ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES

EFFECT OF SERVICE QUALITY AND CUSTOMER SATISFACTION IN ETHIOPIAN HOUSING CONSTRUCTION PROJECT: THE CASE OF AYAT 2 40/60 CONDOMINIUM PROJECT

BY

HANNA ASCHALEW BEKELE

JUNE, 2023

ADDIS ABABA

ASSESSMENT OF SERVICE QUALITY AND CUSTOMER SATISFACTION IN ETHIOPIAN HOUSING CONSTRUCTION PROJECT: THE CASE OF AYAT 2 40/60 CONDOMINIUM PROJECT

Name of Student:
Hanna Aschalew Bekele

Advisor:
Misganaw Solomon (PhD)

A Thesis submitted to the School of Graduate Studies of ST. Mary's University in partial fulfillment of the requirements for the Degree of Master of Arts in Project Management

June, 2023

Addis Ababa, Ethiopia

DECLARATION

I **Hanna Aschalew**, do hereby declare that this thesis is my original work and that it has not been submitted partially; or in full, by any other person for an award of degree in any other university/institution.

Submitted by:

 Hanna Aschalew   _____   _____

Name of Student   Signature   Date

ENDORSEMENT

I confirm that this thesis has been produced as per the standards of higher institutions and submitted to St. Mary's University for examination approvable as a university advisor.

 Misganaw Solomon (PhD)   _____   _____ ____

Name of Advisor   Signature   Date

APPROVAL SHEET

The undersigned certify that they have read and hereby recommend to St. Mary's University to accept the Thesis submitted by Hanna Aschalew Bekele, entitled "**Assessment of Service Quality and Customer Satisfaction in Ethiopian Housing Construction Project: The Case of Ayat 2 40/60 Condominium Project**" in partial fulfilment of the requirements for the award of a Master Degree in Project Management.

Advisor: Name: Misganaw Solomon (Ph.D)   Signature   Date 03/08/2023

External Examiner: Name: Saleamlak Molla (Ph.D)   Signature   Date 03/08/2023

Internal Examiner: Name: Temesgen Belayneh (Ph.D)   Signature   Date 03/08/2023

Dean   :   Name _____Signature   Date 03/08/2023

ACKNOWLEDGEMENT

First and foremost, all praise goes to the Almighty God who helped me to accomplish this paper successfully. I am deeply indebted to many people for their contributions in diverse ways towards the successful completion of this thesis. Secondly, I pay my gratitude to my advisor, Dr. Misganaw Solomon, for his comprehensive support, unreserved commitment, and constructive comments from the beginning to final stage of my work. Thirdly, I would like to take this opportunity to express my deepest regards and appreciation to my beloved family who had shown their holistic willingness to sponsor my academic carrier. Fourthly, I would like to extend my sincere gratitude to all participants and respondents of the study for their contribution. Finally, I thank all those who have helped me directly or indirectly in the successful completion of my research.

Table of Contents

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS

AASHDE	Addis Ababa Saving Houses Development Enterprise
ANOVA	Analysis of Variance
CS	Customer Satisfaction
FDRE	Federal Democratic Republic of Ethiopia
EIB	Emotional Intelligence Behavior
ERG	Existence-Relatedness-Growth
ICT	Information Communication Technology
IT	Information Technology
IHDP	Integrated Housing Development Program
NBE	National Bank of Ethiopia
OH	Over Head Costs
OLS	Ordinary Least Square
OCB	Organizational Citizenship Behavior
PCM	Project Cost Management
PM	Project Management
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute
SERVQUAL	Service Quality
SPSS	Statistical Package for the Social Sciences
US	United States
US	United States
VIF	Variance Inflation Factor
WBDS	Work Break Down Structure

ABSTRACT

This study aimed to investigate the quality of service and the level of customer satisfaction in Ayat 40/60 Condominium Project in Addis Ababa. The study adopted descriptive as well as explanatory research design. SERVQUAL model with five dimensions was used. The study collected primary data from randomly selected 155 Condo housing winner in Ayat 40/60 Condominium Project in Addis Ababa. The data was analyzed using Statistical Package for Social Sciences (SPSS). From statistical tools, descriptive statistics Pearson correlation, and multiple regressions were used to investigate the relationship among the variables. The result revealed that customers' satisfaction level towards project service delivery of Ayat 40/60 Condominium Project in Addis Ababa was low. In line with this, the result showed that more than three-fourth (77.6%) of respondents were dissatisfied with the agency overall service delivery; 72.4% of respondents were dissatisfied with the house interior partition and other finishing work; 67% of respondents were dissatisfied with the quality of house; 60.9% of respondents were dissatisfied with the design of house. The result from correlation shows that there are positive and high correlation between the four service quality dimensions (tangibility, reliability, responsiveness, and assurance) and condo housing winner satisfaction in Ayat 40/60 Condominium Project in Addis Ababa. In addition, the result from regression revealed that the combined effect of various service quality dimensions significantly influenced customer satisfaction positively. The value of adjusted R2 is 0.731 tells that the five service quality dimensions can account for 73.1% of the variation in the overall condo housing winner satisfaction in Ayat 40/60 Condominium Project in Addis Ababa. In terms of individual effect, four out of the five service quality dimensions (tangibility, reliability, responsiveness, and assurance) are significant in predicting condo housing winner satisfaction in Ayat 40/60 Condominium Project in Addis Ababa; whereas empathy was not significant in predicting condo housing winner satisfaction in Ayat 40/60 Condominium Project in Addis Ababa. Thus, the study concluded that service quality has a positive and significant effect on condo housing winner satisfaction in Ayat 40/60 Condominium Project in Addis Ababa. Therefore, the Addis Ababa Saving Houses Development Agency should influence these services quality dimensions as a way of ensuring its housing service customers get the satisfaction.

***Key Words**: Service Quality, Customer Satisfaction, 40/60 Condominium Project.*

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

The construction industry is a significant contributor of economic and social development in global, regional and national economy. It has hugely influenced the economy, the environment and the society. Particularly important is the role that the construction industry plays in resolving the urban housing shortage. One of the major challenges of Addis Ababa city is lack of shelter as identified by city administration of Addis Ababa, which needs an urgent remedy. It is an acute problem especially for low-income households that account for over 80 percent of the city's population.

In order to solve these challenges, the city administration has established an integrated housing development program which has to be planned to change the image of the city, to modernize the life style of the society, and to promote the construction industry (Ministry of Works and Urban Development, 2010). The massive housing needs are unlikely to be met by the small-scale housing cooperative, government, and upgrading approaches prevailing from the late 1970s until the mid-2000s, especially considering the high demand by the low-income sector of the population for affordable housing. In response to this challenge, the Ethiopian government outlined an ambitious vision for low-income urban and housing development, formulated as the Integrated Housing Development Program (IHDP) (Ministry of Works and Urban Development, 2010). The housing development program is also considered by the founder (Addis Ababa city administration) as the major development task to reduce urban poverty and improve the lives of slum dwellers and to bring sustainable socio-economic transformation.

Addis Ababa housing Agency is the main government institution responsible for planning and implementation of projects in urban housing city. It is responsible to ensure proper implementation of urban development and to alleviate house shortage seen in Addis Ababa city. Accordingly, the agency gave special attention to the housing sector, and launched different construction activities, the Addis Ababa Saving Houses Development Enterprise (AASHDE) is one of the construction activities particularly managed by the government involvement and construction companies to help the middle level dwellers, AASHDE launched the 40/60 housing

project to the saving house programs which was established in July 2012, with the aim of building and distributing houses to the middle class segment of the city tenants, who can afford to save 40% of the cost of the houses, while the rest will be facilitated by a bank loan from the Commercial Bank of Ethiopia. Further, the program of this type requires the customers to save 40 percent of the value of the houses within the five years and the government arranges a loan for the remaining 60 percent from the Commercial Bank of Ethiopia (CBE), and the loan will be paid for the bank upon receiving the house with the agreement made between the bank and the house owner (Nuru, 2014).

The public sector has been under increasing pressure to improve upon service delivery and to demonstrate that it is customer-centric. The success of any service providing organization according to Huffman & Bateson (2001) as cited by Kibret et al (2018) can be measured in terms of its customers' expectation towards the service delivery practice, which means service quality, will be the dominant element in customers' evaluations of a given service. Customers' go to service providers expecting to get a good service and the level of expectation among each individual varies. The ultimate goal of public sector is to sustain the quality of the public service and to enhance the capacity to carry out core government functions so as to promote a sustained economic, social and political development in the environment of its operation (Theodore, 2003).

In this regard, assessment of satisfaction level of urban residents about project implementation and the quality of services provided by the Housing Agency is an important way to improve its performance in the process of urban development planning in the context of Addis Ababa. It is essential to use the appropriate tools to comprehend the perspective of housing beneficiaries and their satisfaction with the housing quality because improving the quality of project implementation and services provided by the Housing Agency in terms of timely providing the house, delivering finished and quality house, and arranging necessary infrastructure and spatial planning approach is impossible without taking into consideration the perspectives, demands, and expectations of housing beneficiary. Thus, this study aims to examine service quality and customer satisfaction in Ethiopian housing construction project by specifically focusing on Ayat 2 40/60 Condominium Project in Addis Ababa.

1.2 Statement of the problem

Projects in general, construction and housing projects in particular, be it a government or private project, usually encounter problems both in developed and developing countries including Ethiopia. Since projects are mostly initiated to increase organizational capabilities, meeting new demands, realizing new opportunities due to very frequent change of organization's environment then it is more likely that problems could occur during execution of the project. Saudi et al., (2006) point out that completing projects on budget is an indicator of efficiency, but the construction process is subject to many variables and unpredictable factors, which result from many sources. These sources include the performance of stakeholders, resources availability, uncertainty conditions, contractual relationships, and required sophisticated technology and technical experts. By these cases, it is difficult to see a project is completed within the specified budget, quality and time, which in turn create dissatisfaction on final beneficiary and customers (Memon et al., 2011).

Housing is one of the major challenges of the city of Addis Ababa due to rapid increase of population and high rate of urbanization. It is an acute problem especially for low-income households that account for over 80 percent of the city's population. It is stated that more than 70 percent of the population of Addis Ababa lives in slums with inhuman and unhygienic conditions (World Bank, 2020). The housing development program is also considered by Addis Ababa city administration as the major development task to reduce urban poverty and improve the lives of slum dwellers and to bring sustainable socio-economic transformation. However, the majority of condominium housing projects encounter a number of difficulties related to poor quality and late delivery, which in turn causes client and housing beneficiary disappointment and dissatisfaction.

Empirical evidence by Wescott (1999) shows many African municipality services are characterized by corrupt, inefficient and poor public service delivery that requires capacity building and relevant reforms to change the existing trend that in turn enhances social-economic developments. To address this, the public sector must find ways of improving the efficiency and effectiveness of its service delivery. This means providing value for money by improving quality of service, and reducing the costs involved in providing those services.

In the case of low-income houses, Carmona & Gallent (2003) contend that poor-quality housing, whether poorly planned in the wider sense, or badly designed, has been the hallmark of a commodity culture whereby housing is viewed as merely a "demand good" to be thrown up wherever the price is right. According to Carmona et al. (2003), quality should be provided with the end-user in mind in order to create a healthy and safe living environment. However, the features of inadequate housing quality include: overcrowding; relatively small sizes of houses; poor building standards in terms of inadequate sound attenuation or heat insulation, and lack of basic urban design amenities, and inadequate supply of services (Carmona et al., 2003). In brief, research studies (Gosaye, 2017; Haile, 2017) indicate that the quality in the building of low-income or condominium houses in Addis Ababa is one of the reasons for dissatisfaction expressed by occupants and beneficiaries.

In line with resident satisfaction with condominium housing project, Gosaye (2017), conducted study to assess the satisfaction of the resident of 10/90 condominium housing residents. He found that the program also has complaints on the construction quality of the houses. The other limitation of the program is absence of infrastructure. It has also been found that the houses are located far from public utilities and city centers. Haile (2017(, also conducted study to assess quality performance of Addis Ababa City Housing construction project focusing on Project No. 13, 14 and Bole Ayat condominium sites. In the study he found that the residents have grievance on the quality of the house. The study reveals that most of the quality defects of the projects are related to finishing work problems, like water leakage, poor roofing and rain disposal, poor finishing work, poor design related to difficulty to move in the house for children, elders and disabled people are major quality defects of the project.

The condominium housing construction in Addis Ababa is proceeding on the basis of Low-Cost Housing (LCH), simple technology with prefabricated component. As such, there are lots of complaints on condominium housing quality. Condominium housing beneficiary in Addis Ababa mostly compliant on lack of basic infrastructure such as water, road, sanitation, etc. The need for giving special attention to needs of housing beneficiary and the quality service is important where; it is essential knowing that the defects in the buildings could cause many problems to the city dwellers as well as government if not given the proper attention, such as physical damages and economic loss. Evaluation of how to implement projects and provide services needs

receiving feedback from the users. Ignoring the demands and expectations of the users also brings about many challenges in the process of serving them (Sureshchandar, et al., 2006). In this regard, assessing the satisfaction level of urban resident residents and housing beneficiaries about the quantity and quality of programs and services helps the government agency to improve this kind of services. Thus, this study aims to examine service quality and customer satisfaction in Ethiopian housing construction project by specifically focusing on Ayat 40/60 Condominium Project in Addis Ababa.

1.3. Research Questions

In line with the problem statement, the study attempts to address the following basic research questions.

1) What is the level of service quality of Ayat 40/60 Condominium Project in Addis Ababa?
2) What is the relationship between service quality and customers satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa?
3) To what extent service quality affect satisfaction of customers of Ayat 40/60 Condominium Project in Addis Ababa?

1.4. Objective of the study

1.4.1. General Objective

The general objective of the study was to investigate the quality of service and the level of customer satisfaction in Ayat 40/60 Condominium Project in Addis Ababa.

