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THE EFFECT OF AFTER SALES SERVICE ON CUSTOMERS RETENTION,

THE CASE OF TECNO MOBILE IN ADDIS ABABA, ETHIOPIA

**A THESIS SUBMITTED TO ADDIS ABABA UNIVERSITY, SCHOOL OF COMMERCE,
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MANAGEMENT**

By: Zelalem Workie

Advisor: Hailemariam K. (PhD)

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Addis Ababa

Ethiopia

APPROVED BY BOARD OF EXAMINERS

Dean, Graduate Studies

Name -----

Sig -----

Advisor

Hailemariam k. (PhD)

Sig -----

External Examiner

Temesgen (PHD)

Sig -----

Internal Examiner

Gojjam (PHD)

Sig -----

Statement of Certification

This is to certify that Zelalem Workie has carried out his research work on the topic entitled **“The Effect of After Sales Service on Customer Retention: the case of Tecno Mobile”** is his original work and is suitable for submission for the award of Master’s Degree in Marketing Management.

Advisor: Hailemariam K. (PhD)

May, 2019

Declaration

I certify that this research paper entitled “**The Effect of After Sales Service on Customer Retention: the case of Tecno Mobile**” has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree.

I also certify that the thesis/project has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

Declared by:

Name: -----

Date: -----

Signature: -----

Confirmed by Advisor:

Name: -----

Date: -----

Signature: -----

Approved by Examiner:

Name: -----

Date: -----

Signature: -----

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List of Abbreviations

IDC: International Data Corporation
GSM: Global System for mobile communication
WOM- word of mouth
SPSS: Statistical Package for the Social Sciences

Abstract

This research aims to study the effect of after-sales service on customer retention in case of Tecno Mobile, at Addis Ababa. The five independent variables namely; warranty, online support, provision of accessories, facility and equipment supply, maintenance and repair. The dependent variable was customer retention. Quantitative research method and non probability sampling technique (convenience) was applied.

The results of the study revealed that the majorities of Tecno Mobile after sales service customers were moderately satisfied with the overall after sales service delivered by the company. But, online support and equipment supply seems somehow lacked great approval by customers since their response was lower than other variables even though the average score is met. The correlation result also proved that all five independent variables have strong and positive relationship with customer retention, dependent variable. The regression result also showed that the cumulative effect of independent variables on customer retention reached 62.4% .Normality test was also conducted and approved it the data were normally distributed.

CHAPTER ONE

1. INTRODUCTION

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

1.1 Background of the Study

Olive, R and Kallenberg R (2003) defined after sales service as “all activities geared towards maintaining the quality and reliability of the product carried out after the customer has taken delivery with the goal of ensuring customer satisfaction”. After sale service involves a continuous interaction between the service provider and the customer throughout the post purchase product life cycle. 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: Olive R and Kallenberg R, 2003) as cited in Muhammad J.N (2011)

After sales service quality has major influence on customer satisfaction as customers buy products or services and on whether they continue to do so. 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 are of interest to companies whose revenues in whole or part from service delivery (Rajnish K. and Satyendra S. 2010).

With increasing competition in trade, rapid technological changes and increasing power and consumer choice, the success will depend on the ability of the companies which are capable to understand customer expectations and values, and respond them favorably. A smart phone sector is becoming increasingly competitive around the world. So, maintaining a sustainable long-term relationship with customer is a major factor of gaining a competitive advantage (Raddats, C. 2011).

1.2 Background of the organization

TECNO Mobile is the premium mobile phone brand of TRANSSION Holdings with a comprehensive mobile devices portfolio across feature phones, smart phones and tablets. As a brand, TECNO is dedicated to transforming state-of-art technologies into localized products under the guideline of “Think Globally, Act Locally” (CohThursday, December 13, 2018n et al., 2006).

The company web site ([CohThursday, December 13, 2018n et al., 2006](#)) also added that, TRANSSION Holdings is committed to becoming consumers' favorite smart device and mobile value added services provider with the highest brand influence in global emerging markets. Its brand portfolio comprises its best known leading mobile phone brands in emerging markets, including TECNO, itel and Infinix, Carlcare for after-sales services, oraimo for smart accessories as well as Syinix for home appliances.

TRANSSION has become the backbone of the mobile phone industry in global emerging markets. In 2017, it sold nearly 130 million mobile phones globally, becoming the largest exporter of mobile phones in China. According to International Data Corporation /IDC/ figures for 2017, the total market share of TRANSSION’s mobile phone brands ranked first in Africa and fourth in the world (Olive, R and Kallanberg R (2003)

IDC added that as of August 2018, TRANSSION has 4 manufacturing facilities around the world, which based in Shenzhen China, Addis Ababa Ethiopia, Noida India and Gazipur Bangladesh. Meanwhile, Carl care, TRANSSION’s after-sales service brand has 2,000+ service contact points (including third-party cooperation partners) plus 7 large after-sales repair centers globally to provide unequalled support to customers. Furthermore, with Google, Facebook, Intel, Sony, Microsoft, Media Tek, Orange, Qualcomm, and other world-renowned enterprises as strong partners, TRANSSION is set to continue its development at a steady pace. With more than 10,000 employees worldwide, TRANSSION has a global sales network covering 50+ countries and regions in Africa, the Middle East, Southeast Asia and South Asia, including Nigeria, Kenya, Tanzania, Ethiopia, Egypt, the UAE (Dubai), India, Pakistan, Bangladesh, and others (DeSarbo W.S. and Madrigal, R. 2011).

Tecno Mobile, a Chinese [mobile phone](#) manufacturer based in [Hong Kong](#), was established in 2006. It is a subsidiary of [Transsion Holdings](#). Tecno focused its business on Africa and the South Asian market. However, following market research conducted in [Southeast Asia](#), [Africa](#) and [Latin](#)

[America](#), the company found that Africa was the most lucrative region. As a result of this, in 2008, it stopped doing business in [Asia](#) to exclusively focus on Africa. Later in 2016, Tecno entered [Middle East](#) mobiles phones market after acquiring a good market in [Africa](#), and then in [Southeast Asia](#) in 2017. (Olive, R and Kallanberg R (2003))

1.3 Statement of the problem

In recent years, globalization of mobile market, having more choice than the past and the increasing of its function in humans' day to day activity leads people to have even more than one cell phone, such as one for business and the other for personal use. Currently, there are number of mobile phone manufactures and new model issues in the market every month. Mobile device designed with complex function and service feature built from several hardware and software components. (DeSarbo W.S. and Madrigal, R. 2011)

Following this complexity of function and service feature, users need more help and technologic support after already they purchased the product. "Understanding what buyers value within a given offering, creating value for them, and then managing it over time have long been recognized as essential elements of every market-oriented firm's core business strategy" A rapidly changing business environment, increased use of technology, higher market competition, and higher potential profits in after sales service has changed the way companies view after sales services (Muhammad J.N 2011).

Currently, there are a number of mobile brands in Ethiopia including Tecno. And one of the after sale service delivering company is Tecno Mobile company. But no research has been conducted how much customers are satisfied and what contributed it regarding customer retention and relationship. Even most researches conducted in this area tried to investigate the relationship between after sale service quality and customer retention. But, there is a limitation with regard to the effect of the existence and absence of after sale service itself on customer satisfaction and retention. It is on this note that this research has investigated the impact of after sales service dimensions on customer satisfaction and retention with special reference to Tecno mobile in Addis Ababa, Ethiopia.

1.4 Research Objectives

1.4.1 General Objective

The general objective of this study is to investigate the effect of after sale service on Tecno mobile customers' retention.

