



**ST.MARY UNIVERSITY  
SCHOOL OF GRADUATE STUDIES  
DEPARTMENT OF MASTERS OF BUSINESS  
ADMINISTRATION**

**THE EFFECT OF AFTER SALE SERVICE PRACTICES ON  
CUSTOMER SATISFACTION IN LG ELECTRONICS SERVICE  
CENTER ETHIOPIA**

**BY  
EYERUSALEM MELAKU**

**ADDIS ABABA, ETHIOPIA**

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**BY**

**EYERUSALEM MELAKU**

**A THESIS SUBMITTED TO SCHOOL OF GRADUATE STUDIES  
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**ST.MARY'S UNIVERSITY COLLEGE  
SCHOOL OF GRADUATE STUDIES SCHOOL  
OF BUSINESS**

**EFFECT OF AFTER SALE SERVICE PRACTICES ON  
CUSTOMER SATISFACTION IN LG ELECTRONICS  
SERVICE CENETR**

**BY: EYERUSALEM MELAKU**

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## Declaration

I Eyerusalem Melaku hereby declare that this thesis entitled “**The effect of after sale service practices on customer satisfaction in LG electronics service center**” is my original work which has not been submitted either in part or in full to any other university for the purpose of earning any degree and that all source of materials used for the thesis have been duly acknowledged.

### Declared by

Eyerusalem Melaku

\_\_\_\_\_

Jun 2020

Student

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Date

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God bless you all!!!

## **ACRONYMS**

SERVQUAL

Service quality

SPSS

Statistical Package for Social Science

## ABSTRACT

*The objective of this study to examined the effect of after sales service practices on customer satisfaction with special reference to LG electronics in Ethiopia. To attain this objective the study used descriptive and explanatory research design. Quantitative approaches of data collection were undertaken. The population of the study covered mainly customers of LG Electronics service center. Data were gathered through a survey using a structured questionnaire with a sample of 109 after sale service customers of LG electronics service center. The instrument used in this study is a close-ended questionnaire that was designed by the researchers. All the study variables were placed on a 5-point Linkert scales and in order to measure the after sales service practices. Returned instruments were analyzed to examine the effect of after sale service practices on customer satisfaction by using regression analysis through the use of statistical package for social science version 20. Correlation and multiple regressions were used to investigate the relationship between dependent and independent variables. The result of this study shows that all after sale service dimensions has positive significant on customer satisfaction. The correlation results indicate that there is a positive correlation between the dimensions of after sale service practices and customer satisfaction. Subsequently, recommendation was made to the management of LG electronics to set up more after sales service departments to the existing ones with experience staff with the view of developing long term relationship with the customers.*

**Key words:** *after sale service, product delivery, installation, maintenance and repair, training, online or telephone support, documentation, upgrades and warranty.*

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# CHAPTER ONE

## INTRODUCTION

This chapter presents the background of the study, statement of the problem, research questions, and objective of the study, significance of the study and scope of study.

### 1.1 Background of the research

After sales service refers to various processes which make sure customers are satisfied with the product and service of the organization. After sales service plays an important role in customer satisfaction and customer retention. It generates loyal customer through a service given to customers who have already purchased the product like warranty. Satisfying the customer is one of the basic objectives of the organization. Customers start believing in the brand and get associated with the organization for a longer duration. They speak well about the organization and its product. A satisfied customer brings more individuals and eventually more revenues for the organization. After sales service plays a pivotal role in strengthening the bond between the organization and customer. After sales service is a way to allow a continuous improvement of product design and quality (Armistead and Clark, 1992; Cohen and Whang, 1997; Thoben et al., 2001). The perception of after-sales as a source of competitive advantage and business opportunity requires a shift from a traditional product-centric view, in which after-sales is considered a “necessary evil” (Lele, 1997) to customer-centric view.

Goffin and New, (2001) discovered that after-sales services maximize the value extracted by customers over the entire product life cycle. Kurata and Nam, 2010; and Ahn and Sohn, (2009) agreed that after-sales services can create sustainable relationships with customers and contribute significantly to customer satisfaction by offering different after-sales services during the various stages of the primary product lifecycle, the provider can ensure product functionality and thereby customer satisfaction. This may lead to a fruitful relationship between the provider and the customer over time, allowing for more transactions. Ehinlanwo and Zairi, (1996) also defined after sales service as “all activities geared towards maintaining the quality and reliability of the car carried out after the customer has taken delivery with the goal of ensuring customer satisfaction.

Saccani,et al., (2007) defined after sales service for manufactured goods as the of activities taking place after the purchase of the product ,devoted to supporting customer in the usage and disposal of goods .According to Ruben,(2012) after sales service is the sum of activities taking place after the purchase of the product which ensure that product is available for trouble free use over its useful life span and guarantee the continuous availability of goods (preventive maintenance ), replace failed product in a timely and cost effective manner(reactive maintenance ) and create competitive advantage for the customer (value added service ).

According to Kotler (2013), the definition of customer satisfaction says that it's predetermined by how the expectations of the customer are met. Customer satisfaction is directly connected to customers need. The degrees to which these needs are fulfilled determine the enjoyment in the case of conformity or disappointment from discrepancy (Hill et al.2007, 31).

After-sales service is often referred to product support services where all activities will support the sold product (Lele and Karmarkar, 1983). However, most of the business organizations are not aware about the after-sales service factors and its impact towards the customer satisfaction. Failing to realize the importance of the factors can lead to a disastrous and threatening business relationship. Dissatisfied customers will turn to competitors who can offer better after-sales services. At the time the product is sold to the customer, this interaction is formalized by a mutually agreed warranty or service contract. The exact terms of the warranty or service contract, the characteristics of the customer base, and nature of the sold product influence the after sales service provider (Cohen et al., 2006: Oliva and Kallenberg, 2003) as cited in (Muhammed, et al (2011)).

According to Lewis and Booms (1983), if the supplier keeps providing quality service to the customer it in fact conforming to the customer expectation consistently and gets awareness about the required type of service delivery system. Further Bhave (2002) stated the satisfied customer is an advertisement in itself which is more reliable for others than any other advertisement technique. Kotler (2002) stated that, selling process should go beyond the delivery of goods and services and there should be follow-up step that a company should apply to ensure customer satisfaction and repeat business to make sure that there was proper installation, instruction and service.

In Ethiopia there are many companies which has no after sale service and even don't know the usage of giving after sale service. According to Ehinlanwo and Zairi (1996), delivery of after-sales

service is becoming increasingly critical as businesses do everything in their power to be more cost-effective, boost profit margins, and meet customer demand for a product or service. In addition, Potluri and Hawariat (2010) shows that the offerings in product design, technology and price are becoming increasingly difficult to differentiate products as a result, companies have to provide after sale service for their customers.

In addition after sale service plays great role as a source of sustainable competitive advantage for the companies so this research paper wishes to investigate the impact of after sales service practices on customer satisfaction in LG electronics service center.

## **1.2 Statement of the problem**

Quality of after sale service relies heavily on the organization because after selling a product usually organizations feel that its wastage of resource to invest in customer satisfaction. According to McDougall & Levesque 1994; Cronin et al 2000 have established perceived service value as a fundamental predictor of customer satisfaction for a company. They noted that customer satisfaction can be increased in two ways. The company may either try to set low customer expectation for service so that the delivery service quality meets these low expectations easily. Alternatively, the company may improve its service quality and customer perception of the same so that customer expectation level can be met. As products and prices have become less important differentiators; the importance of service quality can no longer be overlooked and taken for granted (Ward & Tracey S. Dagger, 2007). (Ko & Pastore 2005) have noted that for a service to be convenient, it must be an appropriate service and must be provided at a time most convenient for the customer. Good after sales service has been known to result in lasting relationships with customers who return time and again are usually the most profitable ones for a company (Cohen et al 2006; Alexander et al 2002).

According to Smith (2007) shows customer satisfaction is critical to any product or service, because it is a strong predictor of customer retention, customer loyalty and product repurchase. (Bhave 2002) stated in this regard that a satisfied customer is a valuable asset to accompany and directly works as a reliable and credible advertisement. For this it important that customer is able to experience quality service conveniently.

In Ethiopia there are so many service provider based on electronics service center and also there will be more competition among them. With this high competition customer satisfaction is the main objective of the organization. Potluri and Hawariat (2010) was conducted the research on after sale service quality behavior of telecom customer by using SERVQUAL. In addition to that Kindye (2011) was conducted the study on effect of after sale service quality on customer satisfaction and loyalty but that is not enough to generalize about the effect of after sale service quality. So this research study will help bridge the gap of previous research and provide direction to the service provider in prioritizing their objective. Furthermore, as Kindye (2011) argued that after sale service is not familiar in Ethiopia and many companies that provide after sale services do not conduct a research on after sale service practices and its effect on customer satisfaction.

Despite the fact that some research are done on effect of after sales service practices on customer satisfaction in developed countries and other developing countries, there are few in Ethiopia. Therefore, considering the importance of after sales service, as well as lack of information on its effect on customer satisfaction in Ethiopian context, this research mainly focuses on the effect of after sale service practices on customer satisfaction in the case of LG electronics service center.

### **1.3 Basic research question**

The research question proposed to meet study objectives are:

- 1, How does after sale service practice of product delivery affect customer satisfaction?
- 2, How does after sale service practice of installation affect customer satisfaction?
- 3, How does after sale service practice of warranty affect customer satisfaction?
- 4, How does after sale service practice of user training affect customer satisfaction?
- 5, How does after sale service practice of documentation affect customer satisfaction?
- 6, How does after sale service practice of maintenance and repair affect customer satisfaction?
- 7, How does after sale service practice of online/telephone support affect customer satisfaction?
- 8, How does after sale service practice of upgrades affect customer satisfaction?



## **1.4 Objective of the study**

### **1.4.1. Main objective**

The primary objective of this study was to examine the effect of after sales service practices on customer satisfaction in the case LG electronics service center.

### **1.4.2. Specific objectives**

- To investigate the effect of delivery on customer satisfaction.
- To investigate the effect of installation on customer satisfaction.
- To investigate the effect of warranty on customer satisfaction.
- To investigate the effect of user training on customer satisfaction.
- To investigate the effect of documentation on customer satisfaction.
- To investigate the effect of maintenance and repair on customer satisfaction.
- To investigate the effect of online/telephone support on customer satisfaction.
- To investigate the effect of upgrades on customer satisfaction.

## **1.5 Significance of the study**

This study was significant in the following regards;

- i. It will help LG electronics service center to develop and implement effective after sale service practices improvement initiatives.
- ii. It provides to the public to better understanding of the organization in terms of after sale service practices to customer. Furthermore, it's hoped that the finding of the study might stimulate further study on other aspect concerning relationship between after sale service practices and customer satisfaction.

- iii. The findings of this study will provide them with empirical information on what customers expect in terms of after sale service practices from LG electronics service center as well as customers assessment of the quality of service they provide.
- iv. The findings of this study will extend the understanding and clarity of customer's expectations and perceptions of after sale service practices in the electronics service provider.

## **1.6 Scope of the study**

The focusing of this study is LG Electronics Company, where researcher is evaluating how customer perceived after sale service practices in this company in general. This study is limited to LG electronics Company because the sample is drawn from the customer using LG electronics service and to those with experience of the electronics industry.

## **1.7 Limitation of the study**

The quality of the output of this study depends on the genuine data acquired from the selected representative branches of LG's customer. This implies that, the finding and the analysis of this paper depend up on the selected branches' reliable data. So that, lack of willingness, for various reasons like suspect of miss use of the companies confidential information for non-academic purpose limits the reliability of the research paper to achieve its objectives. In addition, shortage of pervious similar researches in Ethiopian case, and limited resource may affect the qualities of the study output.

## **1.8 Organization of the study**

This study is divided in five chapters. The first chapter contains the introduction part. The second chapter will present related theories and previous studies related to the topic (literature review). The third chapter contains research methodology and design used in this study. In chapter four the data collected during the data collection process will be presented that is it contains an analysis of the empirical data and discussion will be presented. Finally chapter five will present the summary of finding, conclusion and recommendation.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

This chapter presented theoretical review, Empirical literature, conceptual Framework and hypothesis of the topic under study. This chapter tries to cover topics which are related to after sale service, customer satisfaction, service quality and relationship between them.

#### **2.1 Theoretical review**

##### **2.1.1 After sale service**

###### **2.1.1.1 Definition after sale service**

According to Philip Kotler(2002), after sales service is a service provided by the company to a customer after the sale. “After-sales services” has been used the most, to describe services that are provided to the customer after the products have been delivered (Vitasek, 2005)(Asugman, *et al.*, 1997) defined after sales service as those activities in which a firm engages after purchase of its product that minimize potential problems related to product use, and maximize the value of the consumption experience. Gaiardelli, et al. (2007) define after sale service as those activities taking place after the purchase of the product and devoted to supporting customers in the usage and disposal of the goods to make them loyal. After-Sales Service is defined as set of activities which occurs after the purchase of the product which is devoted towards prospective customers for the maintenance or usage of the product (Saccani, Johansson, &Perona, 2007). According to Philip Kotler(2002), after sales service is a service provided by the company to a customer after the sale. “After-sales services” has been used the most, to describe services that are provided to the customer after the products have been delivered (Vitasek, 2005). After sale services represent one of the few constant connections those customers have with a brand (Gallagher et al. 2005), while Lewis et al. (2004) pointed out how it is affected by and affects the brand image of a firm. Gallagher et al. (2005) point to after-sales as a way to recover profits lost due to the fierce

competition on sales prices of original equipment, representing at the same time “one of the few constant connections that customers have with a brand”.

### **2.1.1.2 Objective of after sale service**

The main objective of the after-sales is to keep the customer satisfied through trust, credibility and sense of security conveyed by the organization, and building lasting relationships that contribute to increased performance for sustainable results (Loomba, 1998).

Forooz and Rostami (2006) as cited by Kindye E. (2011) have shown after sale service advantages like:-

- ✓ Competitive advantage
- ✓ Customer satisfaction
- ✓ Long term customer relationship, customer retention and loyalty
- ✓ New product success and development
- ✓ High profit
- ✓ Differentiation
- ✓ Branding

According to Potluri and Hawariat (2010), delivery of after-sales service is becoming increasingly critical as businesses do everything in their power to be more cost effective, boost profit margins, and meet customer demand for a product or service. Gaiardelli, et al. (2007) said an effective after sales service protocol is essential to streamline service management and meet customer's expectations, it can let you experience customer delight, while also saving on your bottom line and it generates profit.

### **2.1.1.3 Component of after sale service**

According to Irini D. R. (2008) installation and delivery are the keys to the after-sales service that have an influence to the customer. Buyers of product want assurance that the product will perform

satisfactorily over its useful life when operated properly. This is achieved through post-sale support such as installation, warranties, extended warranties, maintenance service contracts, provision of spares, training programs, product upgrades and etc (Murthy D.N.P. et. al, 2004). Many value-conscious consumers are demanding that a company's products offer more value than its competitor's products not only in its design and manufacturing, but also in product delivery and support (Sherman, 1992). Increasingly, distribution and service support options available for a product are key determinants in consumers' product purchase decision (Corey et al., 1989; Lele and Sheth, 1987). Levitt (1993) described that manufacturers and retailers cannot consider their active role ends with the sales but continue by supporting their customers with after-sales service such as delivering spare parts and etc. According to Goffin (1999), refer installation as being one among the seven elements of customer support. Installation is the first element of product support after the sales. The rationale of installation packages are based on three main reasons which are after-sales economics, customer requirements, and competitive arguments (Oliva and Kallenberg, 2003). However, according to Murthy D. N. P., et al. (2004) customer dissatisfaction can arise due to poor performance of the purchased item and/or the quality of warranty service provided by the manufacturer. The consequence of poor warranty servicing is more difficult and costly to rectify and hence it is very important that manufacturer avoids this occurrence in the first instance. Since non-conforming items have a higher failure rate, they tend to fail early and this affects consumer satisfaction. One way of overcoming this is through a consumer incentive warranty policy (Murthy D. N. P, et al., 1995). Offering better warranty terms convey greater assurance to buyers and can result in greater sales. This implies that product warranty logistic is very important from customer satisfaction as well from the manufacturer's profitability point of view. (Murthy D. N. P., et al., 2004).

