows the impact of overall service quality provided by the company on customer satisfaction. Details of the SPSS output displayed in appendix III.

**Table 4.12: The impact of overall service quality on customer satisfaction**

Variable	$\beta$	t	Sig.	R square
Overall service quality	.657	9.551	.000	0.432

**Source: SPSS output of my own primary data**

Table 4.12 shows that the output of simple liner regression analysis and indicates that about 43.2% ( $R^2=0.432$ ) of the variation in the overall customer satisfaction is explained by overall service quality of the Company. There is also positive and statistically significant ( $p =0.000$ ,  $\beta= 0.657$ ) linear relationship between overall service quality and customer satisfaction. This result shows that, overall service quality has a positive significant impact on customer satisfaction. Therefore, this finding supports hypothesis six ( $H_6$ : there is positive relationship between overall service quality and customer satisfaction). The interpretation of this finding is that overall service quality of Lifan motor company is significant to the assessment of the customer satisfaction. Therefore, key account customer satisfaction towards overall service quality will increase when the overall quality of the service increases.

#### 4.8 The Relationship between Service Quality dimensions and Overall Service Quality

To analyze the relationship between service quality dimensions and overall service quality multiple linear regression was applied. Table 4.13 shows the impact SERVPERF dimensions on overall service quality of the company. Details of the SPSS output displayed in appendix IV.

The results in table 4.13 indicates that about 35.3% ( $R^2=0.353$ ) of the variation in the overall service quality is explained by the SERVPERF dimensions. In addition, the results demonstrate that there is positive and statistically significant ( $p=0.000$ ,  $F=12.681$ ) relationship between the SERVPERF dimensions and overall service quality of the company. Therefore, at least one of the five SERVPERF dimensions (tangibles, reliability, responsiveness, assurance and empathy)

are statistically significant to overall service quality provided by the company. Thus, this finding leads us to overlook the relationship of individual SERVPERF dimensions on overall service quality.

**Table 4.13 The Relationship between Service Quality dimensions and Overall Service Quality**

Dimensions	$\beta$	t	Sig.	Overall Sig.	R square
Tangibles	.187	1.948	.054	0.000 <sup>b</sup>	0.353
Reliability	.027	.248	.804		
Responsiveness	.028	.242	.809		
Assurance	.035	.338	.736		
Empathy	.425	3.967	.000		

**Source: SPSS output of my own primary data**

As shown in table 4.13, the SERVPERF dimensions separately have different significant levels. That is, there is a positive and statistically significant ( $p = 0.000$ ,  $\beta = 0.364$ ) relationship between empathy and overall service quality. Hence, hypothesis eleven ( $H_{11}$ : empathy has significant positive influence on overall service quality) is supported. Moreover, among the five service quality dimensions, only empathy predict the overall service quality.

Moreover, Table 4.13 shows, among the five service quality dimensions four of them (tangibles, responsiveness, reliability and assurance) have not statistically significant ( $p > 0.05$ ) relationship with overall service quality. This implies that tangibles, responsiveness, reliability and assurance have no significant impact on overall service quality. Thus, hypothesis seven ( $H_7$ : tangibles have significant positive influence on overall service quality), and hypotheses eight ( $H_8$ : reliability has significant positive effect on overall service quality), hypothesis nine ( $H_9$ : responsiveness has significant positive impact on overall service quality) and hypothesis ten ( $H_{10}$ : assurance has significant positive impact on overall service quality) are not supported.

#### **4.9 Summary of Findings**

The objective of this study is to assess the service quality and key account customer satisfaction of Lifan Motor users in Addis Ababa. The study was conducted by distributing questionnaires to

250 key account customers from which 244 (97.6%) have been collected. To test the reliability of the modified SERVPERF instrument Cronbach coefficients (alpha) were computed for the 22 questionnaires administered for pilot survey. The Cronbach coefficient (alpha) for perception items was 0.911. And it was greater than 0.6 for all items. The overall satisfaction level of key account customers was measured using a point Likert scale range from very unsatisfied (1) to very satisfied (5). Total of 6.6% respondents were unsatisfied while 93.4% (228) were satisfied.

The influence of service quality dimensions on customer satisfaction was measured using linear regression model. The result shows that there is positive and statistically significant ( $p < 0.01$ ) relationship between the overall SERVPERF dimensions and overall customer satisfaction. The findings also showed that there is a positive and significant relationship between two dimensions (assurance and empathy) and customer satisfaction. Assurance is the most predictor of service quality followed by empathy. The result also demonstrates that there is no significant relationship between the other three dimensions (tangibles, reliability and responsiveness) and customer satisfaction.