1.4.2 Specific Objectives of the Study

The specific objective of the study is:

1. To examine the influence of after sale warranty on Customer Retention.
2. To determine the effect of maintenance and repair on Customer Retention.
3. To examine the impact of Facilities and Equipment supply on Customer Retention.
4. To investigate the effect of after sale Provision of Accessories on Customer Retention.
5. To examine the effect of online support on Customer Retention in the case of Tecno mobile.

1.5 Research question

- To what extent Warranty influence customer retention in Tecno Mobile in Ethiopia?
- To what extent Provision of Accessories influence customer retention in Tecno Mobile in Ethiopia?
- To what extent Maintenance and repair influence customer retention in Tecno Mobile in Ethiopia?
- To what extent Facilities and Equipment supply influence customer retention in Tecno Mobile in Ethiopia?
- To what extent online support influence customer retention in Tecno Mobile in Ethiopia?

1.6 Significance of the Study

It is hopeful that the finding of this research will be very important and useful to the following groups of people:

The Tecno mobile company

Managers of Tecno mobile in Addis Ababa may use the findings of this study as a feedback and may take corrective measure if necessary. Similarly, staffs of Tecno mobile in Addis Ababa may take a lesson from this finding.

Customers (public)

Since the study revealed the importance of after sale service in attracting and retaining customers, it gives the general public an idea of what they shall expect from mobile phone companies so that they can easily identify value for their investments. It also enables the public to identify companies that meet their needs.

The researcher

The researcher uses it for the partial fulfilment of MA degree, in addition to the opportunity for acquiring knowledge throughout the research.

1.7 Scope/Delimitation

1.7.1 Theoretical scope

After sale service is one of the best marketing tool for all companies to satisfy their customer needs and wants and attracting, developing, and retaining customers. This research has conducted to analyze the effect of after sale service on customer retention by taking five explanatory variables representing warrant, maintenance and repair, accessory provision, accessibility of equipment and online support.

1.7.2 Geographical scope

This research confined to the effect of after sale service on customer retention in Tecno mobile. But, due to time and budgetary constraints the researcher obligated to conduct the research activity only in Addis Ababa.

1.7.3 Methodological scope

This research is explanatory by nature. It used quantitative approach. Both primary and secondary sources of data were used. With regard to the secondary sources various publications, books, and journals regarding the subject matter addressed. And to achieve the objective of the study, well designed structured questionnaire were distributed to the study respondents from customers of Tecno mobile which were selected in the basis of convenience sampling.

1.8 Organization of the study

This research has five chapters. Chapter one includes background of the study, statement of the problem, research questions, objectives of the study, significance of the study, scope of the study, and limitation of the study. Chapter two covers literatures which are relevant on the subject matter under study. Under chapter three, the methodology part of the study described in detail. The findings of the study presented, analyzed and discussed in chapter four. Finally, in chapter five conclusions, recommendations and limitations disclose based on the study findings

HAPTER TWO

2 REVIEW OF RELATED LITRATURES

2.1 Introduction

This chapter discussed about three main areas, theoretical review, empirical review and conceptual framework. The theoretical review elaborates different theories developed by different scholars. Similarly, in the empirical framework different findings in the area with the actual figures presented. And in the conceptual framework, the independent and dependent variables discussed both theoretically as well as in figure.

2.2 Theoretical Review

2.2.1 Understanding After Sales Service

Philip Kotler (2002: 508) says "After sales service is a service provided by the company to a customer after the sale". Meanwhile, according to Tjiptono Fandy (2008: 32) "After sales service is a service provided by the manufacturer to the consumer after the consumer buys the product from the company".

According to Potluri R. and Hawariat H. (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. 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. This may lead dissatisfied customers switch to a competitor or the company lose potential for new customers due to negative word-of-mouth effect. Hence, every business should know the objective and importance of having after sale service and implement it to satisfy customers and make them loyal.

Similarly, Muhammad et al. (2011) stated that after sales service is defined as customer support following the purchase of a product or service. It is usually formalized by a warranty or service agreement between the service provider and the customer. By providing after sales services, the company facilitates the customer's attainment of the initially perceived value of the product (during purchase).

After sales 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 (Gaiardelli P. et

al. 2007). After-sales services are often referred to as “product support activities”, meaning all activities that support the product-centric transaction (Rigopoulou, et al. 2008). Like ways, as stated in Potluri R. and Hawariat H. (2010), the term ‘after-sales services’ has been approached in the literature under two broad perspectives. When referring to service providing companies, after-sales services are being treated as one among several supplementary service elements provided. On the other hand, when referring to tangible goods, they are mostly seen as operative activities of some or all members of the distribution chain.

According to Kotler (2002), attracting a new customer is five times greater than the cost to keep a current customer happy. According to Rigopoulou, et al. (2008) in today’s marketing environment, an increasingly important source of competitive advantage is the way we serve customers. In recent years, more and more organizations focus their attention on retaining existing customers rather than attracting new ones.

Gaiardelli, et al. (2007) Effective after-sales service is not a slogan, advertising program, a button that everyone wears, or a banner touting a “we care attitude.” It is a mindset that good salespeople develop to improve customer satisfaction and retention.

2.2.2 Component of After Sales Service

After-sales service has several elements, as told by Philip Kotler (2002: 509) that elements in the after-sales service are as follows:

1) Warranty

A warranty assures the buyer that product is of a kind specified (Meet Specification) and is free of encumbrances (Workmanship Defect or Material) A guarantee That assures a product performance will amply with the warranty. Simply Stated if the product does not meet the term of the warranty listed, it will be repaired or replaced at the option of seller. Warranty is shown to convince consumers that the product is in good condition or free from damage, a result of inaccuracy pengajaran or use materials that are less well applicable for a period of time.

2) Provision Accessories

In the implementation of after-sales services, supply of spare parts is very important, because in the absence of spare parts that are defective product components cannot function properly, even these products cannot be used again.

Kotler added that Component parts or subassembly that may be needed at some time to keep the appliance or device Operable for the user. The component or assembly will be required to satisfy

the original warranty repair the appliance or device beyond the basic warranty period, and be available at all the times to Insure and protect the good will of purchases and that will maintains his brand loyalty.

3) Maintenance and Repair Services

Service for maintenance and repairs is needed if a product has a consumption of time and requires regular maintenance in order to always function properly, and also to repair any damage that occurs in the product during use.

4) Facilities and Equipment supply

Facilities and equipment of a product is a means to perform after-sales service. Sophisticated equipment and supplies will be able to determine the smoothness of the service personnel in performing maintenance and repair products bought by consumers.

On the other hand, Goffin K. (1999) puts seven elements of after sale support which must be provided to customers over the working lifetime of product, which are:

1. 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.

2. 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.

3. 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.

4. 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.

5. 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).

2.2.3 Service Quality

Service quality has been defined as the degree and direction between customer service expectations and perceptions (Ms.R.Suriya et al. 2015). Service quality is the result of the comparison that customers make between their expectations about a service and their perception of the way the service has been performed (Parasuraman et al., 1985). There are several reasons why customers must be given quality service (Rajnish K. et al. 2010). Most important of them are:

- Industry has become so competitive that customers now have variety of alternatives, if the customer is lost, it can be extremely difficult to win back the individual and
- Most customers do not complain when they experience problems. These customers simply opt out and take their business elsewhere.

2.2.4 Customer Satisfaction

According to Brady and Rajnish K. et al. (2010) customer satisfaction is an individual's feeling of pleasure or disappointment resulting from comparing a product's perceived performance in relation to his expectations. According to Rizaimay *et al.* (2009), customer satisfaction measures should depend on quality, on-time delivery, money, issue factor, accommodation and cooperation. Mohd J. et al.(2015) also list out reasons for importance of customer satisfaction, which are:

- Customer satisfaction increases the lifetime value of the customer.
- .Customer satisfaction is a point of differentiation.
- Customer satisfaction is helpful to reduce the negative communication of word of mouth.
- It shows the loyalty and re-purchase intentions of the customer.
- For reducing customer churn customer satisfaction is important.