1.4.2 Specific objectives of the study

The specific objectives of the study include the following:

1) To identify the level of service quality of Ayat 40/60 Condominium Project in Addis Ababa
2) To assess customers' satisfaction level towards project service delivery of Ayat 40/60 Condominium Project in Addis Ababa.
3) To investigate the relationship between service quality and customers satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa

4) To investigate the effect services quality on customers satisfaction in relation to project service delivery of Ayat 40/60 Condominium Project in Addis Ababa.

1.5 Significance of the Study

The findings and recommendations of this study would be of a great importance to different project stakeholders, housing agencies, housing beneficiary, customer, project practitioners and project managers and project teams undertaking similar projects. The study help the administrators of the housing agencies to review service delivery system in a way that it meets the customers' needs and expectations. It also helps different levels of the sector to identify their respective status in relation to improvement of service delivery and customer satisfaction. Furthermore, it helps to identify the level of satisfaction/dissatisfaction in the prevailing service delivery and to recommend possible solutions on the causes or dissatisfying factors. For customers and housing beneficiary, the study paves way for the improvement of service delivery system, provide formal means of feedback to service received, which may help to identify existing and potential problems regarding to the housing project services delivery. Eventually, the finding may help any interested person who wants to conduct study in the area as a point of reference.

1.6 Scope of the Study

The geographic scope of this study was delimited to selected (project Ayat 40/60 Condominium Project) in Addis Ababa; which may restrict generalization of the findings to all housing projects all over the country. Thematically, this study was delimited to the quality of housing project service delivery and the current level of customer satisfaction on the delivery system of housing project service of city government, emphasizing on major challenges affecting the provision of quality and processes in the housing project service delivery of city government. The study examined assess the quality of public service delivery and customer satisfaction, using the five quality service dimensions from customers' perspectives.

1.7. Limitation of The Study

The study was solely focused on the case of Ayat 40/60 Condominium Project in Addis Ababa, which in turn made it insufficient for further studies that focus to generalize about residents of all condominium housing units. But such study would have been a great significance if it had been

studied for wider range of population. As a result of this factor, future studies should consider analysis from other Condominium projects sites in various parts of Addis Ababa and cut across several aspects, including larger sample size. More so this study only considered the perspectives of the condo winners (customers) and not considered the service providers, and as result the researcher may fail to triangulate different data sources of information will be sited as limitations of this study. Thus, future studies will consider the both customers and services providers and apply other approach to triangulate the findings from multiple sources.

1.8. Organization of the study

The study is organized into five chapters. Chapter one discusses the introduction part. It contains the background to the research study, presents the statement of problem, objectives significance and scope of the study. Chapter two contains theoretical and empirical review of previous studies. Chapter three outlines the research methodology adopted in this study. Chapter four discusses about the data analysis and interpretation of the outputs. Chapter five outlines the summary of the finding, conclusions, recommendations and further research suggestions.

CHAPTER TWO
LITERATURE REVIEW

In this chapter the researcher reviews relevant literature on theoretical and empirical issues which are found to be essential to the research inquiry. Thus, the first section discussed theoretical literature related to the study variables which are consider in order to lay solid foundation for the research. Then a brief summary of some of the related previous works are discusses. In the final analysis, the chapter presents the gab in literature.

2.1 Theoretical Review

This opening section discusses the theoretical background of basic concept and theories concerning the construction project in general and real estate development project in particular. Also discuss the project cost management. The meaning of terms varies from study to study depending on their purpose and the context in which they are utilized. The precise clarifications of basic concepts and theories make clear how they are utilized in the study. The main concepts and theories that this study cover is explain in the following section.

2.1.1. Definition Service

The meaning of terms varies from study to study depending on their purpose and the context in which they are utilized. The precise clarifications of basic concepts make clear how they are utilized in the study.

There is no generally accepted and complete definition of services. Services could basically be referred to as dynamic activities and processes, while goods are static things. International Business Machine (IBM), in their ongoing research program Services science, lists a random selection of efforts to define services from the literatures and suggests that services are 'a provider-client interaction that creates and capture value (Michael and Susan t, 2010). In review of a wide variety of definitions Payne (1993) summed it up when he said, "A service is an activity which has some element of intangibility associated with it which involves some interaction with customers or with property in their possession, and does not result in a transfer of ownership. A change in condition may occur and production of the service may or may not be

closely associated with a physical product." In simple terms "Services are deeds, processes, and performances" (Zeithaml and Bitner, 2003).

However, in a broader definition, Fitzsimmons and Fitzsimmons (2001) citing Quinn, Baruch and Paquette (1987) and Zeithaml and Bitner (2003) indicate that "services include all economic activities whose output is not a physical product or construction, and is generally consumed at the time of production, and provides added value in forms such as convenience, amusement, timeliness, comfort, or health which are essentially intangible in nature". Kotler (1994), on the other hand, defines services as "any act or performance that one party can offer to another that is essentially intangible and does not result in the ownership of anything". He affirms the view that "services are intangible, inseparable, variable and perishable and also added that services normally require more quality control, supplier credibility, and adaptability". According to Gronroos (2000), services are "activities or series of activities of more or less intangible nature that normally, but not necessarily, take place in interactions between customer and service employees and/or physical resources or goods and/or systems of the service provider, which are provided as solutions to customer problems".

In its broad definition, we should be aware over time services and services sector of the economy have been defined in subtly different ways. The variety of definitions often explains the confusion or disagreement people have when discussing services. Compatible with the simple definition, broad definition is one that define service to include "all economic activities whose output is not a physical product or construction, is generally consumed at the time it is produced, and provide added value in forms (such as convenience, amusement, timeliness, comfort, or health) that are essentially intangible concerns of its first purchaser" (Zeithaml, Betner and Gremler, 2001).

From the above definition, it is evident that intangibility is the key detriment of whether the offering is a service or not. In all, service can also be defined as an intangible offer by one party to another in exchange of money for pleasure.

2.1.3. Service Quality

Service quality is composed of the two-term service and quality. In the above section service is defined, now looks brief definition of the concept quality then will define the concept service

quality. Quality can also be defined as the totality of features and characteristics of a product or services that bear on its ability to satisfy stated or implied needs (Kotler et al., 2002). It is evident that quality is also related to the value of an offer, which could evoke satisfaction or dissatisfaction on the part of the user.

Service quality can be defined as the difference between customer's expectations of service performance prior to the service encounter and their perceptions of the service received. Gefan (2002) defined Service quality as "the subjective comparison that customers make between the quality of the service that they want to receive and what they actually get".

Service quality also defined as the degree of discrepancy between customer normative expectations for service and their perceptions of service performance. Service quality can be defined as meeting the needs and expectations of the customer (Kotler, and Armstrong, 2010). The definition of service quality can be extended to the overall evaluation of a specific service with ten service quality dimensions: tangibles, reliability, responsiveness, competence, courtesy, credibility, security, access, communication and understanding/knowing the customer (Lassar & Winsor, 2000).

Quality service has a positive effect on the bottom-line performance of a firm and thereby on the competitive advantages that could be gained from an improvement in the quality of the service offered so that the perceived service exceeds the service level desired by customers (Ladhari, 2008).Nowadays, with increased competition, service quality has become a popular area of academic investigation and has been recognized as a key factor in keeping the competitive advantage and sustaining satisfying relationships with customers (Zeithmal et al., 2000)

Service quality is considered an important tool for a firm's struggle to differentiate itself from its Competitors (Ladhari, 2008). Service quality has received a great deal of attention from both academicians and practitioners (Negi, 2009). British Journal of Marketing Studies Published by European Centre for Research Training and Development UK (2008) pointed out that, by defining service quality, companies will be able to deliver services with higher quality level. Akroush (2008) also pointed out that service quality is the result of the comparison made by customers about what they feel service firms should offer, and perceptions of the performance of

firms providing the services. Gronroos (2007) also defined service quality as the outcome of the comparison that consumers make between their expectations and perceptions.

2.1.3. Customer Expectation vs. Perception of Service

Customer expectations are beliefs about service delivery that serve as standards or reference points against which performance is judged. Customer expectation is what the customer expects according to available resources and is influenced by cultural background, family lifestyle, personality, demographics, advertising, experience with similar products and information available online. Because customers compare their perceptions of performance with these reference points when evaluating service quality, thorough knowledge about customer expectations is critical to service marketers. Knowing what the customer expects is the first and possibly most critical step in delivering quality service. Being wrong about what customers want can mean losing a customer's business when another company hits the target exactly. Being wrong can also mean expending money, time and other resources on things that do not count to the customer and even mean not surviving in a fiercely competitive market (Zeithaml and Bitner, 2003).

Customer perception is totally subjective and is based on the customer's interaction with the product or service. Perception is derived from the customer's satisfaction of the specific product or service and the quality-of-service delivery. Perceptions are always considered in relation to expectations. Perceptions are formed through customers' assessment of the quality of service provided by a company and whether they are satisfied with the overall service. Zeithaml and Bitner (2003) argue that because perceptions may shift over time and therefore it is necessary for companies to continually assess customer perceptions.

2.1.4. Service Quality Model

For the past three decades practitioners and academicians strive to measure service quality accurately in order to understand it well and develop a method for improving quality and achieve comparative advantages (Abdullah 2006a). A number of literatures confirms that there are many evidences that insure the importance of service quality in educational institutions (Ham 2003). According to Rasli et al. (2012), measuring service quality in higher education is increasingly important for attracting and retaining tuition-based returns. There exist a number of models

developed by different scholars which is used to measure service quality in different service sectors; accordingly, three mostly known services quality models, namely: Gaps Model of Service Quality, Performance Only Model (SERVPERF) and Service Quality (SERVQUAL) model, are discussed as follows.

2.1.4.1. Service Quality (SERVQUAL) Models

The service quality (SERVQUAL) model is considered to be the earliest model for measuring service quality; the first SERVQUAL model used to measure the determinant of service quality was developed by Parasuraman et al. in 1985, the concept was service quality is the gap between customer expectation and perception; they also explain the model SERVQUAL is used to measure how is the delivered service matches customers expectation (Figure 1). Basically, they developed ten dimensions and determinant of service quality including: reliability, competence, responsiveness, access, communication, courtesy, credibility, security, understanding the customers and tangibles. Most importantly, SERVQUAL configures the gap where the quality improvement is needed (Ho and Wearn 1996; Rowley 1997; Abdullah 2006; Ruiqi and Adrian 2009). Later, Parasuraman et al. (1988), reduce the dimensions of service quality measurement in to five only; the main reason for the reduction was that the ten criteria make study questionnaires too long and for that matter there was the need for a shorter version. The revised version of SERVQUAL model includes reliability, responsiveness, assurance, empathy and tangibles.

Reliability - The ability to perform services dependably and accurately in a consistent manner is referred to as reliability. Reliability is a very important factor in product quality, besides good personal service, staff attitude, knowledge, and skills (Walker, 1990). Berry and Parasuraman (1991) reported that reliable service is the result of continuous improvement. Similarly, in another study, it found that service reliability is the service "core" to most customers. Therefore, managers should use every opportunity to build a "do-it-right-first" attitude (Berry, 1990)

Responsiveness - reflects employees' willingness or readiness to provide quick services to customers. Customers are particularly attentive to employees' behavior in the service industry, particularly in the hotel industry. Service recovery and Problem-solving has been recognized as important parts of services quality (Nelson and Chan, 2005).

Assurance - Assurance is defined as an employee's knowledge, courtesy, and the firm's and its employees' ability to inspire trust and confidence. The dimensions are likely to be especially important for services that the customer perceives to be high risk and/or for which they are unsure of their ability to evaluate outcomes. The measurement scales for assurance include credibility, security, competency, and courtesy (Jenet 2011).

Empathy- Empathy is the treatment of customers as individuals. Empathy is defined as the firm's caring, personalized attention to its customers. The essence of empathy is conveying to customers that they are unique and special through personalized service. Customers must feel understood and valued by businesses that provide them with services. Personnel in small service firms frequently understands customer requirements and performance. When such a small firm competes with larger firms, the ability to be empathetic may provide a clear advantage to the small firm (Jenet 2011).

Tangibility - demonstrates the physical aspects of services, such as physical facilities, the appearance of personnel, and tools used to provide services. It translates to the interior design of the restaurant, the appearance and condition of the cutlery, tableware, and staff uniforms, the appearance and design of the menu, restaurant signage, and advertisements. Firms use tangibles to convey image and signal quality (Zeithaml et al., 2006).

2.1.4.2. Gaps Model of Service Quality

Parasuraman has extensively researched service quality, Zeithaml, and Berry (1985). Perceived Service Quality, according to them, can be defined as "the extent of discrepancy between customers' expectations or desires and their perceptions."

GAP1: Consumer expectation-management perception gap – This gap is the difference between customer service expectations and the company's understanding of these expectations. Many executive perceptions of what consumers expect from a quality service are consistent with the consumer expectations revealed. However, there is a misalignment between executive perceptions and consumer expectations. In essence, executives at service firms may not always understand what features connote high quality to consumers' needs, and what levels of performance on those features are required to deliver high quality service. Consumer perceptions

of quality may be influenced by this lack of understanding (Parasuraman, Zeithaml, and Berry 1985).

GAP2: Management perception – service quality specification – A company may correctly perceive the needs of its customers, but it may fail to set a specific performance standard. This can happen because management believes customer expectations are unreasonable at times, or because of resource and market constraints. Another reason for the disparity between expectations and the actual specifications for a service is the lack of total management commitment to service quality. In short, many factors, such as resource constraints, market indifference, and/or management indifference, may result in a mismatch between management perceptions of consumer expectations and the actual specifications established for a service. This disparity has an impact on consumers' perceptions of quality (Parasuraman, Zeithaml and Berry 1985).

GAP3: Service quality specifications – gap in service delivery – This is the difference between service quality specifications and service delivery. Even when guidelines exist for providing high-quality services and treating customers properly, high-quality service performance is not always guaranteed. Managers recognize that the employees of a service firm have a strong influence on the service quality perceived by customers, and that employee performance cannot always be standardized (Parasuraman, Zeithaml and Berry 1985)

GAP4: Service delivery-communications gap – This is essentially a chasm between what you deliver and how you communicate with others. A company's media advertising can influence consumer expectations and other communications. If expectations influence consumer perceptions of service quality, the firm must be careful not to promise more in communication than in reality. When promises are made that are not kept, it raises initial expectations, but lowers perceptions of quality (Parasuraman, Zeithaml, and Berry 1985).