Goffin (1999) explains seven elements of after sale support which must be provided to customers over the working lifetime of product as follows.

- **Installation:** - for many products the first element of product support following the sale is installation. This is usually performed for complex product or where personnel from the manufacturing company or their representatives involve safety issues

- **User training:** - the complexity of some type equipment necessitates that manufacturers provide good training for users. Many computers based and complex products include functions that help users learn to use them more efficiently.
- **Documentation:** - most products have some form of documentation and industries such as medical electronics plays key role. Typical form of documentation covers equipment operation, installation, maintenance, and repair. Good documentation can lead to lower support cost.
- **Maintenance and repair:** - maintenance and repair are an important element of product support, which has required companies to invest significant resource. Preventive maintenance is undertaken to clean, refurbish or replace parts of equipment which otherwise would be liable to fail. Mechanical parts, for example, normally require regular maintenance as in the case of cars.
- **Online support:** - telephone advice on product is a major element of customer support in many industries. Product experts give online consulting to customers to help them use products more or, sometimes to trace the cause of fault (troubleshooting).
- **Warranties:** - manufacturers of most products offer warranty and, in some markets such as automobiles. Manufacturers try to gain a competitive advantage by offering longer warranty periods. Warranty reduces the financial risk of owning products and therefore it is an important element of customer support.
- **Upgrades:** - offering customer the chance to enhance the performance of the existing products can be an important aspect of support. For example, computer manufacturers' offer upgrades, because they increase the working lifetime of products and can be a significant source of revenue. Original equipment manufacturers have a competitive advantage in this because they normally have records of where equipment has been sold which could benefit from upgrading.

#### 2.1.1.4. Challenges of After Sale Service

According to Gaiardelli, et al. (2007) the challenge of after sale service exists when the company gives after sale service to the third party by outsourcing.

- **Increased chances of pilferage-** While outsourcing your after-sales may help you reduce the operational issues relating to managing the service centers; it also increases the chances of pilferage on the flip side
- **Risk of non-compliance of regulatory terms and conditions-** Since the service centers work on their own models and regulations, it may be difficult to streamline your business processes with theirs.
- **Discontent with the automation solution used by your service partner-** Some service providers use a service management solution that may not offer the results that you seek from your after-sales process; while some service providers may not use any automation technique at all

## 2.1.2 Quality service

### 2.1.2.1 What is service quality?

According to Parasuraman et al., (1988), service quality is seen as the difference between customers' expectations and perceptions of service with the view of building a competitive advantage. This indicates that delivering quality service means conforming to customer expectations on a consistent basis and could be assessed by probing whether perceived service delivery meets, exceeds or fails to meet customer expectations and It has been defined that service quality is very important for customer satisfaction, and by it service quality impacts customer loyalty (Cronin and Taylor, 1992; Oliver, 1999).

Service quality is considered an important tool for a firm's struggle to differentiate itself from its competitors (Ladhari, 2009). Understanding service quality must involve acknowledging the characteristics of service which are intangibility, heterogeneity and inseparability. In that way, service quality would be easily measured (Negi., 2009). Gronroos (2007) also defined service quality as the outcome of the comparison that consumers make between their expectations and

perceptions. Customer's expectation serves as a foundation for evaluating service quality because, quality is high when performance exceeds expectation and quality is low when performance does not meet their expectation (Athanasopoulos *et al.*, 2001). Service quality has a strong correlation with customer satisfaction, financial performance, manufacturing costs, customer retention, customer loyalty, and the success of marketing strategy (Cronin *et al.*, 2000; Wong *et al.*, 2008).

## **2.1.3 Customer satisfaction**

### **2.1.3.1 Definition of customer satisfaction**

A comprehensive definition of customer satisfaction in term of pleasurable fulfillment is given by Oliver (1997) in (Grigoroudis & Siskos 2010):

“...Satisfaction is the consumer's fulfillment response. It is judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under or over fulfillment...”

According to Rigopoulou (2008) customer satisfaction is the state of mind that customers have about a company when their expectations have been met or exceeded over the lifetime of the product or service. Service companies have since recently focused on customers in order to improve competitiveness. Customer satisfaction is one of the important outcomes of marketing activity. Whether the customer is satisfied after purchase also depends on the offer's performance in relation to the customer's expectation. Customers form their expectation from past buying experience, friends' and associates' advice, and marketers' and competitors' information and promises (Kotler; 2010).

### **2.1.3.2 Customer satisfaction measurement**

The measurement of customer satisfaction has emerged within the field of Total Quality Management (TQM) although it has been explored by several researchers and theorists from other scientific areas (e.g. marketing). The TQM School formalizes customer satisfaction as a quality



component, as appearing in the major quality awards, emphasizing on the exploitation of customer satisfaction data within a business organization (Grigoroudis & Siskos 2010).

Henley center headlight vision (Smith, 2007) states the research carried out in the UK with public sector organizations suggests that there are five themes that are likely to be relevant to all organizations in measuring customer satisfaction.

- Delivery of the service (how problems were handled, reliability, outcome.)
- Timeliness (waiting times, number of times contacted)
- Information (accuracy, enough information, kept informed)
- Professionalism (competent staff, fair treatment)
- Staff attitude (friendly, polite, sympathetic)

### **2.1.3.3 Factor that affect customer satisfaction**

Matzler et al., (1996), classify factors that affect customers' satisfaction into three factor structures;

- i. Basic factors: these are the minimum requirements that are required in a product to prevent the customer from being dissatisfied. They do not necessarily cause satisfaction but lead to dissatisfaction if absent. These are those factors that lead to the fulfillment of the basic requirement for which the product is produced. These constitute the basic attributes of the product or service. They thus have a low impact on satisfaction even though they are a prerequisite for satisfaction. In a nutshell competence and accessibility
- ii. Performance factors: these are the factors that lead to satisfaction if fulfilled and can lead to dissatisfaction if not fulfilled. These include reliability and friendliness.
- iii. Excitement factors: these are factors that increase customers' satisfaction if fulfilled but does not cause dissatisfaction if not fulfilled which include project management.

### **2.1.3.4 After sale service quality and customer satisfaction**

Quality in services provides a competitive factor for continued consumption, especially when intangibility relations are tightened between quality and services.

From this customer relationship viewpoint, after-sales service is regarded as an important factor that has an impact on establishing good relationships with customers. On the other hand, a default and free basic after-sales service, also plays an important role in attracting more customer attention in a market with severe brand competition. Offering adequate after-sales service to customers has become a major generator of revenue, profit, and competency in modern industries Cohen et al., (2006).

Fen & Lian, (2005, p.59-60) as cited by Kindye E.(2011) found that both service quality and customer satisfaction have a positive effect on customer's re-patronage intentions showing that both service quality and customer satisfaction have a crucial role to play in the success and survival of any business in the competitive market. This study proved a close link between service quality and customer satisfaction.

After sales service quality has major influence on customer satisfaction as customers buy products or services and on whether they continue to do so. With the aim of sustaining long term relationship with their customers, many businesses have changed their strategic focus to emphasize customer retention (Peng and Wang 2006). Preserving their long term customer relationships requires that these businesses both measure and appropriately adjust the quality of their customer's service. As a result measurement and improvement in the current service quality level of interest to companies whose revenues in whole or part from service delivery (Rajnish K 2010).

## **2.2 Empirical studies on after sale service and customer satisfaction**

According to Ehinlanwo and Zairi (1996) Toyota describes its after sales objectives as customer satisfaction, customer retention, efficiency in work and job flow, both for the distributor and

dealer, and high service absorption for dealers, while Ford describes its after-sales objectives as to make Ford the number one aftermarket operation by providing owners of Ford vehicles with an ownership experience. The after sale services given by those companies include: Maintenance service, original spare parts, warranties, washing, key-care service and training program.

As shown in Ehinlanwo and Zairi (1996) a survey carried out by Autohaus in 1993, approximately 59 per cent of car dealer's yearly profits come from the after-sales service. The after-sales market, apart from being profitable, is also less subject to economic cyclic ups and downs.

There was a research conducted by Lin (2009) on electric power customer satisfaction using Kano model to evaluate the customer satisfaction, depending on the customers' satisfaction degree and importance degree corresponding to each service item during the statistical work. On the other hand, Potluri and Hawariat (2010) conducted a study on assessment of after-sales service behaviors of Ethiopia Telecom customers to assess and review fixed-line telecom customers' perception of the quality of after-sales services provided by Ethiopian Telecom. It was conducted on 450 telecom customers who are in Addis Ababa using self-administered questionnaires. They use SERVQUAL measures in order to assess after sale service behavior Ethiopia telecom customers. Finally they get service provider is the most determinant for customer satisfaction and on an average 61.86 percent of customers responded positively to the after-sales service offered by the Ethiopian Telecom employees on the dimensions of on responsiveness, reliability, assurance, empathy, and tangibility or appearance. Though the research was conducted in after sale service behavior of Ethiopia telecom customers using SERVEQUAL, the researcher doesn't see the effect using another model to prove the relationship.

## **2.3 Conceptual framework and hypothesis**

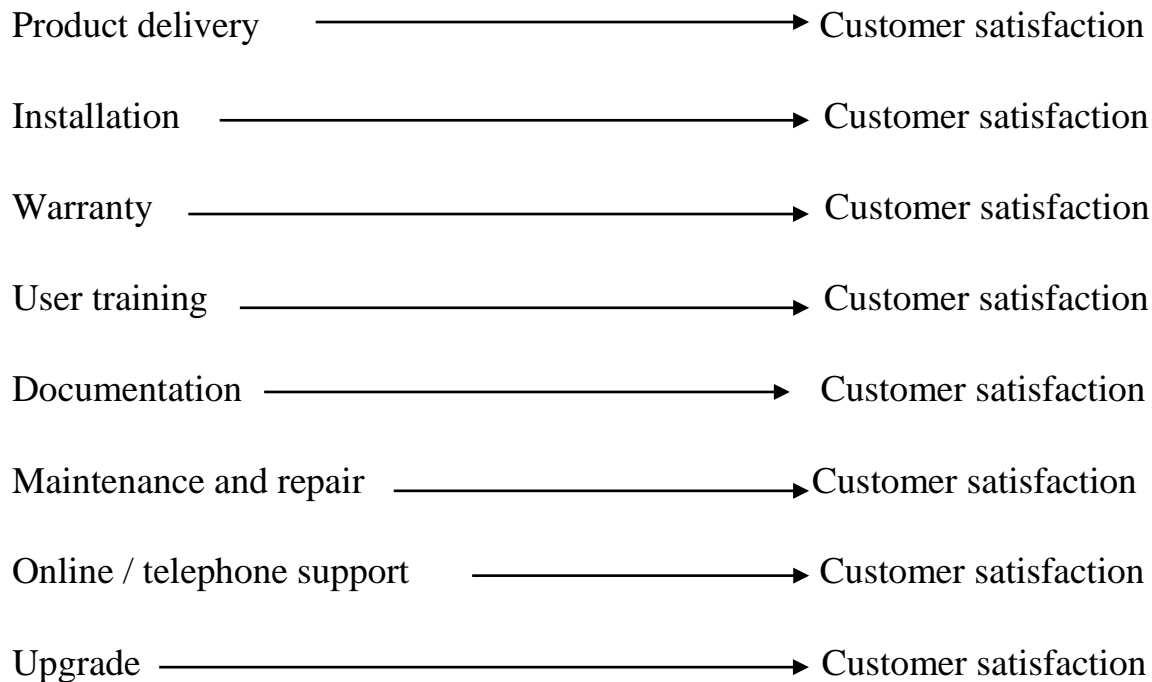
### **2.3.1 Conceptual framework**

The conceptual framework is purposed to show the direction of the study. The study shows the relationship between the eight after sale service practices (delivery, installation, maintenance and

repair, warranty, documentation, online/telephone support, user training, and upgrades) and customer satisfaction.

**Independent variable**

**Dependent variable**



**2.3.2 Research hypothesis**

The research was guided by the following research hypothesis

**Hypothesis 1:** Product delivery has significant effect on customer satisfaction

**Hypothesis 2:** Installation has significant effect on customer satisfaction

**Hypothesis 3:** Warranty has significant effect on customer satisfaction.

**Hypothesis 4:** User training has significant effect on customer satisfaction

**Hypothesis 5:** Documentation has significant effect on customer satisfaction

**Hypothesis 6:** Maintenance and repair has significant effect on customer satisfaction

**Hypothesis 7:** Online/ telephone support has significant effect on customer satisfaction

**Hypothesis 8:** Upgrades has significant effect on customer satisfaction

# **CHAPTER THREE**

## **RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter looks at the methods used to achieve the objectives of the study. It explains the research design, sampling techniques, sampling procedures, data collection techniques, data analysis and interpretation. To provide the detail of each sub methodology application, they are discusses separately as follows.

### **3.2 Research design and Approach**

The objective of this research is to examine the effect of after sale service practices on customer satisfaction in LG electronics service center .Taking the research objective and nature of the study into consideration, the design of the research used is descriptive and explanatory and in order to meet the objective of the study quantitative approach of data collection were undertaken.

The quantitative approach was applied to examine the relationship between the dependent variables (customer satisfaction) and independent variables (8 dimensions of after sale service).

### **3.3 Sampling Techniques and procedures**

This study is interested to identify the effect of after sale service practices on customer satisfaction in LG Electronics service center. The study confined those branches of the company which are found in Addis Ababa due to the prominent limitation inherited to survey research such as time, finance other factors. In addition to the convenience of the researcher, the majority of LG branches concentrated here in the city and had a head office here in Addis Ababa. So the branches of LG which are located in Addis Ababa were found to be ideal for the study.

LG has total of 16 branches in Addis Ababa. 13 of the branches are called Brand shop which is provide the products only for sale (they don't have after sale service center) and the other 3 branches has both brand shop which provide the product for sale and has after sale service center. The researcher selects 3 service centers by using purposive sampling techniques. On the other hand the study uses one of the non-probability sampling techniques which are convenience sampling technique. The reason for using convenience sampling is because the population is too large (more than 3500 registered after sale customers for last 2 years) to coordinate and also it is impossible to contact the customers in the service center as they are in rash movement, most of them are coming from their place just to get the service. So, not all of them would be willing to take much time in the service center. Therefore, it becomes suitable to use respondents who are easily accessible and proximity to the researcher.

The populations of the study are all customers who are using the service of LG electronics service center under three branches. However, because it is difficult to study all the customers who visited the service center the target population considered as the customers who visit the service center for one month. The total target populations that considered as a population in this study are average number of customers who had visited LG service center for one month which are 150 customers according to the information from the service center database.

The sample size of the study is calculated based on the population of one month customers who visited the LG service center for after sale service which be total of 150, and with the 95% confidence level (tells how sure the researcher can be) and 5% margin of error (error margin that the researcher can tolerate), from 150 population (after sale service customers who well get after sale service for one month) depending on the sample size calculator the sample size be 109.

### **3.4 Data collection instrument**

At this study, self-administered questionnaires were used for gathering data. Quantitative data about the level of customer satisfaction in each after sale service have been collected from sample customers through close-ended questionnaires prepared in English and Amharic languages. Likert

scale rated from 1 to 5 (very satisfied to very dissatisfied) was employed to measure the level of customer satisfaction.

The questionnaires were composed of two sections. The first section collected data on general information of the respondents, the second section contained questionnaire items on five point Likert Scale to assess the level of customer satisfaction.

### **3.5 Data source and collection procedures**

The data that was employed includes detailed information on after sale service components and customer satisfaction in LG electronics service center by using both primary and secondary sources. The primary data was collected through self-administered questionnaires containing close ended questions from sample respondents related to the component of after sale service and the satisfaction of customer in the after sale service. The questionnaires were given to the concerned bodies. Questionnaires prepared in English and Amharic distributed within the sample frame. Even though the sample size was 109, the total distributed questionnaire was 100 and from the 100 distributed questionnaires 91 usable questionnaire was returned.