Customer satisfaction is the key parameter to know the customer expectation for a particular product of brand. Customer satisfaction is defined as the percentage of total customers who are using the product and experience the quality of service of their service center and they feel happy or satisfy (Mohd J. et al. 2015). Kotler P. (2002) defined customer satisfaction as “the level of persons felt state resulting from comparing a product perceived performance or outcome in violation to his / her own expectations. “Customer satisfaction represents the influence of a long relationship between the firm and its customer (Kotler P. 2002).

According to Rigopoulou, *et al.* (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. Customer satisfaction measurement involves the collection of data that provides information about how satisfied or dissatisfied customers are with a service. This information can be collected and analyzed in many different ways. After Sales Service Quality and Customer Satisfaction

It is well known that the margin from after-sales service is much larger than that from the product. That is, aftersales service is considered a key revenue generator in certain categories (Cohen et al., 2006; Cohen and Whang, 1997). Hence, on one hand, offering a large number of extra after-sales service plans to consumers, leads to higher profitability on the other hand recent marketing management focuses on lifetime value of a customer and maintaining long-term relationships with customers (Gupta and Lehmann, 2007). 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.

Quality in services provides a competitive factor for continued consumption, especially when intangibility relations are tightened between quality and services. Service quality plays a notable role as a source of sustainable competitive advantage for the companies (Gupta and Lehmann, 2007). After sales service quality has major influence on customer satisfaction as customers buy products or services and on whether they continue to do so. 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 are of interest to companies whose revenues in whole or part from service delivery (Rajnish K 2010).

2.2.5 Customer Retention

Shaharudin, M.R. et al (2009) said that “Customer retention refers to the activities and actions companies and organizations take to reduce the number of customer defections. The goal of customer retention programs is to help companies retain as many customers as possible, often through customer loyalty and brand loyalty initiatives. It is important to remember that customer retention begins with the first contact a customer has with a company and continues throughout the entire lifetime of the relationship. While most companies traditionally spend more money on customer acquisition because they view it as a quick and effective way of increasing revenue, customer retention often is faster and, on average, costs up to seven times less than customer acquisition. Selling to customers with whom you already have a relationship is often a more effective way of growing revenue because companies don’t need to attract, educate, and convert new ones.”

A low retention rate is similar to filling a bucket with holes in the bottom — sure, you could keep piling on to make up for it, or you could figure out what caused the holes and how you can patch them up. Retaining customers costs less than acquiring them, and both add to your company’s bottom line; revenue doesn’t care where it comes from, earned or saved, (Eshghi, A.,et al, 2008).

According to studies done by Lalonde, B.J. and Zinszer, P.H. (1976), increasing customer retention by 5% can lead to an increase in profits of 25% and more and the likelihood of converting an existing customer into a repeat customer is 60% – 70%, while the probability of converting a new lead is 5% – 20%, at best. Companies that shift their focus to customer retention often find it to be a more efficient process because they are [marketing to customers](#) who already have expressed an interest in the products and are engaged with the brand, making it easier to capitalize on their experiences with the company. In fact, retention is a more sustainable business model that is a key to sustainable growth. In this study of customer service practices suggested that customer service could be examined under 3 elements.

- Pre-transaction elements: relate to corporate policies or programs.
- Transaction elements: involved in performing the physical product distribution functions
- Post-transaction elements: generally supportive of the product while in use.

2.3 Empirical Review

After sales service was determined through delivery, installation and warranty. 100 respondents were sampled through closed ended questionnaire, while Ordinary Least Square was used to analyse the data. Results showed that delivery, installation and warranty has significant positive impact on the customer satisfaction and retention, (Ladokun Isaac et al Jul. - Aug. 2013, PP 54-58)

Ruben J. (2012) also agreed that after sales service significantly enhance the value of the product to its users. He noted that customers may decide to purchase a product based upon service and aftermarket considerations.

Rigopoulou I. et al, (2008) also examined the consequences of after sales service on customer satisfaction and retention. Data was collected through closed ended questionnaire, which was administered through telephone interviews from 420 respondents in Greece. The results show that after sales service has significant and positive impact on customer satisfaction and retention. They suggest that service marketing managers should understand the impact of after sales service on customer satisfaction and behavioral intentions.

Gupta S, Lehmann DR (2007) in their study on the impact of after sales service on customer relationship discovered that after-sales service is regarded as an important factor that has an impact on establishing good relationships with customers. Alexander WL. et al., (2002) accepted the claim that returning customers are the most profitable ones, as they require less marketing effort and relationship building. They agreed that after-sales service acquires a critical role as a means to achieve customer satisfaction and retention.

Rosen D. and Surprenant C. (1998) studied whether after sales service is enough for the long relationship with customers. They selected two different industries with 220 respondents, while open ended questionnaire was used to collect the data. Both descriptive and qualitative analyses were used to analyze the data. Results showed that after sales service is marketing tool that create and establish long term relationship with customers through good communication and flexibility. Furthermore, excellent service may enhance the success rate of new products.

Cohen MA. Whang S. (1997) all of them believed that large number of extra after-sales service plans to consumers will lead to customer satisfaction and retention as well as higher profitability.

After-sales service quality affect satisfaction, which in turn affects behavioral intentions. Hence, after-sales services affect the overall offering and thus, the quality of the relationship with customers, (Kurata, H., and Nam, S.-H. 2010).

After-sales service has emerged as a major source of competitive maneuvering, so firms strive for competitive advantages with their after-sales service portfolio to differentiate offers from competitors (Goffin, 1994; Slater, 1996; as cited in Ruben J. 2012). After-sales services are an important marketplace differentiator because primary products are often physically comparable (Ruben J. 2012).

Saccani, et al., (2007) defined aftersales service for manufactured goods as the set of activities taking place after the purchase of the product, devoted to supporting customers in the usage and disposal of goods. Rigopoulou, et al., (2008)described aftersales services as services that are provided to the customer after the products have been delivered.

Cavalieri, et al., (2007) viewed after-sales service as those activities occurring after the purchase of the product and devoted to supporting the customer in the usage and disposal of the goods. Urbaniak, A. J. (2001) defined after sales service as those activities that enhance or facilitate the role and use of the product. Like ways, 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.

Ehinlanwo, O. O., & Zairi, M. (1996) also defined after sales service as “all activities geared towards maintaining the quality and reliability of the product carried out after the customer has taken delivery with the goal of ensuring customer satisfaction.’ According to Ruben J. (2012) after-sales services is the sum of activities taking place after the purchase of a product which:

- ensure that a product is available for trouble-free use over its useful life span and guarantee the continuous availability of goods (preventive maintenance)
- replace failed products in a timely and cost-effective manner (reactive maintenance)
- create competitive advantage for the customer (value added services).

Raddats, C. (2011) is of opinion that customers are no longer demand just for a product but also a comprehensive solution for their problem; they are increasingly moving away from requesting for

a specific product to requesting for a certain service package (including the original purchase and all aftermarket needs) instead. Chien YH (2005) also agreed that free basic after-sales service plays an important role in attracting more customer attention in a market with severe brand competition.

2.3.1 Conceptual Framework

According to Miles and Huberman (1994, pp. 101–171) a conceptual framework or theoretical framework is defined as something that explains either graphically or in narrative form the main things to be studied, the key factors, constructs or variables and the presumed relationship among them. Framework captures independent and dependent variables. Independent variables of this study are Warranty, Provision of Accessories, Maintenance & Repair Services, online support and Facilities & Equipment supply. On the other hand, the dependent variable is customer retention.