GAP5: Expected services – perceived service gap - the magnitude and direction of the gap between expected and perceived services determines the quality that a consumer perceives a service to be. Meeting or exceeding what customers expect from a service is the key to ensuring good service quality. The perception of high and low service quality is determined by how 20

consumers perceive actual service performance in relation to what they expected. (1985, Parasuraman, Zeithaml, and Berry)

Information on customer expectations levels can help managers understand what customers actually expect from a particular service. Similarly, information on service quality gaps can help managers determine where performance improvement should be focused. The concept of gaps scores is clearly useful for a service manager, because it provides information on customer expectations, perceptions of service received, and any gaps between the two. The use of such service quality dimensions enables managers and other stakeholders to better understand the service's relative performance across these dimensions (Mik, 1999).

In general, information on service quality gaps can help managers determine where performance improvement can be most effectively targeted. Identifying the most significant negative gaps, in conjunction with an assessment of where expectations are highest, allows for the prioritization of performance improvement.

2.1.4.2. Performance Only Model (SERVPERF)

Cronin and Taylor (1992) developed SERVPERF as part of their trial work, which included the adjustment of SERVQUAL for conceptualization and estimation of service quality. They questioned the conceptual basis of the SERVQUAL scale and found it confusing with service satisfaction. They, therefore, opined that expectation (E) component of SERVQUAL be discarded and instead performance (P) component alone be used. They proposed what is referred to as the 'SERVPERF' scale. Besides theoretical arguments, Cronin and Taylor (1992) provided empirical evidence across four industries (namely banks, pest control, dry cleaning, and fast food) to corroborate the superiority of their 'performance-only' instrument over disconfirmation-based SERVQUAL scale

Cronin and Taylor (1992) created "SERVPERF," an execution-based measure of service quality that demonstrates service quality is a type of customer demeanor. It assesses service quality based on execution. Cronin and Taylor (1992) argued that because execution is the measure that best clarifies customers' perceptions of service quality, perception should not be included in the service quality estimation instrument. SERVPERF examines the characteristics of the five

dimensions, which are phrased similarly to SERVQUAL, but does not rehash the arrangement of explanations as expected items.

The present study used the SERVQUAL model. This is because of the fact that model is the most important model regarding the measurement and management of service quality across different service contexts and numerous cultural backgrounds and is valued by academics and other professionals. The first argument for using SERVQUAL is the model ability to record customer perceptions of service quality of the respective orginization. Once the data are collected and analyzed it is possible to visualize them with the help of several tools and due to that it is easy to identify the strengths and weaknesses or in other words the potential improvement areas of a service (Naeen & Sait, 2009).

Furthermore, SERVQUAL provides the opportunity for a firm to assess its service quality performance on the basis of each analyzed area for both individually and overall orginizational departments. This means, that the SERVQUAL concept can also be useful to improve the internal service quality: It is not only easier to analyze the respective business departments independently from each other, but one also can figure out which share each area contributes to the overall company success. With regard to the customer, the SERVQUAL concept allows the orginization to classify its customers into different segments based on their individual SERVQUAL scores. After this classification it could be easier to change the service features regarding the specific customer requirements and at least this would improve the customer's satisfaction in a more exceptional way (Naeen & Sait, 2009).

2.1.5. Customer Satisfaction

Customer satisfaction has been recognized as one of the most important elements of contemporary marketing thought, particularly in the case of service sectors. Customer satisfaction is a post-purchase evaluation of a service offering. A traditional definition of customer satisfaction followed the dissatisfaction paradigm of consumer satisfaction/ dissatisfaction, suggesting that customer satisfaction/ dissatisfaction is the result of interaction between the consumer's pre-purchase expectations and post purchase evaluation. 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. Service companies have since recently focused on customers in order to improve competitiveness. Customer satisfaction is one of the important outcomes of marketing activity. Customer satisfaction is the level of customer felt state resulting from comparing a perceived

performance of service or product in relation to customers' expectations. It means, if the perceived performance is less than expected, can result in a dissatisfaction by customer, and if the perceived performance exceeds expectations, can result in satisfaction of customer (Guo et al., 2008).

Giese and Cote, (2000,) clearly state that there is no generic definition of customer satisfaction and after carrying a study on various definitions on satisfaction they came up with the following definition, "customer satisfaction is identified by a response (cognitive or affective) that pertains to a particular focus (i.e. a purchase experience and/or the associated product) and occurs at a certain time (i.e. post-purchase, post consumption)"

Studies in services marketing have shown that service quality and customer satisfaction are closely related. Services marketers are involved in substantial campaigns to improve the quality of their organizations" services and profitability by ensuring customer satisfaction (Woodruffe, 1995). According to Zeithaml et al. (2008), customer satisfaction is a broad concept, whereas service quality focuses specifically on the dimensions of services and, therefore, perceived service quality is a component of customer satisfaction. According to Noone and Namasivayam (2010), there is a strong relationship between customer satisfaction and service quality. Customer satisfaction affects assessments of service quality and assessments of service quality affect customer satisfaction.

Good customer satisfaction has an effect on the profitability of nearly every business. For example, when customers receive good service, each will typically tell nine to ten people. However, customers who receive poor service will typically relate their dissatisfaction to between fifteen and twenty others Naiket al. (2010). Therefore, customer satisfaction is an asset that should be monitored and managed just like any physical asset. The satisfaction judgment is related to all the experiences made with a certain business concerning its given products, the sales process, and the after-sale service. 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).

2.3. Empirical Review

In this section, different reviewed literature relevant to the study will be discussed. This section highlights some literature and findings from previous researches regarding the service quality and customer satisfaction particularly focusing on the construction industry.

Song and Yan (2006) used household satisfaction index (HSI) model to assess customer satisfaction theory applied in the housing industry: an empirical study of low-priced housing in Beijing. Specifically, the empirical study analyzes the HSI of low-priced housing in Beijing. The results show that the HSI model is valid and the customer satisfaction theory can effectively analyze the housing industry. The results can help illustrate the factors which most affect customer satisfaction, and can be used to not only enhance the quality of homes and promote the housing market, but also to improve the standard of living for lower income people and provide suggestions to policy makers.

Kärnä (2009) used a quantitative method to analyze the concepts and attributes of customer satisfaction in construction. The study consists of a summary and six independent articles. The study outlines a theoretical model of the relationships between the factors of customer satisfaction and examines the attributes of satisfaction. Regarding the level of customer satisfaction, the negative factors appear towards the end of the project. It is well described by the fact that in less successful projects, all sectors of the project are seen as poor, and if a project succeeds in one sector, it is likely to succeed in another as well. What is noteworthy here is that co-operation and contractor's quality of services are not separate dimensions but intertwine with the central processes of construction. Moreover, direct and indirect relationships can be perceived between the factors of customer satisfaction. The study offers new perspectives for customer-centered development of construction. The most significant targets for development in practice are related to communication and handover methods of a construction project. By developing these methods, the constructor can eliminate factors causing dissatisfaction and improve their operations and customer orientation.

Junnonen and Kankainen (2013) explore empirically the clients´ main satisfaction/dissatisfaction factors. Empirical data is gathered from nearly 400 construction projects in Finland. The views of customer with respect to the performance of contractors are measured using five factors; quality assurance and handover, environment and safety at work, co-operation, personnel, site supervision and subcontracting. Several implications regarding customer satisfaction were drawn from the findings of the research. Customers were typically satisfied with the contractor's abilities to co-operate and the skills of contractor's workers and supervisors. In contrast, low satisfaction could be found for the items related to quality assurance and handover procedures and material. The common feature for the areas of low satisfaction items is that they come out in later phases of the construction project. In generally, the quality of contracted work and of overall service level has an effect on general satisfaction.

Yogesh, et al. (2014), conducted study to examine housing quality and customer satisfaction with reference to delivery methods. The study considered the measurement of customer satisfaction and quality in new housing. The study identified the fact that customer satisfaction in terms of new housing is more than just the technical quality of the constituent components of a house. The research has found when asking purchasers for their overall rating of the quality of their new home that certain service-related aspects of the developer could skew the overall rating from very satisfied to very unsatisfied. Whilst there may not be a major difference between the ideas of the developers and those of the customers in terms of technical quality in new housing, it would appear that there is an abyss between the two in terms of perceptions of what contributes overall quality. This perception gap seems to be the problem area, and this gap appears to be more to do with perceptions about service issues than technical issues. It appreciates this by discussing a range of external issues that have been used outside of construction to interpret quality; and considers their application to define and measure quality in new housing.

Omonori and Lawal (2014) conducted study to examine customers satisfaction in the construction industry in Nigeria. The results showed that the quality of the product is not usually dependent on the price of the product or services. Quality is seen as precedent of customer satisfaction. Quality of construction projects can be regarded as the fulfillment of expectations (i.e., the satisfaction) of those participants involved. It also showed that high customer satisfaction leads to relationship strength and a deep state of collaboration has also been found

profitable. Companies use different form of customer satisfaction methods in developing and monitoring product or service offering in order to manage and improve customer relationship.

Palm (2014) made an assessment entitled with measuring customer satisfaction: a study of the Swedish commercial real estate industry. The aim was to identify the strategies of formal customer evaluations and the use of Satisfied Customer Index in the Swedish commercial real estate industry. The research was based on an inventory of twenty-four commercial real estate companies" use of formal customer evaluations and an analysis of fifteen interviews with top-level managers in the Swedish commercial real estate sector. The analysis shows that only half of the companies included in the study conduct formal evaluations, although they are considered to work customer oriented. Two different strategies for using formal evaluations is, for improvement work and for signaling quality. One proposed explanation to why only half of the companies conduct formal evaluations is the possibility that the official Swedish Real Estate Barometer is not sufficient if the company would like to use the result for organizational development. There are instead indications that this Barometer mainly is used in publicity and marketing purpose, to signal quality. The research in this paper is limited to Swedish commercial real estate sector. But, the overall strategies for conducting formal evaluations should be applicable in general. The insight the paper provides regarding how the industry perceive the Swedish Real Estate Barometer gives direct implications of improvements of the barometer.

Rahman (2015) made a survey to exploring key contractor factors influencing client satisfaction level in dealing with construction project: an empirical study in Jordan. The aim of this paper is to reach the most important factors influencing client satisfaction level of performance provided by contractor in Jordanian construction industry. Satisfaction measurement is gauged by evaluating the level of client satisfaction of construction performance. The measurement of client satisfaction is also based on the quality of the end product. This evaluation is used to encourage contractors to improve their performance to a required level and to ensure that the projects are delivered as expected in terms of time, budget and quality. This paper discusses client satisfaction attribute on contractor performance. The results shows that there are seven extremely important factor that have a significant affect in client satisfaction level and immediately need to improve namely (1) service quality (2) Communication skills (3) adherence to budget, (4) safety performance, (5) adherence to schedule, (6) sit personnel skills, and (7) management capabilities.

Lepkova and Butkiene (2016) used a survey method to analyze customer satisfaction with living conditions in new apartment buildings. The article presents the concept of customer satisfaction in construction and the criteria that define the quality of dwellings; the benefits, consequences, merits and demerits of the assessment of customer satisfaction are also named. The findings of the study indicate that customer satisfaction with dwellings is subjective and depends on their social background, habits, circumstances, experiences, expectations and needs. Lithuanian construction companies should use the customer feedback model, which provides information about customer satisfaction, leads to better decisions and helps to improve the quality of housing-related services and products. The analysis further indicates those economic motives, as well as the functional and technical properties of dwellings are the most important when choosing a dwelling.

In Ethiopian context, Mesay (2018), conducted study to examine the service quality provision on Afro Tsion Real Estate against with potential customers' satisfaction. The study applied the service quality model for the purposes of identifying determinants of service quality; determine whether property buyers' service expectations are congruent with their perceptions of service rendered by estate agents by using Likert Scale and open-ended questions. The data are gathered from a questionnaire survey among 55 respondents in Afro-Tsion Real Estate. The results of the research revealed that reliability responsiveness, empathy and tangibles has significant effect with customer satisfaction, whereas assurance and assurance didn't show significant effect with customer satisfaction. Furthermore, service quality was found to be delivered in areas of service empathy and tangible product characteristics. However, service quality fell below expectations in the areas of service assurance and reliability. Possible causes of poor service delivery and specific intervention measures for improving service quality have been advanced in the study. For instance, the result shows that performance feedback and evaluation are necessary to improve service quality.

In summary, all the above studies show the need for a coordinated and an integrated cost management framework. Even in organizations which are cost focused, there is still a gap that needs to be filled between the theory of project cost management which should be applied and the actual practice that is performed. This study aims at assessing the cost management practices

of real estate companies in Addis Ababa in the hopes that the findings and recommendations could close such gap and contribute to the very limited literature in the area.

2.3. Conceptual Framework

A conceptual framework is a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation (Kombo & Tromp, 2009). It is a research instrument that helps a researcher to develop awareness and understanding of the situation under inquiry and to communicate it. Unlike theory, a concept is an abstract or overall impression inferred or deduced from specific instance. The general idea from the past literature is that there is a relationship between customer satisfaction and service quality. Then, service quality could be evaluated with five service quality dimensions, and the most usable is the SERVQUAL scale.