The secondary source of data has collected from LG service center, literatures found related to the topic and from both company profiles and documents.

### **3.6 Data analysis tool and techniques**

According to Gujarati (2004), when there are two or more than two independent variables, the analysis concerning relationship knows as multiple correlations and the equation describing such relationship as the multiple regression equation computed with the help of different statistical packages. In order to test the hypothesis linear multiple regression analysis was employed to undertake the statistical techniques, SPSS was used. To describe the sample characteristics in the data analysis report, respondent's profile such as age, gender, and educational background has been analyzed in the form of table.

**A. Descriptive analysis** the descriptive statistical results were presented by tables, frequency distributions and Percentages to give a condensed picture of the data.

**B. Pearson correlation analysis** in this study Pearson correlation coefficient was used to determine the relationships between after sale service quality dimension ( delivery, installation, maintenance and repair, user training, warranty ,online/telephone support ,documentation and upgrades) and customer satisfaction.

**C. multiple regression analysis** in this study multiple regression analysis was used to investigate the effect of after sale service quality dimensions (delivery, installation, maintenance and repair, user training, warranty, online/ telephone support, documentation and upgrades) and customer satisfaction.

### **Reliability analysis**

In this research Cronbach's Alpha of reliability test was used to assess the reliability of eight independent variables of after sales service quality and dependent variable customer satisfaction. The reliability analysis is used to test consistency of respondents' answers to all the items of independent and dependent variables in the questionnaire, whether the items are hanged together as a set which they are highly correlated with one another.

**Validity** customers in pre-test of the questionnaires checked the validity of questionnaires. In addition marketing experts has checked the validity of questionnaires.

### **3.7 Ethical consideration**

Since the researcher was used the data from customers which was collected through questionnaire, permission was obtained from the customers. To maintain the confidentiality of the information provided by the respondents, the respondents were instructed not to write their names on the questionnaire and assured of that the responses would be used only for academic purpose and kept confidential. Brief description of the central objectives or purpose of the study and the potential benefit of the research outcome to respondents in addition, the title with the company was clearly



given in the introductory part of the questionnaire so as to motivate them and participate in the study and provide relevant information about the company under study. Finally, respondents were included in the study based on their free will. Texts belonging to other authors that have been used in any part of this study have been fully referenced with reference page.

# **CHAPTER FOUR**

## **DATA PRESENTATION, ANALYSIS AND INTERPRETATION**

### **4.1 Introduction**

The main objective of this study is to examine the effect of after sales service practices on customer satisfaction in LG electronics service center. In this chapter, presentation of the analysis, interpretation and discussions made to address the research objectives. The first part presents reliability and validity test, the profile of participants showing gender, age group, level of education, and the second section presents questions related to topics which are product type they use, duration of LG product usage, and frequency after sales service of the product by using pie charts and histogram. Descriptive statistics used in the research includes frequency, percentage, mean, standard deviation to present the study results. The chapter then applies particularly cross tabulations and correlations to analyze the results further. In addition multiple regression analysis is applied with the help of SPSS version 20. The response rate of the study was 91%. The study commences by providing the results of the study regarding the respondents' biographical details.

### **4.2 Reliability and Validity Test**

Reliability measures the internal consistency of items used to measure the latent constructs. The reliability analysis procedure calculates a number of commonly used measures of scale reliability and also provides information about the relationships between individual items in the scale. To be more specifically, Dunn et al. (1994) indicates that the term reliability refers to the accuracy or precision of the scale. There are several ways to assess reliability, namely Cronbach's Alpha, Split half, Guttman, Parallel, and Strict parallel. Among these measuring models, Cronbach's Alpha is the most widely used one (Dunn et al., 1994). Therefore, as shown in table the reliability of the whole items is 0.798 which means the whole items were reliable and acceptable.

In addition, this research measures the reliability of basic item individually as shown in the second table.

**Reliability Statistics**

|                  |            |
|------------------|------------|
| Cronbach's Alpha | N of Items |
| .798             | 45         |

**Reliability test for basic item individually**

| variable               | Cranach's Alpha | N of Items |
|------------------------|-----------------|------------|
| Maintenance and repair | 0.841           | 6          |
| Warranty               | 0.686           | 4          |
| Installation           | 0.749           | 6          |
| User training          | 0.743           | 5          |
| Documentation          | 0.836           | 4          |
| Delivery               | 0.942           | 6          |
| Online support         | 0.915           | 6          |
| Upgrades               | 0.584           | 3          |

Source: SPSS (20), June, 2020

**Validity Test**

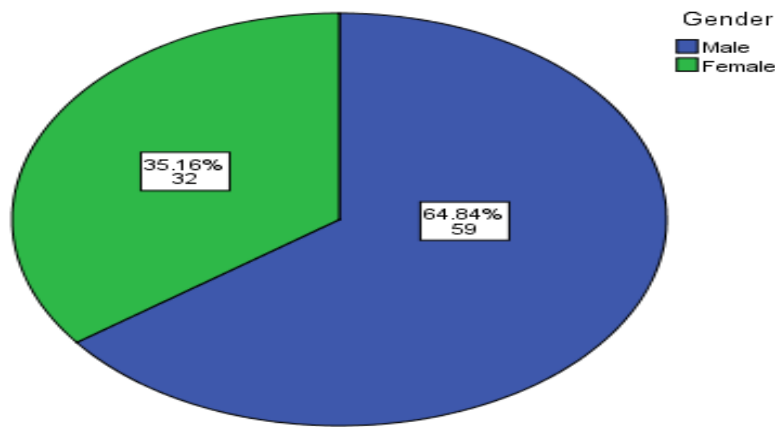
In Pearson correlation all variables values are more than 0.159 of r table product moment at 5% level of significance. Hence it can be concluded that all variables are valid

### 4.3 Demographic Profile of Respondents

The study focused on LG electronics service center in Addis Ababa branches. For the analysis, the customer was categorized with demographic variables: gender, age, education level, types of product, product usage duration, and frequency of after sales service, necessity of after sales service.

#### 4.3.1 Gender of the respondents

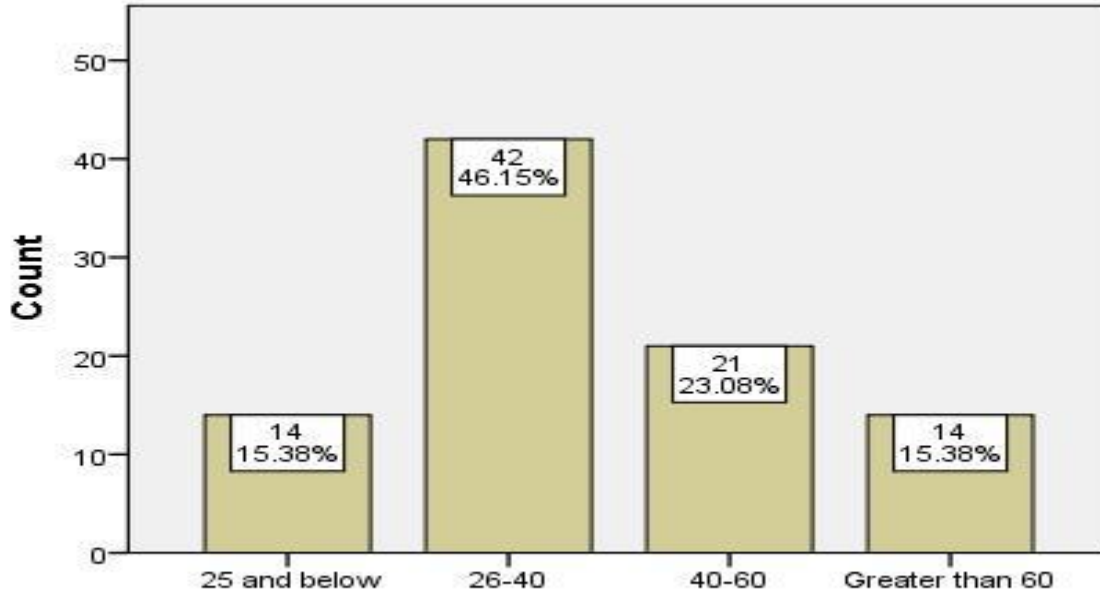
The respondents were asked to indicate their gender and the results presented in Figure 4.1. 65% were male and 35 % were female. This implies that majority of the respondents who took part in the study were male.



**Figure 4.1 Gender of the respondents**

#### 4.3.2 Age of the respondents

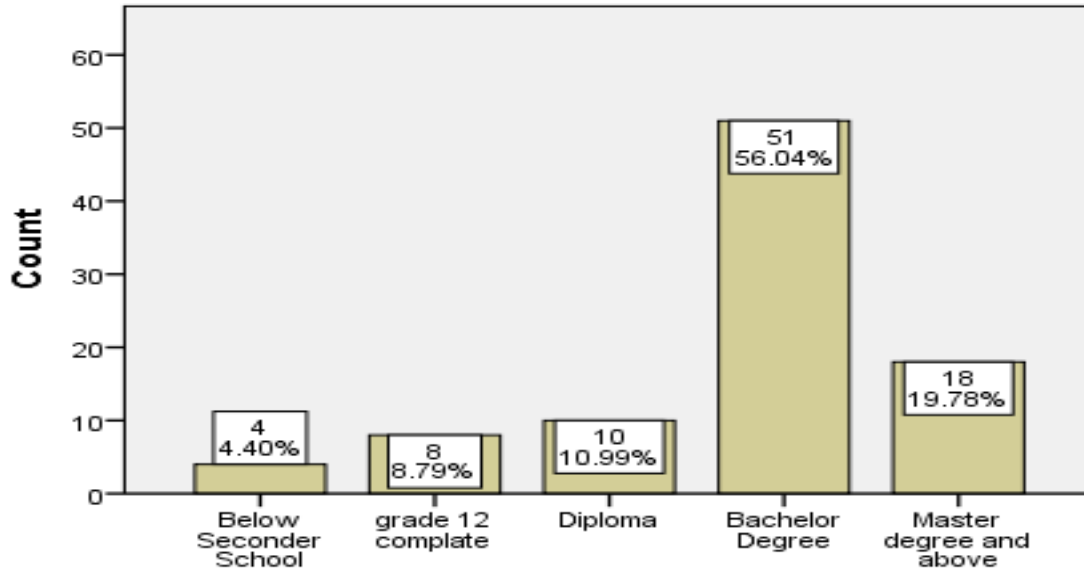
The respondents were also asked to indicate their age and the results presented in figure 4.2. from the findings, 46 % of the respondents who constituted the majority were in the age bracket of 26-40 years, 21 % were in the age bracket of 40-60 years, 14 % were 60 years and above and the remaining 14% were in the age of 25 years and below.



**Figure 4. 2Age of the respondents**

### **4.3.3 Level of Education**

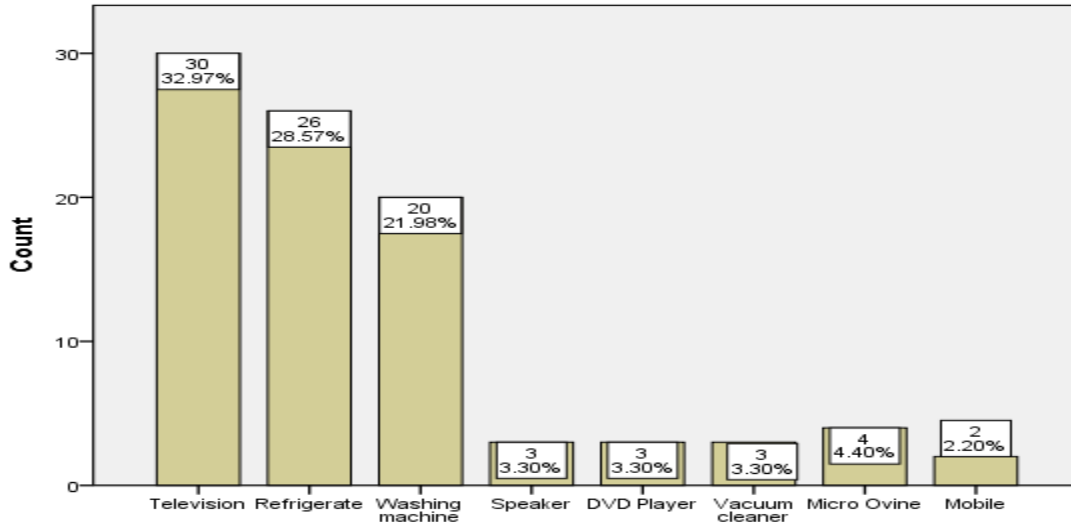
Regarding to the educational level of the participants more than a half of the respondents were degree holder that is 51 (56%) and the second largest group of the respondents were masters and above holder that is 18 (20%), and the remaining group of participants 10 (11%), 8(9%) and 4(4%) were diploma,grade 12 complete and below seconder school respectively.



**Figure 4. 3Level of Education of respondents**

#### **4.3.4 Types of LG products respondents use**

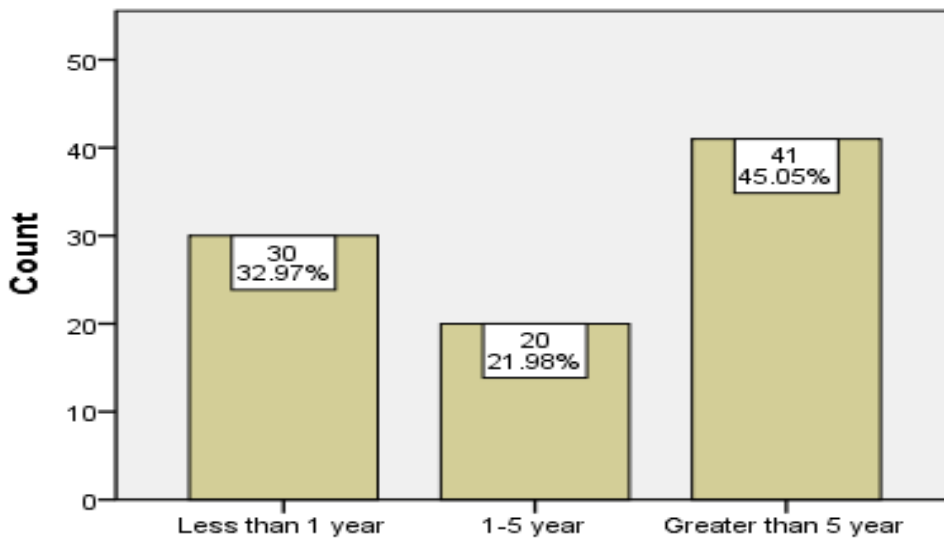
The study sought to find out the types of LG products that customer use, the findings are presented in below figure. As it is already explained in the research design and methodology part, the researcher has focused on all LG products. Accordingly, out of the 91 respondents 30(33%) use LG television, 26(29 %) uses LG refrigerate, 20(22%) uses washing machine, and the remaining 15 % of respondents uses speaker, DVD player, vacuum cleaner, micro ovine and mobile.



**Figure 4. 4 Types of product respondent’s use**

**4.3.5 Duration of LG product usage**

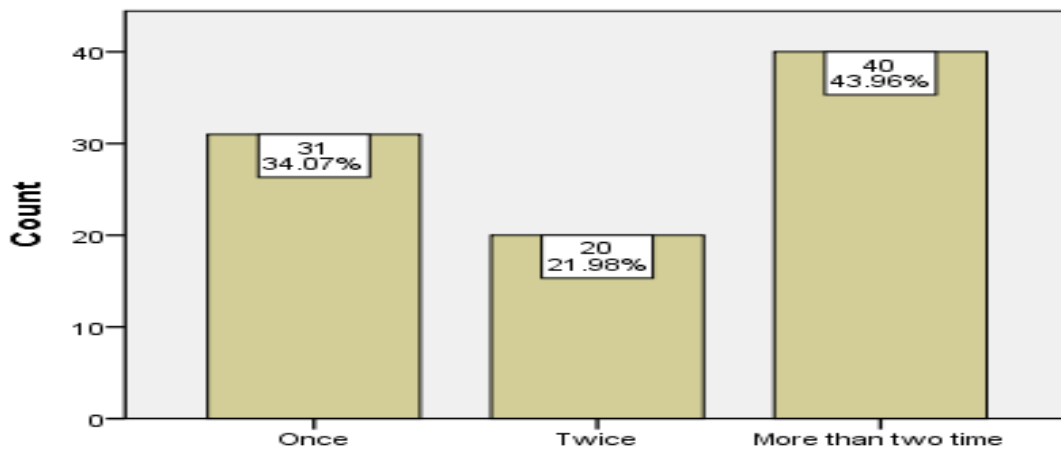
The study sought to find out the duration of LG product usage of the respondents. Based on the collected data, 45 % of the respondents uses the LG products for more than five year, 33% of the respondents use the LG product for less than one year, whereas the remaining 22 % of the respondents use the product for one-five year.