Independent variables

Dependent variable

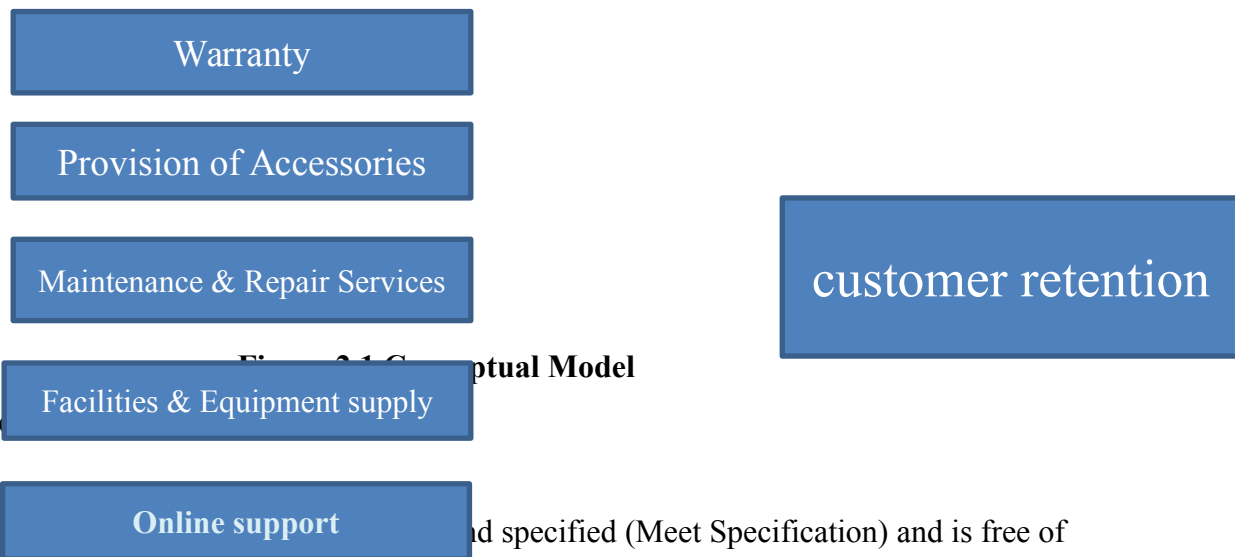


Figure 2.1 Conceptual Model

According to k

1) Warranty

A warranty ass and specified (Meet Specification) and is free of encumbrances (Workmanship Defect or Material)

2) Provision Accessories

The component or assembly will be required to satisfy the original warranty repair the appliance or device beyond the basic warranty period, and be available at all the times to Insure and protect the good will of purchases and that will maintains his brand loyalty.

3) Maintenance and Repair Services

Service for maintenance and repairs is needed if a product has a consumption of time and require regular maintenance in order to always function properly, and also to repair any damage that occurs in the product during use.

4) Facilities and Equipment supply

Facilities and equipment of a product is a means to perform after-sales service. Sophisticated equipment and supplies will be able to determine the smoothness of the service personnel in performing maintenance and repair products bought by consumers.

5. 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).

2.3.2 Research Hypothesis

The following hypotheses were developed for this study

Ha: After sale service and customer retention are positively correlated

H1: Warranty and customer retention are positively correlated

H2: Online support and customer retention are positively correlated

H3: Provision of Accessories and customer retention are positively correlated

H4: Facilities and Equipment supply and customer retention are positively correlated

H5: Maintenance and repair and customer retention are positively correlated

CHAPTER THREE

3 RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, issues such as description of the study area, research approach, research design, target population, sample frame, sampling technique, Sample size determination, data collection procedure, unit of analysis, data analysis, test of reliability and validity and ethical consideration discussed.

3.2 Description of the Study Area

Tecno Mobile is a Chinese [mobile phone](#) manufacturer which is based in [Hong Kong](#). It was established in 2006. It is a subsidiary of [Transsion Holdings](#). Tecno focused its business on Africa and the South Asian market. Anybody who is the customer of Tecno Mobile can get free access of maintenance and repair whenever failure faces, (www.tecno-mobile.com).

One of the service delivered by Tecno is after sales service, which has major influence on customer satisfaction as customers buy products or services and on whether they continue to do so. 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 are of interest to companies whose revenues in whole or part from service delivery (Rajnish K. and Satyendra S. 2010).

3.3 Research Approach

The research approach where the researcher has used is quantitative approach. Quantitative research design is used in situations where there are predetermined instrument based questions, performance data, attitude data, observational data, Cochran,W,G.(1963). The objective of quantitative research is to develop and employ mathematical models, theories and hypothesis pertaining to mutual phenomena, (Kothari, R. 2004). And this research used predetermined instrument based questions where closed ended questioners have been distributed and analyzed, that is why this approach was selected.

3.4 Research Design

A research design is a conceptual structure within which research is conducted. It is a survey attempt to collect data from members of a population in order to determine the current status of population with respect to one or more variables (Mugenda, O. M., & Mugenda, A. G. 1999).

Therefore, the researcher has used explanatory type of design to see the relationship or cause and effect between the independent variables and customer retention on Tecno Mobile in Addis Ababa, Ethiopia. In addition, because explanatory research design is concerned with learning of why (i.e. how one variable produces changes in another (Yin, 2009) as cited by Erika E. (2013). So that the design has been chosen to be explanatory type.

3.5 Sampling Design

3.5.1 Target Population

Target population refers to all members or a set of people, events or objects to which a researcher wishes to generalize the results of the study (Borg and Gall 2003). Similarly, Mugenda, O. M., & Mugenda, A. G. (1999) stated that target population is the population to which the researcher generalizes the results of a study. From the perspective of this research, the target population were Tecno Mobile users in Addis Ababa.

3.5.2 Sample Frame

A sampling frame is a list, directory or an index of cases from which a sample is selected (Mugenda, O. M., & Mugenda, A. G. 1999). The sampling frame of this study were Tecno Mobile users who have gotten a Carl care service from the company in Addis Ababa.

3.5.3 Sampling Technique

The researcher has used a non-probabilistic convenient sampling technique. In this type of sampling, items for the sample are selected deliberately by the researcher; his/her choice concerning the items remains supreme. In other words, under non-probability sampling the organizers of the inquiry purposively choose the particular units of the universe for constituting a sample on the basis that the small mass that they so select out of a huge one will be typical or representative of the whole (Kothari 2004). Since those of Tecno Mobile users who have already gotten after sale service have a sense of positivity or negativity, the researcher was purposefully took the information from those customers.

3.5.4 Sample Size Determination

Based on the data from Tecno Mobile Company, there are millions of Tecno Mobile users in Ethiopia. The company has no data the exact number of users and the population is unknown because those phones which are outdated are unknown. Cochran, W. G. (1977), developed a formula to calculate a representative sample for proportions as the size of the population is higher, i.e

$$n = \frac{z^2 pq}{e^2}$$

When there is a large population but that we do not know the variability in the proportion that will adopt the practice; then, we take $p=0.5$ (maximum variability).

Where, n is the sample size, z is the selected critical value of desired confidence Level /1.96/, p is the estimated proportion of an attribute that is present in the population /50%/,

$q = 1 - p$ /50%/ and e is the desired level of precision/95%/.

Hence, the sample size for this research will be

$$n = \frac{1.96^2 * 0.5 * 0.5}{0.05^2} = 384$$

Tecno Mobile has different Carl care centers in Addis Ababa, but, Mobile Carl care center is only one which is located in Bole road around Denbel, specifically at Bitwoded building. The Carl care center of Tecno Mobile data shows that the average monthly customers who come to get the service are 10,000, which means 333 customers per day. Based on this data, the data collection has taken only 2 days to have 384 samples. But, taking the representativeness of samples into consideration, the researcher has collected in all working days (Monday to Saturday). So $384/6=64$ samples per day were taken.