Figure 2.1: Conceptual Framework
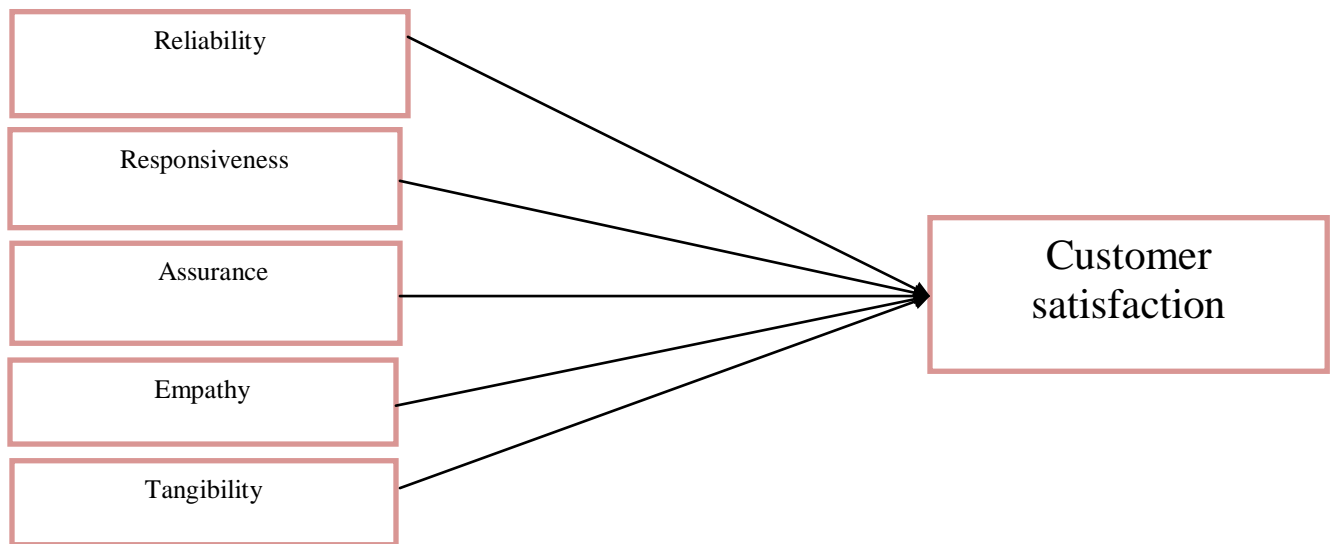
Source**:** Parasuraman et al., (1988).

In this framework, the independent variable, i.e., service quality is operationalized through: tangibility, reliability, responsiveness, empathy and assurance of services while the customers' satisfaction dependent variable.

CHAPTER THREE
RESEARCH METHODOLOGY

This chapter presents the research methodology that was utilized in the study. The chapter discuss about the methods that were employed in the study; it has different sub sections that describes and justifies the method and process that that were used in order to answer the research questions. Accordingly, the chapter describes the methodologies used in this study which includes; the choice of particular research approach, data collection instrument, study population, sampling techniques and data analysis techniques along with an appropriate justification associated with each approach.

3.1. Research Design

Newing (2011) defined research design as the arrangement of conditions for collection and analysis of data in a way that intend to combine importance to the research purpose with economy in procedure. Regarding the research design, mostly there are three types of research design which include: descriptive, explanatory and exploratory research design. This study used the descriptive as well as explantory research design. The descriptive research design is more appropriate for this study for the reason that it helps to show the existing reality services quality and level of customers satisfaction. In doing so, quantitative data was used to investigate the quality of service and to identify the level of customer satisfaction in Ayat 40/60 Condominium Project in Addis Ababa. In addition to investigate the relationship between service quality and customers satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa, the study employed descriptive and casual (also called explanatory) research design through survey questionnaire. Causal research design is focus on an analysis of a situation or a specific problem to explain the patterns of relationships between variables. It helps to understand the nature of the relationship between the independent and dependent variables (Akinyele, 2016). The purpose of using causal research is to know the cause-and-effect relationship between services quality and customer satisfaction.

3.2. Research Approach

Regarding the research approach, the study adopted quantitative approach because the study requires an analysis of the services quality dimensions which impact on customer satisfaction in in Ayat 40/60 Condominium Project in Addis Ababa. The relationships among variables statistically tested, which required a quantitative approach. More so, quantitative approach was used to determine the relationship among the study variables.

3.3 Data Types and Sources

For this study both primary and secondary sources of data was used. Kothari (2004) describes primary data as those which are collected a fresh and for the first time and thus happen to be original in character. The study utilized questionnaire as major instrument for collecting primary data. In addition, the study used secondary data. Dawson (2009) states that secondary research data involves the data collected using information from related studies. The secondary data has collected from different published material like report, manual, books, magazines, journal articles, websites, research findings and any other concerned bodies was used to extract any sort of essential information to strengthen the study findings.

3.4. Population and Sample Design

3.4.1. Target Population

Target population of survey is the entire set of units for which the survey data are used to make inferences (Smyth, 2004). It is the population that a researcher wants to generalize the results of the study. The study target Ayat 2 40/60 project. Specifically, those customers who won second round 40/60 condominium house at Ayat 2 project site are the focus of the investigation. According to information obtained from the Addis Ababa Housing Development Agency, there were about 956 condominium winners in the second round of the 40/60 condominium draw at the Ayat 2 project site, which constitute the target population of the study.

3.4.2. Sample Size

Lavrakas (2008) explains a sample in survey research as a subset of elements drawn from a larger population. Obviously, such a sample should be typically identical with the population thus provide adequate representation. If a sample is not precise and inadequate both in characteristic and size, it may lead to rejection of false null hypothesis, wrong result and

therefore a waste of resources (Gerstman, 2003). Likewise, a study that collects too much data is wasteful. Therefore, it is essential to establish adequate sample size before going on data collection for a study.

In recognition of this fact, model to determine sample size as developed by Nassiuma (2000) was used for this purpose. Therefore, the following formula is used to determine the sample size.

$$n = \frac{NC^2}{C^2 + (N-1) e^2} = \frac{956 (0.3)^2}{0.3^2 + (956) (0.02)^2} = 182$$

Where n = Sample size, N = population size, C = Coefficient of variation and e = Standard margin of error. Nassiuma (2000) recommends a margin error ranging between 2% - 5% and coefficient of variation ranging between 20% - 30%. For this study N = 956 employees, C = 30% and e = 0.02, which gives a sample of 182. Thirty percent coefficient of variation was used to ensure that the sample is too large enough to make generalization of findings. A higher coefficient of variation is not used to avoid very large samples due to limitation of time and research funds. The choice of c = 0.02 is justified to ensure that the estimate is more precise.

3.4.3. Sampling Method

The study used convenience sampling method. Convenience sampling involves using respondents who are "convenient" to the researcher. In this method the participants were consecutively selected in order of appearance according to their convenient accessibility. The researcher employed convenient sampling because it is cheap, efficient, and simple to implement.

3.5 Data Collection Instrument

The study utilized questionnaire as major instrument for collecting primary data. A questionnaire was preferred because of its convenience and ease of administration. Kothari (2004) stated that questionnaires have various advantages, like; it is free from the bias of the interviewer; it is low cost even when the universe is large and is widely spread geographically; respondents have adequate time to give well thought out answers; respondents who are not easily approachable can also be reached conveniently; large samples can be made use of and thus the results can be made more dependable and reliable. In view of the advantages and the need to gather more

information, questionnaire was administered to condominium winners regarding the quality of service and their level of satisfaction in Ayat 40/60 Condominium Project in Addis Ababa.

3.6. Data Analysis Method

In this study, the primary data was collected from distributed questionnaire. Once the questionnaires are gathered, the next step is to edit, clean, encode and look for errors in the data. This was the question of data processing. Data processing is a series of actions or steps performed on data to verify, organize, transform, integrate, and extract data in an appropriate output form for subsequent use. In recognition of this fact, therefore, the data processing of collected questionnaire was rigorously done. This helped in compressing and arranging the data into small sets for easy examination and analysis.

Next, the collected and processed primary data from the questionnaire was analyzed by descriptive statistics, and multiple linear regression analysis. Descriptive statistics such as mean scores, percentages, frequency distribution and standard deviations were computed to describe the characteristics of the variables of interest in the study. Besides, inferential statistics such as correlation and multiple linear regression analysis were used to test the relationships between the variables.

3.7. Reliability and Validity

Reliability and validity were used as the major criteria used to evaluate measurement. Reliability was used to ensure consistence of data whereas validity was used to test the accuracy of the measurement process.

3.6.1 Instrument Validity

Validity refers to the extent to which the scores from a measure represent the variable they are intended (Gakure, 2010). A validity test of the questionnaire was done on its content. Content validity measures the extent to which a test acts to measure a concept analysis of the items so as to confirm adequate coverage of the scope of the study by the measuring instrument (Oyerinde, 2011). In order to ascertain the relevance of each question to variables being measured and to ensure that the content of the instrument provide answers to the objectives of the study and the formulated hypotheses, content validity of the pilot questionnaire was tested. This was done by

experts in the field and then necessary corrections were made on the instrument. More so, the response of the pilot administration of the questionnaire was used to improve the content values of the questions that was used in the main administration.

3.6.2 Instrument Reliability

In addition, reliability test was carried out in order to ensure the consistency of the instruments used in main administration. The reliability is consistency of the measurement; that is, to what extent a measuring device will produce the same results when applied multiple times to the same person under similar conditions (Gakure & Ngumi, 2010). The study employed Cronbachs' alpha to assess reliability of the questionnaire. Cronbachs' co-efficient alpha is the most common way of measuring internal consistency. Cronbachs' coefficient (alpha) may range between 0 to 1, with 0 indicating an instrument full of errors and 1 indicating total absence of error. The closer Cronbach's alpha coefficient is to 1, the higher the internal consistency reliability (Oyerinde, 2011). A reliability coefficient (alpha) of 0.70 is considered acceptable, reliable and recommended for new questionnaire. The reliability of the questionnaire was tested using the Cronbach's alpha correlation coefficient with the aid of Statistical Package for Social Sciences (SPSS) software. Accordingly, the service quality dimensions and customer satisfaction measures were tested as depicted below.

Table 3.1: Reliability Test Result

Variables	Cronbach Alpha	No. of Items
Customer satisfaction	0.843	6
Tangibility	0.861	6
Reliability	0.799	5
Responsiveness	0.835	5
Assurance	0.827	6
Empathy	0.832	4

Source, (Own Survey, 2023)

3.8. Ethical Consideration

In terms of ethics, every effort was made to ensure that all respondents keep their identities and responses private, so that all information can be provided with complete confidence. The questionnaires were distributed in accordance with each respondent's willingness to participate. Consent was obtained from the administrative of the company after explaining the relevance of the study. All the study participants were informed about the purpose of the study and verbal consent of all study subjects was obtained before data collection. Participants were also informed that they have full right to discontinue or refuse to participate in the study. More so, to ensure confidentiality, the name of interviewee was not written on the questionnaire.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

This chapter deals with organization, analysis and presentation of data collected from respondents using questionnaires. The data collected was analyzed and interpreted in line with the objective of the study which was is to investigate the quality of service and the level of customer satisfaction in Ayat 40/60 Condominium Project in Addis Ababa. It gives the empirical findings and results following the application of these variables using the techniques indicated in the third chapter.

4.1 Response Rate

As presented in Table 4.1, the researcher distributed one hundred eighty-two (182) questionnaires and one hundred fifty-five questionnaires (155) were completed and returned. This represents a response rate of 85.2% and none response rate of 14.8%.

Table 4.1: Response Rate

Response rate	Sample size	Percentage (%)
Returned questionnaires	155	85.2
Un-returned questionnaires	27	14.8
Total	**182**	**100**

Source, (Survey data, 2023)

The response rate of 85.2% is a commendable response rate basing on Kothari (2004), who pointed that 50% response rate is adequate, 60% is good, while 70% and above is rated to be very good. In addition, Richardson (2005) avers that an overall response rate for a research questionnaire of at least 60% is both desirable and achievable. As such, 85.2% response rate is regarded a very good response rate warranting the researcher to continue with the analysis and interpretation

4.2 General information of Respondents

This section assesses general information of respondents. Respondents were asked about their gender, age, and level of education attained. This information is not necessarily important for addressing research objectives but they provided important information that helps the researcher

to determine the ability of the respondent to contribute meaningfully to the investigation. The result is presented in Table 4.2.

Table 4.2 General Information of the respondent

Main factor	Factor level	Frequency	Percentage
Gender	Male	77	49.6%
	Female	78	50.4%
	Total	155	100%
Age distribution	18 – 29 years	5	3.2%
	30 - 40 years	51	32.9%
	41 - 50 years	69	44.5%
	Over 50 years	30	19.3%
	Total	155	100%
Educational level	Primary	18	11.6%
	Secondary	64	41.2%
	Diploma	15	9.7%
	BA Degree	41	26.6%
	MSC or above	17	10.9%
	Total	155	100%
Type of house	One Bed Rooms	68	43.9%
	Two Bed Rooms	48	31.0%
	Three Bed Rooms	39	25.1%
	Total	155	100%

Source, (Survey data, 2023)

Table 4.2 shows the gender distribution of the respondents who participated in the study. About 50.4% were female while 49.6% were females. The number of female and male respondents were almost equally represented in study, which also the reflection of the total population structure.

To maintain representativeness of the study's sample population, sample elements were taken from diverse age structures of the company's employees, which is for the purpose of this research, they were classified into four age groups as depicted in Table 4.2. Thus, 44.5% of the respondents are within the age group of 41 - 50 years, 32.9% represents the age group 30 - 40, 19.5% respondents represent the age group 50 and above and the remaining 3.2% respondents are within the age group of 18 – 29. Of the four age classes, the first class is termed as the youth group and all the others are groups of the adult population. From the adult population, the first age group 30-39 years of age is considered early adulthood, the 40-50 years represent middle

adulthood and above 50 years of age represents late adulthood. Demographically, 29 years of age is considered the upper bound for the youth age group, and 30 years is the beginning of early adulthood. This implies that although the different age groups were well represented in the study, most of customers has at early and middle adulthood age.

Regarding the educational qualification, 64 (41.2%) of the respondents had secondary education; 41 (26.6%) respondents had First Degree; 17 respondent (10.9%) had Second Degree; 15 (9.7%) of the respondents have Diploma while the remaining 18 respondents (11.6%) had primary education. This therefore means that the respondents who participated in this study are well informed about the quality of service they are currently receiving from the service providers. Majority of respondents were therefore able to give their perceptions of the quality of service by answering the questionnaire.