**Figure 4. 5 Duration of LG product usage of respondents**

### 4.3.6 Frequency on after sales service of the respondent's product

The study sought to find out the frequency of after sales service of the respondents LG product. The largest group of respondents 40 (44%) indicate that they get after sales service more than two times. 31 (34%) of respondents indicate that they get after sales service once and the remaining 20 (22%) of the respondents indicate that they get after sales service twice.

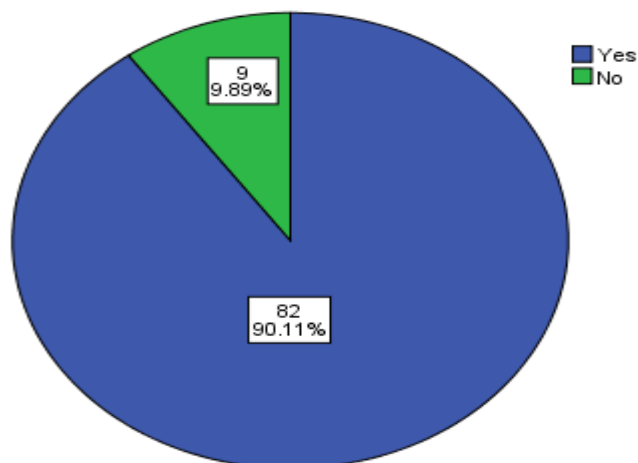


**Figure 4. 6 Frequency of after sales service of respondent's product**

### 4.3.7 The impact of after sales service on respondent level of satisfaction

The study sought to find out the impact of after sales service on respondent level of satisfaction. Based on the collected data, 82(90 %) of the respondents after sales service increase their level of satisfaction, whereas the remaining 9(10 %) of the respondent's level of satisfaction is not affect by after sales service quality.





**Figure 4. 7 Impact of after sales service on respondent level of satisfaction**

#### 4.4 Descriptive statistics analysis

##### 4.4.1 The effect of maintenance and repair on customer satisfaction

This section sought to establish the effects of maintenance and repair on customer satisfaction. The respondents were given different factors and asked to rate using a 5-point Likert scale. Based on this scale a mean score of 0-1.4 denotes Very dissatisfied; 1.5-2.4 denotes dissatisfied; 2.5-3.4 denotes neutral; 3.5-4.4 denotes Satisfied and 4.5-5 denotes Very Satisfied.

The following table presents findings of respondent's level of satisfaction about the effect of maintenance and repair customer satisfaction; a more detailed discussion of the findings is presented later

**Table 4. 1 Descriptive value of maintenance and repair on customer satisfaction**

| Maintenance and repair                                    | Level of satisfaction | Frequency | Percentage | Mean | Std. Dev. |
|---|-----------------------|-----------|------------|------|-----------|
| Accurate information about time of maintenance and repair | Very dissatisfied     | 7         | 7.7        | 3.76 | 1.168     |
|   | Dissatisfied          | 10        | 11.0       |      |           |
|   | Neutral               | 3         | 3.3        |      |           |

|                                       |                   |    |      |      |       |
|---------------------------------------|-------------------|----|------|------|-------|
|                                       | Satisfied         | 49 | 53.8 |      |       |
|                                       | Very satisfied    | 22 | 24.2 |      |       |
| Equipment reliability for maintenance | Very dissatisfied | 10 | 11.0 | 3.54 | 1.259 |
|                                       | Dissatisfied      | 12 | 13.2 |      |       |
|                                       | Neutral           | 6  | 6.6  |      |       |
|                                       | Satisfied         | 45 | 49.5 |      |       |
|                                       | Very satisfied    | 18 | 19.8 |      |       |
| Maintenance and repair cost avoidance | Very dissatisfied | 5  | 5.5  | 3.23 | 1.239 |
|                                       | Dissatisfied      | 32 | 35.2 |      |       |
|                                       | Neutral           | 5  | 5.5  |      |       |
|                                       | Satisfied         | 35 | 38.5 |      |       |
|                                       | Very satisfied    | 14 | 15.4 |      |       |
| Maintenance resource usage            | Very dissatisfied | 8  | 8.8  | 3.36 | 1.269 |
|                                       | Dissatisfied      | 19 | 20.9 |      |       |
|                                       | Neutral           | 15 | 16.5 |      |       |
|                                       | Satisfied         | 30 | 33.0 |      |       |
|                                       | Very satisfied    | 19 | 20.9 |      |       |
| Quality of maintenance work           | Very dissatisfied | 10 | 11.0 | 2.78 | 1.237 |
|                                       | Dissatisfied      | 40 | 44.0 |      |       |
|                                       | Neutral           | 12 | 13.2 |      |       |
|                                       | Satisfied         | 18 | 19.8 |      |       |
|                                       | Very satisfied    | 11 | 12.1 |      |       |
| Overall equipment effectiveness       | Dissatisfied      | 11 | 12.1 | 3.93 | 0.964 |
|                                       | Neutral           | 12 | 13.2 |      |       |
|                                       | Satisfied         | 40 | 44.0 |      |       |
|                                       | Very satisfied    | 28 | 30.8 |      |       |

**Sources: primary data generated by SPSS V.20, June. – 2020**

The researcher has raised a question for accuracy of information about time of maintenance and repair of LG electronics service center as indicated in the above table, 78% of respondents satisfied by the accuracy of information about time of maintenance and repair of LG electronics. On the

other hand, 19 % of the respondents were not satisfied by accuracy of information about time of maintenance and repair of LG products. The rest 3 % of the respondents remain neutral. It indicates that most of the respondents are satisfied by the accuracy of information about time of maintenance and repair on LG product.

In addition to the accuracy of information about time of maintenance and repair of LG electronics service center, LG customers are requested if they are satisfied or not by LG equipment reliability for maintenance, and 24 % of respondents are dissatisfied by equipment reliability for maintenance, majority 69% of the respondents are satisfied by equipment reliability for maintenance. The rest, 7% of the respondents were neutral. From this fact, we can deduce that majority of the respondents are believe that LG equipment is reliable for maintenance of LG products.

Concerning the maintenance and repair cost avoidance 54 % of the respondents are satisfied by maintenance and repair cost avoidance. Then, 41 % of the respondents replied that they are dissatisfied by maintenance and repair cost. The rest, 5 % of respondents are at the middle of the road; they neither satisfied nor dissatisfied. As a result, it is possible to say using LG product is better to avoid maintenance and repair cost of the product.

For the question asked about the maintenance resource usage. 30%, of the respondents were answered that they are dissatisfied by maintenance resource usage, whereas, 54 % of respondent replied that they are satisfied by LG service center maintenance resource usage. The other 16 % of respondents declared that they neither satisfied nor dissatisfied about the maintenance resource usage. From the above fact, we can infer that the maintenance and resource usage have its own contribution in customer satisfaction.

Based on the quality of maintenance work result 32% of respondents are satisfied by LG service center maintenance work quality. On the other hand 55% of respondents are dissatisfied by LG maintenance work quality. The remaining 13 % of respondents are neither of the two sides. From this fact it can be conclude that even if some of respondents are satisfied by quality of maintenance work majority of the respondents believed that they are not satisfied by quality of maintenance work of LG Company. The organization needs to work to improve the quality of maintenance work.

Concerning the overall equipment effectiveness 75 % of respondents responded as that they are satisfied by overall equipment effectiveness. On the other perspective 12 % of respondents are not satisfied by overall equipment effectiveness and the remaining 13 % of respondents neither satisfied nor dissatisfied by overall equipment effectiveness. From this fact, we can infer that majority of the respondent customers are satisfied by LG company overall equipment effectiveness.

#### 4.4.2 The effect of warranty service on customer satisfaction

This section sought to establish the effects of Warranty service on customer satisfaction. The respondents were given different factors and asked to rate using a 5-point Likert scale. Based on this scale a mean score of 0-1.4 denotes Very dissatisfied; 1.5-2.4 denotes dissatisfied; 2.5-3.4 denotes neutral; 3.5-4.4 denotes Satisfied and 4.5-5 denotes Very Satisfied.

The following table presents findings of respondent’s level of satisfaction about the effect of warranty service on customer satisfaction in LG electronics service center; a more detailed discussion of the findings is presented later.

**Table 4. 2 Descriptive value of warranty service on customer satisfaction**

| <b>Warranty service</b>    | <b>Level of satisfaction</b> | <b>Frequency</b> | <b>Percentage</b> | <b>Mean</b> | <b>Std. Dev.</b> |
|----------------------------|------------------------------|------------------|-------------------|-------------|------------------|
| Length of warranty service | Very dissatisfied            | 3                | 3.3               | 3.46        | 1.119            |
|                            | Dissatisfied                 | 21               | 23.1              |             |                  |
|                            | Neutral                      | 13               | 14.3              |             |                  |
|                            | Satisfied                    | 39               | 42.9              |             |                  |
|                            | Very satisfied               | 15               | 16.5              |             |                  |
| Clearness of information   | Dissatisfied                 | 5                | 5.5               | 3.88        | 0.712            |
|                            | Neutral                      | 14               | 15.4              |             |                  |

|   |                   |    |      |      |       |
|---|-------------------|----|------|------|-------|
|   | Satisfied         | 59 | 64.8 |      |       |
|   | Very satisfied    | 13 | 14.3 |      |       |
| Warranty implement as promised                  | Dissatisfied      | 3  | 3.3  | 3.95 | 0.603 |
|   | Neutral           | 10 | 11.0 |      |       |
|   | Satisfied         | 67 | 73.6 |      |       |
|   | Very satisfied    | 11 | 12.1 |      |       |
| Item replacement if the item cannot be repaired | Very dissatisfied | 61 | 67.0 | 1.67 | 1.106 |
|   | Dissatisfied      | 11 | 12.1 |      |       |
|   | Neutral           | 9  | 9.9  |      |       |
|   | Satisfied         | 8  | 8.8  |      |       |
|   | Very satisfied    | 2  | 2.2  |      |       |

**Sources: primary data generated by SPSS V.20, June. – 2020**

Concerning on Length of warranty service, 59 % of the respondents are satisfied by length of warranty service. On the other hand, 26 % of respondents are dissatisfied by length of warranty service. The rest 15 % respondents are neither satisfied nor dissatisfied.

The researcher asked the respondents whether the information is clear or not, 79 % of respondents replied that they are satisfied by clearness of information. On the contrary, 6 % of respondents are dissatisfied by clearness of information. Apart from these perspectives, 15 % of the respondents preferred to be neutral. As a result, it is possible to say that majority of LG customers those participants in this study are satisfied by clearness of information.

One of the issues raised in this part is whether warranty is implemented as promised or not. 86 % of respondents are satisfied because the warranty is implemented as promised, in other hand 3 % of respondent are dissatisfied because the warranty is not implemented as promised. The rest, 11% of respondents are neutral. Therefore, we can reach on consensus that majority of the respondents participate on this study are satisfied by warranty implementation because LG company implement warranty as promised.

Respondents were also asked whether item replaced for them if the item cannot be repaired or not. Subsequently, 11 % of respondents have satisfied by the issue. On the contrary, 79% of

respondents say the item is not replaced if it is not repaired so they are dissatisfied. Furthermore, 10 % of respondents neither satisfied nor dissatisfied on the matter. From this fact we can conclude that LG Company has to work hard to improve customer satisfaction on item replacement.

#### 4.4.3 The effect of Online / telephone support on customer satisfaction

This section sought to establish the effects of Online/telephone support on customer satisfaction. The respondents were given different factors and asked to rate using a 5-point Likert scale. Based on this scale a mean score of 0-1.4 denotes Very dissatisfied; 1.5-2.4 denotes dissatisfied; 2.5-3.4 denotes neutral; 3.5-4.4 denotes Satisfied and 4.5-5 denotes Very Satisfied.

The following table presents the finding of respondent’s level of satisfaction about the effects of Online/telephone support the respondents on customer satisfaction, a more detailed discussion of the findings is presented later.

**Table 4. 3Descriptive value of Online/telephone support on customer satisfaction**

| <b>Online/ telephone support</b> | <b>Level of satisfaction</b> | <b>Frequency</b> | <b>Percentage</b> | <b>Mean</b> | <b>Std. Dev.</b> |
|----------------------------------|------------------------------|------------------|-------------------|-------------|------------------|
| Respond time                     | Very dissatisfied            | 2                | 2.2               | 3.8         | 0.778            |
|                                  | Dissatisfied                 | 5                | 5.5               |             |                  |
|                                  | Neutral                      | 11               | 12.1              |             |                  |
|                                  | Satisfied                    | 64               | 70.3              |             |                  |
|                                  | Very satisfied               | 9                | 9.9               |             |                  |
| Availability of the service      | Dissatisfied                 | 5                | 5.5               | 3.9         | 0.668            |
|                                  | Neutral                      | 10               | 11.0              |             |                  |
|                                  | Satisfied                    | 65               | 71.4              |             |                  |
|                                  | Very satisfied               | 11               | 12.1              |             |                  |
| On time feedback                 | Very dissatisfied            | 30               | 33.0              | 2.79        | 1.395            |

|  |                   |    |      |      |       |
|--|-------------------|----|------|------|-------|
|  | Dissatisfied      | 6  | 6.6  |      |       |
|  | Neutral           | 11 | 12.1 |      |       |
|  | Satisfied         | 41 | 45.1 |      |       |
|  | Very satisfied    | 3  | 3.3  |      |       |
| Client service approach                                | Dissatisfied      | 9  | 9.9  | 3.81 | 0.759 |
|  | Neutral           | 9  | 9.9  |      |       |
|  | Satisfied         | 63 | 69.2 |      |       |
|  | Very satisfied    | 10 | 11.0 |      |       |
| Advice and guidance given by the call center personnel | Very dissatisfied | 3  | 3.3  | 3.68 | 0.93  |
|  | Dissatisfied      | 9  | 9.9  |      |       |
|  | Neutral           | 13 | 14.3 |      |       |
|  | Satisfied         | 55 | 60.4 |      |       |
|  | Very satisfied    | 11 | 12.1 |      |       |
| Ability to solve the problem                           | Very dissatisfied | 5  | 5.5  | 3.53 | 1.026 |
|  | Dissatisfied      | 12 | 13.2 |      |       |
|  | Neutral           | 13 | 14.3 |      |       |
|  | Satisfied         | 52 | 57.1 |      |       |
|  | Very satisfied    | 9  | 9.9  |      |       |

**Sources: primary data generated by SPSS V.20, June. – 2020**

Concerning the question whether responding time satisfy customers or not, from respondents forward their viewpoint 80 % of the respondent are satisfied by LG company respond time. Furthermore 8 % of the respondents are dissatisfied by respond time. Furthermore, 12 % of the respondent is neither satisfied nor dissatisfied. From this fact we can conclude that the LG Company respond time is good because majority of the respondents are satisfied by the respond time of the company.

Regarding to the availability of the service, 83% of respondent are satisfied by the availability of service, 6 % of the respondents are dissatisfied by availability of service, and 11 % of respondent remained neutral. This implies that majority of respondents are satisfied by online and telephone support they get from LG company.