3.6 Data Collection instrument/tools

In this research, the researcher has selected a sample of respondents from a population and distributed a standardized questionnaire to respondents. These questionnaires were closed ended since the research is quantitative by its nature.

The closed ended items measured by five point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree that were prepared in English, and translated to Amharic accordingly to increase the quality of the tools (<https://www.simplypsychology.org/likert-scale.html>).

3.7 Data Sources and Types

The researcher used both primary and secondary sources of data in the study. The secondary data were collected from publications including journals, articles, and various materials that have relevance to this study and the sources used only for literature purpose. Primary data were generated and presented through a structured questionnaire.

3.8 Variables of the study

Independent variables of this study are Warranty, Provision of Accessories, Maintenance and Repair Services, Facilities and Equipment supply and Online support whereas the dependent variable is customer retention.

3.9 Unit of Analysis

The analytical instrument for this study was descriptive statistics, correlation and multiple regression analysis. Descriptive statistics was used mainly to organize and summarize the demographic data of the respondent. And correlation analysis was to show the relationship between components of after sales service and customer retention in Tecno Mobile. On the other hand, multiple regression analysis carried out to measure the impact of after sales service on customer retention in Tecno Mobile. Furthermore, ANOVA was conducted to determine if there is a significant difference between customers' expectation and company performance regarding after sales service. The Statistical Package for Social Scientists (SPSS) 25.0 version was employed in analyzing data collected.

3.10 Reliability and Validity Test

3.10.1 Reliability Test

The data collected on the after-sales service quality for reliability was assessed using Cronbach's Alpha value. Based on Santos (1999) higher Alpha coefficients indicate higher scale reliability. Scales with 0.70 Alpha coefficients and above are considered acceptable according to Nunnally (1978).

Analysis of reliability was conducted to all variables: The result of the Cronbach's alpha shows warranty has a Cronbach's alpha of .841, Online Support has a Cronbach's alpha of .856, Provision of Accessory has a Cronbach's alpha of .851, Availability of Facility has a Cronbach's alpha value of .829, Maintenance and repair has a Cronbach's alpha of .800, and customer retention has a Cronbach's alpha of .835. The Cronbach's alpha values for all the variables considered are greater than 0.7 and this indicates the items in each of the domains are well understood by the respondents.

Item	Cronbach's Alpha	Number of Attributes
warranty	.841	5
Online Support	.856	5
Provision of Accessory	.851	4
Availability of Facility	.829	6
Maintenance and repair	.800	5
Overall Customer Retention	.835	25

Table 3.1 - Reliability Test

(Source: own Survey data, 2019)

The Alpha coefficient for the overall scale in this study is calculated as 0.876. On the table above, the individual Alpha coefficients for the scales were presented. Andy (2006) described the values of Cronbach's alpha around 0.8 is good. Here, the alpha values in this study can be taken as good as they are around 0.8 and above.

3.10.2 Validity

Validity refers to whether an instrument measures what it was designed to measure. According to Agresti & Finlay (1986), there are two types of validity tests namely: criterion and content validity, conducting a pilot test and taking standardized questionnaires respectively. This research used the used criterion type of validity test where 30 sample questionnaires were distributed for pilot test and some modifications have been undertaken accordingly.

3.11 Ethical considerations

Research ethics requires that researchers should protect the dignity of their subjects and publish well the information that is researched (Fouka&Mantzorou, 2011). As Schurink (2005) points out, research ethics is a complex matter to which there is unlikely to be clear solutions. Schurink (2005) believes that it is useful for researchers to follow a practical approach in which they ask questions and push themselves hard to reach answers: "the researcher needs to be honest about the purpose of the research". For the purpose of the study, questionnaires were filled by the respondents only based on their acceptance of participation.

CHAPTER FOUR

4 DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter addresses the presentation, analysis and interpretation of the data collected through questionnaires. Respondents' characteristics, overall after sales service analysis, overall customer satisfaction analysis, the influence of after sales service dimensions on customer satisfaction and the relationship between after sales service dimensions and summary of major findings are also discussed in this chapter.

4.2 Demographic Characteristics of the Sample Respondents

A total of 384 after sale service customers of Tecno Mobile have gotten the opportunity to respond on questionnaires distributed. 372 questionnaires (96.8%) were filled completely and returned back to the researcher. And 12 questionnaires (3.2%) were not used for data analysis due to incompleteness and because some of them were lost in the hands of respondents. Each characteristics of the respondents has summarized as follow.

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	320	86.0	86.0	86.0
	female	52	14.0	14.0	100.0
	Total	372	100.0	100.0	

		Age			
Valid	Below 18	9	2.4	2.4	2.4
	18-30	285	76.6	76.6	79.0
	31-45	69	18.6	18.6	97.6
	Above 45	9	2.4	2.4	100.0
	Total	372	100.0	100.0	

		Marital			
Valid	single	262	70.4	70.4	70.4
	married	110	29.6	29.6	100.0
	Total	372	100.0	100.0	

		Education			
Valid	certificate & below	210	56.5	56.5	56.5
	Diploma	93	25.0	25.0	81.5
	Degree & above	69	18.5	18.5	100.0
	Total	372	100.0	100.0	
		Cycle			
Valid	First time	324	87.1	87.1	87.1
	two times	48	12.9	12.9	100.0
	Total	372	100.0	100.0	

Table 4.1 Demographic Characteristics of the Sample Respondents

(Source: Own Survey data, 2019)

Out of the sample of 372 respondents, 320 (86%) were male and 52 (14%) were female. This indicates that most of the respondents in this survey were male. It has been represented in figure 4.1 below.

Figure 4.1- Gender of respondents

The age groups of the sample respondents are also shown in Table 4.1. Accordingly, 2.4% of respondents were in the age group of below 18 years, 76.6% of respondents were 18-30 years

old and 18.6% were between 31-45 years, and 2.4% of them were 45 years and above. As the table data shows, the majority of Tecno Mobile users are youths and adults.

Out of the total sample respondents 70.40% were single and 29.6% were married as shown in table 4.1 above and fig. 4.2 below. The data indicates that single respondents take the highest percentage.

Figure 4.2 – marital status of respondents

In addition, based on the data in table 4.3 below, 56.5% of the sample respondents were either acquired certificate or below, 25% were diploma holders and 18.5% were first degree graduates and above. Here, we can see that majority of the respondents were educated.

Figure 4.3 – buying education of respondents

Finally, 87.1% respondents of the total sample respondents have bought Tecno Mobile for the first time while 12.9% respondents have bought for the second times and no respondent has bought three times or more as shown on table 4.3 above. Based on this data, the greater number of the respondents were first time users of Tecno Mobile.

4.3 The Respondents response analysis

Descriptive statistic was employed for the analysis of data of this study by using mean and standard deviations for each variable. The need for this measurement was to demonstrate the average responses of respondents for each statement that was included under each dimensions of the predictor variable. Measurement scale intervals or range in the interpretation was made based on Btawee (1987), as cited by Hailu (2013), and Mesay (2015). Accordingly, Mean score between 4.51-5.00 excellent or very good, 3.51-4.50 good, 2.51-3.50 average or moderate, 1.51-2.50 fair and 1.00-1.50 is poor.