The result of simple linear regression indicates that there is positive and statistically significant relationship between overall service quality and customer satisfaction. This result shows that overall service quality has a positive significant impact on customer satisfaction.

Moreover, the influence of service quality dimensions on overall service quality was measured using linear regression model. The result shows that there is positive and statistically significant ( $p < 0.01$ ) relationship between the overall SERVPERF dimensions and overall service quality. The findings also shows that there is a positive and significant relationship between one dimension (empathy) and overall service quality. Empathy is the only predictor of overall service quality. The result also demonstrates that there is no significant relationship between the other four dimensions (tangibles, reliability responsiveness and assurance) and overall service quality.

**Table 4.14: Summary of findings**

Hypothesis	Statement of the hypothesis	Supported?
H <sub>1</sub>	The tangibles have significant positive influence on customer satisfaction.	No
H <sub>2</sub>	Reliability has significant positive impact on customer satisfaction	No
H <sub>3</sub>	Responsiveness has significant positive effect on customer satisfaction	No
H <sub>4</sub>	Assurance has significant positive impact on customer satisfaction	Yes
H <sub>5</sub>	Empathy has significant positive link with customer satisfaction	Yes
H <sub>6</sub>	There is a positive relationship between overall SERVQUAL dimension and customers satisfaction	Yes
H <sub>7</sub>	The tangibles have significant positive influence on overall service quality	No
H <sub>8</sub>	Reliability has significant positive impact on overall service quality	No
H <sub>9</sub>	Responsiveness has significant positive effect on overall service quality	No
H <sub>10</sub>	Assurance has significant positive impact on overall service quality	No
H <sub>11</sub>	Empathy has significant positive link with overall service quality	Yes

## CHAPTER FIVE

### 5. Conclusions and Recommendation, Limitations and Implications for further research

*This chapter includes conclusions and recommendations of the study, and limitation and implications for further research.*

#### 5.1 Conclusions and Recommendation

The primary objective of the study was to assess overall service quality and customer satisfaction of Lifan motors spar part sales and vehicle maintenance service. The study applied the SERVPERF model of service quality measurement instruments, this model has five variables that will measure the service quality constructs namely Reliability, Responsiveness, Assurance, Empathy and tangibles. This model is also based on the actually perceived service quality of the service deliverer. The study measured the response of the respondents using five point likert scale. The study was conducted by distributing questionnaires to 250 key account customers from which 244 (97.6%) have been collected. More over majority of customers (56.6%) in the sample are from private sector but we might conclude that other segments of the market might be neglected. In addition the customer's gender distribution is in balance, majority (70.5%) of the company's customers are male. And also the findings shows that Total of 6.6% respondents were unsatisfied while 93.4% (228) were satisfied with the service of Lifan motors provided to them.

The study findings also shows that only Empathy has a positive and significant effect on over all service quality, but collectively all variables have a positive and significant effect on over all service quality on the context of Lifan motors. This finding of the study is in line with the findings of Burch et al(2004) which states that the dimensions of SERVPERF was found to explain a great deal of the variation in service quality. The finding demonstrated that there is positive significant relationship between the overall SERVPREF dimensions and overall customer satisfaction. This means that the overall service quality dimensions have significant impact on customer satisfaction. When it comes to overall service quality No one of the respondents both sex categories and types of organization rated the service quality of the company very poor.

Furthermore, Assurance is most predictor of overall customer satisfaction followed by Empathy, The result also demonstrates that there is no significant relationship between the other three dimensions (tangibles, reliability and responsiveness) and customer satisfaction.

## **5.2 Recommendation**

Since the majority of the customers from the sample are satisfied doesn't mean that all are satisfied. The company has to conduct an intensive customer satisfaction survey to strength the relationship with its customers. In addition it has to keep the customer always satisfied.

From the sample drawn majority of the customers are coming from a privet business, so the company has to engage itself in the process of widening its customer base from private to other segments of the market like, government, nonprofit organization, embassies and other. This can be done by targeting this segments through promotional means like giving discounts by how many cars the companies buy, by giving payment options and other promotional tools they can fill the niche market segments.