When asked the type of house they get, respondent feedback was as follows; those who got two-bed room constitute 43.9%. Those with who got three-bed room were 31%, whereas those who got one-bed rooms house comprised 25.1%. This was an indication that around three-fourth of respondents got two-bed room or three bed room. This is the reflective 40/60 housing program, where the vast majority of participants are registered in two or three bedrooms.

4.3 Perception of Customers towards Services Quality

The first specific objective of the study was to assess the perception of housing winner towards the level of service quality of Ayat 40/60 Condominium Project in Addis Ababa. To address the objectives descriptive statistics was employed. Descriptive statistics were used to explain the basic features of the data that was collected from the field. It helps to present simple summaries about the sample and the measures together with simple graphic illustrations. This section discusses the descriptive statistics of perception of customers towards the service quality measures using the five dimensions of service quality measures that were collected by the questionnaire.

Respondents' perception about the of Ayat 40/60 Condominium Project were captured along the different items corresponding to the five dimensions that were introduced to measure the study area under each of the service quality measurements such as, tangibility, responsiveness, reliability, assurance and empathy. In this regard the descriptive parts of this study were analyzed

based on using a descriptive statistic of mean and standard deviation. Accordingly, the composite mean value shows the average of all respondents' perceptions on a certain dimensional question; while standard deviation shows how diverse are the perceptions of respondents for a given dimensional questions. A range of mean was constructed by using itemized Likert rating scale. The researcher was used (Shrestha, 2015) guide to interpret the result which is presented in the Table 4.3. The mean of each individual item ranging from 1- 5 falls within the following interval:

Table 4.3: Descriptive statistics result interpretation guide

Interval of Means	Interpretation
1.00 – 1.80	Very Low
1.81 – 2.60	Low
2.61 – 3.40	Medium
3.41 – 4.20	High
4.21 – 5.00	Very High

Source: (Shrestha, 2015)

4.3.1. Respondents Perception on the Tangibility of Ayat 40/60 Condominium Project

Tangibility involves in the companies' representatives, physical facilities, materials, and equipment as well as communication materials. Tangible materials have their own impact in determining customer satisfaction level. To find out the service quality of Ayat 40/60 Condominium Project in Addis Ababa in terms of tangible, the study made an attempt to develop a five scale Likert types of questions and customers were invited to indicate their views for each of the questions. Based on these, respondents were asked about service quality of Ayat 40/60 Condominium Project in Addis Ababa concerning tangibility, the result mean score value and standard deviation illustrated in the Table 4.4.

Table 4.4: Perception of respondents towards tangibility of service quality

Indicators	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)	Mean	STD
	1	2	3	4	5		
The houses are constructed with relevant and quality construction materials	13.2	47.7	13.2	15.4	10.5	2.58	13.2
Provides visually appealing buildings and house.	2.7	47.6	20.4	24.1	5.1	2.8	1
The compound has adequate space, green and parking areas	4.5	28.6	15	39.1	12.8	3.27	.985
The house interior partition and other finishing works are done with good quality	17.9	54.5	21.2	4.5	1.9	2.18	.79
The compound has enough space for children play ground and family retreat	2.7	22.8	29.6	38.8	6.1	3.2	0.95
The door, windows and water pipes work properly without causing breakdowns	23.1	54.5	17.3	3.8	1.3	2.06	.781
The roof and rain disposal and drainage system are well designed	11.5	45.5	34.6	8.3	0	2.4	.859
The roads are built with good quality	26.3	13.2	0	57.9	2.6	2.97	1.03
Grand Mean						**2.66**	**0.90**

Source, (Survey data, 2023)

As indicated on the table 4.4, the grand mean value for service quality in terms of tangibility was 2.66, which considered low, according to Shrestha (2015) interpretation guide indicating that majority of respondents were not satisfied. The total standard deviation aggregate was also found to be 090 implying that there some dispersion/variation among the response of respondents when assess tangibility of services quality.

In terms of individual item when respondents were asked whether the houses are constructed with relevant and quality construction materials, 57% of respondents were disagree, while 34.6% were remained neutral. Similarly, when respondents were asked whether the door, windows and water pipes work properly without causing breakdowns, 77.6% of respondents were disagree.

More so, 72.4% of respondents not satisfied by the house interior partition and other finishing works are done with good quality, and 57% of respondents not satisfied by the roof and rain disposal and drainage system are well designed. Furthermore, the study showed that when respondents asked whether the houses are constructed with relevant and quality construction materials, 61% of respondents disagree. On other hand, among the questions asked whether the compound has adequate space, green and parking areas got relatively higher mean value (3.27). Overall, the result showed that most of respondents not satisfied by the service quality of Ayat 40/60 Condominium Project in Addis Ababa in terms of tangibility (construction materials, the door, windows and water pipes work, the partition and interior design and the roof and rain disposal and drainage system), which is an indication that further improvements are required in these areas.

4.3.2. Respondents Perception on the Reliability of Service Quality

Reliability depends on handling customer service issues, performs the services right the first time; offers services on time, and maintain a record of error-free. Moreover, reliability is the most significant factor in conventional service. In premise to this concept the survey was provided related questions to assess respondent view on the reliability of service quality. Table 4.5 illustrated respondents view regarding cargo service quality in terms of reliability.

Table 4.5: Perception of respondents towards reliability of service quality

Indicators	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)	Mean	STD
	1	2	3	4	5		
The housing agency provides the house at the time it promises to do so	1.4	51	16.7	28.9	2	2.79	0.94
The housing agency display a helpful attitude in solving problems	9.2	50.7	7.8	27.2	4.1	2.66	1.1
The agency identified the condo winners with faire and reliable drawing system.	1.4	29.6	16.7	46.7	6.1	3.3	0.99
The agency keeps accurate records customer information.	0	12.6	31.6	44.9	10.9	3.54	0.84
Average						**3.01**	**0.96**

As indicated on the table 4.5, the question was provided to assess whether, the agency service quality regarding reliability is well performed or not. Accordingly, respondents give their respective view for each of the related questions. The grand mean response for the agency service quality concerning reliability is 3.06, which was considered moderate according to Shrestha (2015) interpretation guide. This indicate the agency service quality in terms of reliability is somehow moderate though there are significant areas that need improvement. The total standard deviation aggregate was also found to be 0.96 implying that there some dispersion/variation among the response of respondents when assess reliability of services quality.

In terms of individual item when respondents were asked whether the housing agency display a helpful attitude in solving problems, 59.9% of respondents disagree, 31.3% disagree, while 7.8% remained neutral. Similarly, when respondents asked whether the housing agency provides the house at the time it promises to do so, 52.4% of respondents, 30.9% disagree, while 16.7% remained neutral. On other hands, when respondents asked whether the agency identified the condo winners with faire and reliable drawing system, 52.8% of respondents were agree, while 31% disagree. Similarly, when respondents asked whether the agency keeps accurate records customer information, 55.8% of respondents agree, 12.6% disagree while 31.6% remained neutral. Overall, the findings revealed that in terms of reliability of services quality the agency needs to keep improving its staff members' ability to show a helpful attitude in problem-solving and provide the house when it promises to doing so.

4.3.3. Service Quality Regarding Responsiveness

Responsiveness is the willingness to help customers and provide prompt service. Furthermore, it is responsiveness such as speed and timeliness of service delivery. Employee responsiveness can affect customer satisfaction. With regards to this concept the study was assessed the agency service quality regarding employee responsiveness through five Likert scale question similar with the above discussion of tangibility and reliability. Accordingly, Table 4.6 illustrated respondents' respective view regarding the agency service quality interims of responsiveness.

Table 4.6: Perception on respondents' regarding responsiveness service quality

Indicators	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)	Mean	STD
	1	2	3	4	5		
Agency employees tells you exactly when the service will be performed	9.2	50.7	7.8	27.2	4.1	2.66	1.1
The housing agency employee gave a prompt service	2.4	58.2	7.5	29.9	2	2.71	0.98
The agency resolves customers complaints appropriately.	1.4	51	16.7	28.9	2	2.79	0.94
The housing agency employees are ready to respond to your enquiries.	0	29.9	26.9	40.1	3.1	3.16	0.89
The agency has sufficient workforce to handle customers query	0	24.8	24.5	45.2	5.4	3.31	0.9
Average						**3.02**	**0.97**

Source, (Survey data, 2023)

As indicated on the table 4.6, the questions were provided to assess whether, the agency service quality regarding responsiveness is well performed or not. Accordingly, respondents give their respective view for each of the related questions. The grand mean response for the agency service quality concerning responsiveness is 3.02, which is moderate according to Shrestha (2015) interpretation guide. This indicate the agency service quality in terms of responsiveness is moderate. The total standard deviation aggregate was also found to be 0.974 which is close to one implying that there some dispersion/variation among the response of respondents when assess responsiveness of services quality.

In terms of individual item when respondents were asked whether the housing agency employee gave a prompt service, 60.6% of respondents disagree, 31.9% agree; while 7.9% remained neutral. Similarly, when respondents asked whether agency employees tells exactly when the service will be performed, 59.9% of respondents disagree, 31.3% agree; while 7.8% remained neutral. Likewise, when respondents were asked whether the agency resolves customers complaints appropriately, 52.4% of respondents disagree, 30.9% agree; while 16.7% remained neutral.

On other hands, when respondents were asked whether the agency has sufficient workforce to handle customers query, 50.6% of respondents agree, 24.8% disagree, while 24.5% remained neutral. Similarly, when respondents were asked whether the housing agency employees are ready to respond to your enquiries, 43.2% of respondents agree, 29.9% disagree while 26.9% remained neutral. Overall, the findings revealed that in terms of responsiveness of services quality the agency needs to keep improving its staff members' ability to give a prompt service, resolves customers complaints appropriately and tell customer exactly when the service will be performed.

4.3.4. Service Quality Regarding Empathy

Empathy is another variable that the study examined. Based on these the study was provided related questions for customers and their respective response were provided below in the Table 4.7.

Table 4.7: Perception of respondents towards empathy of service quality

Indicators	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)	Mean	STD
	1	2	3	4	5		
The agency has the customers best interests at heart	10.2	44.7	13.2	20.4	10.5	2.68	.982
Employees give customers individualized attention that makes them feel special	17.9	54.5	21.2	4.5	1.9	2.18	17.9
Showing non-discrimination when providing services for different groups of people	6.3	43.2	0	47.9	2.6	2.97	.913
Agency provides winner with ample time for processing house ownership	13.2	47.7	13.2	15.4	10.5	2.58	.924
Average						**2.62**	**0.91**

Source, (Survey data, 2023)

As indicated on the Table 4.7, the questions were provided to assess whether, the agency service quality regarding empathy is well performed or not. Accordingly, respondents give their respective view for each of the related questions. The grand mean response for the service quality concerning empathy is 2.62, which is low according to Shrestha (2015) interpretation

guide. This indicate the agency service quality in terms of empathy is low. This implied that the agency services are require to improve its services quality in terms of caring and individualized attention to customers to make them feel they are receiving better services and individualized attention. The total standard deviation aggregate was also found to be 0.91 which is close to one implying that there some dispersion/variation among the response of respondents when assess empathy of services quality.

In terms of individual item when respondents were asked whether employees give customers individualized attention that makes them feel special, 69.4% of respondents disagree, 6.4% agree; while 21.2% remained neutral. Similarly, when respondents were asked whether agency provides winner with ample time for processing house ownership, 60.9% of respondents disagree, 25.9% agree; while 13.2% remained neutral. Likewise, when respondents were asked whether the agency has the customers best interests at heart, 54.9% of respondents disagree, 30.9% agree; while 13.2% remained neutral. Furthermore, the study showed that when respondents asked whether the agency showing non-discrimination when providing services for different groups of people, 49.5% of respondents disagree, while 50.5% agree.

Overall, the findings revealed that the agency services quality in terms of empathy was low and there are significant areas that need further improvement. The results specifically showed that the agency needs to keep enhancing its staff members' capacity to put customers' needs first, treat customers with individualized attention that makes them feel special, give winner enough time to process house ownership, and demonstrate non-discrimination when providing services for various groups of people.

4.3.5. Service Quality Regarding Assurance

Assurance is knowledge and good manners or courtesy of employees. Further, it the ability of employees with the help of the knowledge possessed to inspire trust and confidence will strongly strike the level of customer satisfaction. On account of this fact, the study was provided a related questions to assesses the agency service quality in terms of assurances and the result of the respondents presented in Table 4.8.

Table 4.8: Perception of respondents towards assurance of service quality

Indicators	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)	Mean	STD
	1	2	3	4	5		
The agency assuring the housing quality is up to standard.	11.5	45.5	34.6	8.3	0	2.4	.825
The agency guaranties required infrastructure services	0	43.8	15.6	29.7	10.9	2.87	.979
Employees instill confidence in house winner.	0	47.3	17.7	33	2	2.9	.93
The agency assures the house with affordable price.	8.3	19.5	13.5	45.1	13.5	3.36	.986
The agency employee having sufficient knowledge to answer client's questions	8.3	23.7	6.3	41.7	20.1	3.53	.952
The agency assures safety of place where the houses are built.	16.3	28.8	18	27.8	9	2.86	.978
Average						**2.98**	**0.94**

Source, (Survey data, 2023)

As indicated on the table 4.8, the questions were provided to assess whether, the agency service quality regarding assurance is well performed or not. Accordingly, respondents give their respective view for each of the related questions. The grand mean response for the agency service quality concerning assurance is 2.98, which was considered moderate. This indicate the agency service quality in terms of assurance is moderate that in turn indicated that there are significant areas that need further improvement. The total standard deviation aggregate was also found to be 0.94 implying that there some dispersion/variation among the response of respondents when assess assurance of services quality.

In terms of individual item when respondents were asked whether the agency assuring the housing quality is up to standard, 57% of respondents disagree. Similarly, when respondents were asked whether the agency guaranties required infrastructure services, 43.8% of respondents were disagree, 40.6% agree, while the remaining 15.6% remained neutral. Likewise, when respondents were asked whether the agency assures safety of place where the houses are built, 44.1% of respondents disagree, 36.8% agree, while the remaining 9.1% remained neutral.