4.3.1 The Response of Respondents on the warranty Dimension

Warranty has five items each has five Likert scale values. The values of warranty were obtained by computing the mean of the five items. The descriptive statistics were displayed in Table 4.2

Warranty	S.dis	Dis	Indiff	Agree	s.Agr	N	Mean	Grand mean
The company has given me warranty when I bought my phone.	22	60	5	160	125	372	3.82	3.35
The warranty does not cover personal miss uses.	47	93	14	126	92	372	3.33	
The warranty covers software failure.	33	49	23	142	125	372	3.74	
The warranty does not include substituting the phone itself.	106	213	13	21	19	372	2.02	
The number of warranty cycle is not specified.	26	47	25	132	142	372	3.85	
Valid N (listwise)	46.8 (12.9%)	92.4 (29.3%)	16 (3.7%)	116.2 (27.8%)	100.6 (26.3%)	372		

Table 4.2 Descriptive Statistics Warranty Dimension

(Source: Own Survey data, 2019)

Based on the data in Table 4.2 from the descriptive statistics grand mean value of warranty is 3.35. This is good score. Based on measurement scale intervals or range, mean scores between 3.51 and 4.50 is taken as average score. Accordingly, respondents are moderately satisfied with the warranty delivered by the company.

4.3.2 The Response of Respondents on the Online Support Dimension

Online Support Dimension has also five items each have five Likert scale values. The descriptive statistics were displayed in Table 4.3

Online Support	S.dis	Dis	Indiff	Agree	s.Agr	N	Mean	Grand mean
The company has its own line to contact customers.	54	160	10	74	74	372	2.88	2.90
The company calls me and asks “how do you get our service?” after I received the service.	55	58	26	120	113	372	3.48	
If I want to get any support, I can call to the company at any time.	76	104	42	84	66	372	2.89	
The company has other options of online support than phone line.	72	93	35	92	80	372	3.04	
The company blogs how to operate and manage the problem on its webpage, face book page and other accesses.	102	197	2	28	43	372	2.23	
Valid N (listwise)	71.8 (19.3%)	122.4 (32.9%)	23 (6.1%)	79.6 (21.4%)	75.2 (20.2%)	372		

Table 4.3 Descriptive statistics of Online Support Dimension

(Source: Own Survey data, 2019)

According to Btawee (1987), measurement scale intervals or range: Mean scores 2.50-3.50 is average. The data in table 4.3 shows the descriptive statistics grand mean value of online support is 2.90. Based on this, we can see that the response is average with the after sales service of this item. Implying that online support is on average, even though it is likely less satisfactory compared to other dimensions.

4.3.3 The Response of Respondents on the Provision of Accessories Dimension

Provision of accessories has four items each have five Likert scale values. The values of provision of accessories were obtained by computing the mean of the four items. The descriptive statistics were displayed in Table 4.4

Provision of Accessories	S.dis	Dis	Indiff	Agree	s.Agr	N	Mean	Grand mean
The company provided accessories in free.	47	60	23	128	114	372	3.47	3.25
The company provided accessories in a reasonable price.	59	159	6	75	73	372	2.89	
The company provided accessories in a standardized price.	36	53	19	135	129	372	3.04	
The company provided accessories in an expensive price.	51	164	5	76	76	372	2.23	
Valid N (listwise)	48.25 (12.6%)	109 (24.8%)	13.25 (4.3%)	103.5 (31.2%)	98 (27.1%)	372		

Table 4.4 – Descriptive statistics of Provision of Accessories Dimension

(Source: Own Survey data, 2019)

Data in Table 4.4 from the descriptive statistics indicates grand mean values for provision of accessories is 3.25. Btawee (1987) states measurement scale intervals or range: Mean scores 2.51-3.50 are average. Based on this, respondents feel average with the after sales service provision of accessory dimension.

4.3.4 The Response of Respondents on the Facilities and Equipment Supply Dimension

Facilities and Equipment Supply Dimension has six items each have five Likert scale values. The values of Facilities and Equipment Supply were obtained by computing the mean of the five items. The descriptive statistics were displayed in Table 4.5.

Facilities and Equipment Supply	S.dis	Dis	Indiff	Agree	s.Agr	N	Mea n	Grand mean
Tecno Mobile accessories are available.	55	76	15	119	107	372	3.40	2.96
The company told me to wait till accessories imported.	54	165	4	79	70	372	2.85	
Accessories are avail nearby my resident	43	63	18	137	111	372	3.56	
Accessory shops are open at any reasonable time.	105	216	2	29	20	372	2.04	
Accessories are original and fit easily.	42	73	10	140	107	372	3.53	
There is an adequate transportation facility in the accessory shopping outlets	114	155	8	49	46	372	2.35	
Valid N (listwise)	68.83 (18.5%)	124.67 (33.5)	9.5 (2.5%)	92.17 (24.8%)	76.83 (20.7%)	372		

Table 4.5– Descriptive statistics of Facilities and Equipment Supply Dimension

(Source: Own Survey data, 2019)

The data in table 4.5 from the descriptive statistics shows grand mean values is 2.96. Based on this, respondents feel average with the after sales service of facilities and equipment supply dimension. But, it is less satisfactory compared to other dimensions next to online support.

4.3.5 The Response of Respondents on the Maintenance and Repair Dimension

To measure maintenance and repair, five items each have five Likert scale values were used. The values were obtained by computing the mean of the five items. The descriptive statistics displayed in Table 4.6

Maintenance and Repair	S.dis	Dis	Indiff	Agree	s.Agr	N	Mean	Grand mean
The maintenance and repair staffs have sufficient knowledge to maintain and repair.	37	69	8	147	111	372	3.61	3.15
The maintenance and repair Delivered by the company is the same as the written/ promised warranty	54	164	4	83	67	372	2.85	
The repair and maintenance is free.	34	64	10	150	114	372	3.66	
My data was as it is after software maintenance	142	177	8	20	25	372	1.95	
The company finishes maintenance and repair service within a reasonable period.	32	67	9	143	121	372	3.68	
Valid N (listwise)	59.8 (16.1%)	108.2 (29.1%)	7.8 (2.1%)	108.6 (29.2%)	87.6 (23.5%)	372		

Table 4.6– Descriptive statistics of maintenance and repair Dimension

(Source: Own Survey data, 2019)

Data in table 4.6 from the descriptive statistics indicates grand mean values for maintenance and repair is 3.15. Based on this, respondents are average or moderate with this dimension.

The overall descriptive statistics result shows that warranty took the primary score (3.35), provision of accessories followed by 3.25 and maintenance dimension was the third highest score (3.15). Whereas, online support was the least dominant dimension with the score of 2.90 followed by accessibility of facilities (2.96). And the overall after sales service delivered by Tecno Mobile is moderately satisfactory.

4.4 Correlation and Regression Analysis

4.4.1 Correlation Analysis

The relationship between independent dimensions, which were, warrant, online support, provision of accessories, availability of facilities and maintenance and repair with after sale service customers retention was analyzed using Correlation analysis. In order to explore the relationships between customers' perceived after sales service dimensions and their loyalty, a correlation analysis with Pearson's correlation coefficient (r) was conducted on all variables in the study. The guidelines suggested by Field (2005) were followed to interpret the strengths of relationships between variables. His classification of the correlation coefficient (r) is: 0.1 – 0.29 is weak; 0.3 – 0.49 is moderate; and ≥ 0.5 is strong.

Correlations							
		Customer Retention	warranty	Online	Accessory	Facility	Maintenance
Customer Retention	Pearson Correlation	1	.688**	.621**	.716**	.744**	.868**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	372	372	372	372	372	372
warranty	Pearson Correlation	.688**	1	.250**	.284**	.467**	.584**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	372	372	372	372	372	372
Online	Pearson Correlation	.621**	.250**	1	.330**	.339**	.400**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	372	372	372	372	372	372
Accessory	Pearson Correlation	.716**	.284**	.330**	1	.362**	.513**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	372	372	372	372	372	372
Facility	Pearson Correlation	.744**	.467**	.339**	.362**	1	.613**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	372	372	372	372	372	372
Maintenance	Pearson Correlation	.868**	.584**	.400**	.513**	.613**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	372	372	372	372	372	372

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

Table 4.7 - Pearson's Correlation Matrix

(Source: Own Survey data, 2019)

Table 4.7 indicates that each variable correlates perfectly with itself, meaning that coefficients of intersection of a particular variables' row and column is 1.