Since all the SERVPERF dimensions (tangibility, reliability, assurance, responsiveness and empathy) contribute to the overall service quality of the department, the company has to strive to fulfill the attribute of these variables. Taking the findings in consideration they should focus more on the physical facilities and equipments in their shop, the appearance of their personnel and their willingness to help their customers, they should develop their ability to perform the promised service dependably and accurately. They should also organize events that will include their customers and their stake holders where all the participants can come together and exchange ideas in how to improve the service quality, this will help the customers to raise their compliments and for the company to improve their service. The researcher also recommends the company to give the employees trainings in some time interval on how to conduct and improve customer relations.

### **5.3 Limitation and further area of research**

The study is subjected to several limitations. First the results should be interpreted within usual limitation of survey research. Second, the results of the study were based on only five of the SERVPERF variables: additional variables related to the service context were not introduced. The study has assessed the service quality and customer satisfaction of customers in Addis Ababa during the data collection period so it is difficult to generalize.

With regard to the future area of research, a study on the service quality of other retailers, assemblers and distributors on the area of automotive spare parts sales and vehicle maintenance service should be done in order to obtain a competitive view of the subject area. More over is also possible to conduct a service quality analysis through other service quality measurement models, to find the best service quality model suitable for this particular industry. In addition it is advantageous if the same study is conducted at a larger scale so that generalizability of the finding will be enhanced.

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### **General Internet Sources**

<http://www.emeraldinsight.com/> (the source of most journals)

# APPENDIX



	<b>Reliability</b>					
6	When Lifan Motor promises to do something by a certain time, it does so.	1	2	3	4	5
7	Lifan Motor performs the service right the first time.	1	2	3	4	5
8	Lifan Motor provides its services at the time it promises to do so.	1	2	3	4	5
9	Lifan Motor insists on error free records	1	2	3	4	5
	<b>Responsiveness</b>					
10	Employee's of Lifan Motor tell you exactly when services will be performed	1	2	3	4	5
11	Employee's of Lifan Motor gives you prompt service	1	2	3	4	5
12	Employees of Lifan Motor are always willing to help customers.	1	2	3	4	5
13	Employees of Lifan Motor are never too busy to respond your requests.	1	2	3	4	5
	<b>Assurance</b>					
14	The behavior of employees of Lifan Motor instills confidence in customers	1	2	3	4	5
15	You can feel safe in your transactions with Lifan Motor	1	2	3	4	5
16	Employees of Lifan Motor are consistently Courteous with you	1	2	3	4	5
17	Employees of Lifan Motor have the knowledge to answer your question	1	2	3	4	5
	<b>Empathy</b>					
18	Lifan Motor gives you individual attention	1	2	3	4	5

19	Lifan Motor has employees who give you personal attention	1	2	3	4	5
20	Employee of Lifan Motor understand your specific needs	1	2	3	4	5
21	Lifan Motor has your best interests at heart.	1	2	3	4	5
22	Lifan Motor has operating hours convenient to all its customers	1	2	3	4	5
	<b>Overall Quality</b>	Very Poor	Poor	Mode -rate	Good	Very Good
23	Taking everything in to consideration, Lifan Motor is an excellent company	1	2	3	4	5
	<b>Overall Satisfaction</b>	Very unsatisfied	unsatisfied	Mode -rate	satisfied	Very Satisfied
24	Overall I am satisfied with the service provided by Lifan Motor	1	2	3	4	5