As shown in the above table, 48 % of the respondents satisfied by the timely feedback they get from the company service center anytime they need support. On the other hand, 40 % of respondents are dissatisfied by the time that takes to get feedback. The rest, 12 % of respondents were neutral. From this fact it can be conclude that majority of the respondents are satisfied by online and telephone on time feedback of LG service center.

Regarding to client service approach the respondents were requested if they are satisfied or not, and 80 % of respondent are satisfied by client service approach, 10 % of respondents are not satisfied. The rest, 10 % of respondent preferred to stay neutral on the matter. Considering these all facts, it is possible to say that largest proportions of the respondents are satisfied by client service approach.

The results in above table indicate that, 73 %, of the respondents are satisfied by advice and guidance given by the call center personnel, whereas 14 % of respondents are neutral. The rest, 13 % of respondent are dissatisfied by advice and guidance given by the call center personnel. From the finding the majority of respondent respond that they are satisfied on advice and guidance given by the LG call center personnel.

The researcher has raised a question to respondents whether they are satisfied or dissatisfied by the ability of the company employee to solve the problem. 67 % of respondents are satisfied by the ability to solve the problem. On the other hand, 19 % of respondent were dissatisfied. Furthermore, 14 % of respondent preferred to stay neutral on the matter. Considering these all facts, it is possible to say that largest proportions of the respondents are satisfied by ability of the company employees to solve any problem raised by customers.

#### **4.4.4 The effect of documentation service on customer satisfaction**

This section sought to establish the effects of documentation service on customer satisfaction; the respondents were given different factors and asked to rate using a 5-point Likert scale. Based on this scale a mean score of 0-1.4 denotes Very dissatisfied; 1.5-2.4 denotes dissatisfied; 2.5-3.4 denotes neutral; 3.5-4.4 denotes Satisfied and 4.5-5 denotes Very Satisfied



The following table presents findings of respondent’s satisfaction level about the effects of documentation service on customer satisfaction; a more detailed discussion of the findings is presented later.

**Table 4. 4 Descriptive value of documentation service on customer satisfaction**

| <b>Documentation service</b> | <b>Level of satisfaction</b> | <b>Frequency</b> | <b>Percentage</b> | <b>Mean</b> | <b>Std. Dev.</b> |
|------------------------------|------------------------------|------------------|-------------------|-------------|------------------|
| Accuracy of documentation    | Very dissatisfied            | 4                | 4.4               | 3.52        | 1.026            |
|                              | Dissatisfied                 | 16               | 17.6              |             |                  |
|                              | Neutral                      | 8                | 8.8               |             |                  |
|                              | Satisfied                    | 55               | 60.4              |             |                  |
|                              | Very satisfied               | 8                | 8.8               |             |                  |
| Providing Current awareness  | Very dissatisfied            | 6                | 6.6               | 2.67        | 1.023            |
|                              | Dissatisfied                 | 49               | 53.8              |             |                  |
|                              | Neutral                      | 5                | 5.5               |             |                  |
|                              | Satisfied                    | 31               | 34.1              |             |                  |
| Manual description           | Very dissatisfied            | 4                | 4.4               | 3.48        | 0.993            |
|                              | Dissatisfied                 | 13               | 14.3              |             |                  |
|                              | Neutral                      | 17               | 18.7              |             |                  |
|                              | Satisfied                    | 49               | 53.8              |             |                  |
|                              | Very satisfied               | 8                | 8.8               |             |                  |
| Relevance of information     | Very dissatisfied            | 2                | 2.2               | 3.59        | 0.966            |
|                              | Dissatisfied                 | 16               | 17.6              |             |                  |
|                              | Neutral                      | 8                | 8.8               |             |                  |
|                              | Satisfied                    | 56               | 61.5              |             |                  |
|                              | Very satisfied               | 9                | 9.9               |             |                  |

Sources: primary data generated by SPSS V.20, June. – 2020

LG customers were requested to indicate their level of satisfaction on accuracy of LG documentation, 69 % of respondent are satisfied by accuracy of documentation. On the contrary, 22 % of respondents are dissatisfied by LG company accuracy of documentation. While, 9 % of respondents have stated that they are neither of the two sides. Form this fact, we can infer that majority of the respondent customers are satisfied by LG company's accuracy of the documentation.

To have an overall view about the documentation service respondent were asked if it is provide current awareness or not, 34 % of respondents are satisfied because they get current awareness from company documentation service. While 60 % of respondents replied that they are dissatisfied by this issue, 6 % of respondent have taken neither of the two sides.

In addition to that the researcher has raised a question to assess whether the customers are satisfied or not by manual description and relevance of information, and 62 % and 71 % of the respondents are satisfied by manual description and relevance of information respectively. On the contrary 19 % and 20 % of respondent are dissatisfied by manual description and relevance of information, respectively. The rest, 19 % and 9 % of respondents respectively preferred to be neutral. From above interpretation, the researcher can conclude that the LG Company customers participates on the study are satisfied by manual description and relevance of information.

#### **4.4.5 The effect of training on customer satisfaction**

This section sought to establish the effects of training on customer satisfaction. The respondents were given different factors and asked to rate using a 5-point Likert scale. Based on this scale a mean score of 0-1.4 denotes Very dissatisfied; 1.5-2.4 denotes dissatisfied; 2.5-3.4 denotes neutral; 3.5-4.4 denotes Satisfied and 4.5-5 denotes Very Satisfied

The following table presents findings of respondent's level of satisfaction on training given to them; a more detailed discussion of the findings is presented later.

#### **Table 4. 5Descriptive value of training on customer satisfaction**

| <b>Training</b>                             | <b>Level of satisfaction</b> | <b>Frequency</b> | <b>Percentage</b> | <b>Mean</b> | <b>Std. Dev.</b> |
|---|------------------------------|------------------|-------------------|-------------|------------------|
| Training contents                           | Very dissatisfied            | 5                | 5.5               | 3.42        | 0.944            |
|   | Dissatisfied                 | 10               | 11.0              |             |                  |
|   | Neutral                      | 22               | 24.2              |             |                  |
|   | Satisfied                    | 50               | 54.9              |             |                  |
|   | Very satisfied               | 4                | 4.4               |             |                  |
| Training method                             | Very dissatisfied            | 3                | 3.3               | 3.73        | 0.857            |
|   | Dissatisfied                 | 5                | 5.5               |             |                  |
|   | Neutral                      | 16               | 17.6              |             |                  |
|   | Satisfied                    | 57               | 62.6              |             |                  |
|   | Very satisfied               | 10               | 11.0              |             |                  |
| Trainer knowledge about the product         | Very dissatisfied            | 5                | 5.5               | 4           | 0.394            |
|   | Dissatisfied                 | 18               | 19.8              |             |                  |
|   | Neutral                      | 60               | 65.9              |             |                  |
|   | Satisfied                    | 8                | 8.8               |             |                  |
|   | Very satisfied               | 5                | 5.5               |             |                  |
| Effectiveness of training program           | Very dissatisfied            | 1                | 1.1               | 3.76        | 0.821            |
|   | Dissatisfied                 | 4                | 4.4               |             |                  |
|   | Neutral                      | 80               | 87.9              |             |                  |
|   | Satisfied                    | 6                | 6.6               |             |                  |
|   | Very satisfied               | 1                | 1.1               |             |                  |
| Advise and instruction given by the trainer | Very dissatisfied            | 2                | 2.2               | 3.47        | 1.047            |
|   | Dissatisfied                 | 8                | 8.8               |             |                  |
|   | Neutral                      | 8                | 8.8               |             |                  |
|   | Satisfied                    | 65               | 71.4              |             |                  |
|   | Very satisfied               | 8                | 8.8               |             |                  |

Sources: primary data generated by SPSS V.20, June. – 2020

The researcher has raised a question to assess whether the customers are satisfied or not by training contents, 59 % of respondents replied that they are satisfied company training content h. On the contrary, 17 % of respondent customers are dissatisfied by training contents. Apart from these perspectives, 24 % respondents have preferred to be neutral. From this fact, we can conclude that majority of the respondents are satisfied by LG company training contents.

To have an overall view about the training method the researcher also questioned the respondents if they are satisfied or dissatisfied by training method of company, 74 % of respondents are satisfied by training method. While 9 % of respondents are dissatisfied by training method, the remaining 17 % of respondent have taken neither of the two sides.

As shown in the above table, 14 % of the respondents are satisfied by trainer knowledge about the product. On the other hand, 25 % of respondent are dissatisfied by trainer knowledge about the product. The majority, 61 % of respondents were neutral. This implies majority of respondents are neither satisfied nor dissatisfied by trainer knowledge about the product.

Regarding to contribution of training on customer's awareness the researcher questioned the respondents about the effectiveness of training program. 8 %, of respondents were satisfied by training program effectiveness. In contrast, majority of the respondents 88 % are on the midway. The remaining 6 % of respondents are dissatisfied by effectiveness of training program. This implies majority of the respondents are not get the training properly or they can't understand the methodology of the training.

The researcher has raised a question either the respondents are satisfied or dissatisfied by advice and instruction given by the trainer of the company to customers. Thus, 80 % of respondents are satisfied. On the other hand, 11 % of respondents are dissatisfied. The rest, 9 % of respondent preferred to stay neutral on the matter. Considering these all facts, it is possible to say that largest proportion of the respondents satisfied by advice and instruction given by the trainer to LG company customers about their products.

#### **4.4.6 The effects of installation on customers satisfaction**

This section sought to establish the effects of installation on customer satisfaction; the respondents were given different factors and asked to rate using a 5-point Likert scale. Based on this scale a mean score of 0-1.4 denotes Very dissatisfied; 1.5-2.4 denotes dissatisfied; 2.5-3.4 denotes neutral; 3.5-4.4 denotes Satisfied and 4.5-5 denotes Very Satisfied

The following table presents findings of respondent’s level of customer satisfaction about the LG company installation system; a more detailed discussion of the findings is presented later.

**Table 4. 6Descriptive value of installation on customer satisfaction**

| <b>Installation</b>  | <b>Level of satisfaction</b> | <b>Frequency</b> | <b>Percentage</b> | <b>Mean</b> | <b>Std. Dev.</b> |
|--|------------------------------|------------------|-------------------|-------------|------------------|
| Accurate information about time of installation                  | Very dissatisfied            | 6                | 6.6               | 3.4         | 1.01             |
|  | Dissatisfied                 | 12               | 13.2              |             |                  |
|  | Neutral                      | 14               | 15.4              |             |                  |
|  | Satisfied                    | 51               | 56.0              |             |                  |
|  | Very satisfied               | 8                | 8.8               |             |                  |
| Time elapsed between delivery and installation                   | Very dissatisfied            | 4                | 4.4               | 3.08        | 1.302            |
|  | Dissatisfied                 | 17               | 18.7              |             |                  |
|  | Neutral                      | 15               | 16.5              |             |                  |
|  | Satisfied                    | 49               | 53.8              |             |                  |
|  | Very satisfied               | 6                | 6.6               |             |                  |
| Attentiveness of installation personnel in order to avoid damage | Very dissatisfied            | 13               | 14.3              | 3.52        | 0.935            |
|  | Dissatisfied                 | 25               | 27.5              |             |                  |
|  | Neutral                      | 4                | 4.4               |             |                  |
|  | Satisfied                    | 40               | 44.0              |             |                  |
|  | Very satisfied               | 9                | 9.9               |             |                  |
| Flawless of the installation                                     | Very dissatisfied            | 3                | 3.3               | 3.79        | 0.782            |
|  | Dissatisfied                 | 8                | 8.8               |             |                  |
|  | Neutral                      | 30               | 33.0              |             |                  |

|   |                   |    |      |      |       |
|---|-------------------|----|------|------|-------|
|   | Satisfied         | 39 | 42.9 |      |       |
|   | Very satisfied    | 11 | 12.1 |      |       |
| Kindness and friendliness of the installation personnel | Very dissatisfied | 1  | 1.1  | 3.79 | 0.81  |
|   | Dissatisfied      | 7  | 7.7  |      |       |
|   | Neutral           | 12 | 13.2 |      |       |
|   | Satisfied         | 61 | 67.0 |      |       |
|   | Very satisfied    | 10 | 11.0 |      |       |
| Advice and instructions given by the technicians        | Very dissatisfied | 13 | 14.3 | 3.86 | 0.607 |
|   | Dissatisfied      | 2  | 2.2  |      |       |
|   | Neutral           | 67 | 73.6 |      |       |
|   | Satisfied         | 9  | 9.9  |      |       |

**Sources: primary data generated by SPSS V.20, June. – 2020**

The researcher has raised a question to assess whether respondents are satisfied or dissatisfied by accuracy of information about time of installation provided by LG and 65 % of respondents are satisfied by accuracy of information about time of installation. On the contrary, 20 % of respondents are dissatisfied by accuracy of information about time of installation. Apart from these perspectives, 15 % of respondents have preferred to be neutral. These indicate that the majority of customers those participate in the study are satisfied by accuracy of information about time of installation on LG products.

Respondents were also asked whether they are satisfied or dissatisfied by time elapsed between delivery and installation and subsequently 60 % of respondents are satisfied. On the contrary, 23% of respondent are not satisfied. Furthermore, 17 % of the respondents have preferred to be neutral. From this fact we can conclude that majority of respondents are satisfied by the time elapsed between delivery and installation time.

By the same manner for the question arises to respondents if they are satisfied or dissatisfied by attentiveness of installation personnel in order to avoid damage, 54 % of respondents answered that they are satisfied by attentiveness of installation personnel in order to avoid damage. The other 42 % of respondents are dissatisfied. The remaining 4 % of respondents are neutral. From this fact,

we can conclude that majority of the respondents are satisfied by attentiveness of installation personnel in order to avoid damage.

Respondents also requested either they are satisfied or dissatisfied by flawless of the installation. Subsequently 55 % of respondent are satisfied by flawless of the installation. On the contrary, 12 % of the respondents advocated the flawless of the installation dose not satisfy them means they are dissatisfied. Furthermore, 33 % of respondents neither satisfied nor dissatisfied on the matter. From this fact we can determine the majority of respondent implicit that they are satisfied by flawless of the installation.

Based on the above table, 78 % of respondents are satisfied by kindness and friendliness of the installation personnel. On the other hand, 9 % of respondent are dissatisfied by kindness and friendliness of the installation personnel. Around 13 % of respondents did not take either of the two. Based on the presented fact majority of respondents are satisfied by kindness and friendliness of the installation personnel.

As shown in the above table, 10 % of the respondents are satisfied by advice and instructions given by the technicians. On the other hand, 17 % of respondent are dissatisfied by advice and instructions given by the technicians. Most respondents 73 % were neutral.

#### **4.4.7 The effect of product delivery on customer satisfaction**

This section sought to establish the effects of product delivery on customer satisfaction; the respondents were given different factors and asked to rate using a 5-point Likert scale. Based on this scale a mean score of 0-1.4 denotes Very dissatisfied; 1.5-2.4 denotes dissatisfied; 2.5-3.4 denotes neutral; 3.5-4.4 denotes Satisfied and 4.5-5 denotes Very Satisfied

The following table presents findings of respondent's level of satisfaction about the effect of product delivery on customer satisfaction; a more detailed discussion of the findings is presented later.