Furthermore, the study showed that when respondents asked whether employees instill confidence in house winner, 47.3% of respondents disagree, 35% agree, while 17.7% remained neutral. On other hands, when respondents were asked whether the agency assures the house with affordable price, majority (58.6%) of respondents agree, 27.8% disagree, while 13.5% remained neutral. This indicated that majority of respondents were satisfied by the housing price. Similarly, when respondents were asked whether the agency employee having sufficient knowledge to answer client's questions, around two-third (65.7%) of respondents agree, 29% disagree, while 5.3% remained neutral.

Overall, the findings revealed that the agency services quality in terms of assurance was moderate and there are significant areas that need further improvement. The results specifically showed that the agency needs to improve its capacity to assure the housing quality is up to standard, guaranties required infrastructure services, and assures safety of place where the houses are built.

4.4. Level of Customer Satisfaction

The second specific objective of the study was to assess customers' satisfaction level towards project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. Customer satisfaction requires full meeting customer expectations of services. When performance matches or exceeds customer expectations for service, they are satisfied. If not, they are not satisfied (Rahman, et al. 2012). In premises to this, the study analyzed customers level of satisfaction od condo winners using a five-scale measure on project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. Accordingly, the result is presented in table 4.9 below.

Table 4.9: Customers level of satisfaction

Indicators	Highly dissatisfied (%)	Dissatisfied (%)	Neutral (%)	Satisfied (%)	Highly satisfied (%)	Mean	STD
	1	2	3	4	5		
My feeling about the agency service delivery can be best described as	18	33.8	19.5	20.3	8.3	2.67	.923
How satisfied are you with the quality of house?	11.5	55.5	24.6	8.3	0	2.4	.752
How satisfied are you with the design of house?	13.2	47.7	13.2	15.4	10.5	2.58	.872
How satisfied are you with the house interior partition and other finishing works?	17.9	54.5	21.2	4.5	1.9	2.18	0.82
How satisfied are you with the associated infrastructure facilities?	23.1	54.5	17.3	3.8	1.3	2.06	.754
How do you describe the extent to which agency employees tried to be helpful and interested in solving your problems?	2.4	58.2	7.5	29.9	2	2.71	.876
Average						**2.43**	**0.83**

Source, (Survey data, 2023)

As can be seen from the table 4.9, customers' satisfaction level towards project service delivery of Ayat 40/60 Condominium Project in Addis Ababa was assessed using different types of questions. The grand mean response for the customers level of satisfaction is 2.43, which was considered to be low according to Shrestha (2015) interpretation guide. This indicates customers' satisfaction level towards project service delivery of Ayat 40/60 Condominium Project in Addis Ababa was low. The total standard deviation aggregate was also found to be 0.83 implying that there was little variation among the response of respondents when assess their satisfaction. The result revealed that more than three-fourth (77.6%) of respondents dissatisfied with the agency overall service delivery; 72.4% of respondents dissatisfied with the house interior partition and other finishing work; 67% of respondents dissatisfied with the quality of house; 60.9% of respondents dissatisfied with the design of house. Overall, customers' satisfaction level towards project service delivery of Ayat 40/60 Condominium Project in Addis Ababa was low.

4.5. Correlation Results

The third specific objective of the study was aimed to investigate the relationship between service quality and customers satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. To address objective, the study conducted correlation analysis to test the strength of relationship or association between the research variables from the primary data. Correlation is the measure of the relationship or association between two continuous numeric variables (Kothari, 2004). Correlation indicates both degree and direction in which research variables co-vary with one another from case to case without implying that one is causing the other (Crossman et al., 2013). The value of correlation coefficient ranges between -1 and +1. A correlation coefficient of +1 indicates that two variables are perfectly related in a positive linear. A correlation of -1 indicates that two variables are negatively linearly related and a correlation coefficient of 0 indicates that there is no linear relationship between two variables. The study used Marczyk, et al. (2005), guide to interpret the result which is presented in the Table 4.10.

Table 4.10: Correlation result interpretation guide

Correlation value in range	Interpretation
0.00 to 0.19	Weak/ very low correlation
0.20 to 0.39	Low correlation
0.40 to 0.59	Moderate correlation
0.60 to 0.79	High correlation
0.8 to 1.0	Very high correlation

Source: (Marczyk, et al., 2005)

The findings of the study are presented in Table 4.11. The result shows that there are positive and high correlation between the four service quality dimensions (tangibility, reliability, responsiveness, and assurance) and customer satisfaction. The results show that tangibility as service quality dimension was positively correlated to customer satisfaction with a Pearson's Correlation Coefficient of r = 0.775 and at level of significance of 0.000. This relationship was high according to Marczyk, et al. (2005) interpretation. The results also revealed that there is a high and positive correlation between assurance and customer satisfaction with a Pearson's

Correlation Coefficient of r = 0.714. More so, the results also revealed that there is a high and positive relationship between reliability, and responsiveness and customer satisfaction with a Pearson's Correlation Coefficient of r = 0.668, and 679, respectively, which is considered high in both cases according to Marczyk, et al. (2005) interpretation. Whereas empathy as service quality dimension was positively correlated to customer satisfaction with a Pearson's Correlation Coefficient of r = 0. 562 and at level of significance of 0.000. This relationship was considered moderate according to Marczyk, et al. (2005) interpretation

Table 4.12: Pearson Correlation Service quality dimensions and customers satisfaction

		Tangibles	Reliability	Responsiveness	Empathy	Assurance	Customer satisfaction
Reliability	Pearson Correlation	1	.630**	.526**	.487**	.601**	.668**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	155	155	155	155	155	155
Tangibility	Pearson Correlation	.630**	1	.560**	.527**	.624**	.775**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	155	155	155	155	155	155
Responsiveness	Pearson Correlation	.526**	.560**	1	.420**	.622**	.679**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	155	155	155	155	155	155
Empathy	Pearson Correlation	.487**	.527**	.420**	1	.571**	.562**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	155	155	155	155	155	155
Assurance	Pearson Correlation	.601**	.624**	.622**	.571**	1	.714**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	155	155	155	155	155	155
Customer satisfaction	Pearson Correlation	.668**	.775**	.679**	.562**	.714**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	155	155	155	155	155	155

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

Source, (Survey data, 2023)

Over all, four out of five service quality dimensions (tangibility, reliability, responsiveness, and assurance) are high correlation with customer satisfaction with a Pearson's Correlation Coefficient of r > 0.6 in all case. This indicates that service quality dimensions had a positive and high correlation with the customers satisfaction.

4.6. Analysis of Regression Results

The fourth specific objective of study was to investigate the effect services quality on customers satisfaction in relation to project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. This was done through regression analysis. Multiple linear regressions are based on the assumptions of Ordinary Least Square (OLS). When one decides to analyze data by means of multiple regressions, part of the process involves checking to make sure that the data need to analyze can in fact be analyzed using multiple regression. One could do this for the reason that it is only appropriate to use multiple regressions if the data "passes" those assumptions that are required for multiple regressions to give a valid result. So, in the following section necessary diagnostic tests were carried out on the variables

4.6.1 Assumptions/diagnostic test for multiple linear regressions

4.5.1.1 Multicollinearity

According to Myers (1990), multicollinearity refers to very high inter-correlation among predicator variables. A perfect linear relationship among the independent variables implies difficulty of computing unique estimates for a regression model. Variance inflation factor (VIF) was used to check the seriousness of multicollinearity among explanatory variables. As a rule of thumb, multi-collinearity is a potential problem when VIF is greater than 4; and, a serious problem when it is greater than 10 (Field, 2013). Table 4.12 present the collinearity statistics of the predictor variables. The results indicated the collinearity statistics were within the allowable values.

Table 4.12: Multicollinearity test for the Study Variables

Variable	Tolerance	VIF
Tangibility	.470	2.130
Reliability	.513	1.950
Responsiveness	.553	1.809
Empathy	.616	1.624
Assurance	.429	2.330

Source, (Survey data, 2023)

4.6.1.2 Heteroscedasticity

Heteroscedasticity in a study usually happens when the variance of the errors varies across observation (Long & Ervin, 2000). On the other hand, Homoscedasticity in a study usually happens when the variance of residuals (error term) would be same for all predicated (Tabachnic & Fidell, 2007). The most commonly used method is Breusch-Pagan test which was used to test the null hypothesis that the error variances are all equal versus the alternative that the error variances area multiplicative function of one or more variables. Breusch-Pagan tests the null hypothesis that heteroscedasticity is not present. If sig-value is less than 0.05, reject the null hypothesis. A large chi-square value greater than 9.22 is an indication of the existence of heteroscedasticity (Sazali, et al., 2010). In this study, as indicated in Table 4.13 the sig-value for fitted values of dependent variable customer satisfaction was 0.1908 and chi-square value of 1.71, which are indicating that heteroscedasticity was not a concern.

Table 4.13: Breusch-Pagan for Heteroscedasticity

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of customer satisfaction
chi2(1) = 1.71
Prob> chi2 = 0.1908

Source: (Survey Data, 2023)

4.6.1.3. Normality

Normality is the assumptions in linear regression that assumes residuals (errors) are approximately normally distributed. This study used Shapiro-Wilk test to find out whether the error term is normally distributed or not. According to Sharpiro and Wilk (1965), the hypothesis for the normality test is formulated as follow:

H0: Error term is normally distributed

H1: Error term is not normally distributed

$\alpha = 0.05$

Decision Rule: if the p-value is less than the chosen alpha level, then the null hypothesis is rejected. On the contrary, if the p-value is greater than the chosen alpha level, then the null hypothesis that the data came from a normally distributed population cannot be rejected. The

result Sharpiro and Wilk test for normality is presented in Table 3.14. In this study, as indicated in Table 3.15, the p-value for fitted values of dependent variable customer satisfaction was 0.05841, which is above cut-point value of 0.05 indicating that data is normally distributed.

Table 3.14: Sharpiro and Wilk test for normality

Variable	Obs.	w	v	Z	Prob>z
Customer Satisfaction	155	0.98333	1.995	1.568	0.05841

Source: (Survey Data, 2023)

However, since the test may be biased by sample size, as the test may be statistically significant from a normal distribution in any large samples. Thus, a or P-P Plot or histogram is required for verification in addition to the test (Asghar & Saleh, 2012). This is a graphical procedure that plots the cumulative probabilities (values range from 0 to 1) on the X-axis and the expected probabilities given the normal curve on the Y-axis. If the sample were exactly normally distributed, the points would lie on a straight diagonal line. The diagram below shows Normal P-P Plots for the dependent variables (customer satisfaction) in which the points would lie on a straight line confirming the data was normally distributed.

Figure 4.1: Normal P-P Plot/Histogram of residual for dependent variables

Source, (Survey data, 2023)

46
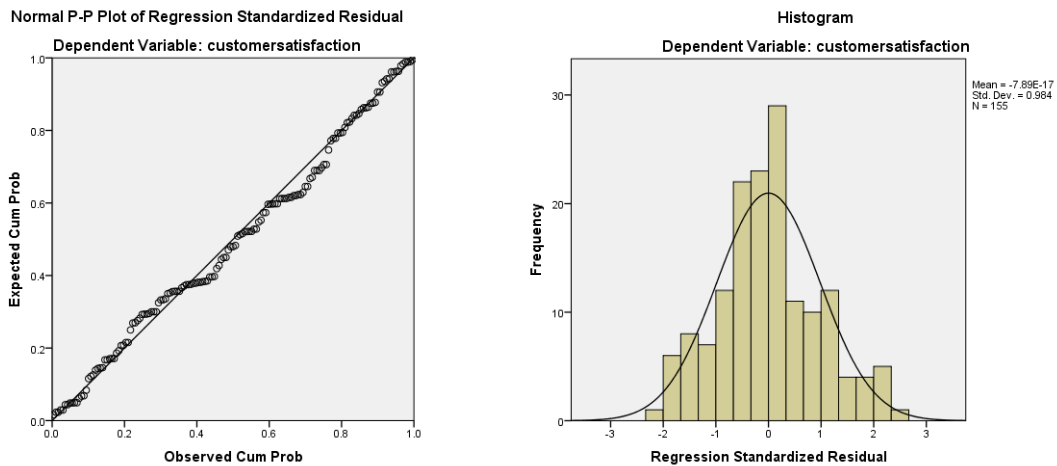
4.6.2 Result of Multiple linear regression

The main objective of study was to investigate the effect services quality on customers satisfaction in relation to project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. The independent variable service quality dimensions are operationalized through: tangibility, reliability, responsiveness, empathy and assurance. Thus, study sought to determine the effect of each of the five service quality dimensions (tangibility, reliability, responsiveness, empathy and assurance) on the customers' satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. The result of the regression analysis is presented in the following section.

4.6.2.1. The Model Summary (Multiple Coefficient of Determination R²)

Coefficient of determination explains the percentage of variation in the dependent variable (the customers' satisfaction) that is explained by all the five independent variables (tangibility, reliability, responsiveness, empathy and assurance). The Table 4.15 below preset the model summary.

Table 4.15: Model Summary for service quality and the customers' satisfaction

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.860[a]	.739	.731	1.42085	2.183

a. Predictors: (Constant), Assurance, Empathy, Tangibility, Responsiveness, Reliability
b. Dependent Variable: Customer satisfaction

Source, (Survey data, 2023)

As indicated in the above Table 4.15 R has a value of 0.860, representing the simple correlation between the five independent variables (tangibility, reliability, responsiveness, empathy and assurance) and customers' satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. R^2 on the other hand explains the percentage of variation in customers' satisfaction that is explained by the five service quality dimensions. The value of adjusted R^2 is 0.731 tells that the five service quality dimensions can account for 73.1% of the variation in the overall customers' satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. This means having a tangibility, reliability, responsiveness, empathy and assurance cargo service in the company are the factors that created the 73.1 % of the variance on

customers' satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. The remaining 16.9% of the variability in customers' satisfaction is left unexplained by the explanatory variables used in the study.