		□□□□□□ (1)	(2)	□ (3)	□ (4)	□□□□□□ (5)
	<b>(□□□□ □□□□) Tangibles</b>					
1	□□□ □□□□ □□□□□□ □□□□ □□□□ □□□□ □□□	1	2	3	4	5
2	□□□ □□□□ □□□□□ □□□□□ □□□□□□ □□□ □□□□□ □□□ □□□□ □□□□ □□□□	1	2	3	4	5
3	□□□□□ □□□□□ □□ □□□ □□□□□ □□□□ □□□□ □□□□□□	1	2	3	4	5
4	□□□ □□□□□□□ □□□□□ □□□□□□ □□□□ □□□ □□ □□□□ □□□ □□□□ □□□□ □□□□ □□□□ □□□	1	2	3	4	5
	<b>□□□□□ (Reliability)</b>					
5	□□□□ □□□□ □□□□□ □□ □□□ □□□□ □□□ □□□□ □□□□ □□□□□ □□ - □□□□□ □□□ □□ □□□□□□	1	2	3	4	5
6	□□□ □□□□ □□□□□□□ □□ □□□□□ □□□ □□□□□ □□□□ □□□□ □□□□□ □□ □□□□ □□□ □□□□ □□□□	1	2	3	4	5
7	□□□□ □□□□□□□ □□□□□□ □□ □□□□□□ □□ □□□□□□□ □□□□	1	2	3	4	5
8	□□□□ □□□□□□ □□□□□□ □□ □□□□□ □□ □□□□□	1	2	3	4	5
9	□□□□ □□□□□□□ □□□□□□□□ □□□□□ □□ □□□□□ □□□□□□□ □□□□□ □□□□□	1	2	3	4	5
	<b>□□□ □□□□ (Responsiveness)</b>					
10	□□□□□ □□□□□□ □□ □□□□□ □□□□□□ □□□□□ □□□□□□□□ □□ □□□□□ □□□□□□	1	2	3	4	5
11	□□□□□□□ □□□□ □□□ □□□□ □□□□□ □□□□□ □□□□□ □□□□ □□□□□□ □□□□□	1	2	3	4	5
12	□□□□□ □□□□□□□ □□□□□ □□□□□□ □□□□□□ □□□□□□ □□□	1	2	3	4	5
13	□□□□□ □□□□□□ □□ □□□□□ □□□□□□□ □□□ □□□□□□ □□□□□ □□□ □□ □□□□□□□□□	1	2	3	4	5
	<b>□□□□ (Assurance)</b>					

14	□□□□ □□□□□ □ □□□□ □□ □□□□ □□□□□ □□ □□□ □□□□□□ □□□□□	1	2	3	4	5
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17	□□□□ □□□□□□ □ □□□□ □□□□□□ □□□□□ □□□□□ □□□□ □□□□	1	2	3	4	5
	<b>□□□□ □□□□□ (Empathy)</b>					
18	□□□□ □□□□□ □□□□□ □□□□□ □□□□ □□□□□□ □□ □□□□□ □□□	1	2	3	4	5
19	□□□□□ □□□□□□ □ □□□□ □□□□□□ □□ □□□□ □□□□□	1	2	3	4	5
20	□□□□ □□□□□ □□□□□□ □□□□ □□□□	1	2	3	4	5
21	□□□□ □□□□□□ □□□□□ □□□□□□ □□□□ □□□□	1	2	3	4	5
22	□□□□ □□□□ □□□□□ □□ □□□ □□□ □□□ □□□	1	2	3	4	5
	<b>Overall Quality</b>	Very Poof	Poor	Mode -rate	Good	Very Good
23	□□□□ □□□ □□□ □□□ □□□□□□ □□□ □□□□ □□□ □□□ □□ □□□□ □□	1	2	3	4	5
	<b>Overall Satisfaction</b>	Very unsatisfied	unsatisfied	Mode -rate	satisfie d	Very Satisfied
24	□□□□□□ □□□□ □□□□□ □□□□□□ □□□□□□	1	2	3	4	5

**Appendix II: SPSS out puts on the Relationship between Service Quality dimensions and customer satisfaction**

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Empathy, Tangibles, Assurance, Reliability, Responsiveness	.	Enter

a. Dependent Variable: Overall satisfaction of customers with the service provided by Lifan Motors

b. All requested variables entered.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.716 <sup>a</sup>	.513	.492	.565

- a. Predictors: (Constant), Empathy, Tangibles, Assurance, Reliability, Responsiveness

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	39.010	5	7.802	24.418	.000 <sup>b</sup>
	Residual	37.064	116	.320		
	Total	76.074	121			

- a. Dependent Variable: Overall satisfaction of customers with the service provided by Lifan Motors

- b. Predictors: (Constant), Empathy, Tangibles, Assurance, Reliability, Responsiveness

<b>Coefficients<sup>a</sup></b>								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.646	.489		-1.321	.189		
	Tangebles	.051	.039	.109	1.305	.194	.603	1.659
	Reliability	.000	.032	.001	.014	.989	.471	2.121
	Responsiveness	.039	.034	.113	1.141	.256	.425	2.354
	Assurance	.133	.033	.364	4.007	.000	.509	1.966
	Empathy	.060	.021	.265	2.846	.005	.486	2.059

- a. Dependent Variable: Overall satisfaction of customers with the service provided by Lifan Motors

**Appendix III: SPSS outputs on the Relationship between Overall Service Quality and customer satisfaction**

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Overall service quality		Enter

a. Dependent Variable: Overall satisfaction of customers with the service provided by Lifan Motors

b. All requested variables entered.