According to Pearson correlation matrix, as it is shown in table 4.7, all independent variables have positive and strong relation with dependent variable. That is, according to Field (2005), a correlation greater than 0.5 is considered as strong and when we see the result of table 4.7, it proved that all independent variables have scored above it, i.e, warranty (0.688), Online support (0.621), Provision of Accessories (0.716), Availability of facilities (0.744) and maintenance and repair (0.868)

4.4.2 Normality

The level of association as measured by Pearson's coefficient falls between -1.0 and +1.0, which indicates the strength and direction of association between the two variables. The interpretation of the result is as follows; a correlation result between 0 to 1 implies positive relationship, 0 (zero) for no relationship, 1 for perfect positive relationship, -1 for perfect negative relationship and between -1 to 0 indicate the existence of negative relationship. Any violation of the normality rule may lead to overestimation or underestimation of the inference statistic. In order to examine normality, one has to measure each variable's skewness, which looks at lack of symmetry of distribution, and kurtosis, which looks at whether data collected, are peak or flat with relation to normal distribution (Marczyk et al., 2005).

As described in the Table 4.8 below, the level of skewness and kurtosis for all independent variables is between -1 and +1. Therefore, the researcher concluded that the data for this study are normally distributed.

Normality Statistics						
	N Statistic	Maximum Statistic	Skewness		Kurtosis	
			Statistic	Std. Error	Statistic	Std. Error
warranty	372	4.80	-.404	.126	.334	.252
Online	372	4.60	.099	.126	-.423	.252
Accessory	372	5.00	.049	.126	-.530	.252
Facility	372	4.33	-.293	.126	-.299	.252
Maintenance	372	5.00	-.536	.126	-.073	.252
Valid N (listwise)	372					

Table 4.8 Normality Test

(Source: own survey 2019)

4.4.3 Regression Analysis

Regressions fit a predictive model to data and use that model to predict the values of dependent variable from one or more independent variables, Andy (2005). Linear regression estimates the coefficients of the linear equation, involving one or more independent variables that best predict the value of the dependent variable.

A regression analysis examines the relation of the dependent variable to specified independent variables. In this study, multiple linear regressions were conducted to identify the relationship and to determine the most dominant variables that influenced the customer satisfactions and retention of Tecno Mobile after sale service.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig.
1	.790	.624	.644	.6221613	.000 ^b

The significance level of 0.05 was used with 95% confidence interval. Multiple linear regression model was applied because the objective of the study to investigate the relationship between after sales service dimensions of Tecno Mobile on customer retention. The multiple linear regressions were used to model the value of a dependent scale variable based on its linear relationship to one or more predictors.

Predictors: (Constant), warranty, online, accessory, facility, maintenance

Table 4.9 - Model Summary

(Source: Own Survey data, 2019)

From the model summary of table 4.9, R Square is 0.624 indicates the effect of the five independent variables with the dependent variable. From this, overall customer retention 62.4% is affected by the combination of the predictors and the remaining 37.6% is by extraneous variables. This result also indicates that there may be other variables that could have been neglected by the current study in predicting customer retention.

Model		Un standardized Coefficients B	Standardized Coefficients Beta	Tolerance	VIF	sig
11	(Constant)	2.409				
	warranty	.200	.237	.640	1.564	.000 ^b
	Online	.200	.248	.807	1.239	.000 ^b
	Accessory	.200	.315	.716	1.397	.000 ^b
	Facility	.200	.237	.595	1.682	.000 ^b
	Maintenance	.200	.324	.427	2.343	.000 ^b

a. Dependent Variable: Overall Customer satisfaction

Table 4.10– Coefficients (Source: Own Survey data, 2019)

The above table verified that there is no multi Co-linearity problem (the undesirable situation when one independent variable is a linear function of other independent variables) between independent variables since the highest variance inflation factor (VIF) is 2.343 (less than 10) and the lowest tolerance level is 0.427 (greater than 0.1)

Table 4.10 also reveals that the weight of beta analysis result shows that the independent variables have significant contribution to the prediction model. This signifies that for every additional point or value in the warrant, online support, provision of accessory, availability of facility and maintenance and repair, one could predict a gain of 0.237, 0.248, 0.315, 0.237 and 0.324 respectively on the respect of customer satisfaction and retention that other variables remaining constant.

Therefore the regression model would be:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + 0.324 X_5 + e$$

$$Y = 2.409 + 0.237 X_1 + 0.248 X_2 + 0.315 X_3 + 0.237 X_4 + 0.324 X_5 + e$$

Where:

X1 = Warrant

X2 = Online support

X3 = Provision of accessory

X4 = Availability of facility

X5 = Maintenance and repair

e= sampling error

4.5 Hypothesis Testing

Hypothesis is based on standardized coefficients beta and p-value test whether the hypotheses are rejected or not. According to Henkel (1976), hypothesis testing is employed to test some assumption (hypothesis) that the researcher has about the given population against the sample from the population. The result of a significance test is a probability by which the researcher attach to a descriptive statistic calculated from a sample. This probability reflects how likely is that the statistic could have come from a sample drawn from the population specified in the hypothesis (Henkel, 1976).

4.5.1 Warranty and Customer Retention

Hypothesis H1 states that there is a positive relationship between warranty and Customer retention. The hypothesis is supported by the data because its contribution to the customer retention has shown a positive value of 0.237. So, there is a positive relationship between warranty and Customer retention. And the hypothesis which was developed by the researcher is accepted.

4.5.2 Online Support and Customer Retention

The regression coefficient finding indicates that Online support has a strong and significant effect on Customers retention ($P < 0.01$; $\beta = 0.248$). This means when all independent variables have a value of zero and Online support shows an increment by one unit, customer's retention probability increase by 24.8%. Therefore H2, which states there is a positive relationship between Online support and customer's retention is also supported. So that, the null hypothesis is rejected and the alternative one is accepted.

4.5.3 Provision of accessory and customer retention

Hypothesis H3 suggests that, there is a strong and positive relationship between Provision of accessory and customer's retention. The hypothesis is supported by the regression coefficient with a value of 0.315. So, there is a strong and positive relationship between Provision of accessory and customer retention and the alternative hypothesis is accepted.

4.5.4 Availability of Facilities and Customer Retention

The regression coefficient finding indicates that Availability of Facilities has a significant effect on customers satisfaction ($P < 0.01$; $\beta = 0.237$). This means when all independent variables have a value of zero and customer service increase at a unit, the chance of customers retention increased by 0.237. Therefore the hypothesis, H4, which states there is a positive relationship between Availability of Facilities and customer retention is also supported and the null hypothesis is rejected.

4.5.5 Maintenance and Repair and Customer Satisfaction

Hypothesis H5 states that there is a positive relationship between Maintenance and Repair and Customer Satisfaction. The hypothesis was supported by the data because the contribution of Maintenance and Repair to the customer retention was 0.324. Therefore, the developed

hypothesis can be accepted. It means that there is a positive relationship between Maintenance and Repair and Customer Satisfaction.

4.6 Summary of Hypothesis Testing

Hypothesis	Statement of the hypothesis	Result
H1	Warranty and customer retention are positively correlated	Supported
H2	Online support and customer retention are positively correlated	Supported
H3	Provision of Accessories and customer retention are positively correlated	Supported
H4	Facilities and Equipment supply and customer retention are positively correlated	Supported
H5	Maintenance and repair and customer retention are positively correlated	Supported

Table 4.11 Hypothesis Testing

Source: own survey data, 2019

4.11 Finding

The main objective of this study is pointing out the influence of after sales service on Tecno Mobile users in Addis Ababa. Questionnaires were distributed to 384 customers from which 372 have been returned back.