#### **Table 4. 7Descriptive value of product delivery on customer satisfaction**

| <b>Product delivery</b>                             | <b>Level of satisfaction</b> | <b>Frequency</b> | <b>Percentage</b> | <b>Mean</b> | <b>Std. Dev.</b> |
|---|------------------------------|------------------|-------------------|-------------|------------------|
| Reliability in delivery time                        | Very dissatisfied            | 7                | 7.7               | 4.1         | 0.473            |
|   | Dissatisfied                 | 3                | 3.3               |             |                  |
|   | Neutral                      | 1                | 12                |             |                  |
|   | Satisfied                    | 59               | 65                |             |                  |
|   | Very satisfied               | 7                | 12                |             |                  |
| Packaging quality on delivery                       | Dissatisfied                 | 2                | 2.2               | 3.27        | 1.076            |
|   | Satisfied                    | 76               | 83.5              |             |                  |
|   | Very satisfied               | 13               | 14.5              |             |                  |
| Appearance of delivery personnel                    | Very dissatisfied            | 4                | 4.4               | 2.69        | 1.051            |
|   | Dissatisfied                 | 23               | 25.3              |             |                  |
|   | Neutral                      | 16               | 17.6              |             |                  |
|   | Satisfied                    | 40               | 44.0              |             |                  |
|   | Very satisfied               | 8                | 8.8               |             |                  |
| Transfer of product to your place                   | Very dissatisfied            | 8                | 8.8               | 3.47        | 1.139            |
|   | Dissatisfied                 | 44               | 48.4              |             |                  |
|   | Neutral                      | 7                | 7.7               |             |                  |
|   | Satisfied                    | 32               | 35.2              |             |                  |
| Kindness and friendliness of the delivery personnel | Very dissatisfied            | 7                | 7.7               | 3.76        | 0.874            |
|   | Dissatisfied                 | 17               | 18.7              |             |                  |
|   | Neutral                      | 2                | 2.2               |             |                  |
|   | Satisfied                    | 56               | 61.5              |             |                  |
|   | Very satisfied               | 9                | 9.9               |             |                  |
| Product quality on delivery                         | Very dissatisfied            | 3                | 3.3               | 4.05        | 0.311            |
|   | Dissatisfied                 | 10               | 11.0              |             |                  |
|   | Satisfied                    | 71               | 78.0              |             |                  |
|   | Very satisfied               | 7                | 7.7               |             |                  |

**Sources: primary data generated by SPSS V.20, June. – 2020**



To have an overall view about the reliability in delivery time the researcher also questioned the respondents either they are satisfied or dissatisfied by reliability in delivery time, 77 % of respondents are satisfied by reliability of delivery time. While, 11 % replied that they are dissatisfied by reliability of delivery time, whereas the rest 12% of respondents have taken neither of the two sides. Having all these facts in mind, we can infer that majority of the LG company customers participate in this study are satisfied by LG company reliability of delivery time.

The researcher has raised a question to respondents if they are satisfied or dissatisfied by packaging quality on delivery and appearance of delivery personnel. As indicated in the above table, 98 % and 53% of respondents are satisfied by packaging quality on delivery and appearance of delivery personnel, respectively. On the other hand, 2 % and 30 % of the respondents where are dissatisfied by packaging quality on delivery and appearance of delivery personnel respectively. The rest 18 % of the respondents remain neutral on appearance of delivery personnel. Thus, it is noted that most respondents are satisfied by LG company product packaging quality and appearance of delivery personnel.

Respondents were also asked whether they are satisfied or dissatisfied by transfer of product to their place and kindness and friendliness of the delivery personnel and subsequently 35 % and 71 % of respondents are satisfied by transfer of product to their place and kindness and friendliness of the delivery personnel respectively. On the contrary, 56 % and 26 % of respondents are dissatisfied by transfer of product to their place and kindness and friendliness of the delivery personnel, respectively. Furthermore, 8% and 2% of respondents neither satisfied nor dissatisfied on the matter respectively. This implies majority of the respondents are not satisfied by product transferring to their place on the other hand majority of the respondents are happy with kindness and friendliness of the delivery personnel.

The researcher has raised a question to assess whether respondents are satisfied or dissatisfied by product quality on delivery time and 86 % of respondents are satisfied by product quality on delivery time. On the contrary, 14 % of respondents are dissatisfied by product quality on delivery time. This indicates that the company customers those participate in the study are satisfied by product quality of LG products, means the product is not affected when it's delivered to the customer.

#### 4.4.8 The effect of product upgrading on customer satisfaction

This section sought to establish the effects of upgrading product on customer satisfaction; the respondents were given different factors and asked to rate using a 5-point Likert scale. Based on this scale a mean score of 0-1.4 denotes Very dissatisfied; 1.5-2.4 denotes dissatisfied; 2.5-3.4 denotes neutral; 3.5-4.4 denotes Satisfied and 4.5-5 denotes Very Satisfied

The following table presents findings of respondent's level of satisfaction about the effect of upgrading product on customer satisfaction; a more detailed discussion of the findings is presented later.

**Table 4. 8** Descriptive value of product upgrading on customer satisfaction

| <b>Upgrade</b>                   | <b>Level of satisfaction</b> | <b>Frequency</b> | <b>Percentage</b> | <b>Mean</b> | <b>Std. Dev.</b> |
|----------------------------------|------------------------------|------------------|-------------------|-------------|------------------|
| Improving product quality        | Neutral                      | 2                | 2.2               | 4.09        | 0.839            |
|                                  | Satisfied                    | 82               | 90.1              |             |                  |
|                                  | Very satisfied               | 7                | 7.7               |             |                  |
| Offering new product and service | Dissatisfied                 | 8                | 8.8               | 3.81        | 0.815            |
|                                  | Neutral                      | 4                | 4.4               |             |                  |
|                                  | Satisfied                    | 51               | 56.0              |             |                  |
|                                  | Very satisfied               | 28               | 30.8              |             |                  |
| Improvement of service quality   | Very dissatisfied            | 3                | 3.3               | 3.89        | 0.737            |
|                                  | Dissatisfied                 | 4                | 4.4               |             |                  |
|                                  | Neutral                      | 10               | 11.0              |             |                  |
|                                  | Satisfied                    | 64               | 70.3              |             |                  |
|                                  | Very satisfied               | 10               | 11.0              |             |                  |

Sources: primary data generated by SPSS V.20, June. – 2020

The above table indicated that majority (98%) and (87%) of respondents are satisfied respectively by LG products quality improvement and offering of new product and service to customer. While 9% of respondents participate in this study are dissatisfied by the company capacity to offer new product and service to customer. Furthermore, (2%) and (4%) of respondents neither satisfied nor dissatisfied respectively by LG products quality improvement and offering of new product and service to customer. Based on the above presented fact, larger proportion of the respondents are satisfied by LG products quality improvement and offering of new product and service to customer.

Regarding to improvement of service quality, the researcher questioned the respondent’s weather they are satisfied or dissatisfied by service quality improvement, and 81 % of respondents are satisfied by LG product service improvement. In contrast, the rest of the respondents 8 % dissatisfied and 11% neutral respectively by service quality improvement. This implies majority of the respondents are satisfied by LG company product service improvement from time to time.

#### **4.4.9 The effect of LG staff on customer satisfaction**

This section sought to establish the effects of LG staffs on customer satisfaction; the respondents were given different factors and asked to rate using a 5-point Likert scale. Based on this scale a mean score of 0-1.4 denotes Very dissatisfied; 1.5-2.4 denotes dissatisfied; 2.5-3.4 denotes neutral; 3.5-4.4 denotes Satisfied and 4.5-5 denotes Very Satisfied

The following table presents findings of respondent’s level of customer satisfaction about the effect of LG staffs; a more detailed discussion of the findings is presented later.

**Table 4. 9Descriptive of LG staff on customer satisfaction**

| <b>Effect of LG staff</b>                           | <b>Level of Satisfaction</b> | <b>Frequency</b> | <b>Percentage</b> | <b>Mean</b> | <b>Std. Dev.</b> |
|---|------------------------------|------------------|-------------------|-------------|------------------|
| Satisfaction on the competency of technician of LG? | Dissatisfied                 | 9                | 9.9               | 4           | 0.447            |
|   | Neutral                      | 3                | 3.3               |             |                  |

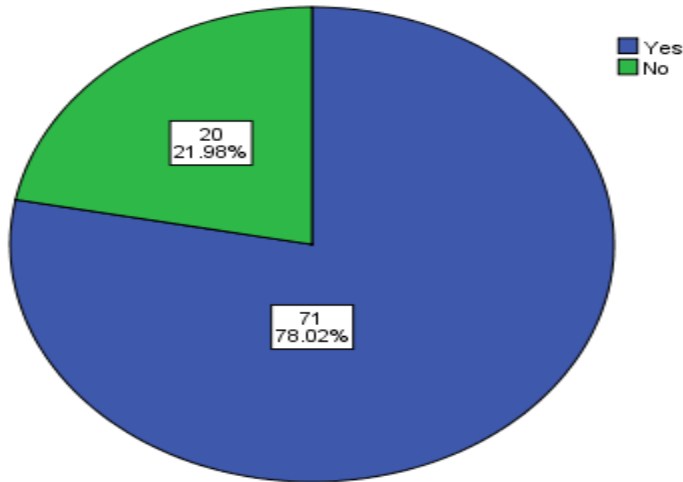
|   |                |    |      |      |       |
|---|----------------|----|------|------|-------|
|   | Satisfied      | 68 | 74.7 |      |       |
|   | Very satisfied | 11 | 12.1 |      |       |
| Level of satisfaction on the LG service center staff co-cooperativeness and politeness? | Dissatisfied   | 3  | 3.3  | 4    | 0.516 |
|   | Satisfied      | 82 | 90.1 |      |       |
|   | Very satisfied | 6  | 6.6  |      |       |
| Satisfaction on LG after sale service experience?                                       | Neutral        | 12 | 13.2 | 3.24 | 1.205 |
|   | Satisfied      | 67 | 73.6 |      |       |
|   | Very satisfied | 12 | 13.2 |      |       |

**Sources: primary data generated by SPSS V.20, June. – 2020**

The researcher has raised a question to assess whether respondents are satisfied or dissatisfied by the competency of LG company technician and service center staff co-cooperativeness and politeness. (87%) and (97%) of respondents are satisfied respectively by competency of LG company technician and service center staff co-cooperativeness and politeness. On the contrary, (10%) and (3%) of respondents are dissatisfied respectively by competency of LG company technician and service center staff co-cooperativeness and politeness. Apart from these perspectives, 3 % of respondents have preferred to be neutral on competency of LG company technician. These indicate that the company customers those participate in the study are satisfied by competency of LG company technician and service center staff co-cooperativeness and politeness.

Respondents were also asked whether they are satisfied or dissatisfied by after sale service experience and subsequently 87 % of respondents are satisfied after sales service experience. Furthermore, 13 % of the respondents have preferred to be neutral. From this fact we can conclude that majority of respondents are satisfied by LG company after sales service.

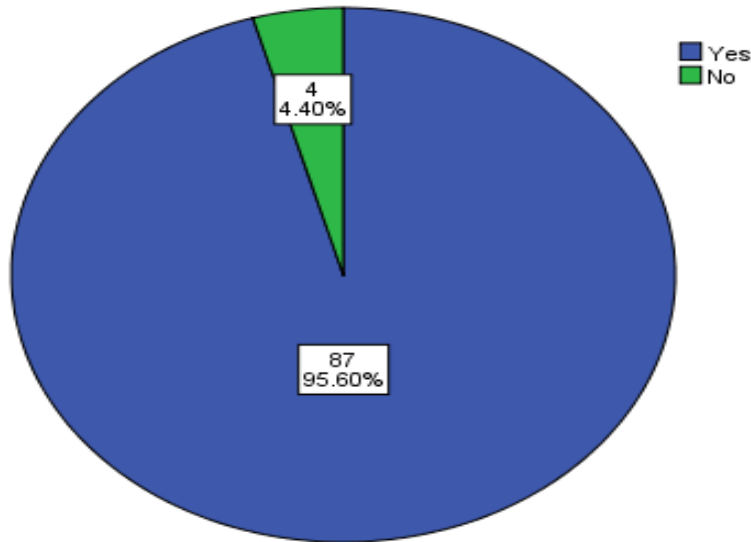
- i. Based on your overall experience in the after sales service of LG, would you visit the after sales service station again?**



**Figure 4. 8 Satisfaction on after sale service station**

By the same manner for the question arises to respondents if they visit the LG Company after sale service station again, 78 % of respondents answered that they are satisfied by LG product and they have high willingness to visit the after sales service center again. The remaining 22 % of respondents is not dissatisfied by the after sales service. From this fact, we can conclude that majority of the respondents are satisfied by LG company after sales service station and show their willingness to visit again.

- ii. **Based on your overall experience in the after sales service of LG, would you buy another product from LG?**



**Figure 4. 9 Satisfaction on LG product**

Respondents were also asked whether they are buying new product from LG Company again, subsequently 96 % of respondents have shown willingness to buy other product from LG Company. On the contrary, 4% of respondent are not agreed. From this fact we can conclude that majority of respondents are satisfied by LG company products.

#### **4.5 Correlation analysis among variables**

The Pearson’s Correlation Coefficient measures the degree of association between two variables. The correlation coefficients of the variables will be found between 1 and -1. That mean if the value of coefficients is near to 1 it shows that the two variables are strongly and positively correlate while the value is near to -1 represents a negative and strong relationship, zero is the sign of no correlation between the variables.

The following table shows the correlation values of both dependent and independent variables. The first variable is Delivery in relation to the dependent variable customer satisfaction has the coefficient of correlation of 0.740 which shows a strong positive relationship between the two variables. This implies if the product delivery is improved the customer is satisfied. Similarly, the second independent variable installation also has a positive correlation of 0.699 with customer satisfaction. Warranty has a positive relationship with customer satisfaction with the value of

0.649. User Training has positive relationship with customer satisfaction with the value of 0.480. Documentation in relation to the dependent variable customer satisfaction has the coefficient of correlation of 0.423 which shows a positive relationship between the two variables. Similarly, maintenance and repair have strong positive correlation of 0.847 with customer satisfaction. Online/telephone support has a strong positive relationship with customer satisfaction with the value of 0.724. Upgrade has good relationship with customer satisfaction with the value of 0.332. All the independent variables used in the study have a positive relationship with dependent variable which shows that they significantly affect the dependent variable.

**Table 4. 10 Pearson Correlation Matrix**

|                        |                     | Correlations          |          |              |          |               |               |                        |                |         |
|------------------------|---------------------|-----------------------|----------|--------------|----------|---------------|---------------|------------------------|----------------|---------|
|                        |                     | Customer Satisfaction | Delivery | Installation | Warranty | User Training | Documentation | Maintenance and repair | Online Support | Upgrade |
| Customer Satisfaction  | Pearson Correlation | 1                     |          |              |          |               |               |                        |                |         |
|                        | N                   | 91                    |          |              |          |               |               |                        |                |         |
| Delivery               | Pearson Correlation | .740                  | 1        |              |          |               |               |                        |                |         |
|                        | Sig. (2-tailed)     | .282                  |          |              |          |               |               |                        |                |         |
|                        | N                   | 91                    | 91       |              |          |               |               |                        |                |         |
| Installation           | Pearson Correlation | .699                  | .025     | 1            |          |               |               |                        |                |         |
|                        | Sig. (2-tailed)     | .350                  | .810     |              |          |               |               |                        |                |         |
|                        | N                   | 91                    | 91       | 91           |          |               |               |                        |                |         |
| Warranty               | Pearson Correlation | .649                  | .244     | .096         | 1        |               |               |                        |                |         |
|                        | Sig. (2-tailed)     | .541                  | .020     | .364         |          |               |               |                        |                |         |
|                        | N                   | 91                    | 91       | 91           | 91       |               |               |                        |                |         |
| User Training          | Pearson Correlation | .480                  | .054     | .001         | .013     | 1             |               |                        |                |         |
|                        | Sig. (2-tailed)     | .452                  | .610     | .992         | .904     |               |               |                        |                |         |
|                        | N                   | 91                    | 91       | 91           | 91       | 91            |               |                        |                |         |
| Documentation          | Pearson Correlation | .423                  | .205     | .183         | .264     | .046          | 1             |                        |                |         |
|                        | Sig. (2-tailed)     | .826                  | .051     | .082         | .012     | .662          |               |                        |                |         |
|                        | N                   | 91                    | 91       | 91           | 91       | 91            | 91            |                        |                |         |
| Maintenance and repair | Pearson Correlation | .847                  | .068     | .051         | .082     | .096          | .315          | 1                      |                |         |
|                        | Sig. (2-tailed)     | .659                  | .524     | .633         | .440     | .364          | .002          |                        |                |         |
|                        | N                   | 91                    | 91       | 91           | 91       | 91            | 91            | 91                     |                |         |
| Online Support         | Pearson Correlation | .724                  | .034     | .117         | .114     | .110          | .065          | .165                   | 1              |         |
|                        | Sig. (2-tailed)     | .820                  | .746     | .270         | .280     | .298          | .538          | .119                   |                |         |
|                        | N                   | 91                    | 91       | 91           | 91       | 91            | 91            | 91                     | 91             |         |
| Upgrade                | Pearson Correlation | .332                  | .036     | .029         | .244     | .062          | .012          | .113                   | .092           | 1       |
|                        | Sig. (2-tailed)     | .429                  | .735     | .782         | .020     | .556          | .912          | .288                   | .387           |         |
|                        | N                   | 91                    | 91       | 91           | 91       | 91            | 91            | 91                     | 91             | 91      |

Source: SPSS V 20 output from research data, June 2020

## **4.6 Regression Analysis**

This section focuses on the results from the econometric analysis from the sampled responses. In this section, econometric method of data analysis is used to estimate the coefficients of delivery, installation, warranty, user training, documentation, maintenance and repair, online/telephone support, and upgrades effect on customer satisfaction. To estimate the coefficients for delivery, installation, warranty, user training, documentation, maintenance and repair, online /telephone support and upgrades variables multiple regression model was employed.