4.6.2.2. ANOVA Interpretation

The result in Table 4.16 shows that the sum of squares of the regression is 853.363 at 5 degrees of freedom and a mean square of regression is 170.673. The residual sum of squares is 300.805 with 149 degrees of freedom and residual mean square value of 2.019. The test for the joint significant which is given by the F statistic is 84.541, it is statistically significant at 0.00. This imply that the five independent variables, that are tangibility, reliability, responsiveness, empathy and assurance, considered were relevant in explaining the satisfaction of customer in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa.

Table 4.16: ANOVA for service quality and the customers' satisfaction [a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	853.363	5	170.673	84.541	.000[b]
	Residual	300.805	149	2.019		
	Total	1154.168	154			

a. Dependent Variable: Customer Satisfaction

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

Source, (Survey data, 2023)

4.6.2.3. Regression Coefficients

The findings in Table 4.17 show the coefficients of the regression. According to the findings, four out of the five service quality dimensions (tangibility, reliability, responsiveness, and assurance) are significant in predicting the customer satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa since the p values are less than 0.05. Whereas empathy as one service quality dimensions is not significant in predicting the customer satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa since the p values is not less than 0.05.

Table 4.17: Coefficients for service quality and the customers' satisfaction

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.529	.745		-3.392	.001
	Tangibility	.252	.039	.393	6.445	.000
	Reliability	.116	.047	.146	2.498	.014
	Responsiveness	.208	.068	.196	3.063	.003
	Empathy	.120	.085	.076	1.421	.157
	Assurance	.213	.052	.228	4.057	.000

a. Dependent Variable: customer satisfaction

Source, (Survey data, 2023)

Tangibility has positive and significant effect on customers satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa with a beta value (beta =.252) and t value of 6.445 which is significant. Similarly, Assurance as one dimension of service quality has also positive and significant effect on customers satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa with a beta value (beta =.213) and t value of 3.063 which is also statistically significant. Responsiveness has also positive and significant effect on customers satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa with a beta value (beta =.208) and t value of 4.057 which is also statistically significant. Reliability has also positive and significant effect on customers satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa with a beta value (beta =.116) and t value of 2.498 which is also statistically significant at 0.014. Whereas assurance has not significant influence customers satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa since the significance value is not less the cut point value of 0.05.

4.7. Discussion of Findings

The study has mainly an objective to investigate the quality of service and the level of customer satisfaction in Ayat 40/60 Condominium Project in Addis Ababa. The service quality was measured using SERVQUAL dimensions (tangibility, reliability, responsiveness, assurance and empathy).

As the study revealed that customers' satisfaction level towards project service delivery of Ayat 40/60 Condominium Project in Addis Ababa was low. The grand mean response for the customers level of satisfaction is 2.43, which was considered to be low according to Shrestha (2015) interpretation guide. This indicates customers' satisfaction level towards project service delivery of Ayat 40/60 Condominium Project in Addis Ababa was low. The result revealed that more than three-fourth (77.6%) of respondents were dissatisfied with the agency overall service delivery; 72.4% of respondents were dissatisfied with the house interior partition and other finishing work; 67% of respondents were dissatisfied with the quality of house; 60.9% of respondents were dissatisfied with the design of house. Overall, customers' satisfaction level towards project service delivery of Ayat 40/60 Condominium Project in Addis Ababa was low.

This finding was in line with Lisanework (2015) study, who examined the housing satisfaction level with condominium residential apartment in Addis Ababa in the case of Nefas Silk Lafto sub-city and he found that residents have generally express nearest to moderate satisfaction with their physical features of the housing unit, low satisfaction with the service & the public facilities provided, slightly above moderate satisfaction with social environment within the housing area. Lisanework (2015) study found residents are dissatisfied with the overall housing environment. Similarly, Abraham (2018) who examined project quality assessment of Addis Ababa condominium housing construction projects found that the sample projects had quality defects related to finishing work problems and however the structure and design work of the project does not have any quality defects. Water leakage, poor roofing and rain disposal, poor finishing work, poor design related to difficulty to move in the house for children, elders and disabled people are major quality defects of the project. However, unlike the present study, Mesay (2018), found that the customer satisfaction in Afro-Tsion Real Estate found high.

The results depicted overall regression model was found significant valid and fit. The values of regression coefficients i.e., actual service tangibility, reliability, responsiveness, and assurance has significant positive effect on actual customer satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. The result of the study is consistent with the previous studies (Sohrabi et al, 2012; and Mangeli, 2013), who found that services quality dimensions had significantly affecting customers satisfaction in Real Estate Agency in Kenya. The statistical significance of each independent variables (services quality dimension) in

explaining satisfaction of customer in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa is captured throughout the p-values. From the coefficient table above, tangibility has significantly influence on satisfaction of customer in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa According to the result, one unit increase in tangibility of service quality result in 0.252 unit increase in customer satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. The results of tangibility on customer satisfaction matched those of Lau, et al (2011) study, who found that tangibility has significant influence on satisfaction of customer in Real Estate industry in Nigeria. This finding is consistent with Mesay (2018), who found that tangibility was considered to be one of the key factors that can affect satisfaction of customer in Real Estate Industry in case of Afro-Tsion Real Estate.

The study also found that service quality in terms of assurance had significantly influence on satisfaction of customer in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. According to the result, holding other factor constant one unit increase in assurance dimension of service quality result in 0.213 unit increases in satisfaction of customer in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. This result is consistence with many studies which have undertaken with different countries. In the study which undertake in Kenya by Trimba, et al, (2013), they found that reliability had significantly contributed to satisfaction of customer in Kenyan Real Estate Companies. Similarly, Rahman, et al, (2012) reliability has significant influence on satisfaction of customer in Real Estate companies in Jordan context.

The study further found that service quality in terms of responsiveness had significantly influence on satisfaction of customer in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. According to the result, holding other factors constant one unit increase in responsiveness of service quality result in 0.208 unit increase in satisfaction of customer in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. The positive and significant relationship of service quality in terms of responsiveness with customer satisfaction is in line with the previous studies of Trimba, et al, (2013); Watiki, (2014); Mezgebe, (2020); and Lukrozo (2020).

More so, the finding indicated that service quality in terms of reliability has significant effect on satisfaction of customer in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. When service quality in terms of reliability changed by one unit, satisfaction of customer in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa changed by 0.116 units. The positive and significant effect of service quality in terms of reliability with customer satisfaction is in line with the findings of Atalik & Arslan (2009), who found reliability has significant influence on satisfaction of customer in Real Estate Companies in Turkish context. Likewise, Zaid (2015), found that reliability had significantly contributed to satisfaction of residents in government apartment in Malesia context.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purpose of the study was to investigate the quality of service and the level of customer satisfaction in Ayat 40/60 Condominium Project in Addis Ababa. In this chapter, the summary of findings, conclusions and recommendations of the study are discussed.

5.1 Summary of Findings

The study was conducted with an aim to investigate the quality of service and the level of customer satisfaction in Ayat 40/60 Condominium Project in Addis Ababa. In order to address the objective, the survey questionnaire was prepared and a sample of 182 questionnaires distributed and 155 were duly completed and returned for analysis. Following the analysis, the following findings were obtained.

Investigating the perception of condo winner in Addis Ababa towards their satisfaction in Ayat 40/60 Condominium Project in Addis Ababa was also among objectives of this study. As the study revealed that customers' satisfaction level towards project service delivery of Ayat 40/60 Condominium Project in Addis Ababa was low. The grand mean response for the customers level of satisfaction is 2.43, which was considered to be low according to Shrestha (2015) interpretation guide. This indicates customers' satisfaction level towards project service delivery of Ayat 40/60 Condominium Project in Addis Ababa was low. The result revealed that more than three-fourth (77.6%) of respondents were dissatisfied with the agency overall service delivery; 72.4% of respondents were dissatisfied with the house interior partition and other finishing work; 67% of respondents were dissatisfied with the quality of house; 60.9% of respondents were dissatisfied with the design of house. Overall, customers' satisfaction level towards project service delivery of Ayat 40/60 Condominium Project in Addis Ababa was low. This shows that many residents continue to express dissatisfaction with the Agency's housing service quality, which serves as a warning to the senior management of the Agency that significant improvement is needed to raise the level of customer satisfaction.

The study was examined assess the perception of housing winner towards the level of service quality of Ayat 40/60 Condominium Project in Addis Ababa. Accordingly, the finding from descriptive statistics showed that the grand mean response for service quality concerning

tangibility is 2.66, which considered low, indicating that majority of respondents were not satisfied. The result showed that most of respondents were not satisfied by construction materials, the door, windows and water pipes work, the partition and interior design and the roof and rain disposal and drainage system, which is an indication that further improvements are required in these areas. The grand mean response for service quality concerning for reliability is 3.06, which was considered moderate. This indicate the agency service quality in terms of reliability is somehow moderate though there are significant areas that need further improvement. Specifically in terms of reliability of services quality the agency needs to keep improving its staff members' ability to show a helpful attitude in problem-solving and provide the house when it promises to doing so. On other hands, grand mean response for service quality concerning for responsiveness is 3.02, which is moderate. This finding revealed that in terms of responsiveness of services quality the agency needs to keep improving its staff members' ability to give a prompt service, resolves customers complaints appropriately and tell customer exactly when the service will be performed.

The finding from descriptive statistics further showed that the grand mean response for service quality concerning empathy is 2.62, which considered low. This finding revealed that the agency services quality in terms of empathy was low and there are significant areas that need further improvement. The results specifically showed that the agency needs to keep enhancing its staff members' capacity to put customers' needs first, treat customers with individualized attention that makes them feel special, give winner enough time to process house ownership, and demonstrate non-discrimination when providing services for various groups of people. Furthermore, the grand mean response for the agency service quality concerning assurance is 2.98, which was considered moderate. This finding revealed that the agency services quality in terms of assurance was moderate and there are significant areas that need further improvement. The results specifically showed that the agency needs to improve its capacity to assure the housing quality is up to standard, guaranties required infrastructure services, and assures safety of place where the houses are built.

The correlation result shows that there are positive and high correlation between the four service quality dimensions (tangibility, reliability, responsiveness, and assurance) and customer satisfaction. The results show that tangibility as service quality dimension was positively

correlated to customer satisfaction with a Pearson's Correlation Coefficient of r = 0.775 and at level of significance of 0.000. This relationship was high. The results also revealed that there is a high and positive correlation between assurance and customer satisfaction with a Pearson's Correlation Coefficient of r = 0.714. More so, the results also revealed that there is a high and positive relationship between reliability, and responsiveness and customer satisfaction with a Pearson's Correlation Coefficient of r = 0.668, and 679, respectively. These relationships were considered high. Whereas empathy as service quality dimension was positively correlated to customer satisfaction with a Pearson's Correlation Coefficient of r = 0. 562 and at level of significance of 0.000. This relationship was considered moderate.

From regression analysis, the result revealed that the combined effect of various service quality dimensions significantly influenced customer satisfaction positively. The value of adjusted R^2 is 0.731 tells that the five service quality dimensions can account for 73.1% of the variation in the overall customers' satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. This means having a tangibility, reliability, responsiveness, empathy and assurance cargo service in the company are the factors that created the 73.1 % of the variance on customers' satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. In terms of individual effect, four out of the five service quality dimensions (tangibility, reliability, responsiveness, and assurance) are significant in predicting the customer satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa since the p values are less than 0.05. Whereas empathy as one service quality dimensions is not significant in predicting the customer satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa since the p values is not less than 0.05.

5.2 Conclusion

The study was undertaken to investigate the quality of service and the level of customer satisfaction in Ayat 40/60 Condominium Project in Addis Ababa. Accordingly, based on the findings presented in the above section, the researcher makes some conclusions concerning the relationship between service quality dimensions and satisfaction of customers in Ayat 40/60 Condominium Project in Addis Ababa.

The first specific objective of the study was to assess the perception of housing winner towards the level of service quality of Ayat 40/60 Condominium Project in Addis Ababa. Accordingly, the finding from descriptive statistics showed that the overall mean response for service quality dimensions was low. Thus, from this the study conclude that the level of service quality of Ayat 40/60 Condominium Project in Addis Ababa is low. A detailed analysis of perception mean scores of the attributes could help agency managers in detecting the weak points of services and designing the services to meet or exceed customers' expectations.

The second specific objective of the study was to assess customers' satisfaction level towards project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. In line with this, the study concluded that customers' satisfaction level towards project service delivery of Ayat 40/60 Condominium Project in Addis Ababa was low. This shows that many residents continue to express dissatisfaction with the Agency's housing service quality, which serves as a warning to the senior management of the Agency that significant improvement is needed to raise the level of customer satisfaction.

The third specific objective of the study was aimed to investigate the relationship between service quality and customers satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. Based on the finding the study conclude that reliability, responsiveness, assurance and tangibility, as service quality dimensions are positively and strongly correlated to customer satisfaction; whereas empathy as service quality dimension is positively and moderately correlated to customer satisfaction in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa.

The fourth specific objective of the study was to investigate the effect services quality on customers satisfaction in relation to project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. In this regard, the study found that four out of five predictor variables or service quality dimensions (tangibility, reliability, responsiveness, and assurance) have statistically significant influence on the satisfaction of customers in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. The most important factor in predicting satisfaction customers in relation to the project service delivery of Ayat 40/60 Condominium Project in Addis Ababa is tangibility followed by assurance, responsiveness and reliability respectively.

Whereas assurance is not significant in predicting the satisfaction of customer in project service delivery of Ayat 40/60 Condominium Project in Addis Ababa.

Overall, it can be concluded that five out of four service quality dimensions (reliability, responsiveness, tangibility and assurance) influence satisfaction of condo housing winner in relation to the project service delivery of Ayat 40/60 Condominium Project in Addis Ababa. The improvement of these services' quality dimensions has a higher potential of improving condo housing winner satisfaction level. From this point of view, obtaining specific knowledge about these areas in relation to the project service delivery of Condominium Project show differences with regard to the residents they serve, the services they offer, and the cultural context from which the Housing Agency generates its customers would create more satisfying outcomes in quality efforts.