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.657 <sup>a</sup>	.432	.427	.600

a. Predictors: (Constant), Overall service quality

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.853	1	32.853	91.212	.000 <sup>b</sup>
	Residual	43.221	120	.360		
	Total	76.074	121			

a. Dependent Variable: Overall satisfaction of customers with the service provided by Lifan Motors

b. Predictors: (Constant), Overall service quality

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

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		

1	(Constant)	.919	.299		3.072	.003
	Overall service quality	.749	.078	.657	9.551	.000

a. Dependent Variable: Overall satisfaction of customers with the service provided by Lifan Motors

## Appendix IV: SPSS Outputs on the Relationship between Service Quality dimensions and Overall Service Quality

### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	Empathy, Tangibles, Assurance, Reliability, Responsiveness	.	Enter

a. Dependent Variable: Overall service quality

b. All requested variables entered.

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.594 <sup>a</sup>	.353	.326	.572

a. Predictors: (Constant), Empathy, Tangibles, Assurance, Reliability, Responsiveness

ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.718	5	4.144	12.681	.000 <sup>b</sup>
	Residual	37.905	116	.327		
	Total	58.623	121			

a. Dependent Variable: Overall service quality

b. Predictors: (Constant), Empathy, Tangebles, Assurance, Reliability, Responsiveness

Coefficients<sup>a</sup>

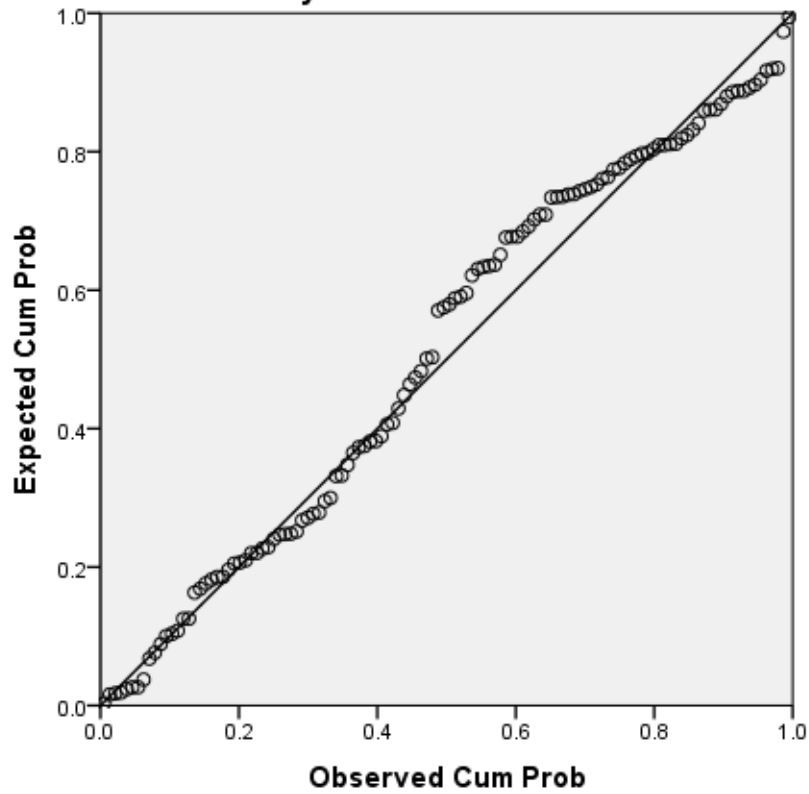
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
1	(Constant)	.708	.495		1.431	.155		
	Tangebles	.077	.040	.187	1.948	.054	.603	1.659
	Reliability	.008	.033	.027	.248	.804	.471	2.121
	Responsiveness	.008	.035	.028	.242	.809	.425	2.354
	Assurance	.011	.033	.035	.338	.736	.509	1.966
	Empathy	.085	.021	.425	3.967	.000	.486	2.059

a. Dependent Variable: Overall service quality

### Appendix V: Linearity Assumption checking of the dependent variable overall customer satisfaction provided by Lifan motor company

**Normal P-P Plot of Regression Standardized Residual**

**Dependent Variable: Overall satisfaction of customers with the service provided by Lifan Motors**



**Appendix VI: Linearity Assumption checking of the dependent variable overall service quality provided by Lifan motor company.**

**Normal P-P Plot of Regression Standardized Residual**

**Dependent Variable: Overall service quality**