### **4.6.1 Classical Linear Regression Model Assumption and Diagnostic Test**

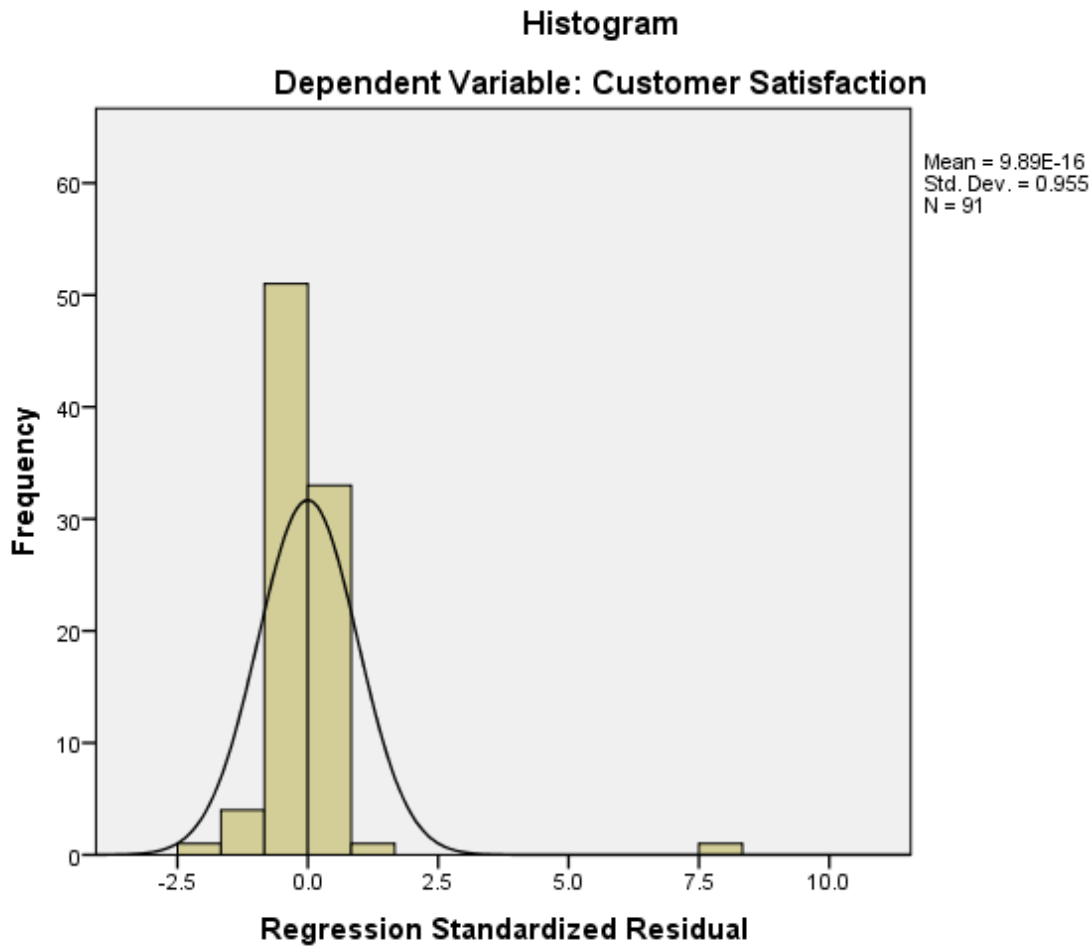
Before estimating the effect of the explanatory variables on customer satisfaction, diagnostic test was made to make sure Classical Linear Regression Model Assumption are violated and not. In this specific study an attempt is made to test for data normality, homoscedasticity and multicollinearity. The result for each presented and discussed as follows.

#### **4.6.1.1 Normality Test**

According to Gujarati, 2005 In order to make valid inferences for the regression results, the residual of the regression should have to follow a normal distribution. The residual is simply the error term, or the difference between the observed value of dependent variable and predicted value. There are several tools that used to test the normality of a given data. In study the researcher use histogram to measure the normality of the data. According to Gujarati, 2005 if the data is normally distributed the result will be bell shaped histogram, accordingly, as presented in the figure below the histogram of this study data is bell shaped. So, this depict that the data for this study is normally distributed.

#### **Figure 4. 10 Normality Test: Residual**



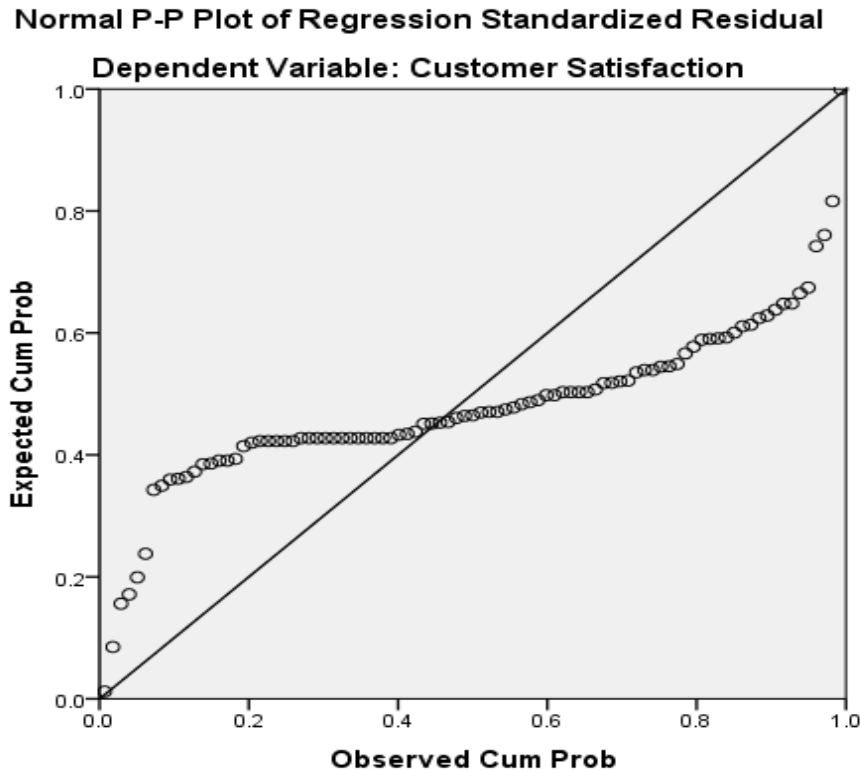


Source: SPSS V 20 output from research data, (2020)

#### 4.6.1.2 Homoscedasticity Test

This assumption means that the variance around the regression line is the same for all values of the predictor variable(X). The plot shows a violation of this assumption. For the lower values on the X axis, the points are all very near the regression line. For the higher values on the X axis, there is much more variability around the regression.

**Figure 4. 11 Homoscedasticity Test: Residual**



Source: SPSS V 20 output from research data, (2020)

#### 4.6.1.3 Multicollinearity Test

The other very important assumption of the classical linear regression model is multicollinearity. According to Gujarati (2004) one of the assumptions of the classical linear regression model is that there is no multicollinearity among the variables, the X's. Broadly interpreted, multicollinearity refers to the situation where there is either an exact or approximately exact linear relationship among the independent variables. To test the multicollinearity problem the current study used regression multicollinearity analysis.

Multicollinearity in regression occurs when independent variables in the regression model are more highly correlated with each other than with the dependent variable. When the independent variables in our model are highly correlated with one another, they are basically measuring the same thing. In other words, when two variables are highly correlated, they both convey essentially the same information.

According to Kennedy (2008) multicollinearity problem exists when tolerance value is below .10; and the average VIF is larger than 2.5. Table 4.11 below shows the tolerance values and Variance

Inflation Factor (VIF) in this study. The tolerance values are greater than 0.10 and, also Variance Inflation Factor (VIF) below than 2.5. Therefore, there is no evidence for presence of multicollinearity problem in this study model

**Table 4. 11** Multicollinearity Test

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

| Model |                        | Collinearity Statistics |       |
|-------|------------------------|-------------------------|-------|
|       |                        | Tolerance               | VIF   |
| 1     | Delivery               | .906                    | 1.104 |
|       | Installation           | .922                    | 1.085 |
|       | Warranty               | .797                    | 1.255 |
|       | User Training          | .968                    | 1.033 |
|       | Documentation          | .764                    | 1.310 |
|       | Maintenance and repair | .834                    | 1.199 |
|       | Online Support         | .918                    | 1.090 |
|       | Upgrade                | .900                    | 1.112 |

a. Dependent Variable: Customer Satisfaction

Source: SPSS V 20 output from research data, (2020)

**Independent of residuals**

Multiple regressions assume that the residual is independent. Residuals are the prediction errors or differences between the actual score for a case and the score estimated by the regression equation. No serial correlation implies that the size of the residual for one case has no impact on the size of the residual for the next case. The Durbin-Watson statistic is used to test for the presence of serial correlation among the residuals. The value of the Durbin-Watson statistic ranges from 0 to 4. Generally, the residuals are not correlated if the Durbin-Watson statistic is approximately 2, and an acceptable range is 1.50 - 2.50.

**Table 4. 12 Independent of residuals**

**Model Summary<sup>b</sup>**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1     | .360 <sup>a</sup> | .130     | .745              | .407                       | 1.388         |

a. Predictors: (Constant), Upgrade, Online Support, User Training, Delivery, Installation, Maintenance and repair, Documentation, Warranty

b. Dependent Variable: Customer Satisfaction

**Source: SPSS V 20 output from research data, (2020)**

According to the value of R Square the correlations of independent variable (delivery, installation, warranty, training, documentation, maintenance and repair online/telephone support and upgrades) affect or influence the dependent variables (customer satisfaction by the value Adjusted R Square i.e. 74.5% and the remaining 25.5% was influenced by other than those independent variables. This indicated that after sales service variables are highly affect customer satisfaction and the relationship between independent variable / after sales service variables and dependent variable/ customer satisfaction was significantly positive.

#### **4.6.2 Regression Coefficient Analysis for after sales service**

A Multiple regression analysis was conducted to further assess the nature of the relationships between the dependent and the independent variables. Table 4.13 is showing the results of the multiple regression analysis.

**Table 4.13: Regression Coefficient Analysis independent variables**

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

| Model |                        | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|-------|------------------------|-----------------------------|------------|---------------------------|-------|------|
|       |                        | B                           | Std. Error | Beta                      |       |      |
| 1     | (Constant)             | .866                        | .432       |                           | 2.004 | .048 |
|       | Delivery               | .076                        | .048       | .169                      | 1.604 | .046 |
|       | Installation           | .052                        | .045       | .125                      | 1.138 | .040 |
|       | Warranty               | .014                        | .052       | .030                      | .270  | .029 |
|       | User Training          | .017                        | .038       | .047                      | .449  | .030 |
|       | Documentation          | .046                        | .040       | .123                      | 1.147 | .038 |
|       | Maintenance and repair | .096                        | .069       | .147                      | 1.386 | .044 |
|       | Online Support         | .071                        | .036       | .214                      | 1.969 | .049 |
|       | Upgrade                | .032                        | .034       | .100                      | .945  | .035 |

a. Dependent Variable: Customer Satisfaction

**Source: SPSS V 20 output from research data, (2020)**

The general equations for predicting the effect of after sales service on customer satisfaction are.

**Customer Satisfaction** = a + b Delivery

$$=.866 + .169\text{Delivery}$$

**Customer Satisfaction** = a + b Installation

$$=.866 + .125\text{Installation}$$

**Customer Satisfaction** = a + b Warranty

$$=.866 + 0.030\text{Warranty}$$

**Customer Satisfaction** = a + b User training

$$=.866 + 0.047\text{User training}$$

**Customer Satisfaction** = a + b Documentation

$$=.866 + .123\text{Documentation}$$

**Customer Satisfaction** = a + b Maintenance and Repair

$$=.866 + 0.147 \text{ Maintenance and Repair}$$

**Customer Satisfaction** = a + b Online/telephone support

$$=.866 + 0.214 \text{ Online/telephone support}$$

**Customer Satisfaction** = a + b Upgrades

$$=.866 + .10 \text{ Upgrades}$$

**H1: Delivery has a significant positive effect on customer satisfaction.**

From above table the Beta coefficient result indicates that a change of one standard deviation in delivery has 16.9% change of standard deviations on customer satisfaction. Therefore, the hypothesis test indicated that the result is supported (delivery has a significant positive effect on customer satisfaction).

**H2: Installation has a significant positive effect on customer satisfaction.**

From above table the Beta coefficient result indicates that a change of one standard deviation in installation has 12.5 % change of standard deviations on customer satisfaction. Therefore, the hypothesis test indicated that the result is supported (installation has a significant positive effect on customer satisfaction).

**H3: Warranty has a significant positive effect on customer satisfaction.**

From above table the Beta coefficient result indicates that a change of one standard deviation in warranty has 3 % change of standard deviations on customer satisfaction. Therefore, the hypothesis test indicated that the result is supported (warranty has a significant positive effect on customer satisfaction).

**H4: User training has a significant positive effect on customer satisfaction.**

From above table the Beta coefficient result indicates that a change of one standard deviation in User training has 4.7 % change of standard deviations on customer satisfaction. Therefore, the hypothesis test indicated that the result is supported (User training has a significant positive effect on customer satisfaction).

**H5: Documentation has a significant positive effect on customer satisfaction.**

From above table the Beta coefficient result indicates that a change of one standard deviation in Documentation has 12.3 % change of standard deviations on customer satisfaction. Therefore, the hypothesis test indicated that the result is supported (Documentation has a significant positive effect on customer satisfaction).

**H6: Maintenance and Repair has a significant positive effect on customer satisfaction.**

From above table the Beta coefficient result indicates that a change of one standard deviation in Maintenance and Repair has 14.7 % change of standard deviations on customer satisfaction. Therefore, the hypothesis test indicated that the result is supported (Maintenance and Repair has a significant positive effect on customer satisfaction).

**H7: Online/telephone support has a significant positive effect on customer satisfaction.**

From above table the Beta coefficient result indicates that a change of one standard deviation in online support has 21.4 % change of standard deviations on customer satisfaction. Therefore, the hypothesis test indicated that the result is supported (Online support has a significant positive effect on customer satisfaction).

**H8: Upgrades has a significant positive effect customer satisfaction.**

From above table the Beta coefficient result indicates that a change of one standard deviation in Upgrades has 10 % change of standard deviations on customer satisfaction. Therefore, the hypothesis test indicated that the result is supported (Upgrades has a significant positive effect on customer satisfaction).

Generally, the correlation and regression analysis indicated that independent variable /after sale service (product delivery, warranty, user training, documentation, maintenance and repair, online/telephone support, installation and upgrades) significant positive effect on dependent variable/customer satisfaction and there is relationship between after sale service and customer satisfaction.