- ✓ Cronbach (alpha) was computed to test the reliability of the data and its value was 0.835 while it was greater than 0.7 for all items. In addition, a sample of 30 questionnaires were distributed to evaluate the validity and the researcher was aware that the questioners were well understood.
- ✓ From the descriptive statistics grand mean values, the researcher conclude that Tecno Mobile users are moderately satisfied by the after sales service delivered by the company and they opt to be loyal for the brand.
- ✓ According to Pearson correlation matrix, all independent variables have positive and strong relation with dependent variable.
- ✓ The multi Co-linearity result proved there is no problem in this regard with the score of highest VIF 2.343 (less than 10) and the lowest tolerance level 0.427 (greater than 0.1)
- ✓ The beta result of regression analysis also showed that the independent variables have significant contribution to the prediction model.

- ✓ Generally, the researcher proved that the following scholars research result is supported by this study as all variables of after sales service dimensions have strong and positive effect on the dependent variable, (Ladokun Isaac et al Jul. - Aug. 2013, PP 54-58), Rigopoulou I. et al, (2008), Gupta S, Lehmann DR (2007), Rosen D. and Surprenant C. (1998), Cohen MA. Whang S. (1997), Gupta and Lehmann, (2007) all and other stated in chapter two have been proved.

CHAPTER FIVE

SUMMARY

5.1 Introduction

In this chapter, Conclusion has done based on the finding, and recommendation has been given for the company on its weakness. In addition, limitation and implications for further research are included.

5.2 Conclusions

Investigating after sales service effect on customer retention regarding Tecno Mobile after sales service station was the primary objective of the study. This study investigated five variables that measure the after sales service constructs (dependent variable) namely Warranty, Online support, Provision of Accessories, Facilities and Equipment supply and Maintenance and repair. The responses of the respondents were measured using five point likert scales, from strongly disagree (1) to strongly agree (5).

The researcher distributed 384 questionnaires after 30 pilot tests conducted to examine the validity of the questionnaires. Among the distributed ones, over 96% of (372) were returned after properly filled by the respondents.

According to the descriptive statistics, grand mean values for all independent variable dimensions showed that the results were average or moderate. Greater number of customers are satisfied with the overall Warranty, Provision of Accessories, Maintenance and repair whereas many are dissatisfied with the overall Online support, Facilities and Equipment supply dimensions.

On the other hand, Pearson correlation matrix showed all variables have strong and positive relationship from 0.621 (online support) to 0.868 (maintenance and repair).

From the regression model, the researcher noted that with 62.4% of the R-Square in customer retention is significant and the model is appropriately measure the latent construct. This finding answered the major objective of assessing the influence of after sale service on customer retention. This proved that independent variables have significant effect on customer retention, up to 62.4%. Hence, the researcher concluded that maintenance and repair has taken the lead followed by Facilities and Equipment supply, provision of accessory, warranty and online support.

5.3 Recommendation

The researcher recommends the following for the concerned body based on the results of the analysis of this study.

- ✓ The descriptive analysis shows that Online support, though rated moderate, its mean values is relatively lower than the other variables. So, the after-sales service station is better to catch customers' attention and profit by retaining them loyal through developing different websites, activating and updating the existed ones, assigning the responsible body to follow up, update and assist customer through phone, e-mail and other means of communication. In addition, blogging different news, new features of the company, how to improve miss operation of mobiles and other common mistakes can lead them to improve the gap in this dimension.
- ✓ Again the descriptive analysis shows that Facilities and Equipment supply, though rated moderate, its mean value is relatively lower than the other variables, but above online support. So, the after-sales service station need to address the shortcomings in this regard by increasing after sale service stations and being addressable, launching new way of service delivery like movable stations (temporary stations for a daily operation only), improving the shortage of parts and supply accessibilities.
- ✓ Based on the regression analysis the most influential maintenance, accessory and online support. So, the researcher recommends the service station to largely focus and exploit its capacity on developing these dimensions more.
- ✓ Even though the majority of the customers in the sample are satisfied with the overall after sales service, it doesn't mean that all are satisfied with all of the dimensions. The researcher recommends that the company has to conduct an intensive after sale service research to exploit the causes of its customers dissatisfaction.

5.4 Limitation and Further Area of Research

This study was conducted to assess the after sales service and customer retention of Tecno Mobile in Addis Ababa station only. Thus, this study may be limited in generalizing of the findings to other customers of the company lived all over. Therefore, future research should draw sample of respondents on regional customers of the company.

Besides, the regression model result advocated that only 62.4% of customer retention is affected by the expected variables conducted by the researcher. Therefore, it might be limited to generalize the population based on this finding. So that, the researcher want to recommend other researchers in order to conduct the research in this area to investigate the remaining 37.6% determinants.

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Addis Ababa University School of Commerce
Department of Marketing Management
Post graduate program

Dear respondents,

I, Zelalem Workie, am post graduate student in Addis Ababa University School of commerce in marketing management department. First of all I would like to thank you for spending your valuable time in filling the questionnaire. I am conducting a research on examining the effect of after sales service on customer retention, in case of Tecno Mobile. The researcher is hopeful that you are the one who can give the real picture of after sale services offered by the company. Your responses to the questionnaire will be kept strictly confidential and the information is accessed only by the researcher for academic purpose.

Hence, please lend me few minutes of your time to fill out the questionnaire as genuinely and completely as possible. Writing your name on the questionnaire is not mandatory.

I remain grateful to you for your kind cooperation.

Part I: General Information

Instruction:

Please put a tick mark “√” on the most appropriate category against each question

1. Sex Male Female

2. Age Below 18 18-30 30-45 45 years and above

3. Marital status Single Married Divorced Widowed

4. Education level
 Certificate and below Diploma Bachelor’s Degree and above

5. Cycle you use Tecno
 First time second time Third and more

Part II: Perception Statements Instruction:

Please put a tick mark “√” the most appropriate response number against each statement where (1= Strongly Disagree; 2= Disagree; 3=Indifferent; 4= Agree; 5= Strongly Agree)

1. warranty Dimension

No	Service type	Strongly Disagree	Disagree	Indifferent	Agree	Strongly Agree
1	The company has given me warranty when I bought my phone.					
2	The warranty covers personal miss uses.					
3	The warranty covers software failure.					
4	The warranty includes substituting the phone itself.					
5	The number of warranty cycle is not specified.					

2. Online support

No	Service type	Strongly Disagree	Disagree	Indifferent	Agree	Strongly Agree
1	The company has its own line to contact customers.					
2	The company calls me and asks “how do you get our service?” after I received the service.					
3	If I want to get any support, I can contact to the company at any time.					
4	The company has other options of online support than phone line.					
5	The company blogs how to operate and manage the problem on its webpage, face book page and other accesses.					

3. Provision of Accessories Dimension

No	Service type	Strongly Disagree	Disagree	Indifferent	Agree	Strongly Agree
1	The company provided accessories in free.					
2	The company provided accessories in a reasonable price.					
3	The company provided accessories in a standardized price.					
4	The company provided accessories in an expensive price.					

4. Facilities and Equipment supply

No	Service type	Strongly Disagree	Disagree	Indifferent	Agree	Strongly Agree
1	Tecno Mobile accessories are available.					
2	The company told me to wait till accessories imported.					
3	Accessories are avail nearby my resident.					
4	Accessory shops are open at any reasonable time.					
5	Accessories are original and fit easily.					
6	There is an adequate transportation facility in the accessory outlets					

5. maintenance and repair Dimension

No	Service type	Strongly Disagree	Disagree	Indifferent	Agree	Strongly Agree
1	The maintenance and repair staffs have sufficient knowledge to maintain and repair.					
2	The maintenance and repair Delivered by the company is the same as the					

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