5.3 Recommendation

Based on the major findings and conclusion of the study the following recommendations were forwarded;

⇒ Although the service quality dimensions (i.e., tangibility, reliability, responsiveness, assurance and empathy) are considered very preliminary predictor of the condo housing winner satisfaction, so these factors should be incorporated in Addis Ababa Housing Development Agency as a core of the strategy that is aiming at enhancing customer satisfaction. Moreover, during resource allocation, it is recommended that more emphasis should be put on the tangibility and assurance dimension because they portray a higher impact on condo housing winner satisfaction.

⇒ The satisfaction of customers was significantly influenced by various the service quality dimensions. It is thus apparent that Addis Ababa Housing Development Agency could make assessing and monitoring service quality periodically to enable the agency to identify where improvements are needed from the customers' view point, and to place an emphasis on the underlying dimensions of service quality, and should start with improving service quality in order to raise customer satisfaction.

⇒ Addis Ababa Housing Development Agency are customer-oriented government agency, so to provide quality services and make customers satisfied, it is recommended that the

top management should pay much attention to the customer complaints, customer's feedback and individual attention should be given to customers in order to better understand their needs and satisfy them.

$\Rightarrow$ Provision of services within the housing area is one of the basic components that should be fulfilled to have favorable living environment. The research finding showed that residents are not satisfied with the most services provided within the housing area. The result showed that most of respondents were not satisfied by construction materials, the door, windows and water pipes work, the partition and interior design and the roof and rain disposal and drainage system, which is an indication that further improvements are required in these areas. Thus, it is advisable the agency needs to improve its capacity to assure the housing quality is up to standard, guaranties required infrastructure services, and assures safety of place where the houses are built. More so, the needs to increase the size & condition of the toilet room; the size of dining area and the size & condition of the Kitchen.

$\Rightarrow$ Provision of services within the housing area is one of the basic components that should be fulfilled to have favorable living environment. The research finding showed that residents are not satisfied with the most services provided within the housing area. Thus, it is vital to increase the size and condition of corridor; improve location and condition of staircase; corridor and staircase cleaning; sewerage line and condition within the housing area and provide common area & staircase maintenance service.

$\Rightarrow$ The results the findings have complained that almost all of the condominium owners had owned their house regardless of their design preferences. Therefore, the study recommends that resident's participation in design selection will contribute for the success of future housing development program thereby minimize post housing transfer residential complaints & increases their satisfaction with their housing unit.

$\Rightarrow$ More so, to win its residents heart and to build trust between the city dwellers and government for future, the agency must give undivided attention to keeping promises, providing accurate and timely service, guaranteeing safe and secure housing services based on their specific needs. The Agency also should provide continuous training to the employees on issues like communication skills, complaint handling technique, customer service, and work ethics to improve its customer satisfaction.

In general, the study infers that merely providing housing does not indicate success of housing development programs and policies, but meeting the actual housing needs and preferences of the residents will determine whether the government can achieve the goal of providing adequate and affordable housing for all citizens as stipulated under the Ethiopian constitution & housing development proclamations.

Reference

Aboye, B. A. (2021). Service quality and customer satisfaction on hotels in Gondar: Customer's role in hotel development. Unpublished Master thesis, Gander University. Gondar

Addisie, A. (2014). Assessment Of Service Quality Dimension and Its Impact on Customer Satisfaction In Selected Ethiopian Private Banks (Doctoral dissertation, St. Mary's University), Addis Ababa.

Agyapong, G. K. (2011). The effect of service quality on customer satisfaction in the utility industry–A case of Vodafone (Ghana). International Journal of Business and management, 6(5), 203-210.

Berry, L. L., Zeithaml, V. A., & Parasuraman, A. C. S. Q. (1990). Five imperatives for improving service quality. MIT Sloan Management Review, 31(4), 29.

Bitner, M. J., & Hubbert, A. R. (1994). Encounter satisfaction versus overall satisfaction versus quality. Service quality: New directions in theory and practice, 34(2), 72-94.

Brady, M. K., Cronin Jr, J. J., & Brand, R. R. (2002). Performance-only measurement of service quality: a replication and extension. Journal of business research, 55(1), 17-31.

Briggs, S., Sutherland, J., & Drummond, S. (2007). Are hotels serving quality? An exploratory study of service quality in the Scottish hotel sector. Tourism management, 28(4), 1006-1019.

Cronin Jr, J. J., Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. Journal of retailing, 76(2), 193-218.

DeLone, W. H., & McLean, E. R. (1992). Information systems success: The quest for the dependent variable. Information systems research, 3(1), 60-95.

Dubben, N. & Sayce, S. (1991): *Property portfolio management: an introduction*, Routledge.

Gwinner, K. P., Gremler, D. D., & Bitner, M. J. (1998). Relational benefits in services industries: the customer's perspective. Journal of the academy of marketing science, 26(2), 101-114.

Iddrisu, A. M., Nooni, I. K., Fianko, K. S., & Mensah, W. (2015). Assessing the impact of service quality on customer loyalty: a case study of the cellular industry of Ghana. British Journal of Marketing Studies, 3(6), 15-30.

Jamaluddin, M. R., Radzi, S. M., & Hashim, R. Assessing Social Responsibility towards Satisfaction and Trust in the Five-Star Hotel Brand. In National Research & Innovation Conference for the Graduate Students in Social Sciences 2014.

Kerzner, H. (2006). *Project Management: Case Studies*. (2nd edn). New Jersey: John Wiley & Sons.

Kothari, C. (2004). *Research Methodology. Methods and Techniques. (2nded).* India, New Delhi: New age International Publishers.

Laroche, M., Ueltschy, L. C., Abe, S., Cleveland, M., & Yannopoulos, P. P. (2004). Service quality perceptions and customer satisfaction: evaluating the role of culture. Journal of international marketing, 12(3), 58-85.

Lavrakas, P. (2008). *Encyclopedia of Survey Research Methods*. United States of America, Los Angeles; Sage Publications.

Ling-Yee, L. (2011). Marketing metrics' usage: Its predictors and implications for customer relationship management. Industrial Marketing Management, 40(1), 139-148.

Lock, D. (2003). Project Management, Eighth edition, Gower Publishing Ltd.\

Lisanework, K. (2015). Assessment of Residential Satisfaction with Condominium Housing: The Case of Nefas Silk Lafto Sub-City Administration, Unpublished Master Thesis, St. Mary's University, Addis Ababa.

Lukrozo, Z. (2020). An application of the rail-servqual model for improving service quality at a selected rail organisation in South Africa.

Mezgebe, A. (2020). Effect of electronic marketing on customer satisfaction: the case of four star hotels in Addis Ababa. Int. J. Manag. Account, 2(4), 74-95.

Mesay, Y. (2018). The Effect of Service Quality on Customer Satisfaction in Real Estate Industry: The Case of Afro-Tsion Real Estate, Unpublished Master Thesis, Addis Ababa University, Addis Ababa.

Mohammad, A. A. S., & Alhamadani, S. Y. M. (2011). Service quality perspectives and customer satisfaction in commercial banks working in Jordan. Middle Eastern Finance and Economics, 14(1), 60-72.

Nejadjavad, Maryam & Gilaninia, Shahram. (2016). The Role of Service Quality in Organizations. Kuwait Chapter of Arabian Journal of Business and Management Review. 5. 19-27. 10.12816/0019403.

Nongmaithem, R. S., & Gebremaria, M. D. Factors Affecting Customer Satisfaction of Hotels in Debre Berhan, Ethiopia. Innovative Issues and Approaches in Social Sciences.

Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Understanding customer expectations of service. Sloan management review, 32(3), 39-48.

Petzer, D. J., Steyn, T. F. J., & Mostert, P. G. (2009). Customer retention practices of small, medium and large hotels In South Africa: An exploratory study. African Journal of Marketing Management, 1(1), 032-042.

Pizam, A., Shapoval, V., & Ellis, T. (2016). Customer satisfaction and its measurement in hospitality enterprises: a revisit and update. International journal of contemporary hospitality management.

Rahman, M. S., Khan, A. H., & Haque, M. M. (2012). A conceptual study on the relationship between service quality towards customer satisfaction: Servqual and Gronroos's service quality model perspective. Asian Social Science, 8(13), 201.

Reinartz, W., Krafft, M., & Hoyer, W. D. (2004). The customer relationship management process: Its measurement and impact on performance. Journal of marketing research, 41(3), 293-305.

Schwab, D. (2005). *Research Methods for Organizational Studies*.*(2nded.)* London: Lawrence Erlbaum Associates.

Suki, N. M. (2014). Moderating role of gender in the relationship between hotel service quality dimensions and tourist satisfaction. Journal of Quality Assurance in Hospitality & Tourism, 15(1), 44-62.

Sureshchandar, G. S., Rajendran, C., & Kamalanabhan, T. J. (2001). Customer perceptions of service quality: A critique. Total quality management, 12(1), 111-124.

Teas, R. K. (1993). Consumer expectations and the measurement of perceived service quality. Journal of professional services marketing, 8(2), 33-54.

Tse, D. K., & Wilton, P. C. (1988). Models of consumer satisfaction formation: An extension. Journal of marketing research, 25(2), 204-212.

Wang, X., Guchait, P., & Paşamehmetoğlu, A. (2020). Tolerating errors in hospitality organizations: relationships with learning behavior, error reporting and service recovery performance. International Journal of Contemporary Hospitality Management.

Watiki, C. (2014). Service quality and customer satisfaction in hotels in Nairobi, Kenya (Doctoral dissertation, University of Nairobi).

Wilkinson, S. & Reed, R. (2008): *Property Development*, 5th ed., Routledge.

Wisniewski, M. (2001). Using SERVQUAL to assess customer satisfaction with public sector services. Managing Service Quality: An International Journal.

Yemane, A. M., Heniey, H. A., & Gebrehiwet, K. G. (2021). Performance Measurement and Improvement of Healthcare Service Using Discrete Event Simulation in Bahir Dar Clinic. Journal of Optimization in Industrial Engineering, 14(2), 41-51.

Yilmaz, K. (2013). Comparison of quantitative and qualitative research traditions: Epistemological, theoretical, and methodological differences. European journal of education, 48(2), 311-325.

APPENDIX I: RESEARCH QUESTIONNAIRE

The purpose of this questionnaire is to collect data for post graduate study for Master of Project Management for the study entitled "Assessment of Service Quality and Customer Satisfaction in Ethiopian Housing Construction Project: The Case of Ayat 2 40/60 Condominium Project". This questionnaire is required to assist in determining the objectives of the study. Your privacy will be kept anonymously and, therefore, no one knows who provided the information. Any information provided will be used for academic purpose only and will be treated in strict confidence. Therefore, you are kindly requested to provide your responses to different questions below. Thank you in advance for agreeing to participate in this study.

General Instruction: - Circle your response or indicate "√" in the box beneath for closed-ended questions among the provided alternatives. You don't need to write your name.

Section A: Demographic Profile of Respondent

Instruction: - Circle your response or indicate "√" in the box beneath for each question. You don't need to write your name.

1.	Sex:	a) Male b) Female
2.	Age:	a) 18-25years c. 41-55 years b) 26-40 years d. over 55years
3.	Education level	a) Primary school d. First Degree b) Secondary school e. Master Degree and above c) Diploma
4.	Type of house:	a) Studio b) One Bed Rooms c) Two Bed Rooms d) Three Bed Rooms

Part II: Service Quality Dimension Measures

1. Respond by putting "√" Mark to the only number that best fits your opinion and feelings.

NB: 5=strongly Agree, 4=Agree, 3=neither Agree nor Disagree, 2=Disagree, and 1 represents strongly Disagree with the respective statements stated below.

Dimensions	Statements/questions	Scale /Value				
		1	2	3	4	5
Tangibility	The houses are constructed with relevant and quality construction materials					
	Provides visually appealing buildings and house.					
	The compound has adequate space, green and parking areas					
	The house interior partition and other finishing works are done with good quality					
	The compound has enough space for children play ground and family retreat					
	The door, windows and water pipes work properly without causing breakdowns					
	The roof and rain disposal and drainage system is well designed					
	The roads are built with good quality					
Reliability	The housing agency provides the house at the time it promises to do so					
	The housing agency display a helpful attitude in solving problems					
	The agency identified the condo winners with faire and reliable drawing system.					
	The agency keeps accurate records customer information.					
Responsiveness	Agency employees tells you exactly when the service will be performed					
	The housing agency employee gave you prompt service					
	The agency resolves customers complaints appropriately					
	The housing agency employees are ready to respond to your enquiries.					
	The agency has sufficient workforce to handle customers query					

Empathy	The agency has the customers best interests at heart					
	Employees give customers individualized attention that makes them feel special					
	Showing non-discrimination when providing services for different groups of people					
	Agency provides winner with ample time for processing house ownership.					
Assurance	The agency assuring the housing quality is up to standard					
	The agency guaranties required infrastructure services					
	Employees instill confidence in house winner.					
	The agency assures the house with affordable price.					
	The agency employee having sufficient knowledge to answer client's questions					
	The agency assures safety of place where the houses are built.					

Part III: Level of Customer Satisfaction

Direction: the following statement describes your feeling (satisfaction) about the housing delivery services Please circle the number which best reflects your own perception.

1. **My feeling about the agency service delivery can be best described as**
    1. Highly dissatisfied
    2. Dissatisfied
    3. Neutral
    4. Satisfied
    5. Highly satisfied

2. **How satisfied are you with the quality of house?**
    1. Highly dissatisfied
    2. Dissatisfied
    3. Neutral
    4. Satisfied
    5. Highly satisfied

3. How satisfied are you with the design of house?
    1. Highly dissatisfied

2. Dissatisfied

3. Neutral

4. Satisfied

5. Highly satisfied

4. How satisfied are you with the house interior partition and other finishing works?

1. Highly dissatisfied

2. Dissatisfied

3. Neutral

4. Satisfied

5. Highly satisfied

5. How satisfied are you with the associated infrastructure facilities?

1. Highly dissatisfied

2. Dissatisfied

3. Neutral

4. Satisfied

5. Highly satisfied

5. How do you describe the extent to which agency employees tried to be helpful and interested in solving your problems?

1. Highly dissatisfied

2. Dissatisfied

3. Neutral

4. Satisfied

5. Highly satisfied