## 4.7 Discussion

There seems no comprehensive study about the effect of after sale service practices on customer satisfaction except the researches that conducted about effect of after sale service quality on customer satisfaction by using SERVQUAL. Most of the researches that conducted on the effect of after sale service quality mainly focused on service quality which doesn't use the after sale service components (after sale supports) as a dimension. But this study entitled with the effect of after sales service practices on customer satisfaction in LG electronics service center use eight dimensions as independent variable (product delivery, warranty, maintenance and repair, documentation, installation, online /telephone support, user training and upgrades) to measure customer satisfaction.

The correlation result show that independent variables ( delivery, maintenance and repair ,warranty service, online/telephone support, documentation service, installation, upgrade and training ) are positively and strongly correlated with dependent variables (customer satisfaction).

Multiple regression results show that after sales service variables are highly affect customer satisfaction and the relationship between independent variable / after sales service variables and dependent variable/ customer satisfaction was significantly positive.



## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATION

#### 5.1 Introduction

This chapter winds up the study undertaken so far by giving insights about summary, conclusions, recommendations and highlighting future research areas

#### 5.2 Summary of major finding

Based on the data analysis the major findings are summarized as follows

- ✓ A total of 100 questionnaires were distributed but 91 questioners were filled and returned. Out of the sample of 91 respondents 65% were male and 35 % were female.
- ✓ The respondent's age were also categorized into four. That is, less than 25, from 25 up to 35, from 35 up to 45 and more than 45 .Out of the total respondents 46 % of the respondents were in the age bracket of 26-40 years, 21 % were in the age bracket of 40-60 years, 14 % were 60 years and above and the remaining 14% were in the age of 25 years and below
- ✓ The academic qualification of the respondents was classified in to five. That is, below secondary school, grade 12 complete, diploma, BA degree, Master's degree and above .The educational status of the respondent more than a half of the respondents were degree holder that is 51 (56%) and the second largest group of the respondents were masters and above holder that is 18 (20%),and the remaining group of participants 10 (11%),8(9%) and 4(4%) were diploma,grade 12 complete and below secondary school respectively.
- ✓ Out of the 91 respondents 30(33%) use LG television, 26(29 %) uses LG refrigerator, 20(22%) uses washing machine, and the remaining 15 % of respondents uses speaker, DVD player, and vacuum cleaner, micro ovine and mobile.
- ✓ Based on the collected data, 45 % of the respondents uses the LG products for more than five year, 33% of the respondents use the LG product for less than one year, whereas the remaining 22 % of the respondents uses the product between 1 and 5 year.

- ✓ The largest group of respondents 40 (44%) indicate that they get after sales service more than two times. 31 (34%) of respondents indicate that they get after sales service once and the remaining 20 (22%) of the respondents indicate that they get after sales service twice. out of the respondent 82(90 %) of the respondents after sales service increase their level of satisfaction, whereas the remaining 9(10 %) of the respondent's level of satisfaction is not affected by after sales service
- ✓ Findings of respondent's level of satisfaction about the effect of maintenance and repair customer satisfaction is a mean score of overall equipment effectiveness 3.93, Accurate information about time of maintenance and repair 3.76, Equipment reliability for maintenance 3.54, Maintenance resource usage 3.36, maintenance and repair cost avoidance 3.23 and Quality of maintenance work 2.78.
- ✓ Findings of respondent's level of satisfaction about the effect of Warranty service on customer satisfaction is a mean score of warranty implement as promised 3.95, Clearness of information 3.88, Length of warranty service 3.46, Item replacement if the item cannot be repaired 1.67.
- ✓ Findings of respondent's level of satisfaction about the effect of Online/telephone support on customer satisfaction is a mean score of availability of the service 3.9, client service approach 3.81, Respond time 3.8, advice and guidance given by the call center personnel 3.68, ability to solve the problem 3.53 and on time feedback 2.79.
- ✓ Findings of respondent's level of satisfaction about the effect of documentation service on customer satisfaction is a mean score of relevance of information 3.59, accuracy of documentation 3.52, manual description 3.48 and providing current awareness 2.67.
- ✓ Findings of respondent's level of satisfaction about the effect of training service on customer satisfaction is a mean score of trainer knowledge about the product 4, effectiveness of training program 3.76, training method 3.73, advice and instruction given by trainer 3.47 and training content 3.42.
- ✓ Findings of respondent's level of satisfaction about the effect of installation service on customer satisfaction is a mean score of advice and instruction given by the technicians 3.86, flawless of installation 3.79, kindness and friendliness of the installation personnel 3.79, attentiveness of installation personnel in order to avoid damages 3.52, accurate

information about time of installation 3.4, time elapsed between delivery and installation 3.08.

- ✓ Findings of respondent's level of satisfaction about the effect of product delivery service on customer satisfaction is a mean score of reliability in delivery time 4.1, product quality on delivery 4.05, kindness and friendliness of the delivery personnel 3.76, transfer of product to your place 3.47, packaging quality on delivery 3.27 and appearance of delivery personnel 2.69.
- ✓ Findings of respondent's level of satisfaction about the effect of upgrading service on customer satisfaction is a mean score of improving product quality 4.09, improvement of service quality 3.89 and offering new product and service 3.81.
- ✓ Findings of respondent's level of customer satisfaction about the effect of LG staffs is a mean score of satisfaction on the competency of LG technicians 4, LG staff cooperativeness and politeness 4, and satisfaction on LG after sale service experience 3.24
- ✓ Based on the overall experiences in the after sale service of LG, 78 % of respondents answered that they are satisfied by LG product and they have high willingness to visit the after sales service center again. The remaining 22 % of respondents is dissatisfied by the after sales service on the other hand 96 % of respondents are willingness to buy other product from LG Company. On the contrary, 4% of respondent are not agreed
- ✓ The correlation result show that independent variables ( delivery, maintenance and repair ,warranty service, online/ telephone support, documentation service, installation, upgrade and training ) are positively and strongly correlated with dependent variables (customer satisfaction)
- ✓ The multiple regression analysis tells us independent variable (Delivery, Installation, Warranty, User Training, Documentation, Maintenance and repair, Online Support and Upgrade) affect or influence the dependent variable (Customer Satisfaction) by the value of Adjusted R Square i.e. 74.5% and the remaining 25.5% was influenced by other than those independent variables. This indicated that after sales service variables are highly affect customer satisfaction and the relationship between independent variable / after sales service variables and dependent variable/ customer satisfaction was significantly positive
- ✓ Based on the data analysis the entire hypotheses made were tested. Form the regression result, regression analysis indicated that independent variable of after sales service

variables (delivery, installation, maintenance and repair, online /telephone support, training, upgrades, documentation and warranty service) significant positive effect on dependent variable/customer satisfaction and there is relationship between after sales service and customer satisfaction.

### **5.3 Conclusion of the study**

The majority of the respondent who took part in the study was male. The study also found many of the respondents in the service center has high level of education; most of them have finished college study. As this indicates most of LG customers are educated. This made high sense of expectation and confrontation from customer's point of view.

After sales service play important role in establishing long-term relationships with customers. This study examines the relationship between after sales service practices and customer satisfaction. Based on the main finding after sale service practice dimensions has direct relationship with overall customer satisfaction.

According to correlation analysis, the dependent and independent variables are positively and strongly correlated. In addition to this the most significant correlated variable was between "maintenance and repair" and customer satisfaction.

Overall, all the independent variables used in the study have positive relationship with dependent variable which shows that they significantly affect the dependent variable

In general the correlation and regression analysis indicated that independent variables of after sales service practices (delivery, installation, user training, documentation maintenance and repair online/ telephone support & upgrades) have significant positive effect on dependent variable (customer satisfaction) and there is relationship between after sales service practices and customer satisfaction. So that based on the finding majority of respondent customers are satisfied by the after sales services which are provided under LG service center.

## 5.4 Recommendation

This research has shown the effect of after sales service practices on customer satisfaction in LG electronics service center. The results obtained confirmed that after sales service dimensions have a positive and significant impact on customer satisfaction. Based on the findings and conclusions of the study the following recommendations are forwarded to the management of after sales service departments.

- ✓ LG shall take feedbacks about its products and services from the customers because Feedback will helps the organization to know its customers better, improve customer retention and measure customer satisfaction which is directly linked to many benefits such as increased market share, lower costs or higher revenue.
- ✓ The researcher understood, most customers are satisfied by the services on the company renders and more over appreciate the product quality, modern looking materials and the like. Some of them are gave a suggestion to keep going forward with better performance. Therefore, LG should preserve and progress its mentioned quality more and focus on providing the best customer experience on every aspect so that clients will stay loyal to its brand.
- ✓ As the finding indicates there is a strong correlation between maintenance and repair after sales service variable and customer satisfaction. However, ‘quality of maintenance work’ and ‘maintenance and repair cost avoidance’ are the least scored. In addition to that majority of respondents are not satisfied with ‘item replacement’ Therefore, LG should take this into account and work on to improve these areas by giving training to its staff so that they can choose and apply the right technology, having a well-trained people will in turn reduce maintenance costs and also by having spare parts in stock and extending warranty period so that customers may not incur additional costs.
- ✓ Furthermore, management of LG Electronics in Ethiopia should set up more after sales service departments to the existing ones with experienced staff with the view of developing long term relationship with the customers.

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## **APPENDIX**

### **APPENDIX A: QUESTIONNAIRE**

St. Mary's university school of graduate studies

MBA program

#### **Questionnaire for LG electronics service center customers**

**Dear respondent,**

I am a postgraduate student of MBA in General management at St. Mary's university. I am currently developing my final thesis which focuses on the effect of after sale service practices on customer satisfaction in LG electronics service center.

This research study is purely for academic purpose and the purpose of this questionnaire is to gather data in order to study the effect of after sale service practices on customer's satisfaction. Therefore, this is to request for your kind participation through answering the question herein. The information you shall provide in this questionnaire will be kept confidential and it will be used only for academic purpose.

Thank you in advance for your valuable participation

#### **Please note that:**

1. No need of writing your name.
2. Please fill the answer by putting “√” mark.
3. Please return the completed questionnaire in time.

**PART 1: PERSONAL INFORMATION**

1. Gender:            Male             Female

2. Age:            Under 25             26 – 40             41 - 60             Over 60

3. Educational level

Below secondary school             12 grade complete             Diploma

Bachelor degree             Master degree and above

**PART 2: QUESTIONS RELATED TO THE TOPIC**

1. Name of your set \_\_\_\_\_

2. How long have you been using the set (LG product)? \_\_\_\_\_

3. How many times did you get after sale service?

- ✓ Maintenance and repair \_\_\_\_\_
- ✓ Warranty service \_\_\_\_\_
- ✓ Online/telephone support \_\_\_\_\_
- ✓ Documentation service \_\_\_\_\_
- ✓ Training \_\_\_\_\_
- ✓ Installation \_\_\_\_\_
- ✓ Product delivery \_\_\_\_\_
- ✓ Upgrades \_\_\_\_\_

4. Do you think after sale service by LG service center has effect on your level of satisfaction?

Yes

No

5. Depending on your experience in the after sale service of LG electronics service center , please put “√” for your level of satisfaction in each criterion shown below?

| Maintenance and repair                            | Level of satisfaction |           |         |              |                   |
|---|-----------------------|-----------|---------|--------------|-------------------|
|   | Very satisfied        | Satisfied | Neutral | Dissatisfied | Very dissatisfied |
| Accurate information about maintenance and repair |                       |           |         |              |                   |
| Equipment reliability for maintenance             |                       |           |         |              |                   |
| Maintenance and repair cost avoidance             |                       |           |         |              |                   |
| Maintenance resource usage                        |                       |           |         |              |                   |
| Quality of maintenance work                       |                       |           |         |              |                   |
| Overall equipment effectiveness                   |                       |           |         |              |                   |

| Warranty service                                | Level of satisfaction |           |         |              |                   |
|---|-----------------------|-----------|---------|--------------|-------------------|
|   | Very satisfied        | Satisfied | Neutral | Dissatisfied | Very dissatisfied |
| Length of warrant service                       |                       |           |         |              |                   |
| Clearness of information                        |                       |           |         |              |                   |
| Warranty implement as promised                  |                       |           |         |              |                   |
| Item replacement if the item cannot be repaired |                       |           |         |              |                   |

| Online/telephone support                               | Level of satisfaction |           |         |              |                   |
|--|-----------------------|-----------|---------|--------------|-------------------|
|  | Very satisfied        | Satisfied | Neutral | Dissatisfied | Very dissatisfied |
| Respond time   |                       |           |         |              |                   |
| Availability of the service                            |                       |           |         |              |                   |
| On time feedback                                       |                       |           |         |              |                   |
| Kindness and politeness of call center personnel       |                       |           |         |              |                   |
| Advice and guidance given by the call center personnel |                       |           |         |              |                   |
| Accuracy to solve the problem                          |                       |           |         |              |                   |

| Documentation service              | Level of satisfaction |           |         |              |                   |
|------------------------------------|-----------------------|-----------|---------|--------------|-------------------|
|                                    | Very satisfied        | Satisfied | Neutral | Dissatisfied | Very dissatisfied |
| Accuracy of documentation          |                       |           |         |              |                   |
| Providing Current awareness        |                       |           |         |              |                   |
| Manual description                 |                       |           |         |              |                   |
| Relevance of requested information |                       |           |         |              |                   |

|  | Level of satisfaction |
|--|-----------------------|
|  |                       |

| Training                                    | Very satisfied | Satisfied | Neutral | Dissatisfied | Very dissatisfied |
|---|----------------|-----------|---------|--------------|-------------------|
| Training contents                           |                |           |         |              |                   |
| Training method                             |                |           |         |              |                   |
| Trainer knowledge about the product         |                |           |         |              |                   |
| Effectiveness of training program           |                |           |         |              |                   |
| Advise and instruction given by the trainer |                |           |         |              |                   |

| Installation   | Level of satisfaction |           |         |              |                   |
|--|-----------------------|-----------|---------|--------------|-------------------|
|  | Very satisfied        | Satisfied | Neutral | Dissatisfied | Very dissatisfied |
| Accurate information about time of installation                  |                       |           |         |              |                   |
| Time elapsed between delivery and installation                   |                       |           |         |              |                   |
| Attentiveness of installation personnel in order to avoid damage |                       |           |         |              |                   |
| Flawless of the installation                                     |                       |           |         |              |                   |
| Kindness and friendliness of the installation personnel          |                       |           |         |              |                   |
| Advice and instructions given by the technicians                 |                       |           |         |              |                   |

| Product delivery                                    | Level of satisfaction |           |         |              |                   |
|---|-----------------------|-----------|---------|--------------|-------------------|
|   | Very satisfied        | Satisfied | Neutral | Dissatisfied | Very dissatisfied |
| Reliability in delivery time                        |                       |           |         |              |                   |
| Packaging quality on delivery                       |                       |           |         |              |                   |
| Appearance of delivery personnel                    |                       |           |         |              |                   |
| Transfer of product to your place                   |                       |           |         |              |                   |
| Kindness and friendliness of the delivery personnel |                       |           |         |              |                   |
| Product quality on delivery                         |                       |           |         |              |                   |

| Upgrade                          | Level of satisfaction |           |         |              |                   |
|----------------------------------|-----------------------|-----------|---------|--------------|-------------------|
|                                  | Very satisfied        | Satisfied | Neutral | Dissatisfied | Very dissatisfied |
| Improving product quality        |                       |           |         |              |                   |
| Offering new product and service |                       |           |         |              |                   |
| Improvement of service quality   |                       |           |         |              |                   |

6. How would you rate your satisfaction on the competency of technician of LG?

Very satisfied       Satisfied       Neutral   
Dissatisfied       Very dissatisfied



7. How you rate your level of satisfaction on LG service center staff co-cooperativeness and politeness?

Very satisfied                       Satisfied                       Neutral

Dissatisfied                       Very satisfied

8. How would you rate your overall satisfaction on LG after sale service experience?

Very satisfied                       Satisfied                       Neutral

Dissatisfied                       Very dissatisfied

9. Based on your overall experience in after sale service of LG, would you visit the after sale service station again?

Yes                       No

10. Based on your overall experience in the after sale service of LG, would you buy another product from LG?

Yes                       No

11. If you would like to give another suggestion please

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Thank you very much







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